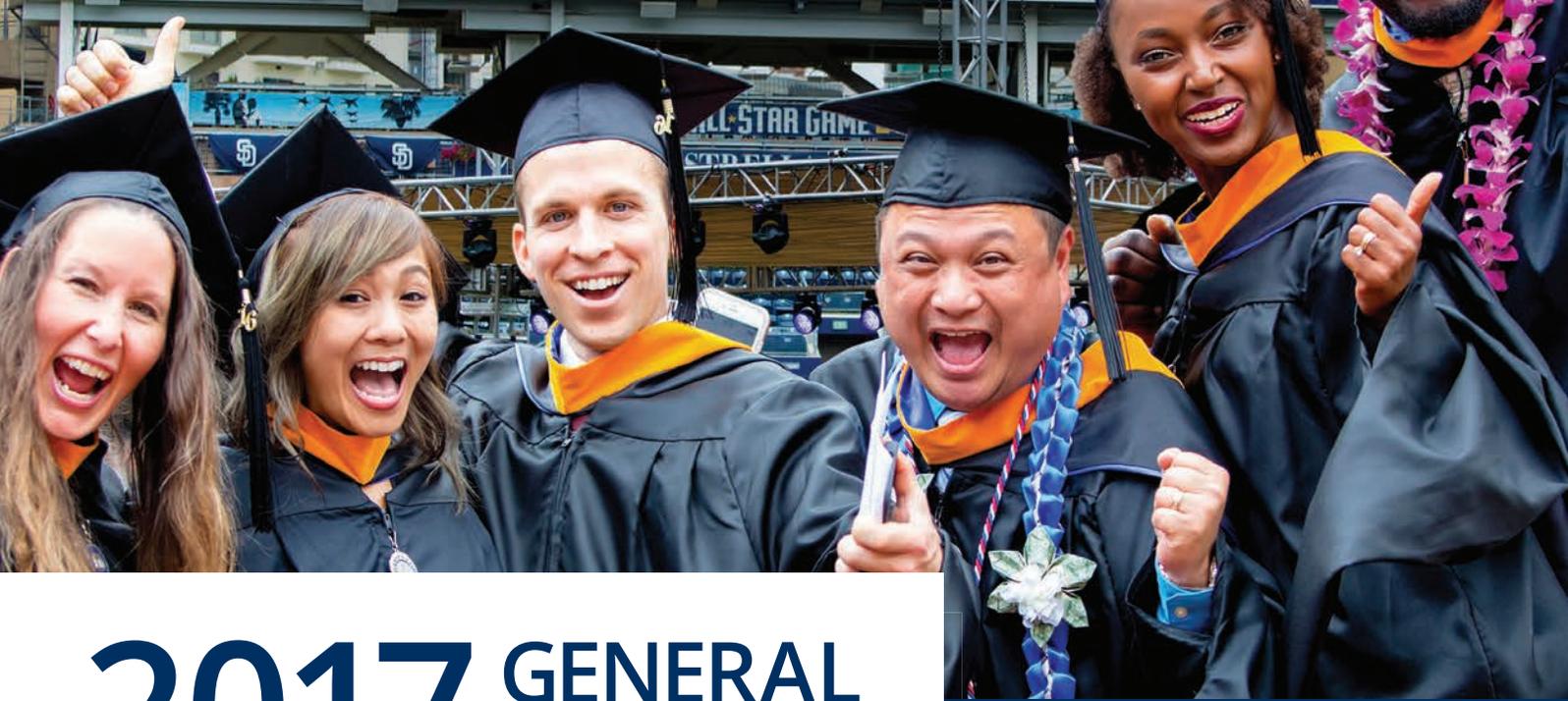


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2017 GENERAL CATALOG

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NATIONAL UNIVERSITY



NATIONAL
UNIVERSITY

2016/2017

GENERAL CATALOG

Volume 80 | September 26, 2016

National University Academic Headquarters

11255 North Torrey Pines Road • La Jolla, CA 92037-1011 • (858) 642-8800





**MICHAEL R.
CUNNINGHAM, Ph.D.**
Chancellor
National University System

MESSAGE FROM THE CHANCELLOR

Dear Student,

It is a great pleasure to welcome you to the National University family of dedicated faculty and staff, an exceptional student body, and over 150,000 alumni. We are excited to support you in reaching your educational goals and we are committed to delivering an exceptional student experience.

National University is a private nonprofit university that has distinguished itself by offering market-relevant degrees through innovative programs that enable graduates to lead effective change in their communities. As part of National University you join an even larger community of students who are part of the National University System. Together we share a common approach to learning and fostering student success while creating new and exciting pathways for your educational future.

Since the creation of the National University System, we continue to build on the foundation that National University laid in 1971 when it began its pioneering work serving adult learners in new and creative formats. Today, NUS is comprised of:

- **National University:** The founding institution, which continues to provide innovative educational solutions to adults and military veterans
- **City University of Seattle:** Emphasizes master's and doctoral degrees, while establishing choice through competency programs
- **John F. Kennedy University:** Focuses on community and social justice, largely through differentiated graduate programs in psychology and law
- **WestMed College:** Promotes education and training for high-demand careers in healthcare
- **The Division of Pre-College Programs:** Caters to the success of the next generation of K-12 learners, through the National University Academy and the National University Virtual High School

Connected by shared values of service and community, the affiliates of the National University System serve students in ways that meet their individual needs through accessibility to high-quality programs that incorporate current research, the latest technological advances, and teachings that are relevant to the real world. The System's network of complementary universities offer pathways for students to attain professional and terminal degrees while recognizing and maximizing the value of faculty, staff, and partners, and maintaining a true commitment to the community.

As graduates can attest, an education from a National University System affiliate provides the skills and knowledge necessary to succeed and lead in today's ever-changing environment.

Thank you for choosing National University and Welcome!

Sincerely,

A handwritten signature in black ink that reads "Michael R. Cunningham". The signature is written in a cursive, flowing style.

Michael R. Cunningham, Ph.D.

NATIONAL

UNIVERSITY





**DAVID W.
ANDREWS, Ph.D.**

President
National University

MESSAGE FROM THE PRESIDENT

Dear Student,

On behalf of the Board of Trustees, faculty, staff, alumni and your fellow students, it is my pleasure to welcome you to National University. We are so pleased that you have chosen to pursue your academic goals with us, and to become part of our transformational community of lifelong learners.

The demand for graduates with a strong academic foundation and superior market-relevant skills has never been stronger. Industries and organizations these days must constantly reinvent themselves as global economic forces and shifting domestic policies create both opportunities and competition. The same goes for us as individuals, and preparing students for today's dynamic, ever-changing workplace is what National University is all about.

Founded in 1971, National University was among the first institutions in the United States to recognize and focus on the unique educational needs of non-traditional learners. Today, National University is the one of the largest, private, nonprofit institution of higher learning in California. The University is unique because of its intensive one-course-per-month format, regional campuses, and flexible degree programs which enable students to complete their degree in an accelerated time frame.

Throughout this catalog, and in every class offered at National University, you will observe a consistent focus on quality and an ongoing commitment to incorporating current subject matter into our curricula. Our goal is to deliver an exceptional student experience, ensuring that the education you receive is among the most rigorous, relevant, and rewarding in higher learning. In addition to our focus on quality, innovation and access, we also believe in encouraging collaborations that serve the public good and weave that into our offerings.

With roots as a technology leader, National University remains focused on providing students state-of-the-art learning experiences, including high-tech classrooms and a library with one of the largest collections of e-books in the United States. The University offers more than 100 programs that are available either completely or partially online, allowing students locally, nationally, and globally to pursue a broad range of degrees and credentials. Remaining true to our mission, we continue to identify new areas for programmatic expansion to meet adult educational needs and workforce demands for our diverse student population.

Our commitment to the exceptional student experience is embodied in our Student Concierge Service which provides a one-stop student service center that is focused on your needs throughout the year. The Student Concierge Service can assist you in many ways, including acting as a liaison with other units in the University, as an advocate for you as you navigate National's processes and programs, and as a central source of quality assurance.

National University is proud of what it has accomplished in the past 45 years, and we look forward to sharing an even more distinguished future with you as we continue to seek new and better ways to address your needs as a student and lifelong learner.

I wish you the best of luck and much success.

Sincerely,

A handwritten signature in cursive script that reads "David W. Andrews". The signature is written in dark ink on a light background.

David W. Andrews, Ph.D.

For More Information

(800) NAT-UNIV (628-8648)

Current Students

(866) NU-ACCESS (682-2237)

Student Concierge Services

(866) NU-ACCESS ext 8900

Visit Us on the Web

www.nu.edu

Note: The University reserves the right to change or modify policies, regulations, curricula, courses, tuition and fees, or any other aspect of its programs described in this catalog at any time.

Not all courses or programs listed in this catalog will be available at every campus or online. Not all facilities, equipment and other resources will be available at every campus.

Catalog Effective Date

September 26, 2016

Accredited By

WASC Senior College and University Commission (WSCUC)
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Alameda, CA 94501
(510) 748-9001
wascsr@wascsenior.org

Approved By

Commission on Teacher Credentialing (CTC)
1900 Capital Avenue
Sacramento, CA 94244

Accredited By

Commission on Collegiate Nursing Education (CCNE)
for the Bachelor of Science in Nursing Program
One Dupont Circle
NW, Suite 530
Washington, D.C. 20036-1120
(202) 463-6930

Accredited By

International Assembly for Collegiate Business Education (IACBE)
for the School of Business and Management
P.O. Box 25217
Overland Park, KS 66225
(913) 631-3009
iacbe@grapevine.net

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CLASS CALENDAR AT A GLANCE

JULY 2016

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
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31						

AUGUST 2016

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SEPTEMBER 2016

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OCTOBER 2016

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NOVEMBER 2016

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DECEMBER 2016

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JANUARY 2017

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FEBRUARY 2017

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MARCH 2017

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MAY 2017

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JUNE 2017

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24	25	26	27	28	29	30

JULY 2017

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23	24	25	26	27	28	29
30	31					

AUGUST 2017

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17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

SEPTEMBER 2017

S	M	T	W	T	F	S
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3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

OCTOBER 2017

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

NOVEMBER 2017

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

DECEMBER 2017

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

 Starting Dates

 Last week / Evaluations

 Vacation week / No classes

 Holiday

CALENDAR AND CLASS SCHEDULES

2016 SUMMER

Summer Break: Sunday, June 26 – Saturday, July 2

Independence Day: Monday, July 4

Summer Quarter Begins: Tuesday, July 5

Labor Day: Monday, September 5

Summer Quarter Ends: Saturday, September 24

2016 FALL

Fall Quarter Begins: Monday, September 26

Thanksgiving: Thursday, November 24 and Friday, November 25

Fall Quarter Ends: Saturday, December 17

Winter Break: Sunday, December 18 – Saturday, January 7

Christmas Eve: Saturday, December 24

Christmas: Sunday, December 25

2017 WINTER

New Year's Day: Sunday, January 1

Winter Quarter Begins: Monday, January 9

Martin Luther King's Birthday: Monday, January 16

President's Day: Monday, February 20

Winter Quarter Ends: Saturday, April 1

2017 SPRING

Spring Break: Sunday, April 2 – Saturday, April 8

Spring Quarter Begins: Monday, April 10

Memorial Day: Monday, May 29

Spring Quarter Ends: Saturday, July 1

Northern Commencement

2017 SUMMER

Summer Break: Sunday, July 2 – Saturday, July 8

Independence Day: Tuesday, July 4

Summer Quarter Begins: Monday, July 10

Labor Day: Monday, September 4

Summer Quarter Ends: Saturday, September 30

2017 FALL

Fall Quarter Begins: Monday, October 2

Thanksgiving: Thursday, November 23 and Friday, November 24

Fall Quarter Ends: Saturday, December 23

Winter Break: Sunday, December 24 – Saturday, January 6

Christmas Eve: Sunday, December 24

Christmas: Monday, December 25

2018 WINTER

New Year's Day: Monday, January 1

Winter Quarter Begins: Monday, January 8

Martin Luther King's Birthday: Monday, January 15

President's Day: Monday, February 19

Winter Quarter Ends: Saturday, March 31

2018 SPRING

Spring Break: Sunday, April 1 – Saturday, April 7

Spring Quarter Begins: Monday, April 9

Memorial Day: Monday, May 28

Spring Quarter Ends: Saturday, June 30

2018 SUMMER

Summer Break: Sunday, July 1 – Saturday, July 7

Independence Day: Wednesday, July 4

Summer Quarter Begins: Monday, July 9

Labor Day: Monday, September 3

Summer Quarter Ends: Saturday, September 29

2018 FALL

Fall Quarter Begins: Monday, October 1

Thanksgiving: Thursday, November 22 and Friday, November 23

Fall Quarter Ends: Saturday, December 22

Winter Break: Sunday, December 23 – Saturday, January 5

Christmas Eve: Monday, December 24

Christmas: Tuesday, December 25

UNDERGRADUATE CLASS SCHEDULE

Undergraduate classes are 4.5 quarter units, 45 contact hours, unless otherwise noted. All online classes begin on Mondays, with the exception of those terms when Monday is a holiday. In these cases, online courses begin on Tuesday. Ending dates vary by program.

- National University's academic year is divided into four twelve-week quarters, each composed of three one-month classes.
- Classes are held two evenings each week from 5:30 to 10 p.m.
- Undergraduate students generally attend two Saturday sessions from 8 a.m. to 12:30 p.m. or 1 p.m. to 5:30 p.m.
- Undergraduate day classes are held either Monday and Wednesday or Tuesday and Thursday from 9 a.m. to 2:30 p.m.
- Eight-week class schedules are listed in SOAR.
- 24 month calendar follows:

WEEKDAY	TIME	SATURDAY SCHEDULE
Monday/Wednesday (8 sessions)	5:30 p.m. - 10 p.m.	8 a.m. - 12:30 p.m. or 1 p.m. - 5:30 p.m. Normally two Saturdays, three Saturdays if weekday holiday makes it necessary.
Tuesday/Thursday (8 sessions)	5:30 p.m. - 10 p.m.	8 a.m. - 12:30 p.m. or 1 p.m. - 5:30 p.m. Normally two Saturdays, three Saturdays if weekday holiday makes it necessary.

ONSITE UNDERGRADUATE CLASS SCHEDULE

Monday and Wednesday

2016 / SUMMER

July 6, 9 (8-12:30), 11, 13, 18, 20, 23 (8-12:30), 25, 27, 30 (8-12:30)
August 1, 3, 8, 10, 13 (8-12:30), 15, 17, 22, 24, 27(1-5:30)
August 29, 31, September 7, 10 (1-5:30), 12, 14, 17 (8-12:30), 19, 21, 24 (8-12:30)

2016 / FALL

September 26, 28, October 3, 5, 8 (8-12:30), 10, 12, 17, 19, 22 (1:30-5)
October 24, 26, 31, November 2, 7, 9, 12 (8-12:30), 14, 16, 19 (8-12:30)
November 21, 23, 28, 30, December 3 (8-12:30), 5, 7, 12, 14, 17 (1-5:30)

2017 / WINTER

January 9, 11, 18, 21 (8-12:30), 23, 25, 28 (1-5:30), 30, February 1, 4 (8-12:30)
February 6, 8, 11 (8-12:30), 13, 15, 22, 25 (8-12:30), 27, March 1, 4 (1-5:30)
March 6, 8, 13, 15, 20, 22, 25 (8-12:30), 27, 29, April 1 (8-12:30)

2017 / SPRING

April 10, 12, 17, 19, 22 (8-12:30), 24, 26, May 1, 3, 6 (1-5:30)
May 8, 10, 13 (8-12:30), 15, 17, 22, 24, 31, June 3 (8-12:30)
June 5, 7, 12, 14, 17 (8-12:30), 19, 21, 26, 28, July 1 (1-5:30)

2017 / SUMMER

July 10, 12, 17, 19, 24, 26, 29 (8-12:30), 31, August 2, 5 (8-12:30)
August 7, 9, 14, 16, 19 (8-12:30), 21, 23, 28, 30, September 2 (1-5:30)
September 6, 9 (8-12:30), 11, 13, 18, 20, 23 (8-12:30), 25, 27, 30 (8-12:30)

2017 / FALL

October 2, 4, 9, 11, 14 (8-12:30), 16, 18, 23, 25, 28 (1-5:30)
October 30, November 1, 6, 8, 13, 15, 18 (8-12:30), 20, 22, 25 (8-12:30)
November 27, 29, December 4, 6, 11, 13, 16 (8-12:30), 18, 20, 23 (1-5:30)

2018 / WINTER

January 8, 10, 17, 20 (8-12:30), 22, 24, 27 (8-12:30), 29, February 3 (8-12:30)
February 5, 7, 10 (8-12:30), 12, 14, 21, 24 (8-12:30), 26, 28, March 3 (1-5:30)
March 5, 7, 12, 14, 17 (8-12:30), 19, 21, 26, 28, 31 (8-12:30)

2018 / SPRING

April 9, 11, 16, 18, 21 (8-12:30), 23, 25, 30, May 1, 3 (1-5:30)
May 7, 9, 12 (8-12:30), 14, 16, 19 (8-12:30), 21, 23, 30, June 2 (8-12:30)
June 4, 6, 11, 13, 16 (8-12:30), 18, 20, 25, 27, 30 (8-12:30)

2018 / SUMMER

July 9, 11, 16, 18, 21 (8-12:30), 23, 25, 30, August 1, 4 (8-12:30)
August 6, 8, 13, 15, 18 (8-12:30), 20, 22, 27, 29, September 1 (8-12:30)
September 5, 10, 12, 15 (8-12:30), 17, 19, 22 (8-12:30), 24, 26, 29 (8-12:30)

2018 / FALL

October 1, 3, 8, 10, 13(8-12:30), 15, 17, 22, 24, 27 (8-12:30)
October 29, 31, November 5, 7, 10 (8-12:30), 19, 21, 24 (8-12:30)
November 26, 28, December 3, 5, 8 (8-12:30), 10, 12, 17, 19, 22 (8-12:30)

ONSITE UNDERGRADUATE CLASS SCHEDULE

Tuesday and Thursday

2016 / SUMMER

July 5, 7, 12, 14, 16 (8-12:30), 19, 21, 26, 28, 30 (1-5:30)
August 2, 4, 9, 11, 16, 18, 20 (8-12:30), 23, 25, 27 (8-12:30)
August 30, September 1, 6, 8, 10 (8-12:30), 13, 15, 20, 22, 24 (1-5:30)

2016 / FALL

September 27, 29, October 4, 6, 11, 13, 15 (8-12:30), 18, 20, 22 (8-12:30)
October 25, 27, November 1, 3, 5 (8-12:30), 8, 10, 15, 17, 19 (1-5:30)
November 22, 29, December 1, 3 (1-5:30), 6, 8, 10 (8-12:30), 13, 15, 17 (8-12:30)

2017 / WINTER

January 10, 12, 17, 19, 24, 26, 28 (8-12:30), 31, February 2, 4 (1-5:30)
February 7, 9, 14, 16, 21, 23, 25 (1-5:30), 28, March 2, 4 (8-12:30)
March 7, 9, 14, 16, 18 (8-12:30), 21, 23, 28, 30, April 1 (1-5:30)

2017 / SPRING

April 11, 13, 18, 20, 25, 27, 29 (8-12:30), May 2, 4, 6 (8-12:30)
May 9, 11, 16, 18, 20 (8-12:30), 23, 25, 30, June 1, 3 (1-5:30)
June 6, 8, 13, 15, 20, 22, 24 (8-12:30), 27, 29, July 1 (8-12:30)

2017 / SUMMER

July 11, 13, 18, 20, 22 (8-12:30), 25, 27, August 1, 3, 5 (1-5:30)
August 8, 10, 15, 17, 22, 24, 26 (8-12:30), 29, 31, September 2 (8-12:30)
September 5, 7, 12, 14, 16 (8-12:30), 19, 21, 26, 28, 30 (1-5:30)

2017 / FALL

October 3, 5, 10, 12, 17, 19, 21 (8-12:30), 24, 26, 28 (8-12:30)
October 31, November 2, 4 (8-12:30), 7, 9, 11 (8-12:30), 14, 16, 21, 25 (1-5:30)
November 28, 30, December 5, 7, 9 (8-12:30), 12, 14, 19, 21, 23 (8-12:30)

2018 / WINTER

January 9, 11, 16, 20 (1-5:30), 23, 25, 30, February 1, 3 (1-5:30)
February 6, 8, 13, 15, 20, 22, 24 (1-5:30), 27, March 1, 3 (1-5:30)
March 6, 8, 13, 15, 20, 22, 24 (1-5:30), 27, 29, 31 (1-5:30)

2018 / SPRING

April 10, 12, 17, 19, 24, 26, 28 (8-12:30), May 1, 3, 5 (1-5:30)
May 8, 10, 12 (1-5:30), 15, 17, 22, 24, 29, 31, June 2 (1-5:30)
June 5, 7, 12, 14, 19, 21, 23 (8-12:30), 26, 28, 30 (1-5:30)

2018 / SUMMER

July 10, 12, 17, 19, 24, 26, 28 (8-12:30), 31, August 2, 4 (1-5:30)
August 7, 9, 14, 16, 21, 23, 25 (8-12:30), 28, 30, September 1 (1-5:30)
September 4, 6, 11, 13, 18, 20, 22 (1-5:30), 25, 27, 29 (1-5:30)

2018 / FALL

October 2, 4, 9, 11, 16, 18, 20 (8-12:30), 23, 25, 27 (1-5:30)
October 30, November 3 (8-12:30), 6, 8, 13, 15, 17 (8-12:30), 20, 24 (1-5:30)
November 27, 29, December 4, 6, 11, 13, 15 (8-12:30), 18, 20, 22 (1-5:30)

GRADUATE CLASS SCHEDULE

Graduate classes are 4.5 quarter units, 40 contact hours, unless otherwise noted. All online classes begin on Mondays, with the exception of those terms when Monday is a holiday. In these cases, online courses begin on Tuesday. Ending dates vary by program.

- National University's academic year is divided into four twelve-week quarters, each composed of three one-month classes.
- Classes are held two evenings each week from 5:30 to 10 p.m.
- Graduate students meet for a final session on the last Saturday of the four-week term, either from 8:30 a.m. to 12:30 p.m. or 1 p.m. to 5 p.m.
- Eight-week class schedules are listed in SOAR.
- 24 month calendar follows:

WEEKDAY	TIME	SATURDAY SCHEDULE
Monday/Wednesday (8 sessions)	5:30 p.m. - 10 p.m.	8 a.m. - 12:30 p.m. or 1 p.m. - 5:30 p.m. Normally two Saturdays, three Saturdays if weekday holiday makes it necessary.
Tuesday/Thursday (8 sessions)	5:30 p.m. - 10 p.m.	8 a.m. - 12:30 p.m. or 1 p.m. - 5:30 p.m. Normally two Saturdays, three Saturdays if weekday holiday makes it necessary.

ONSITE GRADUATE CLASS SCHEDULE

Monday and Wednesday

2016 / SUMMER

July 6, 9 (8-12:30), 11, 13, 18, 20, 25, 27, 30 (8:30-12:30)
August 1, 3, 8, 10, 15, 17, 22, 24, 27 (1-5)
August 29, 31, September 7, 12, 14, 17 (8-12:30), 19, 21, 24 (8:30-12:30)

2016 / FALL

September 26, 28, October 3, 5, 10, 12, 17, 19, 22 (1-5)
October 24, 26, 31, November 2, 7, 9, 14, 16, 19 (8:30-12:30)
November 21, 23, 28, 30, December 5, 7, 12, 14, 17 (1-5)

2017 / WINTER

January 9, 11, 18, 23, 25, 28 (1-5:30), 30 February 1, 4 (8:30-12:30)
February 6, 8, 11 (8-12:30), 13, 15, 22, 27, March 1, 4 (1-5)
March 6, 8, 13, 15, 20, 22, 27, 29 April 1 (8:30-12:30)

2017 / SPRING

April 10, 12, 17, 19, 24, 26, May 1, 3, 6 (1-5)
May 8, 10, 13 (8:00-12:30), 15, 17, 22, 24, 31, June 3 (8:30-12:30)
June 5, 7, 12, 14, 19, 21, 26, 28, July 1 (1-5)

2017 / SUMMER

July 10, 12, 17, 19, 24, 26, 31 August 2, 5 (8:30-12:30)
August 7, 9, 14, 16, 21, 23, 28, 30, September 2 (1-5)
September 6, 9 (8-12:30), 11, 13, 18, 20, 25, 27, 30 (8:30-12:30)

2017 / WINTER

October 2, 4, 9, 11, 16, 18, 23, 25, 28 (1-5),
October 30, November 1, 6, 8, 13, 15, 20, 22, 25 (8:30-12:30)
November 27, 29, December 4, 6, 11, 13, 18, 20, 23 (1-5)

2018 / WINTER

January 8, 10, 17, 22, 24, 27 (8-12:30), 29, 31, February 3 (8-12:30)
February 5, 7, 10 (8-12:30), 12, 14, 21, 26, 28, March 3 (8-12:30)
March 5, 7, 12, 14, 19, 21, 26, 28, 31 (8-12:30)

2018 / SPRING

April 9, 11, 16, 18, 23, 25, 30, May 1, 3 (8:30-12:30)
May 7, 9, 14, 16, 19 (8:30-12:30), 21, 23, 30, June 2 (8-12:30)
June 4, 6, 11, 13, 18, 20, 25, 27, 30 (8:30-12:30)

2018 / SUMMER

July 9, 11, 16, 18, 23, 25, 30, August 1, 4 (8-12:30)
August 6, 8, 13, 15, 20, 22, 27, 29, September 1 (8-12:30)
September 5, 10, 12, 15 (8-12:30), 17, 19, 24, 26, 29 (8-12:30)

2018 / FALL

October 1, 3, 8, 10, 15, 17, 22, 24, 27 (8-12:30)
October 29, 31, November 5, 7, 12, 14, 19, 21, 24 (8-12:30)
November 26, 28, December 3, 5, 10, 12, 17, 19, 22 (8-12:30)

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Tuesday and Thursday

2016 / SUMMER

July 5, 7, 12, 14, 19, 21, 26, 28, 30 (1-5)
August 2, 4, 9, 11, 16, 18, 23, 25, 27 (8:30-12:30)
August 30, September 1, 6, 8, 13, 15, 20, 22, 24 (1-5)

2016 / FALL

September 27, 29, October 4, 6, 11, 13, 18, 20, 22 (8:30-12:30)
October 25, 27, November 1, 3, 8, 10, 15, 17, 19 (1-5)
November 22, 29, December 1, 6, 8, 10 (8-12:30), 13, 15, 17 (8:30-12:30)

2017 / WINTER

January 10, 12, 17, 19, 24, 26, 31, February 2, 4 (1-5)
February 7, 9, 14, 16, 21, 23, 28, March 2, 4 (8:30-12:30)
March 7, 9, 14, 16, 21, 23, 28, 30, April 1 (1-5)

2017 / SPRING

April 11, 13, 18, 20, 25, 27, May 2, 4, 6 (8:30-12:30)
May 9, 11, 16, 18, 23, 25, 30, June 1, 3 (1-5)
June 6, 8, 13, 15, 20, 22, 27, 29, July 1 (8:30-12:30)

2017 / SUMMER

July 11, 13, 18, 20, 25, 27, August 1, 3, 5 (1-5)
August 8, 10, 15, 17, 22, 24, 29, 31, September 2 (8:30-12:30)
September 5, 7, 12, 14, 19, 21, 26, 28, 30 (1-5)

2017 / FALL

October 3, 5, 10, 12, 17, 19, 24, 26, 28 (8:30-12:30)
October 31, November 2, 4 (8-12:30), 7, 9, 14, 16, 21, 25 (1-5)
November 28, 30, December 5, 7, 12, 14, 19, 21, 23 (8:30-12:30)

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January 9, 11, 16, 18, 23, 25, 30, February 1, 3 (1-5)
February 6, 8, 13, 15, 20, 22, 27, March 1, 3 (1-5)
March 6, 8, 13, 15, 20, 22, 27, 29, 31 (1-5)

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April 10, 12, 17, 19, 24, 26, May 1, 3, 5 (1-5)
May 8, 10, 15, 17, 22, 24, 29, 31, June 2 (1-5)
June 5, 7, 12, 14, 19, 21, 26, 28, 30 (1-5)

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July 10, 12, 17, 19, 24, 29, 31, August 2, 4 (1-5)
August 7, 9, 14, 16, 21, 23, 28, 30, September 1 (1-5)
September 4, 6, 11, 13, 18, 20, 25, 27, 29 (1-5)

2018 / FALL

October 2, 4, 9, 11, 16, 18, 23, 25, 27 (1-5)
October 30, November 3 (8:30-12:30), 6, 8, 13, 15, 20, 24 (1-5)
November 27, 29, December 4, 6, 11, 13, 18, 20, 22 (1-5)

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Public Affairs and Communications Consultant, Rodriguez & Company

Mr. Jay Stone

Vice President, Van Scoyoc Associates, Inc.

Mr. Thomas Topuzes

President and CEO, Thomas Topuzes & Associates, LLC

NATIONAL UNIVERSITY SYSTEM ADMINISTRATION

Dr. Michael R. Cunningham

Chancellor, The National University System

Mr. Chris Graham

Vice Chancellor, External Relations

Mr. Brian Jensen

Interim Vice Chancellor, Pre-College Programs

Mr. Christopher T. Krug

Vice Chancellor, Information Technology

Dr. Mario Martinez

Vice Chancellor, Strategy and Innovation

Ms. Michelle Bello

Associate Vice Chancellor, Finance

Ms. Julie Lanthier Bandy

Associate Vice Chancellor, Marketing

Ms. Carol A. Tiernan

Associate Vice Chancellor, Marketing

NATIONAL UNIVERSITY ADMINISTRATION

Dr. David Andrews

President, National University

Dr. Gangaram Singh

Provost

Dr. Joseph Hoey

Associate Provost

Dr. Nancy Rohland-Heinrich

Executive Vice President

Dr. Robert Benson

Vice President, Office of International Affairs

Dr. Brandon Jouganatos

Vice President, Enrollment Management

Dr. Joseph Zavala

Vice President, Student Services

Dr. Thomas MacCalla

Director, National University Community Research Institute and
University Vice President

Dr. John A. Cicero

Dean, School of Engineering and Computing

Dr. Daniel P. Donaldson

Dean, School of Professional Studies

Dr. Kenneth Goldberg

Interim Dean, School of Business and Management

Dr. Judy Mantle

Dean, Sanford College of Education

Dr. Gloria McNeal

Dean, School of Health and Human Services

Dr. Carol P. Richardson

Dean, College of Letters and Sciences

Dr. Jason Aleksander

Associate Dean, College of Letters and Sciences

Dr. Donna Elder

Associate Dean, Sanford College of Education

Mr. Jonathon Chillas

Associate Vice President, Data Analytics

Mr. Louis Cruz

Associate Vice President, Regional Operations, Southern Region

Dr. Bernell Hirning

Interim Associate Vice President, Regional Operations, Northern Region

Ms. Jane Sawyer

Associate Vice President, Human Resources

Mr. Vernon Taylor

Associate Vice President, Regional Operations, Military and
Veteran's Programs

Dr. Mahvash Yadegarpour

Associate Vice President, Regional Operations, Los Angeles

Ms. Stephanie Allen

Associate Regional Dean, San Bernardino and Ontario

Ms. Karen Challgren

Associate Regional Dean, North San Diego County

Mr. Ravinder Dhaliwal

Associate Regional Dean, San Jose

Ms. Chermaine Harrell

Associate Regional Dean, Military Bases and Veteran's Affairs

Ms. Maheba Merhi

Associate Regional Dean, Nevada

Mr. Mark Moses

Associate Regional Dean, South San Diego County

Ms. Lorelei Newman

Associate Regional Dean, Orange County

Mr. Matthew Nygren

Associate Regional Dean, Enrollment Center

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DEGREE PROGRAMS OFFERED AT NATIONAL UNIVERSITY

UNDERGRADUATE DEGREES

Associate of Arts

with Majors in:

- General Education 
 - with a Concentration in:
 - » Business Administration 
- Creative Writing 

Associate of Science

with Majors in:

- Alcohol and Drug Abuse Counseling
- Business 
- Engineering Technology 
- Human Biology
- Paralegal Studies

Bachelor of Arts

with Majors in:

- Digital Journalism 
- Digital Media Design 
- Early Childhood Development with a Preliminary Multiple Subjects Teaching Credential (CA) 
- Early Childhood Education 
 - with Concentrations in:
 - » Early Childhood Administration 
 - » Infant and Toddler
 - » Teacher Education 
- English 
 - with a Concentration in:
 - » Creative Writing 
- English with Preliminary Single Subject Teaching Credential (CA) 
- English with Single-Subject Matter Preparation 
- Film Arts 
- General Studies 
- Global Studies 
- Health Sciences with a Preliminary Single Subject Teaching Credential (California) 
- History 
- Integrated Marketing Communication 
- Integrative Psychology 
- Interdisciplinary Studies 
- Interdisciplinary Studies with a Preliminary Multiple Subjects Teaching Credential (CA) 
 - with a Concentration in:
 - » STEM (Science, Technology, Engineering, Mathematics)
- Management 
 - with Concentrations in:
 - » Alternative Dispute Resolution 
 - » Business Law 

- » Economics 
- » Entrepreneurship 
- » Human Resource Management 
- » Marketing 
- » Project Management 
- Mathematics with a Preliminary Single Subject Teaching Credential (CA) 
- Political Science 
- Pre-Law Studies 
- Psychology 
- Social Science with a Preliminary Single Subject Teaching Credential (California) 
- Sociology 
- Spanish
 - with Optional:
 - » Preliminary Single Subject Teaching Credential (CA) 
- Sport Psychology 
- Strategic Communications 

Bachelor of Business Administration

with Concentrations in:

- » Accountancy 
- » Alternative Dispute Resolution 
- » Business Law 
- » Economics 
- » Entrepreneurship 
- » Finance 
- » Human Resource Management 
- » Marketing 
- » Project Management 

Bachelor of Public Administration

Bachelor of Science

with Majors in:

- Accountancy 
 - with a Concentration in:
 - » Accounting Professional Skills
- Allied Health 
 - with a Concentration in:
 - » Health Informatics
- Biology
- Clinical Lab Science 
- Computer Science 
- Construction Engineering Technology 
- Construction Management 
- Criminal Justice Administration 
- Cybersecurity 
 - with Concentrations in:
 - » Computer Network Defense 
 - » Digital Forensics 

- Electrical and Computer Engineering 
- Financial Management 
- Healthcare Administration 
- Homeland Security and Emergency Management 
- Information Systems 
 - with Concentrations in:
 - » Business Management
 - » Information Management
- Information Technology Management 
- Manufacturing Design Engineering 
- Mathematics 
 - with a Concentration in:
 - » Single-Subject Teaching
- Nursing (Generic Entry)
- Nursing (Second Bachelor Degree)
- Nursing (Licensed Vocational Nurse/ Licensed Practical Nurse to BSN)
- Nursing (RN Completion)
- Organizational Behavior 
- Organizational Leadership 
- Paralegal Studies
- Public Health 
- Radiation Therapy

Foreign Credential Bridge Program

DEGREE PROGRAMS OFFERED AT NATIONAL UNIVERSITY

GRADUATE DEGREES

Global Master of Business Administration (in Spanish)

Master of Accountancy

- with a Specialization in:*
- » Accounting Professional Skills

Master of Arts

with Fields of Study in:

- Cause Leadership 
- Counseling Psychology
with Specializations in:
 - » Licensed Professional Clinical Counseling
 - » Marriage and Family Therapy
- Digital Journalism 
- Education
with Specializations in:
 - » Best Practices 
 - » Education Technology 
 - » e-Teaching and Learning 
 - » Teacher Leadership 
 - » Teaching Mathematics 
 - » US Education in a Global Context
- English 
with Specializations in:
 - » Gothic Studies
 - » Rhetoric
- Film Studies 
- Gerontology 
- History 
- Human Behavior 
- Human Resource Management 
with Specializations in:
 - » Organizational Leadership 
- Performance Psychology 
- Special Education
with Specializations in:
 - » Autism 
 - » Early Childhood Special Education 
 - » Language and Academic Development
 - » Mild/Moderate 
 - » Moderate/Severe 
- Strategic Communications 

Master of Business Administration

- with Specializations in:*
- » Accounting Professional Skills 
 - » Financial Management 
 - » Human Resource Management 
 - » Integrated Marketing Communication 
 - » International Business 

- » Management Accounting 
- » Marketing 
- » Mobile Marketing and Social Media 
- » Organizational Leadership 
- » Supply Chain Management 

Master of Criminal Justice

Master of Education with a Preliminary Multiple or Single Subject Teaching Credential and Internship Option (California)

- with Specializations in:*
- » Best Practices 
 - » e-Teaching and Learning
 - » Educational Technology 
 - » Teacher Leadership 
 - » Teaching Mathematics 
 - » US Education in a Global Context

Master of Fine Arts

with Fields of Study in:

- Creative Writing 
- Digital Cinema Production 
- Professional Screenwriting 

Master of Forensic Sciences

with Specializations in:

- » Criminalistics
- » Investigation 

Master of Global Management

Master of Healthcare Administration

Master of Public Administration

with Specializations in:

- » Human Resource Management 
- » Organizational Leadership 

Master of Public Health

with Specializations in:

- » Health Promotion 
- » Healthcare Administration 
- » Mental Health 

Master of Science

with Fields of Study in:

- Advanced Teaching Practices 
with Specializations in:
 - » Advanced Assessment Literacy
 - » Advanced Digital Literacy
 - » Advanced Instructional Literacy
 - » National Board Certified Teaching Leadership
 - » Reading and Literacy Added Authorization
- Applied Behavioral Analysis

- Applied School Leadership with Preliminary Administrative Services Credential Option 
- Biology
- Business Analytics
- Clinical Affairs 
- Clinical Regulatory Affairs 
- Complementary and Integrative Healthcare 
- Computer Science 
with Specializations in:
 - » Advanced Computing 
 - » Database Engineering 
 - » Software Engineering 
- Cyber Security 
with Specializations in:
 - » Ethical Hacking and Pen Testing 
 - » Information Assurance and Security Policy 
- Data Analytics 
- Educational Administration with a Preliminary Administrative Services Credential Option (CA) 
- Educational Counseling 
- Educational and Instructional Technology 
- Electrical Engineering
with Specializations in:
 - » Computer Engineering
 - » Wireless Communication
- Engineering Management 
with Specializations in:
 - » Enterprise Architecture
 - » Project Management 
 - » Systems Engineering 
 - » Technology Management 
- Health Informatics 
- Health and Life Science Analytics 
- Higher Education Administration 
- Homeland Security and Emergency Management 
- Information Technology Management
- Juvenile Justice Studies
- Management Information Systems 
- Mathematics for Educators
- Nurse Anesthesia
- Nursing
with Specializations in:
 - » Family Nurse Practitioner
 - » Nursing Administration 
 - » Nursing Informatics 
 - » Psychiatric-Mental Health Nurse Practitioner – Lifespan
- Organizational Leadership 
with a Specialization in:
 - » Community Development 

DEGREE PROGRAMS OFFERED AT NATIONAL UNIVERSITY

- School Psychology with PPSP Credential
- Special Education 
with Specializations in:
 - » Language and Academic Development
 - » Mild/Moderate Disabilities 
 - » Moderate/Severe Disabilities 
- Sustainability Management 

NEVADA PROGRAMS

(Please see Nevada section of this catalog)

- Bachelor of Arts in Elementary Education with Nevada Elementary Licensure
- Bachelor of Arts in Mathematics Education with Nevada Secondary Licensure
- Bachelor of Arts in English Education with Nevada Secondary Licensure
- Bachelor of Arts in Special Education with Nevada Licensure
- Master of Arts in Counseling Psychology
- Master of Education with Nevada Elementary Licensure
- Master of Education with Nevada Secondary Licensure
- Master of Science in Educational Administration with Nevada Endorsement as Administrator of a School Option
- Master of Science in Special Education with Nevada Licensure and Endorsement for Generalist Resource Room

UNDERGRADUATE CERTIFICATES

- Accountancy
- Alcohol and Drug Abuse Counseling
- Alternative Dispute Resolution
- Basic Human Resource Management
- Basic Sales and Marketing
- Cisco Certified Network Associate (CCNA) Exploration
- Criminal Justice Administration
- Finance
- Human Resource Management
- LVN “30 Unit” Option
- Marketing
- Subject Matter Authorization in Introductory Mathematics for Single or Multiple Subject Teaching Credential

GRADUATE CERTIFICATES

- Accountancy
- Applied Behavior Analysis
- Autism
- Best Practices
- Clinical Lab Science Didactic Certificate
- e-Teaching & Learning
- Early Childhood Education
- Early Childhood Special Education Add-On Authorization
- Educational Technology
- Forensic and Crime Scene Investigations
- Health Coaching
- Health Informatics
- Integrative Health
- Lean Six Sigma (Green Belt and Black Belt)
- National Board Certified Teacher Leadership
- Project Management
- Reading and Literacy Certificate (Added Authorization)
- Teaching Mathematics
- US Education in a Global Context

CALIFORNIA CREDENTIAL PROGRAMS

Approved by the Commission on Teacher Credentialing (CTC)

- Clear Administrative Services Credential Induction Program 
- Clear Education Specialist Teaching Credential 
- Early Childhood Special Education Add-On Authorization
- Preliminary Administrative Services Credential 
- Preliminary Education Specialist Authorization Teaching Credential
- Preliminary Multiple Subject Teaching Credential with Internship Option
- Preliminary Single Subject Teaching Credential with Internship Option
- Pupil Personnel Services Credential School Counseling (PPSC)
- University Internship Pupil Personnel Services Credential School Counseling (PPSC)
- Pupil Personnel Services Credential School Psychology (PPSP)

 Entire program can be completed online.

 On-site program with possible online courses or prerequisites.

 Online program with residency in Los Angeles.

Not all courses or programs are available at every campus.

Consult an admissions advisor for online course availability.



GENERAL INFORMATION

Mission Statement

National University is dedicated to making lifelong learning opportunities accessible, challenging, and relevant to delivering an exceptional student experience by providing superior programs and services that are market relevant and result in meaningful learning.

National University's central purpose is to promote continuous learning by offering a diversity of instructional approaches, by encouraging scholarship, by engaging in collaborative community service, and by empowering its constituents to become responsible citizens in an interdependent, pluralistic, global community.

Institutional Learning Outcomes

1. Apply information literacy skills necessary to support continuous, lifelong learning.
2. Communicate effectively orally and in writing, and through other appropriate modes of expression.
3. Display mastery of knowledge and skills in a discipline.
4. Demonstrate cultural and global awareness to be responsible citizens in a diverse society.
5. Demonstrate professional ethics and practice academic integrity.
6. Utilize research and critical thinking to solve problems.
7. Use collaboration and group processes to achieve a common goal.

General Description

Dedicated to educational access and academic excellence, National University provides challenging and relevant programs that are student-centered, success-oriented, and have a proven balance of theoretical and practical attributes. Additionally, students are encouraged to take advantage of National's unique student services options designed to support students throughout their career. National University is geographically dispersed, with its academic and administrative headquarters located in La Jolla, California. These departments include the Office of the President, Vice Presidents, Provost, School Deans and Department Chairs, and Enrollment Management.

From its administrative headquarters, National University supports a variety of campuses, making learning convenient for its students.

Accreditation/Memberships

Since 1977, National University has been accredited by the WASC Senior College and University Commission (WSCUC).

Campuses

Bakersfield
Carlsbad
Costa Mesa
Fresno
Henderson, Nevada
La Mesa
Los Angeles
Ontario
Oxnard
Rancho Bernardo
Rancho Cordova
Redding
San Bernardino
San Jose
South Bay
Spectrum Business Park
Stockton
Technology & Health Sciences
Center – Kearny Mesa
Woodland Hills

Military Learning Centers

Fleet AntiSubmarine Warfare Training
Marine Base Camp Pendleton
Marine Corps Air Station Miramar
Marine Corps Recruit Depot San Diego
Naval Base Coronado
Naval Air Station North Island
Naval Base San Diego
Naval Medical Center
Twentynine Palms Marine Air Ground

Online Information Centers

Long Beach, California
Pleasanton, California
Quantico, Virginia
Santa Ana, California
Temecula, California

The University is also:

- Accredited by the National Council on the Accreditation of Teacher Education (NCATE) for educator preparation programs
- Approved by the Commission on Teacher Credentialing (CTC)
- Accredited by the California Board of Registered Nursing (BRN)
- Approved by the Commission on Collegiate Nursing Education (CCNE) for the offering of the Bachelor of Science in Nursing Program
- Designated as a Center of Academic Excellence in Cyber Defense Education (CAE CDE) for the Master of Science in Cyber Security program
- Approved by the American Bar Association (ABA) for the offering of the Bachelor of Science in Paralegal Studies, Associate of Science in Paralegal Studies, and Paralegal Specialist Certificates
- Approved by the Association of Commercial Diving Educators (ACDE) for the offering of the Professional Certificate in Marine Technology
- Approved by the California Association of Alcoholism and Drug Abuse Counselors (CCADAC) for the offering of the Associate of Science in Alcohol and Drug Abuse Counseling
- Accredited by the Council on Education in Public Health (CEPH) for the offering of the Master of Public Health
- Accredited by the Council on Accreditation for Nurse Anesthesia Educational Programs (COA) for the offering of the Master of Science in Nurse Anesthesia
- Accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT) for the BS Radiation Therapy program
- Approved by the Nevada State Department of Education
- Certified by the Society of Human Resource Management for the Masters of Arts in Human Resource Management
- A member of the American Association of Colleges for Teacher Education (AACTE)
- Approved to train veterans under Title 38, U.S. Code (GI Bill)
- Approved for student financial aid by the Department of Education
- A member of the Council of Colleges of Arts and Sciences (CCAS)
- Authorized under federal law to enroll non-immigrant alien students
- A member of the American Association of Intensive English Programs (AAIEP) through its American Language and Intercultural Studies program
- A participant in the Servicemembers Opportunity College network (SOC)
- Approved for Army, Air Force, Coast Guard, Marine Corps, Navy and U.S. government tuition assistance. Students in San Diego, Los Angeles, and Rancho Cordova who qualify may enroll in the Army or Air Force ROTC cross-enrollment programs.

National University has received specialized accreditation for its business programs through the International Assembly for Collegiate Business Education (IACBE), located at 11374 Strang Line Road, Lenexa, Kansas, USA. The business programs in the following degrees are accredited by the IACBE:

- **Master of Accountancy**
 - » *Specialization in Accounting Professional Skills*
- **Master of Arts**
 - Human Resource Management
 - » *Specialization in Organizational Leadership*
- **Master of Business Administration**
 - » *Specialization in Accounting Professional Skills*
 - » *Specialization in Financial Management*
 - » *Specialization in Human Resource Management*
 - » *Specialization in Integrated Marketing Communication*
 - » *Specialization in International Business*
 - » *Specialization in Management Accounting*

- » *Specialization in Marketing*
- » *Specialization in Mobile Marketing and Social Media*
- » *Specialization in Organizational Leadership*
- » *Specialization in Supply Chain Management*

- **Master of Science**

- Organizational Leadership
 - » *Specialization in Community Development*
- Management Information Systems

- **Bachelor of Arts**

- Management
 - » *Concentration in Alternative Dispute Resolution*
 - » *Concentration in Business Law*
 - » *Concentration in Economics*
 - » *Concentration in Entrepreneurship*
 - » *Concentration in Human Resource Management*
 - » *Concentration in Marketing*
 - » *Concentration in Project Management*

- **Bachelor of Business Administration**

- » *Concentration in Accountancy*
- » *Concentration in Alternative Dispute Resolution*
- » *Concentration in Business Law*
- » *Concentration in Economics*
- » *Concentration in Entrepreneurship*
- » *Concentration in Finance*
- » *Concentration in Human Resource Management*
- » *Concentration in Marketing*
- » *Concentration in Project Management*

- **Bachelor of Science**

- Accountancy
 - » *Specialization in Accounting Professional Skills*
- Financial Management
- Organizational Leadership

Regulatory Disclosures

The following disclosures are required by various state regulatory authorities:

Arkansas

Arkansas Higher Education Coordinating Board certification does not constitute an endorsement of any institution or program. Such certification merely indicates that certain criteria have been met as required under the rules and regulations implementing institutional and program certification as defined in Arkansas Code §6-61-301.

Minnesota

National University is registered as a Private Institution with the Minnesota Office of Higher Education pursuant to sections 136A.61 to 136A.71. Registration is not an endorsement of the institution. Credit earned at institution may not transfer to all other institution.

HIS 233 and HIS 234 courses are not recognized as Humanities classes in Minnesota. Minnesota residents must be required to complete other Humanities classes to satisfy the Minnesota Degree Standards.

ILR 260 is not recognized as an English or Communication class in Minnesota. Minnesota residents must be required to complete other English or Communication class to satisfy the Minnesota Degree Standards.

Texas

National University has permission to operate in the state of Texas, and has been regionally accredited by the WASC Senior College and University Commission since 1977. The Texas State Board of Accountancy's new regulations preclude National University graduates from being qualified applicants for the CPA exam in Texas.

State Licensing

In compliance with United States Department of Education State Authorization Regulation in Section 600.9 Program Integrity Rule, National University has made a "good faith effort" in pursuing state authorization from all states and territories within the U.S.

National University will continue to monitor developments in state laws in each state in which it enrolls students, and, if authorization or licensure is or becomes necessary, will obtain such additional approvals.

Alabama (*approved*)

Alaska (*exemption filed*)

Arizona (*exempt*)

Arkansas (*approved*)

California (*exemption filed*)

Colorado (*exempt*)

Connecticut (*exempt*)

District of Columbia (*exempt*)

Florida (*exempt*)

Georgia (*approved*)

Hawaii (*approved*)

Idaho (*exemption filed*)

Illinois (*exemption filed*)

Kentucky (*approved*)

Louisiana (*approved*)

Maine (*exempt*)

Massachusetts (*approved*)

Minnesota (*approved*)

Mississippi (*exempt*)

Montana (*approved*)

Nebraska (*exempt*)

Nevada (*approved*)

New Hampshire (*exempt*)

New Jersey (*exempt*)

New York (*exempt*)

North Dakota (*pending*)

Ohio (*exempt*)

Oregon (*approved only for the NU NBCT program*)

Pennsylvania (*approved*)

South Carolina (*exempt*)

South Dakota (*exemption filed*)

Tennessee (*exempt*)

Texas (*approved*)

Utah (*approved*)

Vermont (*exemption filed*)

Washington (*exempt*)

West Virginia (*exempt*)

Wyoming (*approved*)

For states with an approved status, please be aware that individual programs may not be approved or may be pending approval by a state licensing authority and cannot be offered to students residing in that state.

Granting of Credit

The academic year is divided into four 12-week quarters, each comprised of three one-month classes (refer to the Financial Aid section for a definition of the academic year used for financial aid calculations). Students may enroll in classes

in most programs any month of the year. National University awards credit in quarter units. Under the current policy, 4.5 units of credit are awarded for most courses. A unit of credit is based upon the hours of classroom instruction for each course and the hours that a typical student reasonably should expect to devote preparing for each hour of class. An undergraduate course requires 45 hours of classroom instruction and an undergraduate student generally is expected to devote two hours or more in outside preparation for each hour of class. Undergraduate courses are typically scheduled for a one-month period, generally for 4.5 hours on two weekdays and 4.5 hours on two Saturdays during the month. A graduate course requires 40 hours of classroom instruction and a graduate student generally is expected to devote three hours or more in outside preparation for each hour of class. Graduate courses are typically scheduled for a one-month period, generally 4.5 hours two weekday nights with a 4.5-hour session on one Saturday. Additional contact hour information is located in the National University Credit Hour Policy available at www.nu.edu.

FACULTY

There are three tiers of faculty at National University—full-time and part-time, which includes associate and adjunct.

Full-Time Faculty are members of the University whose primary responsibilities include teaching, scholarship, service, intellectual coordination with the part-time faculty, professional development, student advising and participation in the University's governance.

Associate Faculty are teachers who make a half-time commitment to the University faculty over the course of the year. They are contracted to teach a designated number of courses per year, advise students on course, program, or career-related issues, participate in departmental, school, and University activities, and engage in scholarship relevant to their teaching.

Adjunct Faculty are teachers whose principal professional commitments are elsewhere in their fields, but who are contracted to teach a designated number of courses per year, advise students on course-related topics, and maintain currency in their professional and disciplinary fields. Adjunct faculty serve initially as adjunct and may be promoted over time to Core Adjunct and Certified Core Adjunct.

All faculty hold advanced degrees in their areas of expertise and are respected professionals with many years of career experience. When hired, they receive an orientation to the University as well as training in the various learning modalities used at National University. Ongoing professional development occurs throughout the academic year.

Familiarity with University Regulations

When signing an enrollment agreement, students acknowledge receipt of the General Catalog and agree to abide by the policies, rules, and regulations of the University. Upon marking the checkbox on the online enrollment form, constituting a virtual signature, students acknowledge that they are bound by the policies, rules, and regulations of the University contained in this catalog. This publication includes academic standards and the general requirements for graduation. Lack of knowledge or familiarity with the information contained in the General Catalog does not serve as an excuse for noncompliance or violations. The University provides assistance in the form of academic advising, but students are responsible for meeting the published requirements of their respective programs.

General Fees

Fees are non-refundable. All records and services are withheld from students who have any outstanding financial obligations to the University or have defaulted on a Title IV loan at the University. Effective May 1, 2011 National University began reporting student account defaults to credit reporting agencies.

Application Fee	\$60
<i>(For students entering any degree program. This fee is charged to all but international students.)</i>	
Non-Degree Application Fee	\$60
<i>(For students entering any non-degree program.)</i>	
International Student Application Fee	\$65
International Student Orientation Fee	\$50
Re-admission Fee	\$60
<i>(For students who have been inactive for more than 12 months or who are entering another degree program.)</i>	

Graduation Processing Fee	\$100
<i>(Charged to all students before graduation.)</i>	
Transcript Fee	\$5
<i>(Per copy fee for each transcript—additional \$2 surcharge applicable to e-transcripts)</i>	
Returned Check Charge	\$20
Reinstatement Fee	\$100
<i>(Charged only to those students with unpaid delinquent financial obligations.)</i>	
Late Payment Fee	\$25
<i>(Charged when tuition payment has not been received by the first night of class.)</i>	
Credit by Examination Fee	\$100
<i>(Per examination, per course.)</i>	
Challenge Examinations Fee	\$50
<i>(Per examination charge, course waiver, no credit.)</i>	

Nursing Fees

NSG 403 Course Fee	\$2,450
SIMS Lab Fee	\$350
<i>(Per make-up session.)</i>	
Nursing Clinical Laboratory (NSG) Fee	\$675 per course
ORI 10 Nursing Course Fee	\$250
E-Portfolio	\$35 per year
E-Portfolio Renewal Fee	\$30 per year

MA in Digital Journalism Fees

iPad Mini Package	\$900
<i>(Including the device and related software.)</i>	

MFA Digital Cinema and Professional Screenwriting Fees

MDC 688 Course Fee	\$1,250
MDC 689 Course Fee	\$550
MDC 695 Course Fee	\$300
SCR 675 Course Fee	\$750
SCR 670P Course Fee	\$250
SCR 690 Course Fee	\$350
SCR 691 Course Fee	\$350

Master of Science in Nursing Fees

FNP and PMHNP Fees	\$14,500
<i>(In addition to tuition.)</i>	

Nurse Anesthesia Fees

Application Fee	\$60
<i>(In addition to University Application fee.)</i>	
Unit Fee	\$329.70
<i>(In addition to tuition fee.)</i>	

Master of Arts in Counseling Psychology MFT

Program Fees	\$350
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Teacher Education Programs

Teaching Performance Assessment Fees	\$305
<i>(Total cost for initial submission of all 4 TPA Tasks. See Credentials section under Sanford College of Education for further information on TPA tasks and Task Stream.)</i>	

College of Letters and Sciences (COLS)

Lab Fee \$90 per lab course
(Courses: BIO 100A, BIO 169A, BIO 201A, BIO 202A, BIO 203A, BIO 330, BIO 406A, BIO 407A, BIO 414A, BIO 416A, BIO 691, BIO 692, BIO 693, CHE 101A, CHE 149A, CHE 150A, CHE 350A, CHE 351A, EES 103A, FSC 620, FSC 623, FSC 632, FSC 633, FSC 634, FSC 635, FSC 647, FSC648, PHS 104A)

School of Business and Management (SOBM)

Some Accounting (ACC) courses utilizing an eText, with the accompanying Interactive eStudy Guide \$75 per course

Tuition

Tuition rates in effect as of July 1, 2016.

Undergraduate \$362 per quarter unit
 Graduate \$416 per quarter unit

COURSE LEVEL	4.5	3	2.25	1.5
	quarter units	quarter units	quarter units	quarter units
100, 200, 300, 400	\$1,629	\$1,086	\$814.50	\$543
500 (Undergraduate)*	\$1,629	\$1,086	\$814.50	\$543
500 (Graduate)*	\$1,872	\$1,248	\$936	\$624
600, 700	\$1,872	\$1,248	\$936	\$624

* Tuition for 500-level courses is charged according to students' degree programs.

Tuition is due and payable prior to the first class session of each course. Tuition not fully paid when due is subject to a late fee. If a tuition payment check is returned due to insufficient funds, the University reserves the right to drop all current and future classes for that student. Students will be notified of this action and assessed a return check charge. The University may require students who have written multiple insufficient-fund checks to make all future payments by cashier's check, cash, or money order.

The University reserves the right to modify tuition at any time. Students whose employers have entered into a contractual agreement with the University may be eligible for reduced tuition.

Military Community

National University has eight convenient locations for the military community in San Diego County, and one in San Bernardino County. Centers are located at Naval Base San Diego, Fleet AntiSubmarine Warfare Training, Naval Air Station North Island, Marine Corps Recruit Depot San Diego, Marine Corps Air Station Miramar, Marine Base Camp Pendleton, Naval Base Coronado, Naval Medical Center, and Twentynine Palms Marine Air Ground. National University also has admissions offices at Naval Hospital and Naval Submarine Base in San Diego, at Naval Base Bremerton, Washington and at the online information center in Quantico, Virginia.

National University offers reduced tuition for classes on base for qualified students, including: active duty members, their spouses and dependents, Active Reserve/National Guard Service Members and dependents. The University accepts DSST tests offered through the military voluntary education program. National University is a member of the Servicemembers Opportunity Colleges (SOC) network, and participates in the Department of Defense's Third Party Review.

Enrollment Agreement

Students must sign an enrollment agreement before beginning classes at National University. The agreement includes topics pertaining to tuition and fees, billing, attendance, financial assistance, payment options and other matters of enrollment. Contact an admissions advisor for further information.

Use of Social Security Number

Applicants are required to include their Social Security Number where indicated on the application for admission forms. The Social Security Number is used to identify student records, including records for financial aid eligibility and the

disbursement and repayment of financial aid and other debts payable to the University. The Internal Revenue Service (IRS) requires the University to file forms that include information such as amount paid for tuition. This information is used by the IRS to help determine whether a student, or a person claiming the student as a dependent, may take a credit or deduction on their federal income taxes.

E-mail Address

All students must provide a valid e-mail address where indicated on the application for admission forms. National University uses e-mail to communicate important announcements to its students regarding financial aid, student accounts, advising, grades, student records, and more. As the preferred method of communication, it is important that students provide the University with an e-mail address they use frequently and notify the University if it changes. The University keeps students e-mail addresses on file with other contact information.

Payments and Release of Records

The University grants degrees and releases transcripts only after a student satisfies all financial obligations to the University. All records and services are withheld from students who have any outstanding financial obligations to the University or who have defaulted on a federal Perkins or NU Institution Loans.

Safety Program

National University is concerned about the safety of its students and employees and has instituted a University Safety Policy and an Injury and Illness Prevention Program. Students play an important role in ensuring that their classroom facilities are safe. Students should:

- Review fire, medical, and earthquake emergency procedures posted in each classroom and be prepared to respond accordingly
- Review emergency egress routes and know the location of fire extinguishers (posted in each classroom)
- Watch for any hazardous conditions and report them immediately to the center assistant

Safety procedures are posted at campuses and labs.

Campus Security

National University recognizes that crime prevention is the responsibility of each person either working, attending school, or visiting at a University facility. Crime prevention is best served by the vigilant surveillance of the premises and the reporting of any suspicious personal behavior. The University, therefore, is committed to providing a safe environment for learning and working. To help prevent crime, students should:

- Lock their cars.
- Never leave valuable items in their parked cars.
- Return to their cars in the company of other students when they leave the classroom at night. If no other students are going in that direction, students should request that a security guard or the center assistant accompany them.
- Take items of value with them when they leave a classroom, unless they are certain that the classroom will be locked or monitored while they are away.
- Report anything that appears to be out of the ordinary (e.g., a stranger lingering in the area) immediately to the center assistant.

Students should never single-handedly try to stop a criminal in the act. Students should call for security or report the act by calling 911. When the emergency operator answers, students should give the operator their direct dial number, name, and specific location, including building and room number. (For students calling from La Mesa, South Bay, Marine Corps Recruit Depot, or any of the San Diego Naval installations, the location displayed on the 911 emergency operator's console will be that of the central telephone switch unit, rather than that of the caller.) If time permits, students should also notify the University operator by dialing 0, since it is possible the 911 emergency operator may try to contact them through the main University number.

If students are involved in or aware of any event that requires the attention of University administration, they should complete a "Report of Student/Visitor Incident or Injury," available through the center assistant.

Pursuant to the Crime Awareness and Campus Security Act of 1990, referred to as the Clery Act, the University publishes the Annual Security Report that discloses information about campus safety policies, procedures, and crime

statistics. This current report is available on the University's website at <http://www.nu.edu/CampusSecurity>. Printed copies are available upon request to all current students and prospective students at each National University campus.

Conference Services

National University offers conveniently located facilities available for conference needs at very competitive rates. The University's conference style classrooms are perfect for hosting seminars, conferences, off-site meetings, or training sessions in an academic atmosphere that is comfortable, focused, and conducive to interaction and learning.

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STUDENT SUPPORT SERVICES

National University provides a number of services to help students attain their educational goals. In addition to the Office of Academic Affairs, several offices of the University join together to provide services for the academic, economic, and personal needs of enrolled students. Student services include student advising and scheduling, records evaluation, veteran's assistance, financial aid, tutoring, and other services. Additionally, the library, alumni association, and student accounts office are available to help students.

STUDENT ACADEMIC SUCCESS CENTER

National University's Student Academic Success Center (SASC) provides a variety of services to support students' academic, professional and personal development. The mission of the Student Academic Success Center is to empower undergraduate students to achieve their academic goals by providing opportunities to enhance learning, increase retention, and improve overall student success. In collaboration with faculty and various campus departments the Center supports classroom instruction by providing resources for students to develop the skills and strategies to become independent and active learners, as well as helping them gain the confidence to achieve academic success.

Services offered include:

- Online tutoring in various subjects.
- Student Success Webinars and information on topics such as study skills, test-taking strategies, time management, financial literacy, and career development.
- Success coaching by trained professionals.
- Assessment of students' needs and referral to appropriate services.
- Campus community engagement opportunities through online communities.
- Academic Intervention Programs to encourage and support our students' persistence and graduation by offering success strategies skills, individual action plans, and additional academic resources.

SASC is a one-stop-shop providing resources to our students as they work toward achieving their goals at National University. We are here to make students' goals more accessible by giving them the support and tools needed to overcome challenges. Contact SASC via phone at 858.642.8290 or email academicsuccesscenter@nu.edu.

MATHEMATICS TUTORING

National University students have the opportunity to work one-on-one with math tutors in algebra, geometry, calculus, and statistics. Tutoring is also available in chemistry and physics. Experienced tutors help students further their skills and build confidence.

Mathematics tutors are available to work with students online or onsite in San Diego, Los Angeles and Fresno. Visit our website (<http://www.nu.edu/OurPrograms/StudentServices/mathcenter.html>) for more information. To access our online scheduler, visit (<http://numath.mywconline.com>).

NATIONAL UNIVERSITY LIBRARY SYSTEM

The Library offers a wide range of resources and services designed to meet the needs of all students. All print collections and library support services are located in the Library at the Spectrum Center in San Diego, CA. Free document delivery of books and articles is available. Library services include tutorials, research guides, and consultations. For more information, see the Research Guide: Library Services (<http://nu.libguides.com/services>).

Online resources and services are available 24/7 at <http://library.nu.edu>. Access to online resources may require authentication: Log in using your 9-digit NU ID number and 6-digit birth date (mmddyy).

Location

9393 Lightwave Avenue
San Diego, CA 92123

Hours (Pacific Time, excluding holidays and breaks)

Monday - Thursday 10 a.m. - 10 p.m.
Friday 10 a.m. - 6 p.m.
Saturday 8:30 a.m. - 5 p.m.
Sunday 10 a.m. - 5 p.m.

Contact Information

E-mail: refdesk@nu.edu

Text: 858.367.0904

In San Diego: 858.541.7900

Toll Free: 858.682.2237 x7900

Ask Us (Chat & FAQ Service): <http://nu.libanswers.com>.

ONLINE INFORMATION CENTERS

National University's Online Information Centers (OIC) enable prospective students to test-drive online programs, find answers to questions about studying at National University, apply, enroll, pay fees, update study schedules, and receive other services normally available on campus. The OICs have been designed for the growing number of online students who enjoy the flexibility of online learning, but also prefer a live student advisory service a reasonable distance from home.

ONLINE LEARNING REQUIREMENTS

National University offers many programs and courses in an online format. Students may complete an online course orientation and also receive instruction on using the synchronous chat technology used to communicate with the faculty and other students in the class. In an online course, students will be able to view the syllabus and assignments, participate in threaded discussions, ask questions of the instructor and view their exam and assignment grades. Course materials and digital learning modules will be presented. Faculty may use the online chat feature for lectures and question/answer sessions. Students are provided access to online courses beginning on the Sunday before the term begins through three weeks after the term ends.

Onsite classes may require students to access an online class supplement where students participate in coursework including (but not limited to) reviewing course materials and accessing assignments. Participation in an online class supplement does not satisfy required onsite contact hours. Contact hour requirements for hybrid courses are detailed in the National University Credit Hour Policy which can be found on the University website.

As of May 2014, the following are the minimum system requirements that are needed to successfully access your courses on the Blackboard Learn platform.

TECHNICAL REQUIREMENTS

Windows Users

- Windows 7 or 8 recommended (Vista supported, Windows 10 not supported)
- 2 GB RAM
- High-speed Internet connection (e.g.: DSL, cable, etc.)
- **Note:** Dial-up Internet connection is supported
- Sound card and speakers
- Screen Resolution: 1280 x 1024 or better
- Headset with microphone using a USB connection
- Web Browser:
 - » Blackboard Learn supports Microsoft Internet Explorer 9 and above, Apple Safari 5, and the most recent releases of Mozilla Firefox and Google Chrome.
 - » If using Windows Vista, please use Microsoft Internet Explorer 9, Mozilla Firefox or Google Chrome.
 - » If using Windows 10, please try using Mozilla Firefox or Google Chrome

Mac OS Users

- Mac OS X 10.9 recommended (Mac OS X 10.7 and 10.8 supported)
- Intel Processor
- 2 GB RAM
- High-speed Internet connection (e.g.: DSL, cable, etc.)
- **Note:** Dial-up Internet connection is supported
- Sound card and speakers
- Screen Resolution: 1280 x 1024 or better
- Headset with microphone using a USB connection

- Web Browser:
 - » Blackboard Learn supports the most recent releases of Apple Safari, Mozilla Firefox, and Google Chrome.

Notes:

- Web Browsers listed have been validated with the course platform. A student risks running into problems with the course software if they choose to use a non-supported browser.
- National University maintains a Technical Requirements web page that is updated frequently with Windows and Macintosh hardware and software requirements, including both recommended and supported web browser software. For further information, please check <http://kb.nu.edu/app/answers/detail/aid/120>.

WRITING CENTER

National University students have the opportunity to work one-on-one with writing consultants to develop their writing and critical thinking skills via synchronous appointments with the Online Writing Center and in person in San Diego, Los Angeles, and Fresno. The Writing Center welcomes the opportunity to help students at all levels to improve—from outlining a first year composition essay to drafting a graduate level research paper. The Writing Center staff, comprised of experienced writing instructors, are eager to work with students to help them develop strategies for improving their writing. For more information about Writing Center services and how to make an appointment, go to www.nu.edu/OurPrograms/StudentServices/WritingCenter.html.

BOOKSTORE

The University contracts with an external vendor for the sale and buyback of textbooks. Textbooks are available for purchase two weeks prior to the first night of class. The cost of books varies with each course. Students must purchase all books and supplies necessary for the course in which they are enrolled. Textbooks may be purchased online or by phone. Online access to the vendor is provided through the student portal on the University's website.

TRANSFER OF CREDITS TO OTHER INSTITUTIONS

Each institution has policies that govern the acceptance of credit from other institutions. Accreditation by one of the regionally accrediting associations is the normal and primary criterion for making such determinations. National University is accredited by the WASC Senior College and University Commission (WSCUC).

Transfer credit is determined by the receiving institution. Generally, credits and degrees from National University have been accepted by transfer institutions. Students who are anticipating a transfer, or advanced studies, are encouraged to contact such institutions directly to determine how National University credits will relate to the requirements of those institutions.

INTERNET AND WIRELESS STUDENT ACCESS

All National University students can access the Internet from any of the computers found in the University's computer classrooms and open computer labs. National University has wireless Internet access at most campuses. At the applicable campuses, wireless access is available within most student areas, such as classrooms and lounges. The student should contact the campus to determine if a site has wireless access and to get log on information to access the wireless network.

National University's programs and courses make frequent use of Internet resources, allowing students to learn the skills required to gain information through such electronic media.

SOAR STUDENT PORTAL

National University offers all students online real-time access to their academic, financial and personal records and other pertinent information. Through the SOAR student portal, accessible from the University's home page, students can access their online classes, grades, Academic Advisement Report (AAR), textbook requirements, online bookstore, financial aid checklists, and student accounts, as well as add courses to their schedules.

STUDENT CONCIERGE SERVICES

National University's Student Concierge Services is students' one-stop center for student service. Student Services Advocates are trained in a range of areas such as Financial Aid, Credentials, Admissions, and Graduations. Student Concierge Services is dedicated to providing guidance, information and innovative solutions for students.

National University Student Services recognizes that National University students may not be available to contact the University during normal business hours. Student Concierge Services is available Monday through Friday from 7 a.m. to midnight PST (excluding some major holidays) at 866.628.8988 or scs@nu.edu.

STUDENTS WITH DISABILITIES

It is the policy of National University, in compliance with Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act of 1990, as amended, and other federal and state disability nondiscrimination laws, that no student shall, on the basis of his/her disability, be excluded from participation in, be denied the benefits of, or otherwise be subject to discrimination under any University program or activity.

National University is committed to providing students with disabilities an equal opportunity to access the benefits, rights, and privileges of University services, programs, and activities, in the most integrated setting appropriate to the students' needs.

National University is committed to providing reasonable accommodations to students with disabilities in order to ensure that all students have an equal opportunity to benefit from and have access to programs and services. "Reasonable accommodation" means a reasonable modification or adjustment that enables qualified students with disabilities to have equal access to programs and services. Under the law, "reasonable accommodation" may include, but is not limited to, removal of barriers of access of the physical facilities or programs, "academic adjustments" such as modification of academic requirements, policies and procedures, and "auxiliary aids" such as taped texts, interpreters, readers and other similar services and actions.

Student Accessibility Services' Office

National University's Student Accessibility Services, through collaboration with the campus and the community, is committed to empowering students with disabilities and providing equal access to higher education through the provision of academic support services, technology, and advocacy in order to promote students' retention and graduation. Student Accessibility Services provides disability consultation and coordination of support services and accommodations for all eligible students with disabilities.

Services

Student Accessibility Services provides a variety of services designed to assist the National University community, including students, faculty and staff. Student Accessibility Services offers services that allow students with disabilities to participate fully in all facets of the learning experience.

- Students with disabilities are equipped with tools to promote self-advocacy, independence, learning, and goal attainment.
- Faculty and staff are provided resources and guidance to assist with the creation of accessible onsite and online learning experiences that foster engagement and interaction with all students.

Requesting Accommodations and Services

Students with disabilities have the right to obtain reasonable accommodations. National University will make such modifications to its academic requirements as are necessary to ensure that such requirements do not discriminate or have the effect of discriminating on the basis of disability against a qualified applicant or student with a disability. Modifications may include changes in the length of time permitted for the completion of the degree requirements, substitution of specific courses required for the completion of degree requirements, and adaptation of the manner in which specific courses are conducted. In course examinations or other procedures for evaluating students' academic achievement, the University shall provide methods for evaluating the achievement of students with disabilities that impair sensory, manual, or speaking skills as will best ensure that the results of the evaluation represent the student's achievement in the course, rather than reflecting the students impaired sensory, manual, or speaking skills, except where such skills are the factors that the test purports to measure.

The University will take necessary steps to ensure that no qualified disabled student is denied the benefits of, excluded from participation in, or otherwise subjected to discrimination because of the absence of educational auxiliary aids. Auxiliary aids may include taped texts, interpreters or other effective methods of making orally delivered materials available to students with hearing impairments, readers in libraries for students with visual impairments, classroom equipment adapted for use by students with manual impairments, and other similar services and

actions. Accommodations cannot be provided which would fundamentally alter the nature of the program, cause undue hardship on the University, or jeopardize the health or safety of others. Reasonable accommodations must specifically address the fundamental limitations of the student's specific disability.

Registration

Students seeking accommodations and services due to a disability should contact Student Accessibility Services. A Student Accessibility Services Coordinator will discuss potential accommodations and required documentation with the student.

Students are encouraged to register with Student Accessibility Services and make accommodation requests as far in advance as possible; accommodations are not retroactive. Students seeking to register with Student Accessibility Services are required to: 1) self-identify to Student Accessibility Services, 2) submit an application, 3) provide documentation of a disability from the appropriate licensed professional, and 4) participate in an interactive appointment with a Student Accessibility Services Coordinator. Student Accessibility Services will provide a letter confirming eligibility for services and detailing approved curriculum accommodations to eligible students with disabilities following completion of the registration process. Electronic application forms and other materials related to the registration process can be found at www.nu.edu/sas.

Disability Documentation

Disability documentation must be signed by a licensed physician, psychologist, audiologist, speech pathologist, physical therapist, occupational therapist, or other professional health care provider. Documentation should indicate the student's current level of functioning with respect to the major life activity impacted by the disability. The diagnostic report should include, where appropriate, recommendations for specific accommodations and an explanation of the reason the accommodation is recommended. In some situations, the University may request additional documentation. The cost of obtaining professional documentation of a disability is the responsibility of the student. Additional information regarding documentation is located at www.nu.edu/sas.

Accommodation Determination

Student Accessibility Services will consider all materials, consult with relevant faculty where necessary, and afford qualifying individuals with appropriate accommodations. The student may provide additional input from an appropriate professional at the student's expense if the student or Student Accessibility Services deems such input to be necessary to determine eligibility for services or appropriateness of a specific accommodation requested.

Once a student is approved to receive accommodation(s), a Student Accessibility Services Coordinator will provide an accommodation letter to the student. It is the student's responsibility to present this letter to his/her instructor in timely fashion, preferably within the first three days of the term/course, to allow sufficient time for the arrangement of any prescribed accommodation. A student may or may not elect to use the accommodation.

Notification is sent to the instructor informing him/her that a student enrolled in his/her class may approach them with an official accommodation letter. The written notification to the instructor will not identify the student. If a student does not approach the faculty member, that student will be deemed to have elected to not request the accommodation(s).

Students requesting, and approved for, onsite testing accommodations are required to complete Test Accommodation Services Orientation at least two weeks prior to their first exam request for in-course exams. For onsite tests, students are also required to complete an Onsite Test Accommodation Request Form. Completed forms are due to Student Accessibility Services at least five business days prior to the exam or quiz date to allow sufficient time for the arrangement of test accommodations, including but not limited to extended test time, distraction reduced setting, etc. In addition, students are required to read and follow the Test Accommodation Policies and Guidelines. The test accommodation services orientation documents, the Onsite Test Accommodation Request Form, and the Test Accommodation Policies Guidelines are located at www.nu.edu/sas in the section entitled, Accessibility Forms and Guides.

Providing advanced notice, students needing captioning and/or interpreting must request these services using the appropriate request forms also located online. Faculty and staff are encouraged to communicate with deaf and hard of hearing students using electronic mail or web-based chat. If the student uses text telephone (TT) or video phone, use the California Relay Services by dialing 888.877.5379.

Faculty members who receive a request from a student for a curriculum accommodation due to a reported disability should request an accommodation letter from the student. If the student informs the instructor that they do not have such a letter or are not registered with Student Accessibility Services, the faculty member should direct the student to Student Accessibility Services, providing him/her with the contact information. In addition, the instructor should contact Student Accessibility Services to discuss any questions or seek additional guidance. Any disability-related information that a student gives to the faculty member is to be used only for making curriculum accessible for the student and may not be disclosed to any parties without written consent from the student. Instructors are not authorized to unilaterally deny a student an approved accommodation. Instructors, who disagree with a particular accommodation prescribed for a student and included on the official accommodation letter, should contact Student Accessibility Services for immediate consultation and discussion.

Denial or Insufficiency of Accommodation

If a student is denied an accommodation requested or believes that the accommodation approved is insufficient, the student may appeal to the Vice President for Student Services, who will render a decision within seven days of receipt of the appeal or prior to the start date of the next course, depending on which occurs first. The decision of the Vice President is final.

Students have the right to appeal any decision by the University denying a requested reasonable accommodation to outside enforcement Agencies, such as the Office for Civil Rights of the United States Department of Education or the California Department of Fair Employment and Housing. See "Appellate Procedures" in the Policies and Procedures section of the General Catalog. Any complaint must be filed with the Office for Civil Rights within 180 calendar days of the University's final decision, or with the California Department of Fair Employment and Housing within one year of the University's final decision. Students need not exhaust the University's appeal procedures in order to file an appeal with an outside agency.

Problems in Receiving Approved Accommodations

In the event that a student believes he/she is not receiving an accommodation that is specified in his/her accommodation letter, the student should immediately contact Student Accessibility Services for assistance at sas@nu.edu.

Confidentiality

Student Accessibility Services maintains appropriate confidential files verifying students' disabilities on behalf of the university; these records are protected in accordance with FERPA (Family Educational Rights & Privacy Act) regulations.

National University will not release any information regarding a student's disability without his or her informed written consent or under compulsion of legal process. Disability-related information will be shared only on a case-by-case basis when there is a compelling reason for such disclosure within the university community or as required by law.

The information a student shares with faculty members regarding their disability is confidential and must be treated as such in accordance with university policy, State and Federal regulations governing confidentiality (FERPA, Section 504 of the Rehabilitation Act of 1973 and the ADA Amendments Act of 2008 (ADAAA)). The Department of Justice (DOJ) has indicated that a faculty member generally does not have a need to know what the disability is, only that the disability has been appropriately verified by Student Accessibility Services. Students are not required to give specifics about their disability when they self-disclose a need for accommodations having already done so with Student Accessibility Services.

Information regarding the student's disability must not be discussed or shared with other faculty members unless the student has signed a release of information form giving permission to do so.

Contact Information

Contact Student Accessibility Services at 858.521.3967, e-mail sas@nu.edu, or visit www.nu.edu/sas if you have any questions or if you require further assistance.

Student Accessibility Services
National University
16875 West Bernardo Drive Suite 110
San Diego, CA 92127-1675
Phone: 858.521.3967
www.nu.edu/sas
sas@nu.edu

STUDENT RELATIONS COORDINATOR

The Office of Student Affairs serves the National University community by advocating for accepted norms of fairness, decency and ethical behavior, adherence to the letter and spirit of National University policies, and prevention of delay, complication, and unresponsiveness in the application of University rules and processes. The Student Relations Coordinator (SRC) works to fulfill the mission of the University by serving as an informal and impartial resource for the National University community and by acting in the following ways:

- Serving as an advisor who listens and identifies options to address the student's problem.
- Encouraging and assisting people to resolve their own conflicts.
- When requested, the SRC will intervene and work with all parties to resolve a dispute.
- Identifying personnel appropriate to handle a given problem, explain National University policies, connect people with University resources, and explain how the University system works.
- Assisting when normal channels have failed to resolve students' problems or when there is not a well-defined channel to address the concern.
- Providing a confidential way to raise sensitive concerns.
- Providing feedback to the President, Board of Trustees, deans, and other University officers about policies, practices, and structures that regularly produce conflicts, problems, and complaints.

In deciding whether to initiate contact with the SRC, it is best to view this step as a last resort to be taken only when other approaches have failed. For many problems, a normal procedure or route of appeal can be found in the General Catalog.

Academic advisors, student concierge services, department chairpersons, deans, and directors are all, by virtue of their office, experts at handling specific types of problems and should normally be consulted first. The SRC does not take sides, but considers the rights and interests of all parties to a dispute with the aim of achieving a fair outcome. The SRC does not make, change, or set aside policies or decisions, but advocates for fairness. The SRC will not identify students or reveal their confidences without permission except when required by law. Information provided by the student to the SRC may not be used in grievance or other formal proceedings.

For help identifying alternative courses of action please contact the Student Relations Coordinator:

Student Relations Coordinator
National University
11255 North Torrey Pines Road
La Jolla, CA 92037-1011
Phone: 858.642.8035
src@nu.edu

CAREER SERVICES

Career Services is committed to providing professional career and employment related services to National University's current students and alumni. Regardless of the geographical location of students, Career Services provides online and in person assistance in the following areas: resume review and development, job search assistance, interviewing and negotiating techniques, career management assistance and career exploration through online assessments for those seeking additional support. Career Services also offers an online portal that enables students and alumni to search for jobs and post resumes. The portal contains additional career-related resources as well.

For more information about Career Services and its services, call 858. 541.7950 or 1-866-NU-ACCESS, ext. 7950 or e-mail: careerservices@nu.edu.

TESTING SERVICES

Testing services include ACCUPLACER testing, DSST, CLEP, and Credit by Exam/Challenge Exam. For more information about National University's testing services, call 858.541.7951 or 1-866-NU-ACCESS, ext. 7951 or via e-mail: testingservices@nu.edu.

STUDENT ENGAGEMENT & LEADERSHIP

Student Engagement and Leadership supports students by providing assistance with goal setting and attainment, meeting new people, experiencing different perspectives, and learning new skills.

Reasons to become involved through the Student Engagement department include:

- Meet friends and make connections that will last a lifetime.
- Develop or expand your personal and professional networks.
- Get leadership training and skill development.
- Learn to become your own personal success coach.
- Make a difference in areas you determine are important.

For more information, contact:

Associate Director
Student Engagement and Leadership
getinvolved@nu.edu
858.309.3456

DEVELOPMENT AND ALUMNI RELATIONS

National University Alumni Relations

The Office of Development and Alumni Relations seeks to identify and promote the successes of graduates. It also provides alumni with lifelong connections, resources, career services and other benefits, while fostering and facilitating opportunities for personal and professional growth and continued participation within the University community. National University strives to broaden the array of programs and services available to alumni through the Office of Development and Alumni Relations. It maintains open communication with the alumni community through its website, e-mail, and mail; through its alumni e-newsletter Newswire, which is circulated regularly to alumni; and through an annual alumni magazine Vision. To subscribe, contact 858.642.8095 or email alumni@nu.edu.

The alumni relations website provides up-to-date information on initiatives being offered. Alumni may also access National University's free Online Alumni Community, a network created exclusively for National University alumni, accessible via the alumni website or at www.alumni.nu.edu. This community features an alumni directory, links to social media, access to Vision magazine and Newswire, consumer services and discounts, and more. Alumni are also encouraged to visit the online National University Store, where they can purchase University apparel and show their pride as alumni. To purchase alumni National University merchandise, visit www.alumni.nu.edu for a link to the online store.

One of the most popular benefits available to Alumni is membership to the National University Online Library, which includes access to e-Books on EBSCOhost and the Academic Search Premier Alumni Edition database. To purchase a one-year membership, visit <http://www.nu.edu/Community/AlumniandFriends/AlumniServices.html> and choose "National University Online Library Membership and Access".

Development

As a nonprofit institution, the University relies to a large extent on contributions and partnerships to provide nontraditional learners with an affordable, accessible, and relevant education. The Development Office is responsible for securing annual gifts, corporate and foundation relations, planned giving, and major donor relations. Charitable gifts help to fund scholarships and endowments that make a college degree affordable to underserved students. Partnerships with corporations and foundations launch new programs that are relevant and leading-edge.

The Development Office fosters interaction with the University among corporations and other organizations to serve mutually beneficial community needs. For further information, visit www.nu.edu/Community/Development.html or contact the Office of Development and Alumni Relations at 858.642.8095 or e-mail development@nu.edu.

NATIONAL UNIVERSITY VETERAN CENTER

The National University Veteran Center assists military and veteran students excel in their military transition and academic journeys through building opportunities that foster community, engagement, and leadership.

Services offered through the National University Veteran Center include quarterly Welcome Aboard orientations, a dedicated Veteran Center Counselor, a veteran fellows program, veteran student work study opportunities, monthly student engagement activities, and access to a veteran lounge area available for study groups and other meetings. Further, the Veteran Center provides connections to University and community veteran groups and resources that will empower your educational experience.

To learn more about National University Veteran Center services and upcoming events, view the online guide at: <http://nu.libguides.com/Vet>.

Veteran Center Welcome Aboard Event

A primary function of the Veteran Center is to host a quarterly Welcome Aboard. This event introduces students to team members from each of National University's student services departments providing an outstanding opportunity to learn about student success resources. Staff members from the National University Veteran Affairs Office, Writing and Math Centers, Student Accessibility Services, Testing Center, Financial Aid, Career Services and Admissions departments are available during this event to help answer specific questions. Faculty members are also available to answer academic questions related to students' specific degree program.

Contact the Veteran Center to secure a seat at the next Welcome Aboard event. For students who reside outside the San Diego region online event access is available. Students are encouraged to view the Online Veteran Guide that provides a summary of the Welcome Aboard information available at the following link: <http://nu.libguides.com/Vet>.

Counseling Services

The National University Veteran Center Counselor provides support in areas outside academic advising helping facilitate the critical military to civilian transition process. Counseling appointments are available at all our San Diego campus and military locations and online for students residing outside San Diego. Counseling support includes assistance with transitional skills and connections to veteran community resources for support.

Students may contact the Veteran Center Counselor at:

Veteran Center Counselor
Spectrum Campus
Phone: 858.541.7794
Email: veteransuccesscenter@nu.edu

The National University Veteran Center is located at the San Diego Spectrum Campus, but available to students system-wide via phone and email.

National University Veteran Center
Spectrum Campus
Room 171
9388 Lightwave Avenue
San Diego, CA 92123-1426
Phone: 858.541.7780
Email: veteransuccesscenter@nu.edu

CALIFORNIA COMMUNITY COLLEGE TRANSFER STUDENT SUPPORT SERVICES

Articulation

National University is one of the top choices in California for community college students interested in transferring to a private school. New courses begin each month, so students can enroll at any time.

National University has articulated coursework from all California Community Colleges for a seamless transfer experience. The articulation agreements can be found at: <http://www.nu.edu/Admissions/Undergraduate/TransferInformation.cfm>.

Students can obtain transfer information from the Transfer Center at the community college or from National University's Community Education Specialists.

Community Education Specialist are available for Northern California, Southern California San Diego and Imperial Counties. Students may ask the Transfer Center for contact information or call 1-866-NU-ACCESS for additional information.

CALIFORNIA COMMUNITY COLLEGE SCHOLARSHIPS

Transfer to Success Scholarship

National University is committed to supporting the success and achievement of community college students continuing their academic journey through its Transfer to Success Scholarship. This scholarship is designed to assist undergraduate students pursuing a bachelor's degree who are transferring from a California community college or another community college which has a signed agreement

with National University. Students who meet the eligibility criteria outlined in the Financial Aid and Scholarship section of the catalog will automatically be considered for this scholarship following formal acceptance to the University.

INTERNATIONAL STUDENT SUPPORT SERVICES

International Student Services

In addition to the University Support Services, the International Student Services departments offer a variety of unique services and resources to international students throughout their studies for optimal student success.

Services offered include:

- New Student Orientation
- Student Life Advising: Housing, Transportation, Banking, Health Insurance, Cultural Adjustment
- Academic Advising
- Scholarship Resources
- Employment Workshops
- Student Success Workshops
- Student Ambassador Program
- Activities & Events

The International Student Team is dedicated to meeting the needs of the growing and changing international student population. Each service and resource serves a unique retention purpose for the enhancement of the overall student experience.

International Student Services | iss@nu.edu | 858.541.7706.

Mandatory Orientation for International Students

All international students are required to attend orientation. Specific orientation dates are indicated on the student's I-20 based on the start of their program.

Students check in with Student Services as part of the registration process. The orientation program includes meeting with program faculty, along with Student Success sessions such as: Academic and Classroom Success, Immigration Regulations and Compliance, Student Life (banking, housing, transportation, health insurance, and other topics of interest) and National University Student Services.

International Student Orientation Fee

International students are required to pay an orientation fee of \$50 as part of the non-refundable pre-payment prior to arrival at the University. Orientation fees are non-refundable.

International students who enroll in a second degree program at the University will be required to pay an additional orientation fee, upon the start of that program.

International Student Responsibilities

Under the Student and Exchange Visitor Program (SEVP), that implements the Student and Exchange Visitor Information System (SEVIS), it is critical that all F-1 international students take responsibility for maintaining their legal status in the United States. If you have any questions regarding SEVIS rules and regulations, please contact the International Programs Office (ipo@nu.edu).

Mandatory Medical Insurance

International students holding F-1 or J-1 non-immigrant visas at National University must provide proof of medical health insurance. Students have two options to show proof of medical insurance:

1. Purchase health insurance in their home country, or
2. Purchase health insurance in the United States, after arrival.

Minimum Health Insurance Requirements

1. Benefit - \$250,000 (for each injury or sickness)
2. Deductible - \$50 (for each injury or sickness)

Assistance with purchasing an acceptable health insurance plan is available upon arrival at National University during orientation. We estimate that one full year of health insurance will cost approximately \$700 - \$1,000 USD (single coverage). Students will need to show proof of medical insurance at orientation. Students who do not show proof of medical insurance may not be able to enroll in classes.

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FINANCIAL AID AND SCHOLARSHIPS

STUDENT FINANCIAL AID

There are many types of financial aid available to assist students who qualify. For specific information regarding financial aid programs and the University's Financial Aid policies and procedures, please visit the Financial Aid website at www.nu.edu or visit a Student Finance Advisor on-campus.

How to Apply for Financial Aid

Planning ahead and applying for financial aid can help students obtain an education, which might otherwise be outside their financial reach.

To be considered for federal and state financial aid, students must complete the process of "need analysis." Need analysis is the method used to estimate the amount of money students and their families can reasonably contribute toward the cost of education. For the current school year, a student's awards will be determined using the previous year's income (taxed and untaxed) and current assets. Other factors that are considered include the student's marital status and the number of dependents.

The data to complete a "need analysis" is collected when a student completes the Free Application for Federal Student Aid (FAFSA). Information on completing the FAFSA is available in the Financial Aid Guide, available from a student finance or academic advisor at all campuses or online at www.nu.edu. The Financial Aid Guide explains how to submit a FAFSA, which students must complete and sign with the federal processor for evaluation. To expedite the application process, students are encouraged to apply online at www.fafsa.ed.gov. National University computer labs are available for students' use.

If a student (and parent, if required) has a Federal Student Aid ID (FSA ID), the application can be signed electronically. Sign up for FSA ID at www.fafsa.ed.gov.

Apply Faster—Sign Your FAFSA with the FSA ID

The FSA ID allows students to electronically sign when they submit a FAFSA. If students are providing parent information, one parent must also sign the FAFSA. To sign electronically, a parent should also apply for a FSA ID.

Students do not have to pay to get help or submit a FAFSA and can submit a FAFSA for free online at www.fafsa.ed.gov. Federal Student Aid provides free help online at www.fafsa.ed.gov or 1-800-4-FED-AID. TTY users (hearing impaired) may call 1.800.730.8913.

Student Eligibility Requirements

To receive financial aid, students must meet all of the federal eligibility requirements. Students must:

- Have a high school diploma or recognized equivalent of a high school diploma.
- Be a U.S. citizen or an eligible non-citizen.
- Be enrolled in an eligible program (programs less than 36 units and 32 weeks of instruction are not eligible) and have their records evaluated by the Office of the Registrar (excludes non-degree studies and continuing education programs, which do not qualify for federal or state aid).
- Demonstrate financial need as determined by the federal methodology (excludes the federal unsubsidized Stafford Loan Program, Grad PLUS Program and Parent PLUS program).
- Have a valid social security number.
- Maintain satisfactory academic progress (SAP), as defined by the university Financial Aid Office.
- Sign a Statement of Educational Purpose/Certification Statement.
- Not owe an overpayment on any Title IV educational grant or be in default on a Title IV educational loan unless satisfactory payment arrangements are made to repay or otherwise resolve the overpayment or default.
- Register with the Selective Service, if required to do so.
- Complete the verification process, if selected to do so, by submitting a signed copy of federal tax forms and any other required documents.

A student's eligibility for any of the federal aid programs may be suspended or terminated by a court as part of a conviction for possessing or selling drugs.

Dependency Status

Students who apply for financial aid must determine whether they qualify as independent (self-supporting) students or as dependent students. Determination of a student's dependency status is made in the student status section on the Free Application for Federal Student Aid (FAFSA).

Students who meet ANY of the following are considered an Independent student and will not have to provide parental information. Students who meet NONE of the following will be asked to provide parental information.

- I was born before January 1, 1993.
- I am married.
- I will be working on a master's or doctorate program (this does not include students who are enrolled in a credential only program).
- I am serving on active duty in the U.S. Armed Forces.
- I am a veteran of the U.S. Armed Forces.
- I have children and I provide more than half of their support.
- Since I turned age 13, both of my parents were deceased.
- I have dependents (other than children or my spouse) who live with me and I provide more than half of their support.
- I was in foster care since turning age 13.
- I was a dependent or ward of the court since turning age 13.
- I am currently or I was in legal guardianship.
- I am currently or I was an emancipated minor.
- I am homeless or I am at risk of being homeless.

Students who claim to be independent may be asked to provide documentation to verify their dependency status prior to receiving financial aid. Students who want to be considered independent due to circumstances other than those listed should contact a Student Finance Advisor prior to completing the FAFSA.

Financial Aid Satisfactory Academic Progress (SAP) Policy

Students must maintain SAP in their selected course of study to receive federal aid. This section describes the standards of satisfactory progress, which must be met by an aid recipient. Students must complete their academic program within 150 percent of the published length, expressed as units, needed to graduate, including units transferred from another institution; this is referred to as Maximum Time Frame (MTF). The financial aid standard is the same or somewhat stricter than the institution's standards for a student enrolled in the same educational program who is not receiving Title IV aid.

Financial aid recipients are subject to all National University academic policies. SAP is evaluated at the end of each payment period and the student will be notified if they are not meeting SAP. This is a three step process: first notification will inform the student to improve their grades, the second notification informs students of probation status, and the third step is cancellation of all federal and state funds. Students do have the right to appeal and will be provided the necessary steps that must be followed.

Academic Year

The academic year (AY) consists of at least 36 units and 32 weeks of instruction. Generally, students are funded for two payment periods. The first payment period is composed of at least half of the coursework in the academic year as measured in units and weeks of instruction. The second payment period comprises the remaining coursework in the academic year. Generally, an academic year consists of eight courses. Students must successfully complete their first payment period and be in current attendance before student loan funds will be released for the second period. Because students apply for and are awarded aid during different times of the year, each student's academic year may be different.

Failing or incomplete grades and units that are earned from accelerated studies or repeated coursework will not count toward completion of the student's academic year.

Qualitative Requirement (GPA)

The qualitative aspect of academic progress is the student's overall grade point average. Students must maintain a cumulative GPA of 2.0 for undergraduate students and a cumulative GPA of 3.0 for graduate students. All coursework attempted at National University must meet the graduation requirements and the qualitative component.

Students who fall below these required minimums will be placed on academic probation, by the Office of the Registrar. Students may continue to receive financial aid during this probationary period, assuming all other satisfactory requirements are met. Students who do not meet the academic requirements and are disqualified from attendance will not receive financial aid from the period of time they are withdrawn.

Quantitative Requirements

Satisfactory academic progress is defined as a reasonable length of time for students to complete their educational objectives. Since students enrolled at National University pursue different degree programs at different times of the Academic Year, the number of units and the length of time to complete each degree program will vary, but students are limited to no more than 150 percent of the published units. The SAP At-A-Glance chart available in the Financial Aid Guide at www.nu.edu defines the completion requirements. Successful progression toward a degree objective is one aspect of satisfactory progress. While it is recognized that individual degree programs vary in length, typical degree requirements are as follows: Students enrolled in an associate degree program are required to complete 90 quarter units; 180 quarter units must be completed to receive a bachelor's degree; and students enrolled in a master's degree program must complete 45 to 110 quarter units to graduate. Satisfactory progress is evaluated beginning with the month of the student's first course and at the end of each academic year of a student's program.

Student Loan Deferment

Federal subsidized Stafford loan borrowers are eligible for a federal interest subsidy whereby the federal government, rather than the student, pays the interest on a student's outstanding loan during the time the student is in school. During an authorized deferment of repayment, unsubsidized Stafford borrowers are eligible for the same deferment as subsidized Stafford borrowers. However, a deferment for an unsubsidized Stafford borrower only applies to the principal loan amount. Deferments for Grad and Parent PLUS applicants vary. See the Financial Aid Guide at www.nu.edu for details.

Loan Deferment Procedures

Once a month, the University submits student enrollment data to the National Student Clearinghouse, which reduces the number of deferment forms students need to complete. Students who receive a letter, statement, or a deferment form from a servicer must complete and submit the form as instructed. To be eligible for loan deferment, students must be in attendance at least half-time and meet one of the following:

1. Have completed at least the first class in their enrollment OR
2. Be in attendance in the first class of their enrollment and the ninth day of the session must have passed.

Deferment forms cannot be processed until students have started their program of study. The University cannot accommodate students who request deferment forms prior to beginning their program.

Deferment forms are only certified for the official class dates of enrollment and are based on unit load per quarter, regardless of the length of the class. The University provides servicers with data on student status but does not grant or deny deferment. The Clearinghouse only reports enrollment status to the National Student Loan Data System (NSLDS) for Stafford/PLUS borrowers. This reporting does not apply to Perkins or NU-HELP borrowers, who should file paper deferment forms to notify the University of their loan status. For further clarification of enrollment status and certification, see "Definition of Student Status" in the Policies and Procedures section of this catalog.

UNDERGRADUATE STUDENTS UNIT REQUIREMENTS			
Number of Months	Half	3/4	Full
1	6	9	12
2	6	9	12
3	6	9	12

GRADUATE & CREDENTIAL STUDENTS UNIT REQUIREMENTS			
Number of Months	Half	3/4	Full
1	4.5	6.5	9
2	4.5	6.5	9
3	4.5	6.5	9

Financial Aid Refund Policy

As part of the Higher Education Amendments of 1998, Congress passed provisions regarding refund policies and procedures for students who have received federal student aid and are considered withdrawn from school. Based on National University policies, which are made in accordance with federal regulations, a student is considered "withdrawn" if not in attendance for 45 consecutive days.

The Federal Return of Title IV Funds (R2T4) policy governs all federal grant and loan programs, including Federal Pell Grant, SEOG, TEACH Grant, Perkins Loan, Stafford/Direct Loans (subsidized and unsubsidized,) and PLUS loans.

For more information, read the Policies and Procedures section of this catalog.

SCHOLARSHIP PROGRAMS

University Scholarships and Grants

Each year, National University awards tuition scholarships or grants to students in the following categories: those who demonstrate exceptional scholastic achievement; those who are educationally and economically disadvantaged in underrepresented categories; those with disabilities and demonstrated financial need; and those who are single-parents with demonstrated financial need. All scholarships or grants are based on the eligibility rules that apply to the particular award. The University's goal is to attract and retain quality students by providing scholarships that are based upon merit and financial need.

The University may, at its discretion, target certain campuses and/or certain academic programs for the awarding of scholarships. This prioritization will then constitute the first criterion for selection. The secondary criterion will be those specified for each type of scholarship as described below.

National University's scholarships are considered "last money" tuition scholarships. These scholarships are designed to supplement, but not replace, federal and state financial aid, employer tuition assistance, and student income. Awards are credited directly to the recipient's financial accounts. The number of scholarships depends on the availability of allocated funds. As a nonprofit institution, the University tries to provide as many scholarship and grant opportunities as possible.

The scholarship application process is available online through the student portal.

Students are responsible for reading and complying with the policies and procedures contained in this catalog prior to applying for a scholarship.

TYPES OF AWARDS

Collegiate Honor Award

Tuition scholarships of up to \$2,000 are available to students who have demonstrated exceptional scholastic achievement and are in need of financial assistance.

To be eligible for this award, undergraduate and graduate applicants must have completed 54 semester units at a U.S. regionally accredited community college or four-year college with an undergraduate grade point average of at least 3.5 on a scale of 4.0. Awards will be credited to students' accounts in increments, up to the maximum of \$500 per course. The application form is available online through the student portal.

Presidential Tuition Scholarship

Presidential Tuition Scholarships of up to \$2,500 are available to undergraduate transfer students in at least one of the following categories:

- Educationally and economically disadvantaged persons who have been historically underrepresented at higher educational institutions (African Americans, Hispanics and Native Americans).
- Single parents with demonstrated financial need.
- Persons with a verified disability and financial need.

Applicants must also meet all of the eligibility criteria listed below.

- Have an annual income below \$18,000 for single applicants or \$25,000 for a family of two or more.
- Demonstrate a cumulative college grade point average of 2.30 on a 4.00 scale.
- Have at least 56 semester units of credit from an accredited college or university.

- Apply for federal and state financial aid.
- Be an undergraduate student working toward a first bachelor's degree.
- Be a U.S. citizen or eligible non-citizen.

Awards will be credited to students' accounts in increments, up to the maximum of the full cost of tuition per course. The application form is available online through the student portal.

Veterans' Victory Scholarship

The Veteran Center offers the Veterans' Victory Scholarship to qualified applicants. The scholarship offers up to \$5,000 based on academic or community achievement and financial need. The National University Veterans' Victory scholarship is considered a "last money" scholarship and is designed to supplement military GI Bill Chapter 31 and Chapter 33 educational benefits when those benefits are exhausted. This scholarship is not intended to replace federal and state financial aid, employer tuition assistance or student income and will only be used to help fund the last two to five courses in a student's academic degree program, helping "bridge the gap" to degree completion.

Applicants must also meet all of the eligibility criteria listed below.

- Be a Veteran of the United States Armed Forces.
- Be an active student enrolled at National University.
- Have completed a minimum of 18 units or 4 courses at National University.
- Not be in receipt of any VA Education Benefit (Chapter 30, Chapter 31, Chapter 33, and Chapter 35) or Active Duty Tuition Assistance at the time the scholarship is awarded.
- Full-time employees of National University are not eligible for the Veterans' Victory Scholarship.

Contact the National University Veteran Center to learn more about the Veterans' Victory Scholarship and to confirm eligibility.

National University Veteran Center
Spectrum Campus
Room 171
9388 Lightwave Avenue
San Diego, CA 92123-1426
Phone: 858.541.7780
Email: veteransuccesscenter@nu.edu

Military Tuition Scholarship

Military Tuition Scholarships of up to \$2,500 are available to military personnel, including active duty, reservists, national guardsmen/ women, their spouses, and their dependents. The scholarship is intended to benefit educationally and economically disadvantaged personnel and their family members who have demonstrated financial need. For active duty personnel to qualify, they must have exhausted the aggregate amount of their military tuition assistance.

In order to determine financial need, an applicant must file a Free Application for Federal Student Aid (FAFSA), which can be done online at www.fafsa.ed.gov. The applicant must also submit a letter describing personal circumstances that make earning an education important. Awards will be credited to a student's account in increments up to a maximum of \$500 per course toward tuition. The application is available online through the student self-service portal. The letter describing personal circumstances should be sent to:

The Office of Scholarships
National University
11255 North Torrey Pines Road
La Jolla, CA 92037-1011

Believe and Achieve Scholarship

This scholarship opportunity assists qualified students to remain in school to support them in achieving their educational and career goals. The Believe and Achieve scholarship is available to undergraduate, graduate, and credential students who are in need of financial assistance.

Prior to applying for this scholarship opportunity, students must meet the eligibility requirements listed below:

- Must be registered with the Office of Student Accessibility Services.

- Have completed at least four courses at National University with an undergraduate cumulative GPA of at least 2.0 or graduate/credential GPA of at least 3.0.
- In order to determine financial need, an applicant must file a Free Application for Federal Student Aid (FAFSA), which can be done online at www.fafsa.ed.gov.
- Recipients must be in good standing with the Student Accounts Office to receive the award.
- Submit an essay (up to 500 words) describing a barrier overcome on their academic journey and what achieving this academic goal means.

Scholarship Rules and Policies

The award amount is equivalent to the tuition for one 4.5 quarter unit course. The award will be disbursed at 50 percent over two courses. The first disbursement would be applied once eligibility requirements are met and the second disbursement would be applied towards the following course. Students must maintain the above GPA requirements to receive the entire award. If the student's GPA falls below the GPA requirements, the second disbursement will not be awarded.

This award will be considered an educational resource when determining your eligibility for Federal Student Aid and award determination will be based on merit and financial need. Financial aid resources may affect your eligibility for this scholarship including full funding for tuition from Cal Grant, military tuition assistance, reduced tuition rates for military and cohorts, and employer reimbursement programs. Students receiving the Transfer to Success Scholarship are not eligible for the Believe and Achieve Scholarship.

Students must contact the Student Accessibility Services to apply for the scholarship.

Transfer to Success Scholarship

National University is committed to supporting the success and achievement of community college students continuing their academic journey through its Transfer to Success Scholarship. This scholarship is designed to assist undergraduate students pursuing a bachelor's degree who are transferring from a California community college or another community college which has a signed agreement with National University. Students who meet the eligibility criteria outlined below will automatically be considered for this scholarship following formal acceptance to the University.

To be eligible for the Transfer to Success Scholarship, a student must meet the following requirements:

- Be enrolling for the first time at the University.
- Be in good academic standing at the community college and have a 2.0 incoming grade point average at the time of application to National University.
- Have completed at least 30 semester units at a California community college or combination of California community colleges or at another approved community college.
- The last semester of attendance was at an approved community college and is within 24 months of application to National University.
- Must be formally accepted to the University (Formal acceptance is achieved once all transcripts have been submitted and evaluated).
- ALL prior university and college academic transcripts must be submitted within 30 days following submission of the application for admission to be eligible for the Transfer to Success scholarship (No Exceptions).

The award will pay up to \$4,700. Fifty percent of the award will apply to two courses within the first six months; with the remainder applied to the last two courses of the degree program. In addition, the \$60 admission fee will be credited to student account.

Financial aid resources may affect your eligibility for this scholarship including full funding for tuition from Cal Grant, military tuition assistance, reduced tuition rates for military and cohorts, and employer reimbursement programs.

Scholarship Rules and Policies

Rules and policies that govern National University funded awards are as follows:

- To be considered for an award, students must apply and begin attending courses within the first three months of admission. Award recipients have

twelve (12) months from the date of notification of the award to use funds, after which, all unused funds will be revoked.

- Funds will not be applied toward non-degree or certificate courses.
- Funds are credited to a student's account in maximum increments of \$500 per 4.5 unit course per month for the Collegiate Honor Award; \$500 per 4.5 unit course per month for the Military Tuition Scholarship; up to the full cost of tuition per month for the Presidential Tuition Scholarship (up to \$2500 total).
- Award funds will only be applied toward the tuition cost for academic coursework toward an intended degree objective.
- Awards are not transferable. Only one award can be received and used per degree objective.
- Awards are made to students for their intended degree objective at the time of application.
- Students who receive other educational assistance in excess of 90 percent of the cost of tuition for a course are not eligible to receive award funds for the course.
- Recipients must maintain good standing with the Student Accounts Office to ensure continuation of their award.
- This award may affect the amount of other financial aid for which a student may qualify, or the award may be reduced or nullified by other educational assistance and aid the student receives.
- Application of award funds toward a withdrawn course will be based on the charge incurred. If there is no charge, there will be no application of funds.

Externally Funded Scholarships

There are many corporations, organizations, and foundations that provide scholarships to students seeking undergraduate and graduate degrees. For application procedures and scholarship criteria, students should consult the University's Financial Aid website or reference books in National University's Library Catalog (<http://tinyurl.com/NUCATALOG>).

MILITARY PROGRAMS AND VA BENEFITS

National University Veterans Affairs Department
9388 Lightwave Avenue
Suite 163A
San Diego CA 92123
Email: veteransaffairs@nu.edu
Phone: 858.541.7970
Fax: 858.541.7975

VA students using GI Bill educational programs are requested to provide the following documents by email or fax.

- VA 22-1990, Application for VA Education Benefits or Certificate of Eligibility.
- DD 214, Certificate of Release or Discharge from Active Duty for prior military service.
- VA 22-1995, Request for Change of Programs or Place of Training when changing schools.
- VA 22-5490, Dependents' Application for VA Education Benefits.
- VA 22-5495, Dependents' Request for Change of Program or Place of Training.
- VA 22-1990e, Application for Family Member to Use Transferred Benefits.

VA students must notify Veterans Affairs Department of National University when their course schedule changes due to additions, drops or withdrawals to minimize indebtedness from the US Department of Veterans Affairs.

VETERANS AFFAIRS (VA) EDUCATIONAL BENEFITS

The toll free number for the Department of Veterans Affairs – Education Call Center is 1.888.GI.BILL (1.888.442.4551) which is located in Muskogee, OK. Education Case Managers are available from 7:00 am to 7:00 pm (CST), Monday to Friday.

Many active duty military personnel, veterans, family members of active duty personnel, family members of deceased or disabled veterans, and reservists are

eligible for US Department of Veterans Affairs' educational benefit and programs (www.gibill.va.gov). These programs and benefit are administered by the Veterans Affairs Department at National University who may be contacted at email veteransaffairs@nu.edu or 858.541.7970.

Chapter 32, Post-Vietnam Veterans' Educational Assistance Program (VEAP)

For veterans who entered active duty between January 1, 1977 and June 30, 1985 and who contributed to the program while on active duty.

Chapter 30, Montgomery GI Bill Active Duty (MGIB-AD)

For veterans who entered active duty beginning July 1, 1985 and who participated in the 12-month pay reduction program while on active duty; remaining entitlement under the Vietnam Era GI Bill (Chapter 34); involuntarily separated for certain reasons or separated under the VSI (Voluntary Separation Incentive) or SSB (Special Separation Benefit) program; Chapter 32 active duty persons with eligibility as of October 9, 1996 who elected to participate in the Montgomery GI Bill.

GI Bill® is a registered trademark of the U.S. Department of Veterans Affairs (VA). More information about education benefits offered by VA is available at the official U.S. government Web site at <http://www.benefits.va.gov/gibill>.

Chapter 1606, Montgomery GI Bill (Selected Reserve Program)

For undergraduates and graduates who enlisted in the reserves and who have made a six-year commitment to the selected reserves.

Chapter 1607, Reserve Educational Assistance Program (REAP)

For undergraduate and graduate students of the reserves personnel who were recalled for active duty. Eligibility is determined by the Department of Defense.

Chapter 35, Dependents' Educational Assistance Program (DEA)

For spouses or children of veterans who died on active duty, whose death was caused by a service-connected disability, or who are rated 100 percent permanently disabled according to the US Department of Veterans Affairs.

Chapter 31, Vocational Rehabilitation and Employment (VetSuccess) Program

Veterans are eligible if they have a service-connected disability rating of at least 10 percent or a memorandum rating of 20 percent or more from the US Department of Veterans Affairs. A Veteran who is eligible for an evaluation under Chapter 31 must first apply for services and receive an appointment with a Vocational Rehabilitation Counselor (VRC). Students should contact the Department of Veterans Affairs at 1.800.827.1000. The VRC will work with the Veteran to determine if an employment handicap exists as a result of a service connected disability. The VRC and the Veteran will work together to implement a plan to assist the Veteran to achieve employment and/or independent living goals.

National University military evaluations staff conducts a pre-evaluation and forwards the estimate to a VRC. The VRC reviews the pre-evaluation and makes a determination. The veteran student meets with the VRC to sign an Individually Written Rehab Plan (IWRP). The VRC generates a VA 28-1905 contract indicating approval and sends a copy to National University Veterans Affairs Department and to military evaluations staff. NU VA Department submits enrollment certifications to notify the Department of Veterans Affairs of the student's enrollment.

Chapter 34, Vietnam Era GI Bill

For veterans who served on active duty after January 31, 1955 and prior to January 1, 1977.

Chapter 33, Post-9/11 GI Bill

The Post-9/11 GI Bill is for individuals with at least 90 days of aggregate service after September 10, 2001, or individuals discharged with a service-connected disability after 30 days and must have received an honorable discharge to be eligible for the Post-9/11 GI Bill. The Post-9/11 GI Bill is effective for training on or after August 1, 2009. Eligibility is determined by the US Department of Veterans Affairs. Depending on each individual's situation benefits could include tuition and fees, a monthly housing allowance, and stipend. Post 9/11 benefits differ from other education assistance programs in that each type of payment is issued separately, with tuition and fee payments made directly to the school while monthly housing allowance and stipend are paid to the individual.

Transfer of Post-9/11 GI Bill Benefits to Dependents (TEB)

Effective August 1, 2009, eligible service members enrolled in the Post 9/11 GI Bill program may transfer unused educational benefit to their spouses or children. See the official DoD TEB website to begin the transferability process of Education Benefit (TEB) Milconnect Web application: <https://www.dmdc.osd.mil/milconnect>.

eBenefits

Veteran students are strongly encouraged to register and utilize eBenefits (<https://www.ebenefits.va.gov>) to assist them in the following:

- Obtaining up to date information on their educational entitlement.
- Updating their Direct Deposit and personal contact information.
- Downloading VA letters and personal documents.
- Viewing the current status of their payments (both education and disability).

Students can register for either a Basic or Premium account, but must be enrolled in the Defense Enrollment Eligibility Reporting System (DEERS) to obtain either account type. If you are unable to register call the VA Education Call Center at 1.888.442.4551 for assistance.

Yellow Ribbon Program for Post 9/11 Chapter 33 Students

National University participates in the Yellow Ribbon Program (YRP), where the Department of Veterans Affairs and National University have agreed to fund the tuition and fees that exceed the basic tuition and fees national annual cap per academic year for a private institution of higher learning (IHL). The academic year is from August 1, 2016 to July 31, 2017.

Application for Yellow Ribbon Program (Post 9/11 Chapter 33) is on a first-come, first-served basis. A student will provide NU Veterans Affairs Department a copy of their most recent Letter of Entitlement indicating balance of Post 9/11 entitlements for the academic year.

Veterans, spouses of veterans and dependents under the Transfer of Entitlement provision must be eligible at the 100% benefit level.

- Active duty members are not eligible for Yellow Ribbon Program.
- Spouses of active duty members are not eligible for Yellow Ribbon Program.

- Recipients of Marine Gunnery Sergeant John David Fry Scholarship are not eligible for Yellow Ribbon Program.
- Students who exhaust their Chapter 33 entitlements prior to exceeding the annual cap are not eligible for Yellow Ribbon Program.

Eligible students will receive matching funds from National University and the US Department of Veterans Affairs per academic year and all subsequent academic years in which National University is participating in the Yellow Ribbon Program; and the student maintains satisfactory progress, conduct and continuous enrollment.

National University will make financial contributions that exceed the tuition and fees cap for the academic year on behalf of the student in the form of a “Yellow Ribbon Program Tuition Waiver” and the US Department of Veterans Affairs will match that contribution.

Students repeating a course, who had previously received credit and an appropriate letter grade, will not receive Yellow Ribbon Program Tuition Waiver for repeating the course.

Students should be aware that the US Department of Veterans Affairs pays educational benefits only for those courses that are part of an approved degree or certificate program and that have not been previously and successfully completed.

Students are required to attend classes regularly and maintain satisfactory grades.

Using VA Benefits for Remedial Courses

Remedial courses such as MTH 12A Algebra I, MTH 12B Algebra II and ENG 013 Strategies for Writing are designed to correct deficiencies in basic Mathematics, English and Reading. These courses - MTH 12A Algebra I, MTH 12B Algebra II and ENG 013 Strategies for Writing can be certified as part of an approved program for students whose needs have been established.

Only Residential (classroom setting or onsite) remedial courses can be certified for VA benefits. Online remedial courses (including online independent study) cannot be approved and cannot be certified to VA.

Chapter 30, 33, 1606 and 1607: Entitlement is charged for remedial training. Chapter 35: Entitlement is not charged up to 5 months of full-time Remedial training.

FINANCIAL AID CALENDAR

A calendar of deadlines and critical dates for students applying for financial aid at the University.

2016-2017	2017-2018	
January 1, 2016	October 1, 2016	<ul style="list-style-type: none"> • Apply for financial aid. Students must file a new Free Application for Federal Student Aid (FAFSA) annually.
March 2, 2016	March 2, 2017	<ul style="list-style-type: none"> • Deadline for new Cal Grant A and B applications. • National University Financial Aid priority filing date for FSEOG and Federal Perkins Loans. Note: The Financial Aid Office will continue to make awards after this date as long as funds remain.
April 2016	April 2017	<ul style="list-style-type: none"> • National University begins processing student awards. Financial Aid Packets containing the IAFFA and other verification documents will be mailed to aid applicants.
June 2016	June 2017	<ul style="list-style-type: none"> • Announcements of Cal Grant A and B Awards.
July 2016	July 2017	<ul style="list-style-type: none"> • The funding period begins for the Federal Pell Grant and Campus-Based programs (FSEOG, Federal Perkins).
October 2016	October 2017	<ul style="list-style-type: none"> • The funding period begins for the Cal Grant programs.
June 30, 2017	June 30, 2017	<ul style="list-style-type: none"> • Federal Pell Grant deadline. • Last day to file the FAFSA. • Note: The Federal Student Aid Center must receive the student's FAFSA by this date (June 30th). Applications post-marked June 30th and received by the processor after June 30th will not be accepted for processing.
June 30, 2017	June 30, 2018	<ul style="list-style-type: none"> • National University Verification/Processing deadline. Students must submit all requested forms by this date in order to receive financial aid for the school year.
Completion of Student's Academic Year		<ul style="list-style-type: none"> • Applying for an additional loan (Stafford and/or PLUS): Because students apply for and are awarded aid during different times of the year, each student's academic year will vary. Generally, students are eligible to reapply after they successfully complete all courses in the previous loan period. In addition, 32 weeks of in-class instruction (8 months) must be completed. Loans at the end of an academic program will be calculated and awarded as prorated based on the remaining units and weeks of instruction.

Non-Matriculated Veteran Students

VA defines matriculated as having been formally admitted to a college or university as a degree-seeking student. VA educational benefits cannot be paid to non-matriculated college or university students unless they are pending admission to National University.

In that case, veteran students can be certified for two terms. A student can be certified beyond this two term limit once the student is formally admitted to National University as a degree seeking student, irrespective of the number of credits taken.

Course Applicability for Veteran Students Using VA Benefits (Applies to all GI Bill Educational Programs)

U.S. Department of Veterans Affairs pays GI Bill benefits in pursuit of one educational degree at a time. Only courses that satisfy the minimum requirements outlined by the curriculum guide or graduation evaluation form can be certified for VA purposes. A curriculum guide or graduation evaluation form should be kept in the student's file. When a student takes a course that does not fulfill a program requirement, it cannot be certified for VA purposes. Excessive free electives, for example, cannot be certified.

Vocational Rehabilitation Eligibility Procedures

Vocational Rehabilitation is a state-supported program of services funded under Title I of the Rehabilitation Act of 1973 that assists individuals with disabilities who are pursuing meaningful careers.

Vocational Rehabilitation can also be sponsored by the US Department of Veterans Affairs.

Prospective students eligible for Vocational Rehabilitation must work with an Academic Advisor to prepare the documents required below. The Academic Advisor will send an email to militaryevaluations@nu.edu with the following information:

1. Student name
2. Student ID
3. Program of interest
4. Name of company or organization providing sponsorship for Vocational Rehabilitation
5. Name and contact information of Vocational Rehabilitation Counselor assigned to the student

In order to make an accurate assessment of the course work remaining under the desired degree program, students must provide transcripts from all previously attended postsecondary institutions, including any military transcripts such as a JST. Unofficial transcripts are acceptable in this pre-evaluation. Once eligibility is determined a letter will be sent to the sponsor(s) listing the courses that the recipient still needs to complete for the requested degree program. This letter, which will be submitted on letterhead and faxed as well as mailed to the sponsor, will furnish a cost estimate. National University will provide up to three different program estimates for each recipient. Students must have a pre-evaluation and Vocational Rehabilitation sponsor approval before enrolling in any classes. The recipient will have exactly one year from the date of the pre-evaluation to take advantage of this contract and retain the catalog rights as stated in the contract. For questions or additional information please contact militaryevaluations@nu.edu.

MILITARY TUITION ASSISTANCE

Tuition Assistance is an educational financial assistance program that provides up to 100% of tuition and fees for courses taken by active duty military personnel. It provides funding to eligible members of the Army, Navy, Marine Corps, Coast Guard, National Guard and Air Force. Each service has its own criteria for eligibility, obligated service, application process and restrictions. Students are to apply for tuition assistance through their Education Offices on-base. Students must send a copy of approved tuition assistance voucher with student ID number to veteransaffairs@nu.edu or fax it to 858.541.7975.

Tuition Assistance Top-up (TATU) allows the Department of Veterans Affairs to reimburse an individual for all or a portion of the charges of a course or courses that are not reimbursed under certain military programs. To receive Top-up, an individual must be eligible for Chapter 30 Montgomery GI Bill – Active Duty or Chapter 33 Post 9/11 GI Bill education benefits and also receive some amount of Tuition Assistance from his or her military component for the course(s) pursuing.

VA cannot pay Top-up if the Tuition Assistance amount is zero. Students must notify the VA Department when they would like to apply for their Top-up by annotating their approved TA voucher with “Top-Up” on the upper portion of the document. Students should send all approved TA vouchers directly to veteransaffairs@nu.edu or fax to 858. 541.7975.

Students who want to apply for programs administered by the US Department of Veterans Affairs can obtain information on how to apply for their benefits at <https://www.ebenefits.va.gov> or by calling or visiting the National University Veterans Affairs Department located at the Spectrum Business Park campus. Veterans who enroll at National University are encouraged to call or visit the veterans representative for instructions prior to signing up for benefits. The National University Veterans Affairs Department telephone number is 858.541.7970 and email is veteransaffairs@nu.edu.

Nevada students should contact National University Veteran Affairs Office at 2850 W. Horizon Ridge Parkway, Suite 300, Henderson, Nevada, 89052, or call 702.531.7800.

Study Abroad

Courses pursued in foreign countries must:

- Be approved.
- Be offered at an institution of higher learning (IHL).
- Be required for the student's degree program.

Under Post 9/11 Chapter 33, VA will pay:

- Home School's tuition and fees.
- Books and supplies stipend.
- Monthly housing allowance based on the home school's address.
- Additional fees specific to the Study Abroad program. The Study Abroad option must be required for graduation.

VA will not pay:

- Costs related to travel (airfare, lodging and meals).
- Third party charges (amenities fees or host school fees) even if study abroad option is required.

POST 9/11 CHAPTER 33 MONTHLY HOUSING ALLOWANCE

A monthly housing allowance is paid directly to the student. Payment is made in arrears. Housing allowance is based on the zip code of National University. A housing allowance is paid when a student's rate of pursuit is more than 50%. This means that a student must take 4.5 units per month. Due to the uniqueness of National University's accelerated degree programs, VA pays prorated housing allowance during the period of attendance and enrollment.

Students may call the VA education hotline at 1.888.442.4551 to discuss housing allowance payment and obtain an estimate of their housing allowance.

Undergraduate Level

Full-time is considered at 4.5 units (one course) per month. Students are encouraged to have a dialogue with their assigned advisors to determine the availability of courses applicable to their degree program when they are pursuing a course less than the full-time rate of 4.5 units per month in order to be eligible for housing allowance for a specific period.

Graduate Level

Full-time is considered at 4.5 units (one course) per month. National University provides the training time/full-time information to the US Department of Veterans Affairs in addition to term dates and credit units/hours of the enrollment for graduate students. In some graduate degree programs, housing allowance may not be paid due to the limitations of the academic structure of the program for a specific term. When a 4.5 unit course spans more than a month, the student may call VA education hotline at 1.888.442.4551 to obtain an estimate of their housing allowance.

Online or Distance Learning

Students exclusively taking an online or distance learning course at 4.5 units per month are eligible for housing allowance equal to 50% of the national average of Basic Allowances for Housing (BAH).

Books and Supplies Stipend

The books and supplies stipend is paid directly to the student when the enrollment certification is processed. The maximum stipend is \$1,000 per academic year. The stipend is prorated by the student's length of service percentage ranging from 40% to 100%.

Rounding Out Rule

A student can round out his/her schedule with non-required courses to bring his/her course load up to a full-time schedule in his/her **last term only**. A student would continue to receive housing allowance benefits in his/her last term of enrollment with the application of the rounding out. This procedure can only be applied once per program.

In rounding out a full-time schedule, students may use any credit hour unit course, including a course that was previously successfully completed (received a passing grade).

Students should coordinate with their assigned advisors to determine the availability of courses for the last term. Then, students must notify the VA Department (veteransaffairs@nu.edu) to seek approval of the application of the rounding out rule. The VA Education Liaison Representative (ELR) San Diego determines if students are eligible for the rounding out rule. National University VA Department submits enrollment certifications for the specific period of the last term only for those students granted approval by VA ELR San Diego.

Repeating Courses

When a student fails a course required for the current degree program or when a degree program requires a higher grade than the one achieved in a particular course for successful completion, that course may be repeated and certified to VA again. A course may be repeated a maximum of two times.

Courses that have been successfully completed may not be certified again for VA benefits if they are repeated.

Scenario 1: The Nursing program requires a “B” or better in all nursing core courses, then that class may be repeated if a “B” or better was not earned. This requirement must be published in the school catalog.

Scenario 2: A student may repeat a course required for graduation and can be certified for said course until it is successfully completed. A course may be repeated a maximum of two times in accordance with National University’s policy.

Scenario 3: A course cannot be certified to VA when a student chooses to repeat a course that was successfully completed just to improve his/her GPA.

PARENT SCHOOL LETTER AND CONCURRENT ENROLLMENT

A student may take courses at more than one school that apply to his/her current degree program. When National University grants the degree, then National University is the primary school. All other schools are secondary schools. All courses to be taken at the secondary school must be pre-approved by National University in order to be certified with the VA. National University VA Department provides an approved parent school letter addressed to the VA school Certifying Official of the secondary school.

ALTERNATIVE EDUCATIONAL FUNDING

Reserve Officers’ Training Program (ROTC) Army and Air Force

Students can enroll in the ROTC program while attending classes at National University. There is a continuing need for scientific computer, engineering, medical, and management personnel as well as pilots and navigators in both the Army and Air Force.

ROTC offers scholarships on a competitive basis for students already enrolled in college. Scholarship programs vary slightly each year. Generally, scholarships exist at the two-, three-and one-half- and four-year college levels. Applicants for ROTC scholarships are selected on the basis of the “whole-person” concept that includes both objective (e.g., grade point average) and subjective (e.g., interview evaluation) factors.

National University students can enroll in ROTC by contacting the local ROTC Recruiting Office. Veterans who complete their studies and are commissioned by age 35 may also be eligible for the ROTC.

Corporate Tuition Assistance

Many companies and government agencies award tuition reimbursement to employees. Students should check with their employer for information on how to apply for this employee-development fringe benefit.

Aid for Native Americans

Native American students who can prove membership in a federally recognized tribe may receive educational grants from the federal Bureau of Indian Affairs (BIA). Applications for BIA grants for California tribes are available by writing the Bureau’s Office of Indian Education, 2800 Cottage Way, Sacramento, CA 95825 or by calling 916.978.4680.

California State Rehabilitation

The Department of Rehabilitation is a state agency that helps men and women with disabilities enter or return to work. It also has programs that ensure the rights of people with disabilities. Persons with a disability who need help living more independently or who need training to get a job should contact the regional office of this state agency.

Private Lenders

There are several privately funded education loan programs available to assist students who do not qualify or have limited eligibility for government or Institutional financial aid. Additional private lenders can be found at www.elmselect.com.

ADDITIONAL INFORMATION SOURCES

California Student Aid Commission

www.csac.ca.gov

U.S. Department of Veterans Affairs

www.benefits.va.gov

Gateway to Veterans Benefits Information eBenefits

<https://www.ebenefits.va.gov>

Military Community Financial Aid Search

www.mcsfex.net

U.S. Department of Education

www.ed.gov/finaid.html

College is Possible

www.collegeispossible.org

Scholarship Search and Financial Aid Calculator

www.fastweb.com

The U.S. Department of Education has created the Student Financial Aid Ombudsman to work with student loan borrowers to informally resolve loan disputes and problems with the following federal loans:

- William D. Ford Federal Direct Stafford Loans: Subsidized and Unsubsidized Direct Stafford Loans, Direct PLUS Loans (for parents and grad students) and Direct Consolidation Loans
- Consolidation Loans
- Guaranteed Student Loans, SLS Loans and Perkins Loans
- Ombudsman Customer Service Line at 877.557.2575 or at www.fsahelped.gov/

Definition of Enrollment Status (Applicable to Graduate Students Receiving Veteran Benefits Only)												
Units	Weeks											
	12	11	10	9	8	7	6	5	4	3	2	1
13.5	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT
12	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT
11	3/4	FT	FT	FT	FT							
10	3/4	3/4	FT	FT	FT	FT						
9	3/4	3/4	3/4	FT	FT	FT	FT	FT	FT	FT	FT	FT
8	1/2	1/2	3/4	3/4	FT	FT	FT	FT	FT	FT	FT	FT
7.5	1/2	1/2	3/4	3/4	3/4	FT	FT	FT	FT	FT	FT	FT
7	1/2	1/2	1/2	3/4	3/4	FT	FT	FT	FT	FT	FT	FT
6	1/2	1/2	1/2	1/2	3/4	3/4	FT	FT	FT	FT	FT	FT
5	←1/2	←1/2	1/2	1/2	1/2	1/2	3/4	FT	FT	FT	FT	FT
4.5	←1/2	←1/2	←1/2	1/2	1/2	1/2	3/4	3/4	FT	FT	FT	FT
3	1/4	1/4	1/4	←1/2	←1/2	←1/2	1/2	1/2	3/4	FT	FT	FT
2.25	←1/4	←1/4	←1/4	1/4	1/4	1/4	←1/2	←1/2	1/2	3/4	FT	FT
1.5	←1/4	←1/4	←1/4	←1/4	←1/4	←1/4	1/4	1/4	←1/2	1/2	3/4	FT

FINANCIAL AID PROGRAMS 2016-2017							APPLICATION DEADLINE	DATE FUNDING BEGINS	
GRANT	LOAN	UNDERGRADUATE	GRADUATE	CRED - 1	CERT - 2	NEED-BASED			
							<p>FEDERAL PELL GRANT is a grant program to help students with tuition cost. This program assists students who are working towards a first bachelor's degree.</p> <ul style="list-style-type: none"> Award Range: \$302 to \$5,775 Applications: FAFSA 	June 30, 2017	July 2016
							<p>FEDERAL SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANT (FSEOG) is a grant-program to assist with tuition cost. Like Pell Grant, a student must be enrolled in a first bachelors degree. Awards are made on a limited basis to students with an exceptional financial need.</p> <ul style="list-style-type: none"> Award: \$1,200 maximum per year Applications: FAFSA 	Priority filing date: March 2, 2016	July 2016
							<p>CAL GRANT A is a state funded grant program to help students with tuition cost. Grant recipients are selected on the basis of financial need and grade point average. Students must be California residents working towards a first bachelor's degree. Recipients of this award will be notified by the California Student Aid Commission in June.</p> <ul style="list-style-type: none"> Award: \$3,028 per quarter Applications: FAFSA, GPA verification 	March 2, 2016	October 2016
							<p>CAL GRANT B is a state funded grant program to help students with tuition cost. This program is intended to assist students with high-potential from disadvantaged/low-income families. Students must be California residents who have completed less than one semester of undergraduate studies. Recipients of this award will be notified by the California Student Aid Commission in June.</p> <ul style="list-style-type: none"> Tuition Award: \$3,028 per quarter Access: \$552 per quarter Applications: FAFSA, GPA verification 	March 2, 2016	October 2016

FAFSA: Free Application for Federal Student Aid
GPA: Grade Point Average
Note: Award ranges and aid types are tentative.

1. Credential Program

Students must complete the program residency requirement at National (except for recipients of NU Scholarships) and may only apply for financial aid as a fifth year undergraduate.

2. Certificate Program

These programs must consist of 36 units in length (except for recipients of NU Scholarships). Students are not eligible to reapply for an additional Stafford or PLUS Loan in the Certificate Program.

FINANCIAL AID PROGRAMS 2016-2017							APPLICATION DEADLINE	DATE FUNDING BEGINS
GRANT	LOAN	UNDERGRADUATE	GRADUATE	CRED - 1	CERT - 2	NEED-BASED		
						<p>TEACH GRANT PROGRAM was created by Congress through the College Cost Reduction Act of 2007. The Teacher Education Assistance for College and Higher Education Grant Program (TEACH) provides grants of up to \$4,000 per year to students who intend to teach in a public or private elementary or secondary school that serves students from low-income families. http://studentaid.ed.gov/PORTALSWebApp/students/english/TEACH.jsp https://teach-ats.ed.gov/ats/index.action</p> <ul style="list-style-type: none"> • Award Range: \$100 to \$4,000 • Applications: FAFSA 	June 30, 2017	July 2016
						<p>FEDERAL PERKINS LOAN is a low-interest (5%) loan program. This program assists students with tuition cost and is funded on a limited basis to students with exceptional need. The major advantage for Perkins recipients is that the government pays the interest during at least half-time attendance and for nine months after the student's last date of attendance. In addition, students are not required to make payments during that time.</p> <ul style="list-style-type: none"> • Award Range: \$300 to \$3,600 • Cumulative Totals: <ul style="list-style-type: none"> » Up to \$20,000 for undergraduate study » Up to \$40,000 for graduate or professional study • Applications: FAFSA 	Priority filing date: March 2, 2016	July 2016
						<p>FEDERAL PLUS PARENT LOANS FOR STUDENTS is a loan program to assist parents of undergraduate dependent students with educational costs. The interest rate is fixed at 6.84% for loans. Like the unsubsidized Stafford Loan, the interest is not subsidized by the government. Repayment begins 60 days after the loan is made.</p> <ul style="list-style-type: none"> • Loan Amount: For each academic year, a parent may borrow up to the student's cost of attendance minus other aid, per undergraduate dependent student. • Fees: Origination and Federal Default fees vary per lender. • Applications: Parent IAFFA, FAFSA, Loan Request 	Three months prior to the student's last course of the academic year.	Based on each student's individual course schedule.
						<p>FEDERAL PLUS LOANS FOR GRADUATE STUDENTS (GRAD PLUS) is a loan program to assist graduate students with educational costs. This loan requires the borrower to demonstrate credit-worthiness, has a fixed interest rate of 6.84%, and fees up to 4% may be charged. Like the unsubsidized Stafford loan, the interest is not subsidized by the government. Contact your lender for information regarding payment deferment, if applicable.</p> <ul style="list-style-type: none"> • Loan Amount: For each academic year, the student may borrow up to the cost of attendance minus other aid. • Fees: (same as the PLUS Loan Program) • Applications: FAFSA, Loan Application 	Three months prior to the student's last course of the academic year.	Based on each student's individual course schedule.
						<p>SUBSIDIZED FEDERAL STAFFORD STUDENT LOAN is a loan program to assist students with educational expenses. The undergraduate interest rate is capped at 8.25% and is adjusted July 1 of each year. The 2015-2016 rate is 4.29%. Stafford recipients are not required to make payments or pay the interest during full-time attendance or the first six months after the student's last date of attendance.</p> <ul style="list-style-type: none"> • Loan Amount: For each academic year, a dependent student may borrow: <ul style="list-style-type: none"> – Up to \$3,500 as a first year undergraduate – Up to \$4,500 as a second year undergraduate – Up to \$5,500 as a third, fourth, or fifth year undergraduate – Dependent students may receive both an unsubsidized and subsidized Stafford up to the amounts listed above. • Applications: FAFSA 	Three months prior to the student's last course of the academic year.	Based on each student's individual course schedule.

FINANCIAL AID PROGRAMS 2016-2017							APPLICATION DEADLINE	DATE FUNDING BEGINS
GRANT	LOAN	UNDERGRADUATE	GRADUATE	CRED - 1	CERT - 2	NEED-BASED		
						<p>UNSUBSIDIZED FEDERAL STAFFORD LOAN is a program available to students who may not qualify for a subsidized Stafford Loan or for students who may qualify for only a partial subsidized Stafford Loan. This loan has a variable interest rate capped at 8.25% adjusted July 1 of each year. The 2015-2016 rate is 4.29%. The terms and conditions are the same as the subsidized Stafford Loan, except that the borrower is responsible for the interest that accrues while the student is in school and during the grace period.</p> <p>Loan Amount: Students may receive both subsidized and unsubsidized Stafford Loans totaling up to the applicable Stafford limit (based on grade level).</p> <p>Applications: FAFSA</p> <p>Loan Amount: For each academic year, an independent student may borrow:</p> <ul style="list-style-type: none"> Up to \$9,500 as a first year undergraduate (at least \$6,000 of this amount must be in unsubsidized Stafford) Up to \$10,500 as a second year undergraduate (at least \$6,000 of this amount must be in unsubsidized Stafford) Up to \$12,500 as a third, fourth, or fifth year undergraduate (at least \$7,000 of this amount must be in unsubsidized Stafford) Up to \$12,500 for a credential (at least \$7,000 of this amount must be in unsubsidized Stafford) Up to \$20,500 as a graduate <p>Note: Students enrolled in an academic year requiring less than 36 units will be subject to a pro-rated loan.</p> <p>Aggregate Stafford Loan Limits</p> <p>Dependent Undergraduate: \$31,000</p> <p>Independent Undergraduate: \$57,500</p> <p>Graduate: \$138,500 (\$65,500 in subsidized Stafford and \$73,000 in unsubsidized Stafford)</p> <p>Note: The graduate debt limit includes any Stafford Loans received as an undergraduate.</p> <p>Fees:</p> <ul style="list-style-type: none"> Loan Origination Fee: A loan origination fee of up to 1.068% of the loan principal is deducted proportionately from each loan disbursement effective October 1, 2015. Insurance Premium: An insurance premium of up to 1% of the loan principal, called the Federal Default fee, may also be deducted proportionately from each loan disbursement effective October 1, 2015. 	Three months prior to the student's last course of the academic year.	Based on each student's individual course schedule.
						<p>NATIONAL UNIVERSITY SCHOLARSHIP PROGRAM consists of the Collegiate Honor Award, the NU Presidential Scholarship, and the Military Tuition Scholarship. These awards are designed to recognize students for outstanding leadership, superior job performance and exceptional scholastic achievement. The NU Presidential Tuition Scholarship is also designed to recruit and retain underrepresented educationally and economically disadvantaged students, single parents with financial need and handicapped students.</p> <p>Awards:</p> <ul style="list-style-type: none"> Collegiate Honor up to \$2,000 Presidential Tuition Scholarship up to \$2,500 Military Tuition Scholarship up to \$2,500 <p>Application: Scholarship Application</p>	Open, but subject to available funds.	Funding will begin upon receipt of the signed scholarship acceptance letter by the Financial Aid Department.
						<p>NATIONAL UNIVERSITY HIGHER EDUCATION LOAN PROGRAM (NU-HELP) is a low-interest (4.29%) loan established by National University. This loan program is designed to supplement other resources the student may receive. Applicants are selected on the basis of financial need and credit history. Repayment begins six months after the student's last date of attendance. The maximum repayment term is 10 years. Funds are awarded to assist students with tuition cost, on a limited basis.</p> <ul style="list-style-type: none"> Award Range: up to full tuition for 12 months 	Open, but subject to available funds.	July 2016



POLICIES AND PROCEDURES

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POLICIES AND PROCEDURES

GENERAL POLICIES AND PROCEDURES

Attendance Procedures

The academic year is divided into four 12 week quarters, each comprised of three sessions. Students may enroll in classes in most programs any month of the year.

The start-date of a session is the first Monday of the new course term. If the first Monday is a holiday, the start-date of the session will be the first Tuesday. For example, if the first class meeting offered in the September session meets on Mondays and Wednesdays, and Monday is the holiday, then that first Tuesday is the start-date for the session. The term start date (whether a Monday or Tuesday) is the start date of the session and not the day students meet for their first class. Students are considered officially enrolled in a class at midnight (PST) of the ninth (9th) day of the session.

All students must be officially enrolled in order to attend class and to receive a grade. This means that the course must be added to the student's schedule prior to the ninth (9th) day of the session. University instructors will not permit non-enrolled students to attend a class or be issued a grade. The Office of the Registrar will not post grades for students who are not officially enrolled.

Students are expected to attend all scheduled classes of a course. An absence is recorded each time a student does not attend a regularly scheduled class, whether or not it is an excused absence. Students who have more than three (3) absences and who are still enrolled as of midnight (PST) of the twenty-first (21st) day of the session will be issued a letter grade of "F" or "U" as appropriate for the grading criteria of the class. Tardiness and early departures from classes accrue and have the potential to cumulatively affect absences.

Lack of participation and/or attendance for students taking onsite or online classes does not qualify the student for a refund or consideration for a drop or withdrawal from the class unless the student submits the request within the established timeframe (see refund and course drop and withdrawal policy). Students, whether onsite or online, are responsible for following the published policy on deadlines for drop and withdrawal.

With instructor approval, students may be allowed to make up examinations or class assignments missed due to absence or tardiness. Students must arrange to complete any make-up work with the instructor in advance. Work must be completed prior to the final class session. A grade of incomplete may be issued if the student has attended two-thirds of the course and coursework is not completed by the final class session. Instructors may use their discretion when issuing approval of, and assigning, an incomplete grade.

Any dispute about attendance must be addressed by the student in writing and submitted to the Office of the Registrar within ninety (90) days of grade posting. If extenuating circumstances prevent the submission of the dispute within that time frame, the Office of the Registrar will make a determination about whether the circumstances warrant further consideration. The Office of the Registrar will not consider a dispute that is more than one year old.

Once grades have been issued and credit awarded, neither the coursework nor the grade can be expunged from the student's record. Tuition will not be refunded without extenuating circumstances and approval of the Finance Committee.

Refund Policy

Students are accepted and enrolled in classes with the understanding they will attend the entire course. Students may drop a course prior to midnight (PST) of the ninth (9th) day of the session by contacting their academic advisor or 1-866-NU-ACCESS (1.866.682.2237) or scs@nu.edu. The student is responsible for ensuring that the drop or withdrawal is reflected in their record appropriately by viewing their schedule on the student web portal.

To accurately count session days, note that the first day of a session—and not the actual day a student attends class—counts as day one. The University counts calendar days rather than business days for determining refunds. As such, if the first day of the session is a Monday, the student would need to drop prior to midnight (PST) of the following Tuesday, the ninth day of that session.

If a student does not complete a course, tuition refunds are made according to the schedule below. The refund policy is the same for onsite and online classes. Students who drop or withdraw from a course:

- Prior to midnight (PST) of the ninth (9th) day of the session receive a 100 percent refund;
- Prior to midnight (PST) of the tenth (10th) day of the session receive a 50 percent refund; and
- After midnight (PST) of the tenth (10th) day receive no refund.

To receive a refund, students must submit a written request to the nearest Student Accounts Office as the University does not disburse refunds automatically. Students must have a credit balance on their account to receive a refund. Most refunds are processed and mailed within ten (10) working days from the receipt of the request depending on the verification of funds. All refunds are processed via EFT to the bank information as provided or mailed to the student's home address. If payment was made by credit card, refunds will be issued back to the original credit card used and as provided on the refund request form. Refund request forms are available at all Student Accounts Offices.

Refund percentage may vary based on state of residence and state regulatory requirements.

International Student Prepayment

International students admitted to National University with F-1 visas are required to pay their first three classes in advance prior to arrival and as part of the check-in process for the University. Tuition for these three classes is non-refundable.

Payment must be made via credit card or wire transfer. No bank drafts (checks) accepted. If payment is not received prior to the Orientation date listed on the student's I-20 an administrative hold will be placed on their record. All records and services are withheld from students who have any outstanding financial obligations to the University.

Financial Aid Refund Policy

As part of the Higher Education Amendments of 1998, Congress passed new provisions on October 29, 2010 regarding refund policies and procedures for students who have received Federal Student Assistance and are considered withdrawn from school. Based on National University policies, which are made in accordance with federal regulations, a student is considered "withdrawn" if not in attendance for 45 consecutive days.

The Federal Return of Title IV Funds (R2T4) policy was effective October 29, 2010, and governs all federal grant and loan programs, including Federal Pell Grant, SEOG, TEACH Grant, Perkins Loan, Stafford/Direct Loans (subsidized and unsubsidized,) and PLUS loans.

This federal regulation assumes that awards of Federal Student Aid funds are earned in proportion to the number of days attended for the period funded. If a student is considered withdrawn from the University, a calculation is then performed to identify the total scheduled financial assistance the student earned and is therefore entitled to receive. If the student receives (or the University receives on the student's behalf) more financial aid than is earned, the unearned funds must be returned to the Department of Education. If the student receives (or the University receives on the student's behalf) less financial aid than the amount earned, the student may be able to receive those additional funds.

The portion of federal grants and loans that a student is entitled to receive is calculated on a percentage basis. The percentage is determined by comparing the total number of days in the specified payment period to the number of days completed before withdrawing from the University.

For example, if a student completes 30 percent of the payment period, the student earns 30 percent of the financial aid he/she was originally scheduled to receive. This means that 70 percent of the scheduled award received at the beginning of the payment period becomes unearned and must be returned.

In general, loan disbursements and grants cover a specific period of time and number of units called the payment period. Once more than 60 percent of the payment period has been completed, all (100 percent) of the financial aid award received for that period is considered earned.

Important Note: If a student is considered withdrawn from the University (officially or unofficially) before completing 60 percent of a payment period, the student may have to repay unearned federal monies that were already disbursed at the beginning of the payment period.

The withdrawal date will be determined as either:

- The effective date of withdrawal from the last course attempted, as documented by the University, or
- The last date of attendance at an academically related activity, as documented by the University.

If it is determined that the student received excess funds that must be returned, the University shares the responsibility of returning those funds. The University's portion of the funds to be returned is equal to the lesser of:

- The entire amount of the excess funds, or
- The total in tuition and fee charges multiplied by the percentage of unearned aid received.

If the refund calculation determines that the University is not required to return all of the excess funds, then the student must return the remaining amount. Any loan funds that a student is required to return must be repaid according to the terms of the promissory note. If any grant funds must be returned, the law allows the repayment amount to be reduced by 50 percent. This means that a student who has received too much in grant funds will only be required to return half of the excess amount.

If there is a return of any unearned financial aid by the University, the student will be billed accordingly. In such cases, the student will be required to make arrangements with the Student Business Services Office to pay the amount refunded to the Department of Education within 45 days of the date of the University's notification. In addition, the student will not be eligible for any further federal financial aid until the balance is paid to the Business Office. Effective May 1, 2011, National University began reporting student account defaults to credit reporting agencies.

Class Drop and Withdrawal

The term "drop" means a student has dropped a course prior to midnight (PST) of the ninth (9th) day of the session, and no grade or notation appears on the student's record. The term "withdrawal" signifies that a student has withdrawn from a course after midnight (PST) of the ninth (9th) day of the session, and a "W" will appear on the student's record. Students who withdraw after midnight (PST) of the twenty-first (21st) day of the session will receive a grade of "F" or "U," as appropriate for grading criteria of the course. This is a permanent mark with no grade points assigned. Notifying the instructor of one's intent to withdraw is insufficient and will not constitute an official withdrawal. Students may drop a course prior to midnight (PST) of the ninth (9th) day of the session, by contacting their academic advisor or 1.866.NU.ACCESS (1.866.682.2237) or scs@nu.edu. The student is responsible for ensuring that the drop or withdraw is reflected in their record appropriately by viewing their schedule on the student web portal.

Active duty, guard, and reserve military personnel (Army, Navy, Air Force, Marines and Coast Guard) who are enrolled at National University and whose academic progress is interrupted due to deployment or activation mid-month may withdraw without tuition penalty. A student currently in a course will not be charged for the course; however, the class will remain on the student's record with a grade of "W". Students must submit a copy of their military duty assignment orders verifying deployment or activation to their academic advisor along with their request to withdraw the course. This policy does not apply to retired military personnel or dependents.

Leave of Absence

Students are limited to 180 leave days per 12 month period. This need not all be taken at once. A student may have multiple LOAs within a 12 month period provided that the cumulative total does not exceed the allowable amount. University scheduled breaks are included in the 180 leave day limit if a student is on an approved LOA during a scheduled break.

A student on an approved LOA will be considered enrolled at National University. In some cases, these students would be eligible for an in-school deferment for student aid loans. Federal Student Assistance (FSA) may be negatively impacted if students fail to apply for a LOA or if the application is denied.

To request a formal LOA, students will need to follow the steps outlined below. Students who receive FSA in the form of loans and grants, and who will have a break in attendance of 45 days or more, may be subject to recalculation and/or return of unearned FSA monies unless they have an approved LOA on file. Students who do not return from an approved LOA will be withdrawn from the University with regard to all financial aid consideration effective the start date of the LOA.

Further information for FSA students may be obtained from their Student Finance Advisor. Students who are not on FSA, or who do not have a federal loan in deferment, are not required to request a LOA but may choose to do so.

Students requesting a LOA must:

1. Inform their Student Finance Advisor of their request and discuss financial aid implications, as appropriate.
2. Submit the e-form request for Leave of Absence located on the student portal and include the following information:
 - a. Beginning and ending dates of the LOA requested
 - b. Reason for the LOA request. The following are acceptable reasons for LOA: military, medical, jury duty, loss of job, family emergency, employment emergency or include extenuating circumstances which will be approved by the Office of the Registrar.
 - c. Include supporting documentation
3. Submit the request prior to the last week of class in the term preceding the LOA request date. Students out of class during winter, spring, or summer breaks do not need to be approved for a LOA. Late requests during the last week of class in the term preceding the LOA request date may be considered for approval if they include an explanation of the unforeseen circumstances that prevented the earlier submission of the request.

All students are encouraged to submit requests at their earliest opportunity to allow the University adequate time to process the request. Requests submitted the day of the requested leave start date or later will not be considered.

A LOA approval must meet the above criteria and the reason for the request must be approved by the Office of the Registrar.

All LOA requests start the day following the student's last date of attendance at National, unless otherwise requested and approved by the Student Leave of Absence Coordinator. Once approved, the LOA will be entered into the student's record and the student will be reported as an approved LOA student. It is the student's responsibility to determine how this status may affect any external institution or agency.

Students who have been academically disqualified are not eligible for a LOA. Similarly, students who are on LOA and have been academically disqualified will be removed from their LOA status and notified of such action. Please contact the LOA coordinator for detailed information pertaining to academic disqualifications related to LOA at studentloa@nu.edu.

Requesting a LOA does not grant a drop or withdrawal from the current class of attendance. The current class remains subject to the official drop and withdrawal policies as published in the catalog.

Financial Aid Students

Financial aid students must contact their Student Finance Advisor as early as possible upon determining that they would like to request a LOA to discuss the impact on student aid. Students who do not return from an approved LOA will have all future loan disbursements canceled. The loan repayment grace periods established on all previously disbursed loans will have begun as of the first day of the student's approved LOA. Therefore, if the student does not return from an approved LOA, the student may have exhausted some or all of the grace period and may be required to enter into immediate repayment on previously disbursed loans. Students will need to contact their lender(s) regarding grace period rules and requirements.

Finance Committee

Students who wish to dispute the interpretation of a University financial policy, or who seek special consideration regarding a financial matter, can appeal their case to the Finance Committee.

Requests must be submitted in writing through the Student Accounts Office and must contain all pertinent information to support the appeal. All financial disputes must be submitted within one year of occurrence. Each case is decided upon its own merits. The decision of the committee is final and not subject to appeal, unless there is information pertinent to the outcome which was not available at the time of the initial request.

Class Scheduling

Any class changes in a degree program must be consistent with a student's degree objective and fulfill the graduation requirements for the degree. Students should contact their academic advisor for assistance in requesting such changes. Scheduling changes should occur prior to the start date of that class.

For students receiving financial aid, changes made to their schedules after processing may delay or cancel their aid. Students should speak to a Student Finance Advisor before withdrawing from a class or requesting a change of schedule or program.

Students may drop a class prior to midnight (PST) of the ninth (9th) day of the session, by contacting their academic advisor or 1-866-NU-ACCESS (1.866.682.2237) or scs@nu.edu. A grade will not be awarded and tuition will not be charged. After midnight (PST) of the ninth (9th) day of the session, a grade will be entered and tuition will be charged according to the refund policy.

Grade Reporting

All grades are reported electronically. Students can access their official grades as posted to their record via the student web portal on the University's website. Students who need an official printed copy of a grade report can request one through the student portal. Grades are not given over the telephone, via e-mail, or by visiting the Office of the Registrar. Although it is requested that instructors submit grades within ten (10) working days, due to the varying requirements of each course, instructors are allowed a reasonable time frame. Grades are only reported for students who are officially enrolled in a class. Students should direct questions regarding the accuracy of a grade to their instructor.

Student Records

Transcripts and other documents received by the University for the purpose of admission or recording supplemental work become the property of the University and will not be released to or copied for students. Even though California regulatory agencies require that student records be kept for only five (5) years, National University's student records are retained indefinitely.

Transcript Request (Issuance)

National University transcripts are ordered online via the National Student Clearinghouse at www.getmytranscript.com. The transcript fee is \$5. An additional \$2 surcharge is required when sending official transcripts electronically.

The Office of the Registrar issues transcripts and other official documents only after students have settled all financial obligations to the University. All records and services are withheld from students who have any outstanding financial obligations to the University or who have defaulted on a federal Perkins, NU-Help, or NUTC loan. Transcripts contain only coursework completed and GPA earned at National University. A total unit summary of previous external education is reflected on the official transcript.

Definition of Student Status (Full-Time, Part-Time/Half-Time)

A student's enrollment status will be determined based upon their course schedule and the number of units carried (see chart in Financial Aid and Scholarship section). Students who do not attend for a quarter (a three-consecutive-month period) are considered to be "Withdrawn" for that time period. Students are not considered "Withdrawn" or discontinued from the University until they either request to enter that status or have a 12 month break from the last class, but are considered "Withdrawn" (for verification purposes such as loan deferment or full/half time student certification) for the time period in which there was a break of two months or more.

The number of units used in determining enrollment status differs depending on the career being pursued (undergraduate or graduate).

The units for any individual class with a "Withdrawn" status do count towards determining full or part-time status. Students, who are working on project, thesis or research class in which a grade of "IP" (In Progress) or "I" (Incomplete) is issued, will receive credit towards enrollment from the official start date through the published end date of the class only. Once 90 calendar days have passed after the published end date of the class it may no longer be used to determine a full or half time student status.

Students with proper identification can verify enrollment at the Office of the Registrar, 858.642.8260 or obtain enrollment verification via the student portal on the University website. Verifications can also be requested through the mail with an authorized student signature.

Off-campus agencies may use different definitions for determining full-time status. For example, the definition of "Full-Time Student Status" may not apply to international students who require an F-1 visa.

Cancellation of Classes or Programs

The University reserves the right to cancel or postpone a class or a program if student enrollment is insufficient. However, every effort will be made to cancel the class or program well in advance of the intended start date allowing students to reschedule or make other arrangements.

Bar from Attendance

Students may be barred from attending classes for failure to:

- Present official transcripts certifying degree/status from previous institutions
- Comply with admission requirements
- Respond to official University notices
- Settle financial obligations when due

Students who are barred from attendance are generally given advance notice. If a student fails to respond or has a history of failing to respond, action will be taken without further notice and the student will no longer be entitled to services of the University, except for assistance toward reinstatement. The University can drop the student from all current and future classes as appropriate. Under no circumstances may a student who has been barred from attendance attend class or receive a grade.

Withdrawal from the University

Students who wish to withdraw permanently from National University must take one of two actions:

1. Complete a "University Withdrawal Form" available at each campus, online through the University's website, or via the student web portal; or
2. Contact their Academic Advisor who will verify student information and submit the request in writing on behalf of the student to the Office of the Registrar.

Students taking one of the two above actions will be withdrawn from the University and all future classes will be deleted from their schedules. Students should be aware that the current term class remains subject to the official drop and withdrawal deadlines as published in this catalog. Federal student aid recipients should refer to the "Financial Aid Refund Policy" in this catalog.

Non-Degree Students

Individuals interested in taking courses for academic credit but not in pursuing a degree or certificate should apply as a non-degree student. Non-degree applicants are not required to undergo a formal admissions process but must submit an application, pay the appropriate non-refundable fee, and established academic qualifications to enter the courses desired. Applicants who wish to take graduate level courses must hold a four-year or approved three-year bachelor's degree, or the equivalent, from a regionally accredited institution. Non-degree students who later decide to become degree-seeking must follow the standard admission procedures, including submission of official transcripts from all previously attended regionally accredited postsecondary institutions. Admission as a non-degree student neither implies nor guarantees admission to a degree or certificate program. Non-degree students are permitted to enroll in no more 27 quarter units. Students requesting an exception to the number of units must submit a request by completing an exception to policy e-form on the student web portal. Non-degree students are not eligible for financial aid.

Transition Program Information

Transition programs are degree programs noted in the catalog where an undergraduate student in an approved transition program who meets certain requirements (length of time remaining in undergraduate degree as well as GPA minimum) may enroll in and take up to three (3) graduate level courses to be used as upper-division electives in his/her bachelor's program. As a result, when the student finishes the bachelor's degree and enrolls in the graduate transition program, the student will have those classes completed and waived in their graduate program; and will not need to replace units.

The following rules apply:

- A student may enroll in an Undergraduate to Graduate transition program when they are within six (6) classes of completion of the Undergraduate program.

- The required Undergraduate cumulative GPA is at a minimum 3.00.
- Students must enroll in and take the first class in the Graduate program within six (6) months after conferral date of the Undergraduate degree.
- Students must complete the Graduate program within four (4) years with no break in enrollment of 12 months or more.
- Only classes that are identified as transition program eligible may be taken and the student must meet all prerequisite requirements for the graduate level class.
- Graduate courses taken as part of an Undergraduate program do not transfer as graduate level classes either at National University or at any other university.
- A student must obtain a grade of B or better in a transition class in order for it to be eligible for both a waiver of content and units in the Graduate program.
- A transition course in which a student earns a grade of B-, C+, or C will qualify for a waiver only of the content in the Graduate program but the student must take another graduate level approved elective(s) to replace the graduate level units. The Graduate level unit requirement will not be lowered for grades of B- or below.
- If a student gets a grade of C-, D+, D, D-, or F neither content waiver nor units will be granted toward the graduate program. The student must retake the course within the Graduate program and obtain a better grade. The original grade will remain part of the Undergraduate record as it is considered to be part of an awarded degree, and as such the GPA is not subject to alteration at any time.

TRANSITION PROGRAMS

College of Letters and Sciences (COLS)

- Bachelor of Arts in Political Science to Master of Public Administration
- Bachelor of Science in Biology to Master of Forensic Sciences
- Bachelor of Science in Organizational Behavior to Master of Arts in Human Behavior

School of Business and Management (SOBM)

- Bachelor of Arts in Management to Master of Global Management
- Bachelor of Business Administration to Master of Business Administration
- Bachelor of Science in Accountancy to Master of Business Administration

School of Engineering and Computing (SOEC)

- Bachelor of Science in Computer Science to Master of Science in Computer Science
- Bachelor of Science in Information Systems to Master of Science in Management Information Systems

School of Professional Studies (SOPS)

- Bachelor of Public Administration to Master of Public Administration
- Bachelor of Science in Criminal Justice to Master of Criminal Justice
- Bachelor of Science in Criminal Justice to Master of Forensic Sciences
- Bachelor of Science in Criminal Justice to Master of Public Administration
- Bachelor of Science in Criminal Justice to Master of Science in Juvenile Justice
- Bachelor of Science in Homeland Security and Emergency Management to Master of Criminal Justice
- Bachelor of Science in Homeland Security and Emergency Management to Master of Public Administration
- Bachelor of Science in Homeland Security and Emergency Management to Master of Science in Homeland Security and Emergency Management

Air Force ROTC

The Air Force Reserve Officer Training Corps (AFROTC) is a three- or four-year program designed to equip students with leadership skills and commission officers for tomorrow's Air Force. AFROTC offers a variety of two, three and four year scholarships, many of which pay the full cost of tuition, books, and fees. These scholarships are available for qualified cadets, and may be applied towards

tuition, lab fees, and other required items. In addition, scholarship students receive a non-taxable book allowance and monthly stipend.

National University does not have an AFROTC program. Students may, however, enroll in AFROTC courses at the following institutions (where AFROTC courses are conducted) in conjunction with completing their degree programs at National University.

California State University Sacramento (CSUS AFROTC)

Further information on these programs may be obtained from the Aerospace Studies Department, 916.278.7315, or Det088@maxwell.af.mil. The detachment website can be found at www.csus.edu/afrotc.

Loyola Marymount University (LMU AFROTC)

Through arrangements with Loyola Marymount University (LMU) in west Los Angeles, students may participate in the Air Force Reserve Officer Training Corps (AFROTC) program. AFROTC offers a variety of two, three and four year scholarships, many of which pay the full cost of tuition, books, and fees. Successful completion of as little as four semesters of AFROTC academic classes and leadership laboratories can lead to a commission as a second lieutenant in the United States Air Force.

Classes consist of one hour of academics and two hours of laboratory for freshman and sophomores; three hours of academics and two hours of laboratory for juniors and seniors. The academic hours earned can normally be counted as elective credit toward graduation. All AFROTC classes and laboratories are held on Fridays to better accommodate students commuting from other colleges and universities. Currently, LMU does not charge for the courses. Additionally, AFROTC cadets under scholarship and all juniors and seniors receive a monthly tax-free stipend.

For more information, contact the Loyola Marymount university Department of Aerospace Studies (AFROTC) at 310.338.2770 or visit the website at <http://academics.lmu.edu/afrotc>.

San Diego State University (SDSU AFROTC)

There is no advance application needed to participate in the Freshmen or Sophomore level course; however, an orientation program, held just prior to the start of the semester, is recommended. Required coursework includes lectures, a leadership laboratory practical component, panel discussions, dialogues, problem solving, and physical training. All coursework is completed on site at or near one of the schools, with the exception of a four-week summer Field Training encampment conducted on a military base between the second and third year. Upon successful completion of the AFROTC program and all requirements for a bachelor's degree, cadets are commissioned as Second Lieutenants and serve a minimum of four years in the Active Duty Air Force. Interested students should contact the AFROTC Detachment 075 Unit Admissions Officer at 619.594.5545 or see the website below for more information. AFROTC Detachment 075 Website: <http://www.rohan.sdsu.edu/dept/afrotc/>.

Auditing Courses

To audit a course, a person who is not a current student must complete an admission application with an advisor. Approval to audit is given on a space-available basis. Students auditing a course must pay the regular fees and tuition and participate in class activities, but are not required to take examinations. No academic credit will be earned for any course that is taken as an audited course.

University alumni are permitted to audit up to a maximum of four (4) classes in total in any content area provided they meet the eligibility and prerequisite requirements of that given year. Courses may be audited for 50% of the prevailing tuition.

Individuals who subsequently enroll in a given degree program will not be eligible to transfer any previously audited course(s) to degree course status. Audited classes are not eligible for federal financial aid or University tuition assistance funding.

Visitors

No one may visit a classroom during class hours without the prior approval of the instructor and the Director of Student Services at the site. Students may not bring children to the classroom or computer lab or leave them at any other University facility while attending class. Violations may result in disciplinary action.

Smoking Policy

The University prohibits smoking in all National University facilities, vehicles, and outside stairways. In addition, the University prohibits the sale of all tobacco

products and tobacco advertising at University facilities and in University publications.

Individuals who smoke outside a University facility should smoke a minimum of 25 feet away from the building and must properly dispose of smoking materials in appropriate designated receptacles.

Animals on Campus

Animals, other than trained service animals for persons with disabilities, are not permitted on University property or in a University facility. Violations may result in disciplinary action.

Questions regarding the appropriateness of bringing an animal into a classroom or on University property should be directed to National University's Student Accessibility Services.

Library Borrowing Privileges and Fines

All current National University students, faculty, and staff are eligible to borrow Library materials. A maximum of 15 books may be checked out at one time. The loan period is four weeks. Periodicals, microforms, reference books, reserve materials, and Special Collection items do not circulate.

Materials overdue for one month are considered lost. For lost items, a Library Hold will be placed on the student record, and students are responsible for \$30 replacement cost plus the \$10 maximum late fee until the items are returned. Once the material is returned, the replacement cost and late fee and late fine will be waived. For more information, see the Research Guide: Circulation (<http://nu.libguides.com/circulation>).

Computer Lab Regulations

Computer labs are available at many University locations for use by students, faculty, and staff. Lab assistants or other authorized staff are available at each location to ensure availability and operability of computing resources and that the resources are used appropriately. By using any National University Computer Lab, students agree to comply with the computer and Internet access policy, and additionally agree to follow the following:

1. Students must sign in to use the computer lab facilities. They may be asked to show University identification.
2. Students may not install software on University computers. Software copyrights are strictly enforced. The Computer Software and Email Policy provides complete details.
3. Students may not bring food or drink into the computer labs.
4. Computing resources in the lab are for University-related purposes only.
5. Students should minimize their use of lab printers. Printing is restricted to 25 pages at a time. Students must use copy machines when multiple copies of documents are required. The lab assistant has the right and responsibility to limit computer printing based on local requirements and his/her judgment.
6. The computers are equipped with headphones for student's use for multi-media content. Students are asked to adjust the volume on the headsets to a level that will not disturb others.

The lab assistant or other authorized staff member has the right to ask students to leave for non-compliance with any University policy. Technical questions, equipment failure or malfunction, and disputes should be reported to the Help Desk line at 858.309.3580 for resolution.

Lab hours are posted at each facility and are subject to change to support class scheduling requirements and holidays. It is the lab user's responsibility to become familiar with the schedule. The computer labs close promptly at the scheduled closing times.

Ethical Usage

Computing resources must be used in accordance with the high ethical standards of the University community and local, state, and federal laws. Examples of unethical and possible illegal use follow:

- Violations of computing system security.
- Unauthorized use of computer accounts, access codes, or computer identification accounts assigned to others.
- Intentional use of computer telecommunication facilities in ways that unnecessarily impede the computing activities of others (such as randomly

initiating interactive electronic communications or e-mail exchanges, or overuse of interactive network utilities).

- Use of computing facilities for private business purposes unrelated to the purposes or to the mission of the college or college life.
- Academic dishonesty (plagiarism, cheating).
- Violation of software license agreements.
- Violation of network usage policies and regulations.
- Violation of another user's privacy.

Illegal Usage

Computer resources may not be used for illegal purposes. Examples of illegal purposes include but are not limited to:

- Harassment of other users.
- Intentional destruction of or damage to equipment, software, or data belonging to the University or other users.
- Intentional disruption or unauthorized monitoring of electronic communications.
- Unauthorized copying of copyrighted material. The copying of copyrighted materials, such as third-party software, without the expressed written permission of the owner or the proper license, is prohibited.

Network Security Terms of Use Policies

In order to promote ethical and facilitative computing, National University's network users are prohibited from any of the following:

- Use of systems and/or networks in attempts to gain unauthorized access to remote systems.
- Use of systems and/or networks to connect to other systems, in evasion of the physical limitations of the remote system.
- Decryption of system or user passwords.
- The copying of system files.
- Intentional attempts to "crash" network systems or programs.
- Any attempts to secure a higher level of privilege on network systems.
- Running of HTTP, E-mail, and FTP servers is strictly prohibited on student machines.
- The willful introduction of computer "viruses" or other disruptive/destructive programs into the organization network or into external networks.

Failure to adhere to these prohibitions may subject the student to punishable disciplinary action.

Computer Software and E-mail Policies

The Copyright Law of the United States (Title 17, United States Code) governs the making of copies of copyrighted software. Copyright infringement could subject the violator to civil damages and criminal penalties, including a fine or imprisonment.

University policy further prohibits any use or copying not authorized by the purchase agreement or license under which the university acquired the software. A copy of such agreement is available for inspection at the Office of the Vice Chancellor, Information Technology. Students may not use the e-mail addresses of other students, faculty, or staff for purposes unrelated to the University. Violations may lead to disciplinary action.

Family Educational Rights and Privacy Act of 1974 (FERPA)

National University maintains all student records in accordance with the provisions of FERPA as amended. FERPA affords students certain rights with respect to their education records. They are:

- The right to inspect and review the student's education records within 45 days of the day the University receives a request for access. Students should submit to the registrar, school dean, head of the academic department, or other appropriate official, written requests that identify the record(s) they wish to inspect. The University official will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the University official to whom the request was submitted, that official shall advise the student of the correct official to whom the request should be addressed.

- The right to request an amendment of the student's education records that the student believes is inaccurate or misleading. They should write the University official responsible for the record, clearly identify the part of the record they want changed, and specify why it is inaccurate or misleading. If the University decides not to amend the record as requested by the student, the University will notify the student of the decision and advise the student of his or her right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.
- The right to consent to disclosures of personally identifiable information contained in the student's education records, except to the extent that FERPA authorizes disclosure without consent. One exception that permits disclosure without consent is disclosure to school officials with legitimate educational interests. A school official is a person employed by the University in an administrative, supervisory, academic, research, or support staff position (including law enforcement unit personnel and health staff); a person or company with whom the University has contracted (such as an attorney, auditor, or collection agent); a person serving on the Board of Trustees; or a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing his or her tasks. A school official has a legitimate educational interest if the official acts in any of the following capacities: is performing a task that is specified in his or her position description or contract agreement, related to a student's education or to the discipline of a student: providing a service or benefit relating to the student or the student's family (e.g., counseling, job placement, financial aid, etc.); or maintaining the safety and security of the campus. Upon request, the University may disclose education records without a student's consent to officials of another school in which that student seeks or intends to enroll. Personally identifiable information may also be disclosed by Federal and State Authorities to any third party designated by a Federal or State Authority to evaluate a federal- or state-supported education program. The evaluation may relate to any program that is principally engaged in the provision of education, such as early childhood education and job training, as well as any program that is administered by an education agency or institution. Federal and State Authorities may also release personally identifiable information to researchers performing certain types of studies. Federal and State Authorities must obtain certain use-restriction and data security promises from the entities that they authorize to receive personally identifiable information. In addition, in connection with Statewide Longitudinal Data Systems, State Authorities may collect, compile, permanently retain, and share without consent personally identifiable information and track participation in education and other programs by linking personally identifiable information to information obtained from other Federal or State data sources, including workforce development, unemployment insurance, child welfare, juvenile justice, military service, and migrant student records systems.
- The right to file a complaint with the U.S. Department of Education concerning alleged failures by National University to comply with the requirements of FERPA. The name and address of the office that administers FERPA is:

Family Policy Compliance Office
U.S. Department of Education
400 Maryland Avenue SW
Washington, DC 20202-4605

Directory information at National University is limited to the following public information:

- Name of student
- Date of birth
- Place of birth
- Email address
- Major field of study
- Dates of enrollment
- Degrees and dates conferred
- Academic honors and awards received
- Addresses, telephone numbers, and e-mail addresses of alumni will be placed in the Alumni Directory
- Any other personal information voluntarily provided by alumni to be distributed to other alumni

If students do not want the University to release directory information they must submit the FERPA Request for Non-Disclosure Form to the Office of the Registrar. This form is found on the University website. For more information, and for particular questions with respect to a student's rights under FERPA, students should contact the Office of the Registrar at 858.642.8260 or e-mail registrar@nu.edu.

ACADEMIC POLICIES AND PROCEDURES

Some degree programs may have additional policies and procedures. Please see the appropriate section of the catalog for more information.

Grade Changes

All grades are final. Students are not allowed to complete additional work after the final grade has been assigned or to repeat examinations in order to improve a grade. Students may request a review of their records if the possibility of a clerical or computational error exists. Additional information is available in the Grade Appeals section below.

Grade Appeals

Faculty members are vested with the authority to establish course requirements and standards of performance. It is the responsibility of faculty to articulate and communicate course requirements and standards of performance to students at the beginning of each course and apply all grading criteria uniformly and in a timely manner. Final grades submitted by faculty to the Office of the Registrar are presumed to be accurate and final. A student who has questions about a grade received in a course should seek to resolve the issue by first consulting with the instructor. If the issue has not been resolved after consultation, and the student believes there are grounds for appealing the grade, the student may invoke the grade-appeal procedure outlined below.

Grounds for a Grade Appeal: Students can appeal a grade only when they can document that one or more of the following has occurred:

- An error in calculating the grade.
- Failure of the instructor to notify students clearly and promptly of the criteria for grade determination.
- Assignment of a grade based on reasons other than the announced criteria and standards.
- Assignment of a grade based on factors other than student achievement, e.g., personal bias.
- Inconsistent or inequitably applied standards for evaluation of student academic performance.
- If the student believes that the grade received is based upon unlawful discrimination, or sexual harassment, as defined in these policies and procedures, the student should proceed with the process under Civil Rights Policies and Procedures.

Appeal Process

When students believe that they have grounds for appealing a grade issued by an instructor because of an occurrence of one or more of the above mentioned circumstances, the following procedures must be followed:

The student must submit an e-form through the student portal to the school dean within 45 days of grade posting for the course. The student must attach to the e-form clear substantiating documentation that demonstrates the occurrence of one or more of the above-listed grounds for appeal. Documentation may be in the form of e-mail correspondence, graded assignments, proof of timely submission, etc. The student must also attach documentary evidence of the level of achievement in support of the particular grade that the student believes he/she should have been awarded. If the evidence meets the criteria, the school dean forwards the student's e-form to the instructor for a response, which the instructor must provide within 15 days. The dean then refers all documentation to the grade appeals committee.

Grade Appeals Committee

A standing committee within each school, the Grade Appeals Committee consists of three or more faculty members (full-time or associate) appointed by the appropriate School Dean. The Grade Appeals Committee considers the documentation and may decide either to change or uphold the grade.

The Grade Appeals Committee will render a decision within 30 days of receiving the grade appeal e-form information from the School Dean. The office of the school dean will notify all of the following: the student, the instructor, and the Office of the Registrar.

Academic Dishonesty

Academic dishonesty includes cheating, plagiarism, and any attempt to obtain credit for academic work through fraudulent, deceptive, or dishonest means. Below is a list of some forms academic dishonesty may take.

- Using or attempting to use unauthorized materials, information, or study aids in any academic exercise.
- Submitting work previously submitted in another course without the consent of the instructor.
- Sitting for an examination by surrogate or acting as a surrogate.
- Representing the words, ideas, or work of another as one's own in any academic exercise.
- Conducting any act that defrauds the academic process.

Plagiarism is the presentation of someone else's ideas or work as one's own. As such, plagiarism constitutes fraud or theft. Plagiarism or academic dishonesty in any form, regardless of intent, is a grave offense and will not be tolerated.

If an instructor determines there is sufficient evidence of academic dishonesty on the part of a student, the instructor may exercise one or more of the following options:

- Require a timed writing sample to be written on the assigned topic to determine the veracity of the suspicion.
- Require that the work be rewritten.
- Issue a lowered or failing grade for the assignment.
- Issue a lowered or failing grade for the course.

If a student's assignment or course grade is lowered on the grounds of academic dishonesty, the instructor must inform the student that academic dishonesty figured into the calculation of the grade. The student may exercise the right to appeal the grade by requesting a review from the Disciplinary Appeals Committee, convened by a Conduct Officer (CO). The student must submit an e-form electronically via the student portal within 45 days of the submission of the grade for the course. The student must attach clear, substantiating documentation that demonstrates grounds for appeal to the e-form. If the evidence meets the criteria, the Conduct Officer forwards the student's e-form to the instructor. The Conduct Officer then refers all documentation to the Disciplinary Appeals Committee. Students are responsible for the work they submit and intent cannot be determined, so neither is grounds for appeal.

Avoiding Plagiarism

Students are responsible for the work they submit and must give credit for any information that is not either the result of original research or common knowledge. For example, it would be necessary to give credit to an author who provided an argument about the strategic importance of the Emancipation Proclamation in the American Civil War. Conversely, major historical facts, such as the dates of the American Civil War, are considered common knowledge and do not require that credit be given to a particular author.

If a student borrows ideas or information from another author, he/she must acknowledge the author in the body of the text and on the reference page. If a student borrows the words of another author, they must be careful to use the author's exact words, enclose them in quotation marks, and cite the source in the body of the text and also on the reference page. If students are unsure whether or not they should cite, they are encouraged to cite. They are also encouraged to ask their instructors for guidance on this issue. Students might also consult writing handbooks such as the *Essential Little Brown Handbook* and for formatting questions refer to manuals such as *The MLA Handbook for the Humanities*, *The Publication Manual of the APA* for social sciences and business, and *The CBE Style Manual* for natural and applied sciences.

Additional information and resources regarding plagiarism, including videos and tutorials, is available on the National University Library web pages. Visit <http://nu.libguides.com> and input plagiarism in the search field.

Disciplinary Appeals Committee

A standing committee, the Disciplinary Appeals Committee consists of three or more faculty members. The Disciplinary Appeals Committee considers the documentation and may decide either to change or uphold the allegation.

The Disciplinary Appeals Committee will render a final decision within 30 days of receiving the e-form information from the Conduct Officer. This decision is then forwarded to the Conduct Officer who notifies all parties by e-mail.

The decision of the Disciplinary Appeals Committee on these matters is final and cannot be appealed.

It is the instructor's responsibility to report any reasonable suspicion of academic dishonesty to the Conduct Officer so that such behavior may be monitored and repeat offenders identified. Notification may be made through one's department chair.

Accelerated Study

Students with a superior academic record and a compelling, demonstrated need may petition the school dean for an accelerated study allowing them to be enrolled in more than 7.5 quarter units in the same session. The granting of an accelerated study is wholly at the school dean's discretion. Applications for acceleration must be approved a month in advance. To be eligible, students must have:

1. Completed 13.5 quarter units at National University prior to the request
2. Maintained a 3.5 grade point average for undergraduates or a 3.7 for graduates
3. Completed all prior coursework with no outstanding grades of "Incomplete"
4. Maintain a current account balance, i.e., the balance should not exceed the current month's tuition. Note: This requirement can be waived if the student has an approved financial aid packet in the Financial Aid Office or an approved military/company reimbursement plan on file in the Student Accounts Office
5. Demonstrated a compelling, exceptional need

Students who believe that they meet the above requirements should submit their e-form well in advance of the anticipated course start date since processing time is approximately six (6) to eight (8) weeks.

Approval to take more than 18 units in a quarter requires approval from the school dean of the student's program. Students are not approved to accelerate their studies every month or to take more than two classes in one month.

If students meet all of the above conditions, they should complete an Accelerated Study Request, available as an e-form on the student portal, or see an academic advisor for assistance. The e-form must include justification of the special circumstances that necessitate an accelerated study.

Independent Study

For a course to be considered eligible, all of the following conditions must be met:

- The course must be approved for online teaching.
- Students may not begin their core requirements with an independent study.
- Students taking an independent study course are expected to meet all of the course competencies and are evaluated according to criteria similar to those employed in normal offerings of the course (i.e., written examination and/or a substantive, interpretive research paper).
- Standard tuition charges apply to independent study classes.

Student Eligibility Requirements

An independent study is a class taught to one student in an online modality. Not all courses in the catalog are approved for independent study. If the course is not approved for online modality, the request may not be approved.

If a required class is canceled, and not available either onsite or online within three (3) months, students may request special consideration to waive the student eligibility requirements.

Circumstances that warrant independent study will be considered by the school/college and academic services. Convenience, or the desire to graduate early, are not considered valid reasons.

For a student to be considered eligible, all of the following conditions must be met:

- The student must be evaluated by the Office of the Registrar.
- The student must have completed 13.5 quarter units in residence, with a grade point average of 3.0 or higher.
- The student must have no grades of "Incomplete" at time of application.

- The student is allowed to complete a total of two independent studies per degree level, unless approved by the program lead and school dean.
- The student must maintain a current account balance, i.e., the balance should not exceed the current month's tuition.
- The students may not have a financial hold on their account.
- International students must verify eligibility with the International Programs Office (IPO) prior to request.

Students who meet all of the above conditions and believe that they have a justifiable reason for an independent study should submit their request six (6) to eight (8) weeks in advance of the anticipated start date.

Work in the independent study cannot begin until the student and the instructor have been placed in the scheduled class. Students who are not approved for an independent study are notified by the Academic Advisor via e-mail.

Guided Study

Guided study is an individualized course that deals with material not covered in any approved catalog course. Guided study course numbers are XXX 490 or XXX 690. Students in guided study courses work independently under the guidance of an instructor. Guided studies follow the same approval process as independent studies and students must meet the eligibility requirements as indicated under the independent study section. Requests should be made well in advance of the desired start of the guided study.

Practicums, Internships, and Residencies

Students may be required to take practical training courses in the form of internships, practicums, or residencies depending on the academic discipline in which they are enrolled. This training may be accomplished at National University facilities or at offsite locations, depending on the specialty. All such courses share commonalities, including:

- Students must register in advance.
- University instructors are responsible for developing course requirements and supervising the progress of students.
- Regular meetings between students and instructors provide opportunities for guidance and evaluation. These interactions are generally held on a weekly basis.
- Practical training experiences require significantly more time than a regular course.
- Students are evaluated on their progress and assigned either a letter grade or a satisfactory/unsatisfactory grade, as determined by the appropriate academic department. The satisfactory grade is not calculated into the student's GPA.
- All practicums, internships, or residencies are granted full credit toward graduation, do not extend degree requirements, and are mandatory in several degree and credential programs.
- Student teaching field experience does not grant graduate credit, but is required for degree conferral as part of a joint master's/credential program.
- Standard tuition charges apply.
- Students who do not complete practicums, internships, or residencies in the time allotted are issued either a grade of Incomplete (I) or In Progress (IP), depending on the approved grading criteria for the course. Students must complete the "I" or "IP" within the time specified. Students who fail to complete the course by the required completion date receive the grade of "F" or "U" as appropriate for the grading criteria of the class.

Students should consult the academic program requirements for further information. Veterans should contact the Veterans Affairs Office at National University to determine how enrollment in such courses may affect benefits.

Repetition of Courses

Students are not obligated to repeat a failed course unless it is a course required for graduation. Students may repeat, at the prevailing cost per quarter unit, any course to improve cumulative GPA. Only courses completed in residence may be repeated to improve cumulative GPA. In the case of Topics courses, the Topics must be the same.

National University courses may be repeated a maximum of two times, for a total of three attempts. All grades earned remain part of the student's permanent record, but only the most recent grade, regardless of grade earned, is considered in computing cumulative grade point average. Credit is only given once for repeated courses. Grades earned at National University remain counted in the student's grade point average if the course is repeated at another institution.

Students receiving veteran benefits may not be eligible for benefits when repeating courses. Additional information may be obtained from the National University Veterans Affairs' Department.

Financial aid will not be awarded for a repeated course or its equivalent. Students who wish to or are required to repeat a course must do so at their own expense. Additional information is available in the Financial Aid Guide at www.nu.edu.

Interruption of Study Due to Excessive Incomplete Grades

Students who have three concurrent "Incomplete" grades will be prohibited from taking any further courses until all "Incomplete" grades have been removed. They will be allowed to resume their program once final grades have been received for all "Incomplete" grades. In the event that these "Incomplete" grades become permanent grades of "F," the student may be dismissed from the University and will not be eligible for reinstatement.

Concurrent Enrollment at Other Institutions

After students are admitted to National University, all courses leading to an associate, credential, bachelor's degree, or master's degree must be taken at National University unless written approval to take coursework at another institution is given in advance by the Office of the Registrar. Credit earned at another institution without such prior approval may not apply toward an academic program at National University. To qualify for concurrent enrollment, students must:

1. Have completed the admissions process and been officially evaluated, and not on an approved leave of absence.
2. Not exceed the maximum number of units (18 quarter units) authorized by the University for each term.
3. Maintain a 2.0 grade point average in undergraduate studies or a 3.0 grade point average in graduate studies.
4. Submit the e-form request for concurrent enrollment located on the student portal no later than **four weeks prior** to the enrollment date at the other institution.
5. Requests must include a course description or request will be canceled.
6. Request that an official transcript be sent directly to the Office of the Registrar upon completion of the approved course(s).
7. Be in good financial standing.
8. International students must complete 13.5 units prior to concurrent enrollment approval.

Courses must be completed at a regionally accredited institution and needed for current plan of study at National University.

Readmission Procedures

Students who are in good standing but have a break in enrollment for 12 or more months may be readmitted to the University by submitting an application for readmission. Students are required to follow the policies of the catalog in effect at the time of readmission, including the degree requirements for their program. Students must pay a readmission fee.

Change of Academic Program

Students may apply for a change of academic program, provided they are not on probation or disqualified from their current program. Application for such a change does not mean automatic acceptance into the new program, which occurs only after the Office of the Registrar approves the change of the student's program on their official record. Students on probation or who are disqualified must submit a policy exception request for a change of program. Students who change academic programs will be subject to the requirements of the new program in effect in the current catalog at the time of the request. Students must be aware that courses taken in the program they are exiting might not apply toward the new program. For financial aid purposes, the University will not include in the calculation of a student's Satisfactory Academic Progress (SAP) standing the credits attempted and grades earned in the previous program that do not count toward the student's new major. The University will count credit earned as it applies toward the current

program. All coursework attempted will be calculated in determining cumulative grade point average and academic standing, regardless of applicability to the current program. Students are allowed a maximum of two change requests. The third (3rd) and subsequent requests for a change in program must be petitioned. The letter accompanying the petition should explain the reason for the change request along with the plan for completion. Petitions are submitted by eform through the student portal.

Application for Certificate

Awarding a certificate is not automatic upon completion of required courses. Students must submit an application for certificate located on the University website: www.nu.edu/OurPrograms/Graduation.html. Students are advised to submit their application during their final required course. There is no fee to submit an application for certificate. Requirements for a certificate include:

1. Satisfactory completion of required courses or specific courses.
2. Students must complete two-thirds of the certificate program at National University.
3. Have a minimum overall cumulative grade point average of 2.0 for courses in an Undergraduate certificate program or 3.0 for courses in a Graduate certificate program.

Specific certificate course requirements can be found in the National University catalog.

Application for Graduation

Graduation is not automatic upon the completion of degree requirements. Students must submit the online graduation application located on the student portal within the designated application period for degree posting. Students are advised to submit their application at least three months prior to their anticipated conferral date. A \$100 processing fee is required at the time of application. Requirements for graduation include:

1. Satisfactory completion of student's program of study leading to a degree.
2. Settlement of all financial obligations with the University.

Additional graduation and commencement information can be found on the University website at www.nu.edu.

Note: National University does not backdate degrees. Students applying for graduation will automatically be processed for the next conferral date.

Degree Conferral

Degrees post to transcripts six times annually in alignment with university conferral dates. National University's degree conferral dates are the third Sunday in January, March, May, July, September and November. Diplomas are mailed four to six weeks following the degree conferral date. A maximum of five duplicate diplomas may be ordered at no additional charge.

Annual commencement exercises are held in San Diego, California and Sacramento, California. Students may elect to attend the commencement ceremony in the location that is most convenient for them. The online Application for Degree allows the student to specify which commencement location he/she would like to attend. Detailed information with specific instructions regarding the commencement exercises is mailed to eligible students prior to each ceremony date for those who have submitted their online Application for Degree by the posted deadline to participate.

Consult the University's website for commencement dates.

Second Degree from National University

A second degree from National University can be granted if all course and residency requirements for the second degree have been met. Completion of an additional minor within the same degree major does not qualify for a second degree. The number of courses for a second degree varies, but at least 45 quarter units must be completed in residence in the new degree program. No more than 50 percent of the core requirements for the second degree can be completed in a previously conferred degree.

National University Memorial Degree

In the event of a student death prior to completion of degree requirements, the family may request that the Board of Trustees award posthumously a memorial degree in the field of the student's area and level of study, as long as the student

was in good standing at the University. A family member may contact the University Registrar at 858.642.8260 or registrar@nu.edu.

Exceptions to Academic Policies

In cases of exceptional circumstance, students can request an exception to a published University academic policy. Convenience or lack of knowledge of a published policy does not constitute sufficient justification for a policy exception request. Some policies are not eligible for petition exception, including, changes to and/or backdating of conferral date, retroactive processing of a program change, waiver of minimum GPA, residency and/or unit requirements toward a degree or certificate, waiver of minimum GPA requirement for student teaching/internships/practicum, extension of an Incomplete or In Progress grade past the allowed completion time-frame, removal of classes completed and graded with an A-D or S grade, adding/ dropping/withdrawing of classes over one calendar year old, utilization of a 400 level course to meet GE requirements. Petitions received requesting exception to policies that are not eligible will be denied or canceled.

Students should make a policy exception request through their academic advisor or by completing an Exception to Academic Policy e-form on the student portal. Students must submit a letter of explanation and documentary evidence in support of the request. Each case is decided upon its own merits and the decision is final and not subject to appeal, unless there is information pertinent to the outcome which was not available at the time of the initial request. Decisions are typically rendered within four (4) weeks of receipt of student petition; however, the University strives to review and render decisions on all incoming petitions in timely manner. All decisions rendered are valid for one (1) year from the date the decision was made. Exceptions to academic policies that are approved will be considered null and void if a student does not take action within the allotted one (1) year time frame. Rendered decisions may require action be taken within a shorter time frame, based on the student's unique circumstance and the policy to which an exception has been requested.

Students should complete the exception to policy e-form on the student portal or see their academic advisor for assistance. All requests must include both justification and documentation of the special circumstances that necessitate an exception to a published University policy. A petition letter is required. Students are notified through email of final decision.

ENGLISH LANGUAGE PROFICIENCY FOR ONLINE INTERNATIONAL STUDENTS

Online International students from a country where English is not the primary language will be required to fulfill the University's English Language Proficiency requirement prior to beginning their degree program.

ENGLISH LANGUAGE PROFICIENCY FOR ONSITE INTERNATIONAL STUDENTS

Verification of English Language Proficiency helps to ensure that lack of facility in English will not hinder academic performance at National University.

Applicants who have obtained a California Teaching Credential from the CTC or passed the NCLEX-RN or NCLEX-PN licensure examinations are exempt from the English Language Proficiency requirement.

Applicants from the following countries are not required to submit English Language Proficiency:

- Anguilla
- Antigua
- Australia
- Barbados
- Belize
- Bermuda
- British Virgin Islands
- Canada (except for the Province of Quebec)
- Cayman Islands
- Commonwealth of Caribbean Countries
- Dominica
- Grenada

- Guyana
- Jamaica
- Liberia
- Montserrat
- New Zealand
- Norway*
- Republic of Ireland
- St. Kitts and Nevis
- St. Lucia
- St. Vincent
- The Bahamas
- Trinidad and Tobago
- Turks and Caicos Islands
- United Kingdom (England, Scotland, Northern Ireland, Wales)

* Specific grades required.

The English Language Proficiency requirement can be fulfilled with one of the following:

- Providing proof of an associate, bachelor or master's degree from a regionally accredited United States college or university. Students who have an Associate degree only MUST provide verification they have met the course equivalency for ENG100/101 with a grade of "C" or better to be eligible to waive the English Language Proficiency requirement.
- Providing proof of satisfactory completion of two full years (equivalent of 60 semester units or 90 quarter units) of transferable degree study in an English language school system at a recognized college or university located in a country where the dominant language is English.
- Providing proof of a minimum of 3 years of study at a United States high school culminating in the award of a high school diploma (graduation).
- Completing Test of English as a Foreign Language (TOEFL) within 24 months before beginning coursework (see below for minimum scores).
- Completing International English Language Testing System (IELTS). Undergraduates must score 5.5 and graduates must score 6, with no band lower than a 5.
- Completing Pearson Test of English Academic (PTEA). Undergraduate students must score a minimum 50. Graduate students must score a minimum 58.

	UNDERGRADUATE	GRADUATE
TOEFL Paper-based Test	525	550
TOEFL Computer-based Test	197	213
TOEFL Internet-based Test	70	79
IELTS	5.5	6
Itep	5	5
PTEA	50	58
DAAD: All from Level A or all from Level B, or a combination of Level A and B only		

- Completing DAAD all from Level A or all from Level B, or a combination of Level A and B only.

English Language Test Requirements

- Certificate of Proficiency in English (CPE) by University of Cambridge English for Speakers of Other Languages (ESOL). The minimum requirement is a grade of 'C'.
- Certificate of Advanced English (CAE) by University of Cambridge English for Speakers of other Languages (ESOL). The minimum requirement is a grade of 'C'.
- GCSE/IGCSE/GCE O' Level English, English Language, or English as a Second Language with minimum grade of 'B'.

- GCE A/AS/AICE Level English or English Language with minimum grade of 'C'
- International Baccalaureate English A1 or A2 Higher Level passed with minimum grade 4.
- London Tests of English, Level 5 (Proficient) by Ed Excel International. The minimum requirement is "Pass".
- London Tests of English, Level 4 (Advanced) by Ed Excel International. The minimum requirement is 'Merit'.
- Completing an English Language Program (ELP) through a language school approved by National University. Students can meet the English Language Proficiency requirements by satisfactorily completing the highest level of study at the following language training institutions:
 1. English Language Systems (ELS) in locations throughout the United States and abroad (in California, ELS centers are in San Diego, Orange County, Santa Monica, San Francisco, and Oakland). Students must complete level 109 for undergraduate studies and level 112 for graduate studies.
 2. San Diego State University's American Language Institute (ALI) - level 106 or pre-MBA program.
 3. San Jose State University's Studies in American Language – advanced level.
 4. University of California at Davis's International Training and Education Center - advanced level.
 5. Fresno International English Institute
 6. EC English in locations throughout the United States and abroad. Students must complete the Advanced Level in the University Preparation Program.
 7. Embassy English with completion of their Advanced Level.
 8. National University's English Language Program. Students must successfully complete EAP 1800X.

For additional information regarding National University's English Language Program students should contact the English Language Program Office at 1.800.986.1036 or by e-mail at elp@nu.edu.

English Language Program
National University
9388 Lightwave Avenue, Suite 185A
San Diego, CA 92123

Institutional Review Board

The National University Institutional Review Board (NU-IRB) was established in accordance with federal regulations governing the use of human subjects in research. The NU-IRB is charged with the responsibility for review and oversight of all research involving human subjects carried out at National University. Review and oversight are conducted to assure the protection of the rights and welfare of all research subjects, including volunteers.

Any research conducted by National University faculty, staff, or students that involves human subjects in any way must receive IRB approval before the research can be undertaken, including any research that utilizes National University faculty, staff, or students as subjects. Research that is based solely on external literature written by others about human subjects does not require approval of the NU-IRB nor does research that is purely theoretical or is exclusively limited to non-human subjects such as engineering, etc. If the research, however, involves human subjects in any way, such as being recorded in a data pool or being asked to participate in an experiment, to be observed, to respond to a survey or questionnaire or to participate in a focus group, then approval of the NU-IRB is required.

All individuals who conduct research at National University or under its auspices shall observe the guidelines and policies in the planning, designing, and implementation of research projects involving human subjects. These policies and guidelines are intended to supplement, not supplant, ethical guidelines for research established by professional organizations that represent the various disciplines within the academic and professional communities. Researchers at the University shall strive to maintain the highest ethical standards and shall utilize the guidelines described in the policy as minimum standards in the effort to protect the welfare and rights of their human subjects and contribute knowledge to

their disciplines. Finally researchers must remember that the highest wisdom is that which cherishes and protects the dignity of each and every human being.

The Collaborative Institutional Training Initiative (CITI) Program provides research ethics instruction in various aspects of the Responsible Conduct of Research including human subjects protection, health information privacy and security, laboratory animal welfare, research misconduct, data management, authorship, peer review, conflict of interest, mentoring and collaborative science. National University uses the CITI program to remain in compliance with Federal and institutional policies regarding training, as a condition before conducting human subjects, as well as assure that research protocols are planned, and conducted in an ethical manner and consistent with standards established by the NU-IRB.

The Office of the Institutional Review Board will only accept electronic protocol submissions via IRBNet (www.irbnet.org). All protocols (including revisions and renewals) must be submitted electronically through IRBNet, and all review decision letters will be issued electronically through IRBNet. Principal investigators (PI), faculty sponsors and IRB members will be required to complete human subject research training through the Collaborative Investigator Training Initiative (CITI). The passing rate is a cumulative score of 85%. Each module takes approximately 15 minutes to complete. Please go to www.citiprogram.org to register for CITI online training.

An interactive IRB training course is available for all applicants, faculty and members of the IRB. You may access IRB Orientation from the main menu in Blackboard using your standard user name and password. There is a separate module for applicants, faculty sponsors, and members of the IRB. User guides, FAQs, and PowerPoints are also available from this site for download. Students enrolled in thesis/capstone courses will be automatically enrolled or contact your academic advisor for enrollment.

The Office of the Institutional Review Board can be contacted at 858.642.8136 or irb@nu.edu.

IRB Orientation

For students conducting human subject research, this self-paced course provides some key information about how to successfully complete the Institutional Review Board process at National University. It is separated into different sections to focus on key groups involved in the approval process: Applicants (Individuals wishing to conduct human subject research; students and faculty), Faculty Sponsors (Instructors teaching research courses), and IRB Committee (Faculty who are approved IRB members). No tuition, non-credit. For more information students should contact irb@nu.edu or their academic advisor.

CIVIL RIGHTS POLICIES AND PROCEDURES

National University (the University) is committed to providing a learning and working environment free from unlawful discrimination. In keeping with this commitment, the University maintains a strict policy that prohibits unlawful harassment based on such factors as race, color, religion, national origin, sex, disability, age, or any other basis protected by state or federal laws.

National University does not permit discrimination or harassment on the basis of race, ethnic or national origin, religion, age, sex, gender, sexual orientation, color, physical or mental disability, marital or veteran status, pregnancy (including childbirth, and related medical conditions) under any program or activity under its control. Sex-based or gender-based discrimination can include acts of sexual violence, sexual harassment, non-consensual sexual contact, domestic violence, dating violence, stalking, gender-based bullying or hazing, and discrimination based on gender identity or failure to conform to stereotypical notions of masculinity or femininity. For detailed information, policies, and procedures regarding sex-based and gender-based discrimination, refer to Title IX: Sexual Misconduct Policies and procedures.

When an allegation of a class-based discrimination or harassment or related retaliation is brought to an appropriate administrator's attention and, through the University process, the University determines that a violation has occurred, serious sanctions will be used to reasonably ensure that such actions are not repeated.

Reporting A Complaint

Reporting a complaint is not limited to the individual or individuals who are subjected to the conduct; third-parties may also report a complaint. As necessary, the University may initiate a complaint, serve as Complainant, and initiate University proceedings without a formal complaint by the alleged victim.

Complaints may be made in person, by phone, or by email to the Office of Student Affairs (OSA). The University encourages submission of complaints in written form. Complaints should clearly describe the incident, incorporate supporting documentation, and describe the desired remedy.

Office of Student Affairs
11255 N. Torrey Pines Road
La Jolla, California 92037
Phone: 858.642.8035
Email: CivilRights@nu.edu

The accuser also has the right to file a complaint with the Office for Civil Rights of the U.S. Department of Education (OCR). An accuser is not required to use the school's grievance process before filing such a complaint.

Office for Civil Rights
400 Maryland Avenue SW
Washington, DC 20202-1100

Customer Service Hotline: 800.421.3481
TDD#: 877.521.2172
Email: OCR@ed.gov
Website: <http://www.ed.gov/ocr>

Procedure for Complaints of Class-Based Discrimination and Harassment

Students who believe that they have been subjected to unlawful discrimination or harassment may use the following informal and formal procedures to resolve their complaint. Students may, at any time, elect to stop these procedures.

Upon receiving a formal report or complaint, OSA will review the complaint and conduct an immediate initial inquiry to determine whether there is reasonable cause to believe that there was a violation of the policy prohibiting class-based discrimination or harassment, i.e. a reasonable person would determine that further inquiry is warranted.

If the initial inquiry indicates there is not reasonable cause to believe that there was a violation of the policy, OSA will close the case. In some cases, OSA may attempt to resolve the complaint through mediation or intervention with the parties, although these methods will not be utilized in cases of sexual violence. If the initial inquiry indicates that there is reasonable cause to believe that the policy may have been violated, OSA will begin the formal grievance procedure described below.

If the initial inquiry indicates that there is reasonable cause to believe a violation occurred and mediation is not being used, the University will initiate a thorough, equitable, impartial and prompt investigation designed to provide a reliable determination about whether or not a violation has occurred.

Any investigation will be conducted by individuals who have received specialized training in conducting civil rights-based investigations. In general, the investigation may include interviews with the parties, interviews with relevant witnesses, the identification, solicitation and review of any information relevant to the investigation including educational or personnel records and available police reports, and consultation with expert witnesses as the investigator deems necessary.

Location of Incident. All complaints will be reviewed regardless of where the conduct occurred, including conduct occurring online or through technological means, to determine whether the conduct occurred in the context of employment or education or had continuing effects on campus or in an off-campus educational program or activity or employment.

Timeliness. The University encourages prompt reporting of complaints so that a rapid response can be made and appropriate action can be taken. There is no time limit on filing a complaint as long as the accused individual remains subject to the University's jurisdiction although a significant delay in reporting may negatively affect the ability of the investigator to gather information about what occurred.

Time Frame for Resolution. The University will resolve complaints in a prompt manner, and will make best efforts to resolve complaints within 60 calendar days, with additional time for any appeals. A concurrent criminal investigation by police may impact this time frame as discussed below. All parties will be provided with periodic updates as to the status of the case as the parties' desire and as is reasonable.

Accompanying Allegations. When a complaint is accompanied by alleged violations of the Student Conduct Code, all of the allegations may be resolved together as described in this document.

Additional Investigations. OSA may designate trained individuals from within or outside of the University to conduct or assist with the resolution process at its discretion.

Party Resolution. Some minor incidents can be handled informally and outside of the OSA Grievance process. Before filing a formal complaint, whenever it is safe and possible, reasonable efforts should be made to constructively resolve issues through discussion. OSA does not require an individual to contact the person involved if doing so is impractical or if they affected party believes that the conduct cannot effectively be addressed through this means.

When a National University student is identified as the respondent, the investigator will review the complaint and determine the most appropriate method for responding. Options may include voluntary informal mechanisms like mediation, a formal investigation as described in the National University Process for Resolving Complaints, or determining that there is not reasonable cause to believe that a violation occurred.

The University will contact the Respondent by email to notify them of the investigation, describe the alleged misconduct and the policies it may violate, and offer the Respondent the opportunity to meet with the investigator in person or by phone to respond to the allegations within the timeframe described in the email. The notification email will be sent to the email address the student has on record with the University. Notice to the Respondent is considered received on the date the email is sent. If the Respondent fails to attend a meeting by the specified date, or if the Respondent schedules but does not attend or attends but does not participate, the investigator may complete the investigation, issue findings, and, as appropriate, issue sanctions without the Respondent's participation. The University encourages Respondents to participate in the grievance process.

The University will use best efforts to provide equitable rights to the parties throughout the resolution process. The Complainant and Respondent each have the option to bring one advisor to any meeting to provide advice or support. Any attorney acting as advisor may not formally represent a party in University

Administrative Proceedings. The investigator may exclude any advisor who disrupts a meeting. Both parties have the right to identify witnesses and provide other information relevant to the investigation. The Complainant and Respondent will not be permitted to directly question each other and are not required to be present together at any point in the grievance process.

The investigation will result in a finding as to whether or not the policy has been violated. The finding will be based on a preponderance of the evidence standard, i.e., whether it is more likely than not that the conduct occurred.

Sanctions and Remedies

When the accused is found not responsible for the alleged violation, the investigation will be closed and the Complainant and Respondent notified. An appeal may be available as described in the Appellate Procedure section.

When the accused is found responsible for the violation, the University will take action to end the discrimination or harassment, prevent its recurrence, and remedy its effects on the victim and the University community. The OSA will determine the consequences or sanctions for the Respondent and remedies for the Complainant, and as appropriate, the University community.

Any student found responsible for a violation may receive sanctions ranging from probation to expulsion along with any other sanctions, depending on the severity of the incident and taking into account factors such as any previous incidents. The University reserves the right to broaden or lessen this range of sanctions in the event of mitigating factors or egregiously offensive behavior. Sanctions imposed are implemented immediately unless the VPSS delays their implementation in extraordinary circumstances pending the outcome of an appeal as described below.

The University will determine which remedies may be offered to a Complainant depending on the nature of the case, including changes to academic or work obligations under the school's control. Possible remedies may include providing an escort to ensure that the Complainant can move safely between classes; ensuring the Complainant and Respondent do not share classes or extracurricular activities; providing victim services such as counseling and academic support services; or

arranging for a Complainant to re-take a class, have extra time to complete a class, or withdraw from a class without an academic or financial penalty.

The Complainant and Respondent will be informed of the finding, the rationale for the finding and any relevant sanctions to the extent permissible by law simultaneously and via email, usually within 24 hours of decision.

Conduct that is Criminal in Nature

The University has authority to address these complaints in a non-criminal context. The University process is completely separate from the police and courts.

For any incident that potentially involves criminal activity, a Complainant may wish to report directly to law enforcement in addition to, or instead of, reporting to the University. In addition, in some cases there may be time-sensitive considerations for reporting to law enforcement, such as the option to have medical or other evidence collected and preserved. University personnel, including staff in the OSA can assist a Complainant in making a report to law enforcement. A Complainant may pursue both the University process and the criminal process simultaneously. In addition, state law may require a University official to report certain crimes to law enforcement if the police have not already been notified.

When a police or criminal matter occurs simultaneous to the University process, in most cases the University will not wait until the criminal case is resolved before proceeding with the University process. The University's fact-finding investigation may be delayed for a short period of time upon a request from law enforcement, but the University will promptly resume the investigation as soon as possible.

In cases involving threats, threatening behavior or violence including sexual violence, the University can provide information about seeking an order of protection through the courts.

Appellate Procedure

The only grounds for appeal are as follows:

1. To consider new evidence, unavailable during the original investigation, that could substantially impact the original finding or sanction. A summary of the new evidence and its potential impact must be included in the request for appeal; or
2. The sanctions imposed are substantially disproportionate to the severity of the violation; or
3. The grievance procedure was not followed which significantly impacted the outcome.

Either party may submit a request for appeal for one of the three reasons above. The Vice President of Student Services (VPSS) must receive any request for appeal in writing along with all relevant documentation within three (3) business days of the decision being sent to the parties.

Vice President, Student Services

Dr. Joseph Zavala
National University
11255 N. Torrey Pines Road
La Jolla, California 92037
Email: CivilRights@nu.edu

The VPSS will review the request for appeal to determine if the appeal meets the limited grounds and is timely.

If the appeal is not timely or eligible, the original finding any sanctions, if sanctions were issued, will stand and the decision is final. The VPSS will notify both parties in writing. The decision of the VPSS to deny appeal requests is final.

If the appeal is timely and eligible, the VPSS will share information from the appeal with the other party, who may file a response within three (3) business days.

The VPSS will review the statements of both parties and may consult with the University staff who resolved the complaint and issued the findings.

If the VPSS determines that new evidence exists which should be considered, the VPSS will return the complaint to the OSA to reconsider in the light of the new evidence only. The reconsideration of the investigator may not be appealed.

If the VPSS determines that the grievance procedure was not followed which significantly impacted the outcome, the VPSS will return the complaint to the OSA to correct the error. The result may not be appealed.

If the VPSS determines that the sanctions imposed are substantially disproportionate to the severity of the violation, the VPSS will return the complaint to the OSA, who may increase, decrease or otherwise modify the sanctions. The results may not be appealed.

The procedures governing the hearing of appeals include the following:

- The parties will be informed of the status of requests for appeal, the status of the appeal consideration, and the results of the appeal decision in a timely manner;
- Appeals are not intended to be full re-hearings of the complaint. In most cases, appeals are confined to a review of the written documentation or record and pertinent documentation regarding the grounds for appeal;
- Appeal officers will not substantiate their judgment for that of the original hearing body merely because they disagree with the finding and/or sanctions. Appeal decisions are deferential to the original hearing body.

The VPSS will render a written decision on the appeal to all parties within ten (10) business days from receiving the appeal. If the VPSS returns the case to OSA as a result of the appeal, the OSA will notify the parties of the final results within five (5) business days from receiving the appeal from the VPSS.

Any sanctions imposed by the OSA prior to appeal are implemented immediately unless the VPSS delays their implementation in extraordinary circumstances pending the outcome of an appeal. Graduation, internships/externships and similar circumstances do not in and of themselves constitute extraordinary circumstances, and students may not be able to participate in those activities during their appeal. In cases where the appeal results in reinstatement to the University or of privileges, all reasonable attempts will be made to restore the student to their prior status.

TITLE IX: SEXUAL MISCONDUCT POLICIES AND PROCEDURES

The University does not permit discrimination or harassment on the basis of sex or gender under any program or activity offered under its control. Sex-based or gender-based discrimination can include acts of sexual violence, sexual harassment, non-consensual sexual contact, domestic violence, dating violence, stalking, gender-based bullying or hazing, and discrimination based on gender identity or failure to conform to stereotypical notions of masculinity or femininity.

When an allegation of a class-based discrimination or harassment or related retaliation is brought to an appropriate administrator's attention and, through the University process, the University determines that a violation has occurred, serious sanctions will be used to reasonably ensure that such actions are not repeated. More specifically, the University complies with Title IX of the Education Amendments of 1972, Titles VI and VII of the Civil Rights Act of 1964, the Violence Against Women Reauthorization Act (VAWA), and regulations for any other applicable federal or state law.

Reporting

Reporting a complaint is not limited to the individual or individuals who are subjected to the conduct; third-parties may also report a complaint. As necessary, the University may initiate a complaint, serve as Complainant, and initiate University proceedings without a formal complaint by the alleged victim.

Complaints may be made in person, by phone, or by email to the Title IX Coordinator and/or to a Deputy Title IX Coordinator. The University encourages submission of complaints in written form. Complaints should clearly describe the incident, incorporate supporting documentation, and describe the desired remedy. Inquiries or complaints concerning the application of Title IX may be referred to the University's Title IX Coordinator and/or Deputy Title IX Coordinators.

Title IX System Coordinator

Dr. Victoria Schaefer-Ramirez

Title IX System Coordinator and Compliance Officer

Phone: 858.642.8070

Deputy Title IX Coordinator

Dr. Joseph Zavala

Vice President, Student Services

Phone: 858.642.8035

Deputy Title IX Coordinator

Ms. Jane Sawyer

Associate Vice President, Human Resources

Phone: 858.642.8195

Email: TitleIX@nu.edu

Mailing Address

11355 N. Torrey Pines Road

La Jolla, California 92037

National University's designated Title IX Coordinator and Deputy Title IX Coordinators oversee the University's compliance with Title IX, including coordinating the investigation of and response to sex-based or gender-based discrimination or harassment complaints, responding to inquiries concerning Title IX, tracking incidents and trends involving sexual misconduct, publicizing the University's policies and providing training on preventing sex discrimination, sexual harassment, and sexual violence.

Information for a Victim

If you have been a victim of domestic violence, dating violence, sexual assault, or stalking, please consider the following procedures:

Medical Attention. Medical providers can treat injuries and test for pregnancy and sexually transmitted diseases (STDs). Some medical providers can perform a Sexual Assault Forensic Exam which preserves evidence for use in a criminal case.

Preservation of Evidence. To preserve evidence of a physical assault, avoid washing your body, brushing your teeth or changing your clothes. If you believe you may have been drugged and wish to have your blood or urine tested, this should be done as soon as possible at a medical facility. Be aware that some physical evidence must be collected close in time to the incident.

Police Reporting. It is your decision whether or not to report to the police. For the quickest police response, dial 911. Even if you already cleaned up or if the incident occurred in the past, you can still report to the police. The University can provide you with the legal definitions that might be relevant to the incident, including the definition of consent in your state, and can assist you in reporting to the police if you so choose.

You may wish to talk with a person who can support you while maintaining confidentiality. In San Diego County, you can contact the Center for Community Solutions, which provides free comprehensive services to victims of sexual assault, relationship violence, and stalking. You can reach them by phone at 888.385.4657 or on the web at <http://www.ccssd.org/get-help/hotline/>.

In California, you can contact CALCASA (California Coalition Against Sexual Assault) at 888.922.5227 or on the web at <http://calcasa.org>; they can direct you to support in your county.

Outside of California, you can contact RAINN (Rape, Abuse & Incest National Network) at 202.544.3064 <https://www.rainn.org/>.

Nationwide Resources Include

- Sexual Assault Hotline: 800.656.4673
- Domestic Violence Hotline: 800.799.7233
- Center for Victims of Crime Hotline: 202.467.8700

These organizations can provide support and information on what types of conduct are prohibited by law and can assist you with information about reporting to the police or in applying for a civil protection order (a legal directive that someone not have contact with you). Importantly, these organizations can assist a victim in considering all of the available options.

Reporting to the School. You may wish to report to the University to access support or to file a complaint against a University student, faculty, or staff member who engaged in the unwelcome behavior. Please be aware that in most cases, any

University employee who receives a complaint of this nature must report all pertinent information to a designated school officer charged with responding.

Sexual harassment, sexual violence and other gender-based or sex-based harassment occurring in the college setting invokes a federal law called Title IX of the Higher Education Amendments of 1972, which prohibits discrimination on the basis of sex in education programs or activities, which triggers certain responsibilities on the part of the school. The University is committed to maintaining a positive learning and working environment and will address all complaints appropriately. When the University determines, through its administrative process, that a violation has occurred, serious sanctions will be used to reasonably ensure that such actions are not repeated.

The University also prohibits retaliation against an individual because that individual participated in any manner in a complaint process.

Accessing National University Support. If the accused individual is not affiliated with the University as a student, faculty, or staff member, or if the accuser chooses not to identify the accused individual, the University can still assist the accuser with location counseling and other support services and may assist in rescheduling course requirements, assigning an incomplete in a class or allowing an accuser to transfer class sections.

Party Resolution. Before filing a complaint with the school, whenever it is safe and possible, reasonable efforts may be made to constructively resolve issues through discussion between parties. The University does not require the accuser to contact the accused if doing so is impractical or unsafe, or if the accuser believes that the conduct cannot effectively be addressed through this means.

Filing a Complaint with National University or with the Office for Civil Rights. If the accused individual is affiliated with the University as a student, faculty, or staff member, the accuser may wish to file a complaint with the school.

The accuser also has the right to file a complaint with the Office for Civil Rights of the U.S. Department of Education (OCR). An accuser is not required to use the school's grievance process before filing such a complaint.

Office for Civil Rights
400 Maryland Avenue SW
Washington, DC 20202-1100

Website: <http://www.ed.gov/ocr>
Customer Service Hotline: 800.421.3481
Email: OCR@ed.gov

Procedure for Title IX Complaints

Upon receiving a formal report or complaint, the Title IX and/or Deputy Title IX Coordinator will review the complaint and conduct an immediate initial inquiry to determine whether there is reasonable cause to determine if there was a violation, i.e. a reasonable person would determine that further inquiry is warranted.

If the initial inquiry indicates there is not a reasonable cause to believe that there was a violation, the Title IX Coordinator and/or Deputy Title IX Coordinator will close the case.

If the initial inquiry indicates that there is reasonable cause to believe that a violation may have occurred, the Title IX Coordinator and/or Deputy Title IX Coordinator will begin the formal grievance procedure described below. In some cases, the Title IX Coordinator and/or Deputy Title IX Coordinator may attempt to resolve the complaint through mediation with the parties, with the complainant's permission, although this method will not be utilized in cases of sexual violence.

If the initial inquiry indicates that there is reasonable cause to believe a violation occurred and mediation is not being used, the Title IX Coordinator and/or Deputy Title IX Coordinator will initiate a thorough, equitable, impartial and prompt investigation designed to provide a reliable determination about whether or not a violation has occurred.

Any investigation will be conducted by individuals who have received specialized training in conducting these types of investigations. In general, the investigation may include interviews with the parties, interviews with relevant witnesses, the identification, solicitation and review of any information relevant to the investigation including educational or personnel records and available police reports, and consultation with expert witnesses as the investigator deems necessary.

Location of Incident. All complaints will be reviewed regardless of where the conduct occurred, including conduct occurring online or through technological means, to determine whether the conduct occurred in the context of employment or education or had continuing effects on campus or in an off-campus educational program or activity or employment.

Timeliness. The University encourages prompt reporting of complaints so that a rapid response can be made and appropriate action can be taken. There is no time limit on filing a complaint as long as the accused individual remains subject to the University's jurisdiction although a significant delay in reporting may negatively affect the ability of the investigator to gather information about what occurred.

The University will resolve complaints in a prompt manner, and will make best efforts to resolve complaints within 60 calendar days, with additional time for any appeals. A concurrent criminal investigation by policy may impact this time frame. All parties will be provided with periodic updates as to the status of the case as the parties' desire and as is reasonable.

Accompanying Allegations. When a complaint is accompanied by alleged violations of the Student Conduct Code, all of the allegations may be resolved together as described in this document.

Additional Investigations. The Title IX and/or Deputy Title IX Coordinator may designate trained individuals from within or outside of the University to conduct or assist with the resolution process at its discretion.

Procedure for Complaints Involving a University Student as Respondent
When a National University student is identified as the respondent, the Title IX and/or Deputy Title IX Coordinator will review the complaint and determine the most appropriate method for responding. Options may include voluntary informal mechanisms like mediation, a formal investigation as described in the Process for Resolving Complaints section, or determining that there is not reasonable cause to believe that a violation occurred.

The University will contact the Respondent by email to notify them of the investigation, describe the alleged misconduct and the policies it may violate, and offer the Respondent the opportunity to meet with the investigator in person or by phone to respond to the allegations within the timeframe described in the email. Notice to the Respondent is considered received on the date the email is sent. If the Respondent fails to attend a meeting by the specified date, or if the Respondent schedules but does not attend or attends but does not participate, the investigator may complete the investigation, issue findings, and, as appropriate, issue sanctions without the Respondent's participation. The University encourages Respondents to participate in the grievance process.

The University will use best efforts to provide equitable rights to the parties throughout the resolution process. The Complainant and Respondent each have the option to bring one advisor to any meeting to provide advice or support. Any attorney acting as an advisor may not formally represent a party in University Administrative proceedings. The investigator may exclude any advisor who disrupts a meeting. Both parties have the right to identify witnesses and provide other information relevant to the investigation. The Complainant and Respondent will not be permitted to directly question each other and are not required to be present together at any point in the grievance process.

The investigation will result in a finding as to whether or not the policy has been violated. The finding will be based on a preponderance of the evidence standard, i.e., whether it is more likely than not that the conduct occurred.

Interim Steps During the Resolution

The Title IX and/or Deputy Title IX Coordinator will take interim steps to protect a Complainant while the case is pending. Depending on the case, the Complainant's wishes and what is reasonably available, these steps may include changes to academic and working situations over which the University has control, directing a Respondent to not have contact with a Complainant, excluding a Respondent from parts of campus, or providing a Complainant with an escort on campus.

Any adjustments made will be designed to minimize the burden on the Complainant's educational program. The Title IX and/or Deputy Title IX Coordinator may modify work or academic arrangements during an investigation as it deems necessary, in order to protect the safety or welfare of a member of the campus community or to allow the Complainant to continue to receive the benefits of education.

A Complainant may wish to report to law enforcement or obtain a civil or criminal restraining order while the case is underway. The Title IX and/or Deputy Title IX Coordinator can provide information about these options.

The Title IX and/or Deputy Title IX Coordinator will discuss retaliation with the parties. Parties who believe they have been retaliated against due to participation in a grievance proceeding should notify the Title IX and/or Deputy Title IX Coordinator as soon as possible. Note that allegations of retaliation will be addressed as separate violations subject to the investigative process described above and may result in sanctions, regardless of the outcome of the underlying case.

The Title IX and/or Deputy Title IX Coordinator may place a Respondent on an interim suspension pending the resolution of the case where there is a substantial concern for the health, safety, or welfare of any person, and will notify the Respondent by email if this occurs. An interim suspension means that the student cannot attend class and must remain off of University property until the grievance procedure is completed. Should a Respondent need to be on campus during this period, they must submit a request to the Title IX and/or Deputy Title IX Coordinator in writing 24 hours in advance, including the reason for needing to be on campus and the specific date, time frame and location requested. The Title IX and/or Deputy Title IX Coordinator will review the request and respond as to whether or not the request has been approved. Until the student receives written approval granting their request, their presence on campus will be considered trespass and law enforcement will be contacted.

Information for an Accused Student. It can be difficult to be accused of misconduct. The following resources may be of use to an accused individual:

San Diego County 24 Hour Crisis Line: 800.479.3339

San Diego County Warm Line (non-crisis telephone support): 800.930.WARM

If you feel you may be a danger to yourself, please call the National Suicide Prevention Lifeline at 800.784.2433.

If you are a Respondent in a case before the school, please note that the University utilizes neutral fact finders who will gather relevant and available information before making decisions about the allegations. Your participation in the grievance process is encouraged. The University is required by federal law to address allegations brought forward and to make decisions using a preponderance of the information standard of proof, including situations where the police are involved and many situations that occur off of campus. You may choose to not participate in a University process or to not make a statement regarding the allegations, but the University will make a finding regardless, and may issue sanctions without your participation if you are found responsible.

Sanctions and Remedies

When the accused is found not responsible for the alleged violation, the investigation will be closed and the Complainant and Respondent notified.

When the accused is found responsible for the violation, the University will take action to end the discrimination or harassment, prevent its recurrence, and remedy its effects on the victim and the University community. The Title IX and/or Deputy Title IX Coordinator will determine the consequences or sanctions for the Respondent and remedies for the Complainant, and as appropriate, the University community.

Any student found responsible for a violation may receive sanctions ranging from probation to expulsion along with any other sanctions, depending on the severity of the incident and taking into account factors such as any previous incidents. The Title IX and/or Deputy Title IX Coordinator reserves the right to broaden or lessen this range of sanctions in the event of mitigating factors or egregiously offensive behavior. Sanctions imposed are implemented immediately unless the Vice President for Student Services (VPSS) delays their implementation in extraordinary circumstances pending the outcome of an appeal as described below.

The University will determine which remedies may be offered to a Complainant depending on the nature of the case, including changes to academic or work obligations under the school's control. Possible remedies may include providing an escort to ensure that the Complainant can move safely between classes; ensuring the Complainant and Respondent do not share classes or extracurricular activities; providing victim services such as counseling and academic support services; or arranging for a Complainant to re-take a class, have extra time to complete a class, or withdraw from a class without an academic or financial penalty.

The Complainant and Respondent will be informed of the finding, the rationale for the finding and any relevant sanctions to the extent permissible by law simultaneously and via email, usually within 24 hours of decision.

Conduct That is Criminal in Nature

The University has authority to address these complaints in a non-criminal context. The University process is completely separate from the police and courts.

For any incident that potentially involves criminal activity, an accuser may wish to report directly to law enforcement in addition to, or instead of, reporting to the University. University personnel can assist a Complainant in making a report to law enforcement. A Complainant may pursue both the University process and the criminal process simultaneously. In addition, in some states and in some circumstances, state law may require a University official to report certain crimes to law enforcement if policy have not already been notified; if you have questions about this, please contact the Title IX Coordinator and/or Deputy Title IX Coordinator.

When a police or criminal matter occurs simultaneous to the University process, in most cases the University will not wait until the criminal case is resolved before proceeding with the University process. The University's fact-finding investigation may be delayed for a short period of time upon a request from law enforcement, but the University will promptly resume the investigation as soon as possible.

In cases involving threats, threatening behavior or violence including sexual violence, the University can provide information about seeking an order of protection through the courts.

Appellate Procedure

The only grounds for appeal are as follows:

1. To consider new evidence unavailable during the original investigation, that could substantially impact the original finding or sanction. A summary of the new evidence and its potential impact must be included in the request for appeal; or
2. The sanctions imposed are substantially disproportionate to the severity of the violation; or
3. The grievance procedure was not followed which significantly impacted the outcome.

Either party may submit a request for appeal for one of the three reasons above. The Vice President of Student Services (VPSS) must receive any request for appeal in writing along with all relevant documentation within three (3) business days of the decision being sent to the parties.

Vice President, Student Services

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The VPSS will review the request for appeal to determine if the appeal meets the limited grounds and is timely.

If the appeal is not timely or eligible, the original finding and any sanctions, if sanctions were issued, will stand and the decision is final. The VPSS will notify both parties in writing. The decision of the VPSS to deny appeal requests is final.

If the appeal is timely and eligible, the VPSS will share information from the appeal with the other party, who may file a response within three (3) business days.

The VPSS will review the statements of both parties and may consult with the University staff who resolved the complaint and issued the findings.

If the VPSS determines that new evidence exists which should be considered, the VPSS will return the complaint to the Title IX and/or Deputy Title IX Coordinator to reconsider in the light of the new evidence only. The reconsideration of the Title IX and/or Title IX Coordinator may not be appealed.

If the VPSS determines that the grievance procedure was not followed which significantly impacted the outcome, the VPSS will return the complaint to the Title IX Coordinator and/or Deputy Coordinator to correct the error. The result may not be appealed.

If the VPSS determines that the sanctions imposed are substantially disproportionate to the severity of the violation, the VPSS will return the complaint to the Title IX and/or Deputy Coordinator, who may increase, decrease or otherwise modify the sanctions. The results may not be appealed.

The procedures governing the hearing of appeals include the following:

- The parties will be informed of the status of requests for appeal, the status of the appeal consideration, and the results of the appeal decision in a timely manner;
- Appeals are not intended to be full re-hearings of the complaint. In most cases, appeals are confined to a review of the written documentation or record and pertinent documentation regarding the grounds for appeal;
- Appeal officers will not substantiate their judgment for that of the original hearing body merely because they disagree with the finding and/or sanctions. Appeal decisions are deferential to the original hearing body. The procedures governing the hearing of appeals include the following:

The VPSS will render a written decision on the appeal to all parties within ten (10) business days from receiving the appeal. If the VPSS returns the case to the Title IX and/or Deputy Coordinator as a result of the appeal, the Title IX and/or Deputy Coordinator will notify the parties of the final results within five (5) business days from receiving the appeal from the VPSS.

Any sanctions imposed by the Title IX and/or Deputy Title IX Coordinator prior to appeal are implemented immediately unless the VPSS delays their implementation in extraordinary circumstances pending the outcome of an appeal. Graduation, internships/externships and similar circumstances do not in and of themselves constitute extraordinary circumstances, and students may not be able to participate in those activities during their appeal. In cases where the appeal results in reinstatement to the University or of privileges, all reasonable attempts will be made to restore the student to their prior status.

DRUG AND ALCOHOL POLICY

The “Drug-Free Schools and Communities Act Amendments of 1989” (Public Law 101–226) clearly states the position that universities are expected to take with regard to drug and alcohol abuse. In support of the purpose of this legislation National University wishes to make known its concern for the health and well-being of all members of the University community—students, staff, and faculty—as well as the health and well-being of the community at large. More specifically, the University:

- Is committed to preventing illicit drug use and alcohol abuse or providing appropriate intervention and referrals;
- Expects that members of the University community who use alcohol or prescription drugs do so within the bounds of lawful behavior and good judgment; and
- Expects that members of the University community accept responsibility for their behavior and its effects on the University community by adhering to University regulations, applicable state laws, and legislation of the United States

National University policy prohibits the unlawful manufacturing, distribution, possession, or use of alcohol, illegal drugs, or controlled substances; inappropriate use of prescription drugs; and the unauthorized use of alcohol on university premises. Such prohibition specifically includes, without limitation:

- Possession, use, sale, distribution, or furnishing of any controlled substance, including heroin, barbiturates, cocaine, LSD, methamphetamine, hallucinogens, and marijuana.
- Possession, use, sale, distribution, or furnishing of alcohol on campus, unless at a specifically authorized University activity;
 - » It is unlawful to distribute, sell, or provide alcohol to a person under the age of 21;
 - » The possession of alcohol by anyone less than 21 years of age in a public place, or a place open to the public is illegal;
- The sale of any controlled substance which is in violation of local, state, or federal statutes; and
- Any other conduct which involves a drug-related violation of local, state, or federal ordinances.

Violations of this policy will result in disciplinary action or referral for prosecution in accordance with local, state, and federal statutes, or both.

STUDENT CODE OF CONDUCT

Student Discipline

Students are expected to conduct themselves in a responsible manner that reflects ethics, honor and good citizenship. They are also expected to be aware of University regulations and to abide by them. It is the students’ responsibility to maintain academic honesty and integrity and to manifest their commitment to the goals of the University through their conduct and behavior. Any form of academic dishonesty, or inappropriate conduct by students or applicants, may result in penalties ranging from warning to dismissal, as deemed appropriate by the University. Students will be informed in writing of the nature of the charges against them. They will be given a fair opportunity to refute the charges and there will be provisions for appeal of a decision.

Classroom Etiquette

Freedom of speech and expression is valued in the academic setting. Students must strive to work together in a setting of civility, tolerance, and respect for each other. To that end, the following code of classroom etiquette has been established.

- When participating in class dialogue, no one monopolizes discussions to the exclusion of others, either in terms of time or opinions expressed.
- Conflicting opinions among members of a class are respected and responded to in a professional manner.
- No side conversations or other distracting behaviors are engaged in during class discussions or presentations.
- No offensive comments, language, or gestures are part of the classroom environment.
- Cell phones and electronic devices (notebooks excepted) are placed in the “off” mode in class time.
- Children and pets (guide dogs excepted) are not brought to class.

Adherence to this code of etiquette will enable students to receive the most from their academic endeavors and should be seen as a regular and voluntary compact among faculty and students. Any infraction of this code that is deemed to be materially or substantially disruptive of the learning environment is cause for removal of a student from a class or for student disciplinary proceedings.

Code of Conduct for Online Students

Freedom of speech and expression is valued in the academic setting. Equally valued is the respect given to university computer systems and information technology. To that end, students will adhere to the following online code of conduct:

- Access National University courses only for lawful purposes.
- Respect the privacy of other members of the class and other students.
- Respect the integrity of the University’s computer systems.
- Respect the diversity of opinions among the instructor and members of the class and respond to them in a courteous manner. Electronic communication consisting of all caps, large font, or bold print may be considered unprofessional and a form of verbal abuse.
- Maintain an environment free of harassment, stalking, threats, abuse, insults, or humiliation to the instructor and members of the class. This includes, but is not limited to demeaning written or oral comments of an ethnic, religious, sexist (or sexual orientation), or racist nature; and the unwanted sexual advances or intimations by email, or on discussion boards and postings in course shells.
- Abide by all rules and regulations published by the University and agree to be subject to disciplinary actions as described in the General Catalog.

Violations of the Student Code of Conduct

Students may also be disciplined for any of the following reasons:

- Academic dishonesty
- Failure to comply to the directions of a University official
- Forgery, altering University documents, or knowingly providing false information
- Disruption of the educational or administrative process of the University, by acts or expression

- Physical abuse or threat of abuse to students, University employees, or their families
- Verbal abuse or intimidation of students or University employees including shouting or other displays of hostility intended to be abusive or insulting rather than a communication of ideas
- Theft of University property or the property of a University employee, student, or visitor
- Vandalism or unauthorized destruction of University property or the property of a University employee, student, or visitor
- Sale or knowing possession of illegal drugs or narcotics
- Use of or being under the influence of alcohol on campus
- Possession, use, or threats of use of explosives or deadly weapons on University property
- Sexually explicit, indecent, or obscene behavior on University property or by any means of communication, including the Internet
- Sexual harassment
- Sexual assault
- Soliciting or assisting another in an act that would subject students to a serious University sanction
- Trespassing in an area of the University where the student is not authorized to be, or failure to leave immediately an area when directed by an employee of the University
- Using University equipment or networks to violate copyrights
- Violation of the University's visitor policy
- Violation of the University's animal policy
- Violation of the University's computer regulations
- Violation of any other lawful policy or directive of the University or its employees.
- Any action that would grossly violate the purpose of the University or the rights of those who comprise the University
- Violation of the University's Human Subject Research Policy and Procedures

Disciplinary action may include probation, suspension, or dismissal from the University. Students suspected of committing any violation of University policy are accorded procedures consistent with fair process typically before disciplinary action is imposed. However, in appropriate circumstances, interim action may be taken prior to the initial Conference.

Any violation of University policy (including all forms of academic dishonesty) can result in a student being barred from graduate or professional schools at this or other universities.

When a violation has occurred, an incident report, including the date, time, and circumstances of the alleged act, must be submitted to the Office of Student Conduct. This report includes a description of the actions of all parties involved, names of witnesses available, and documentary evidence that supports the charge. Students wishing to report a violation should file the report by emailing jao@nu.edu. Upon receipt of the report, the Conduct Officer will contact the student and initiate an Administrative Review.

If the Administrative Review indicates that a violation of the code of conduct has occurred, the Conduct Officer will contact the student in writing informing the student of the charges in sufficient detail, including the time and place the alleged violation occurred and the penalty that would be appropriate if the student did in fact violate the policy. The Conduct Officer is responsible for ensuring the student's right to due process by notice and the opportunity to be heard.

A written warning is used when a student's behavior is unacceptable, but is considered to be minor. It includes a warning that any other violation of University policy, for which the student is found responsible, will result in more severe disciplinary action. The notification does not result in a conduct record and therefore, is not appealable. The written warning shall be delivered to the email address most recently filed with the Office of the Registrar.

Disciplinary Probation is used in cases more egregious than those warranting a written warning, but less than those warranting suspension.

Suspension is appropriate in cases of serious misconduct, in cases when a student has violated a condition of disciplinary probation, or has failed to meet the stipulations of lesser sanctions. During the period of suspension, the student charged may not enter any National University campus, other than to attend the hearing regarding the merits of the suspension. Violation of any condition of suspension shall be grounds for dismissal.

Dismissal is the most severe sanction that the University may impose, and is permanent. If a dismissed student returns to the campus, they could be charged with unlawful entry and may be arrested.

Initial Conference

A Conduct Officer will meet with the charged student to explain the conduct process, answer any questions the student may have, and proceed with an administrative review which allows the student an opportunity to respond to the allegations contained in the Student Conduct Notice. If a student chooses to bring an advisor to the meeting, it is the student's obligation to select an advisor whose schedule allows attendance within the time frame designated in the Student Conduct Notice. Attorneys may not act as advisors to students.

- If a student agrees that their behavior constitutes a violation of the Student Conduct Code as outlined in the Student Conduct Notice, the Conduct Officer will discuss with the respondent the facts alleged to have occurred and any aggravating or mitigating circumstances or information that might affect the sanction. After considering any additional information the student has presented, the Conduct Officer shall decide on a sanction. The student waives the right to appeal by accepting this option, unless the outcome is a sanction of suspension or dismissal.
- If a student denies either they engaged in the conduct described in the Student Conduct Notice or that the conduct constitutes a violation of the Student Conduct Code, the Conduct Officer will conduct a review to determine whether a violation has occurred.

The Conduct Officer will consider the following in making a determination: the allegations in the Student Conduct Notice and the charged student's response to those allegations; any relevant documents and the oral or written statements of any witnesses with relevant information, as supplied by the parties to the case or as requested by the Conduct Officer.

The student may identify witnesses whom they believe have relevant information to impart to the Conduct Officer. If the Conduct Officer determines that the witness may have relevant information, s/he will make a good faith effort to contact such witnesses to obtain a statement from them. However, the Office of Student Conduct cannot guarantee the participation of an identified witness. The Conduct Officer may decline to contact any witnesses if the Conduct Officer believes that the witness does not have information relevant to the facts in dispute. The respondent may submit questions to the Conduct Officer to be asked of the witnesses, but is not entitled to be present during the Conduct Officer's interview of witnesses. It is within the discretion of the Conduct Officer to decide whether to ask the witnesses any question(s) submitted by the respondent. Students and university employees are expected to participate as reasonably requested in conduct proceedings as a responsibility of membership in the university community and failure to do so may result in disciplinary action. The Conduct Officer may re-interview the respondent or any witnesses, including the complainant, in order to obtain responses to additional information gathered during the administrative review.

Technical rules of evidence and procedures applicable to civil and criminal court cases do not apply to the student conduct process. Any relevant information may be considered if it is the sort of information on which responsible persons are accustomed to rely in serious affairs. No information other than that received in conjunction with the conduct process shall be considered. The Conduct Officer may exclude any person, including the respondent and/ or their advisor, who disrupts a meeting.

The Conduct Officer will make determinations about the facts and the credibility of those providing information and determine whether the student has violated the Student Conduct Code. If the student is found responsible for violating the Student Conduct Code, the Conduct Officer will determine any aggravating or mitigating circumstances and assign sanctions. The Conduct Officer will notify

the respondent of the decision in writing. In cases of crimes of violence and sexual harassment, the complainant will be notified of the decision. The appeal process in these cases is outlined in the Appellate Procedure.

- c. The Office of Student Conduct keeps a record of the information obtained. The record includes copies of all correspondence between the respondent and the university, copies of any audio records, all documents, and the decision.
- d. If the student does not schedule or attend a scheduled meeting with the Conduct Officer or attends a meeting but does not participate by the date specified in the notice, the Conduct Officer may decide the outcome of the case in the student's absence or without the student's participation based on the information available to the Conduct Officer.
- e. Unless unusual circumstances beyond the control of the student arise, a delay in the process will not be granted. The Conduct Officer may establish deadlines within the administrative process as necessary for prompt and effective case resolution.

Standard Proof and Process

In order to find that a student has violated the code of conduct, the standard of proof required is a preponderance of the information contained in the record. The information must demonstrate that it is more than likely than not that the student violated the Student Code of Conduct.

All student conduct proceedings are closed. The university may audiotape any conduct proceeding.

Appellate Procedures

The only grounds for appeal are as follows:

- 1. To consider new evidence, unavailable during the original investigation, that could substantially impact the original finding or sanction. A summary of this new evidence and its potential impact must be included in the request for appeal; or
- 2. The sanctions imposed are substantially disproportionate to the severity of the violation; or
- 3. The grievance procedure was not followed which significantly impacted the outcome.

Either party may submit a request for an appeal for one of the three reasons above. The VPSS must receive any request for appeal in writing along with all relevant documentation within three (3) business days of the written decision being sent to the parties.

Vice President, Student Services
National University
11255 N. Torrey Pines Road
La Jolla, CA 92037
858.642.8024

The VPSS will review the request for appeal to determine if the appeal meets the limited grounds and is timely.

If the appeal is not timely or eligible, the original finding and any sanctions, if sanctions were issued, will stand and the decision is final. The VPSS will notify both parties in writing. The decision of the VPSS to deny appeal requests is final.

If the appeal is timely and eligible, the VPSS will share information from the appeal with the other party, who may file a response within three (3) business days.

The VPSS will review the statements of both parties and may consult with the OSA staff who resolved the complaint and issued findings.

If the VPSS determines that new evidence exists which should be considered, the VPSS will return the complaint to the OSA to reconsider in light of the new evidence only. The reconsideration of the OSA may not be appealed.

If the VPSS determines that the grievance procedure was not followed which significantly impacted the outcome, the VPSS will return the complaint to the OSA to correct the error. The results may not be appealed.

STUDENT COMPLAINT

State Contact Information

United States Department of Education State Authorization Regulation requires institutions to comply with applicable requirements in each state. National University works with higher education authorities in all states and other U.S. jurisdictions to ensure compliance with all state and federal requirements that govern the offering of online courses in those states, including complaint processes. In accordance with 34 CFR 600.9, institutions must provide current and prospective students with contact information for filing complaints.

Students who wish to file a complaint based upon discriminatory treatment should review Civil Rights Policies and Procedures found in the policies and procedures section of the General Catalog.

National University encourages you to resolve issues or complaints informally or formally through Student Services. However, if an issue cannot be resolved internally, you may file a complaint about National University with your state of residence or with the University's accrediting organization.

Alabama Department of Postsecondary Education

PO Box 302130
Montgomery, AL 36130-2000
Phone: 334.242.2959

Alabama Commission on Higher Education

100 North Union Street PO Box 302000
Montgomery, AL 36130-2000
Phone: 334.242.2109

Alaska Commission on Postsecondary Education

PO Box 110505
Juneau, AK 99811-0505
Phone: 800.441.2962

Arizona State Board for Private Postsecondary Education

1400 W. Washington Street, Room 260
Phoenix, AZ 85007
Phone: 602.542.5709

Arkansas Higher Education Coordination Board

114 East Capitol Ave.
Little Rock, AR 72201
Phone: 501.371.2000

California Bureau for Private Postsecondary Education

2535 Capital Oaks Drive, Suite 400
Sacramento, CA 95798
Phone: 916.431.6959

Colorado Commission on Higher Education

1560 Broadway, Suite 1600
Denver, CO 80202
Phone: 303.866.2723

Connecticut Department of Higher Education

61 Woodland Street
Hartford, CT 06105
Phone: 860.947.1800

Connecticut Department of Consumer Protection

165 Capitol Avenue, Room 110
Hartford, CT 06106
Phone: 860.713.6300

Delaware Higher Education Office

Carvel State Office Building, 5th Floor
820 N. French Street
Wilmington, DE 19801-3509
Phone: 302.577.3240

District of Columbia Education Licensure Commission

Office of the State Superintendent of Education
810 First Street, NE, 9th Floor
Washington, DC 20002
Phone: 202.442.4314

Florida Commission for Independent Education

325 W. Gaines Street, Suite 1414
Tallahassee, FL 32399-0400
Phone: 850.245.3236

Georgia Nonpublic Postsecondary Education Commission

2082 E Exchange Pl. #220
Tucker, GA 30084-5334
Phone: 770.414.3300

Hawaii Post-Secondary Education Authorization Program

Department of Commerce and Consumer Affairs
335 Merchant Street, Rm. 310
Honolulu, Hawaii 96813
Phone: 808.586.7327
cca.hawaii.gov/hpeap

Idaho State Board of Education

PO Box 83720
Boise, ID 83720-0037
Phone: 208.334.2270

Illinois Board of Higher Education

431 East Adams, 2nd Floor
Springfield, Illinois 62701-1404
Phone: 217.782.2551

Indiana Commission on Proprietary Education

302 W. Washington Street, Room E201
Indianapolis, IN 46204
Phone: 317.232.1320

Iowa College Student Aid Commission

603 E. 12th Street, 5th Floor
Des Moines, IA 50319
Phone: 877.272.4456

Kansas Board of Regents

1000 SW Jackson Street, Suite 520
Topeka, KS 66612-1368
Phone: 785.296.3421

Kentucky Council on Postsecondary Education

1024 Capital Center Dr., #320
Frankfort, KY 40601-7512
Phone: 502.573.1555

Louisiana Board of Regents

PO Box 3677
Baton Rouge, LA 70821
Phone: 225.342.4253

Maine State Board of Education

23 State House Station
Augusta, ME 04333
Phone: 207.624.6616

Maryland Office of the Attorney General

Consumer Protection Division
200 Saint Paul Place
Baltimore, MD 21201
Phone: 410.528.8662

Massachusetts Board of Higher Education

One Ashburton Place, Room 1401
Boston, MA 02108
Phone: 617.994.6950

Michigan Department of Licensing and Regulatory Affairs

PO Box 30714
Okemos, MI 48864
Phone: 517.373.6551

Minnesota Office of Higher Education

1450 Energy Park Drive, Suite 350
St. Paul, MN 55108-5227
Phone: 651.642.0567

Mississippi Commission on College Accreditation

3825 Ridgewood Road
Jackson, MS 39211-6453
Phone: 601.432.6372

Missouri Department of Higher Education

205 Jefferson Street, PO Box 1469
Jefferson City, MO 65102-1469
Phone: 573.751.2361

Montana Office of the Commissioner of Higher Education

2500 Broadway St., PO Box 203201
Helena, MT 59620-3201
Phone: 406.444.6570

Nebraska Coordinating Commission for Postsecondary Education

PO Box 95005
Lincoln, NE 68509-5005
Phone: 402.471.2847

Nevada Commission on Postsecondary Education Commission

3663 East Sunset Road, Suite 202
Las Vegas, NV 89120
Phone: 702.486.7330

New Hampshire Postsecondary Education Commission

3 Barrell Court #300
Concord, NH 03301-8531
Phone: 603.271.2555

New Jersey Commission on Higher Education

20 W. State Street PO Box 542
Trenton, NJ 08625
Phone: 609.292.4310

New Mexico Higher Education Department

2048 Galisteo Street
Santa Fe, NM 87505
Phone: 505.476.8400

New York Office of College and University Evaluation

5 North Mezzanine, Education Building
Albany, NY 12234
Phone: 518.474.2593

North Carolina University of North Carolina General Administration

910 Raleigh Road
Chapel Hill, NC 27515-2688
Phone: 919.962.4558

North Dakota Department of Career and Technical Education

State Capitol – 15th Floor
600 E. Boulevard Ave. Dept. 270
Bismarck, ND 58505-0610
Phone: 701.328.3180

Ohio Board of Regents

30 East Broad Street, 36th Floor
Columbus, OH 43215
Phone: 614.466.6000

Ohio State Board of Career Colleges and Schools

35 East Gay Street, Suite 403
Columbus, OH 43225
Phone: 614.466.2752

Oklahoma State Regents for Higher Education

655 Research Parkway, Suite 200
Oklahoma City, OK 73104
Phone: 405.226.9100

Oregon Office of Degree Authorization

1500 Valley River Drive, Suite 100
Eugene, OR 97401
Phone: 503.378.3921

Puerto Rico Council on Higher Education

PO Box 1900
San Juan, PR 00910.1900

Pennsylvania Department of Higher Education

333 Market Street
Harrisburg, PA 17126-0333
Phone: 717.783.6788

Rhode Island Board of Governors for Higher Education

Shepard Building
80 Washington Street
Providence, RI 02903
Phone: 401.456.6000

South Carolina Commission on Higher Education

1333 Main Street, Suite 200
Columbia, SC 29201
Phone: 803.737.2260

South Dakota Board of Regents

306 E. Capitol Ave, Suite 200
Pierre, SD 57501-2545
Phone: 605.773.3455

Tennessee Higher Education Commission**Division of Postsecondary School Authorization**

404 James Robertson Parkway, Suite 1900
Nashville, TN 37243
Phone: 615.471.3605

Texas Higher Education Coordinating Board

1200 E. Anderson Lane
Austin, TX 78752
Phone: 512.427.6168

Utah Department of Commerce Division of Consumer Protection

160 East 300 South
Salt Lake City, UT 84114
Phone: 801.530.6601

Vermont Department of Education

120 State Street
Montpelier, VT 05620-2501
Phone: 802.828.3135

Virginia State Council of Higher Education for Virginia

James Monroe Building 101 N. 14th St.
Richmond, VA 23219
Phone: 804.225.2600

Washington State Higher Education

917 Lakeridge Way
PO Box 43430
Olympia, WA 98504-3430
Phone: 360.753.7800

West Virginia Higher Education Policy Commission

1018 Kanawha Blvd. East, Suite 700
Charleston, WV 25301
Phone: 304.558.2101

Wisconsin Educational Approval Board

30 W. Mifflin St., 9th Floor PO Box 8696
Madison, WI 53708
Phone: 608.266.1996

Wyoming Department of Education

Hathaway Building
2nd Floor
2300 Capitol Avenue
Cheyenne, WY 82002-0050
Phone: 307.777.7673

WASC Senior College and University Commission (WSCUC)

985 Atlantic Avenue, Suite 100
Alameda, CA 94501
Phone: 510.748.9001
wascsr@wascsenior.org



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ACADEMIC INFORMATION FOR UNDERGRADUATE DEGREES

ADMISSION PROCEDURES

Admissions Advising

National University offers year-round admission. Applicants are interviewed by an admissions advisor, who discusses the applicant's specific requirements for admission at the initial interview. All prospective and registered students receive a unique nine-digit student number.

Faculty Advising

Upon admission to the University, students may contact a faculty advisor to assist them in making appropriate decisions about educational and career-related issues. Faculty advisors, who are listed under each degree program within this catalog, provide students the benefit of experience in professional practice and insight gathered from years of formal study in higher education. Students should direct requests for information about curriculum content, course requirements, proficiency examinations, and program goals to their faculty advisor as well. Faculty advisors help students meet University academic regulations and standards.

Qualifications

Applicants for admission to an undergraduate program must meet the following requirements:

Freshman Admission Applicants:

- Must have attended a regionally accredited high school*
- Must have a high school GPA of 2.0

High school applicants who are within six months of completing their high school diploma may be eligible for conditional admission. See conditional admission section below.

Applicants who meet one of the below criteria are considered First-time students and must attend an orientation course through the Division of Extended Learning prior to enrolling at National University.

- Never attended a college or university
- Educational Experience is limited to the following:
 - » Completed competency based education
 - » Completed college level courses during high school or received AP credit
 - » Received ACE recommended credit through military service or training
 - » Received credit through prior learning (CLEP, DANTES, Excelsior, etc.) and/or life experience.

* Applicants who attended a non-regionally accredited high school or were home schooled must petition for admission approval.

Home Schooled Applicants

Undergraduate students who indicate they received their secondary school instruction through home schooling will be required to submit an official high school transcript with the following information:

- Student's name
- List and description of courses completed by grade level
- Grades earned for the courses completed
- Number of credits earned for each course
- Names of textbooks utilized in courses
- Signed by person who administered curriculum
- Graduation date (if applicable)

Students must also provide a letter from their state Department of Education or local school district confirming home school registration. If the student's home state requires that individuals who were home schooled take an exam to show high school completion, the student must submit official high school proficiency exam test scores to the Office of the Registrar. The student will not be required to submit an official high school transcript if providing official high school proficiency exam test scores.

Students will be considered to be provisionally accepted (see Provisional Acceptance section below) until receipt of the required documentation. Students may be allowed to take courses but should note that final verification of high school completion will be made by the Office of the Registrar at the time official high school transcripts are received. Students who are deemed to not have met the high school completion requirement will be required to submit official high school equivalency test scores prior to continued enrollment.

Transfer Applicants

- Applicants who have not earned an Associate's degree from a regionally accredited institution or who have completed fewer than 90 quarter (60 semester) units of transferable college credit (remedial, pass/fail, repeats, and excessive vocational/PE courses are nontransferable) must have graduated from high school, passed a high school-level proficiency test (standard score for each section must be at least 410 with an overall score of 2250), or received a Certificate of Proficiency from a state Department of Education to be accepted on a provisional basis.
- Applicants transferring from regionally accredited colleges and universities are admitted as degree students if their cumulative grade point average from all schools is 2.0 (C) or better.
- Applicants with a cumulative grade point average below 2.0 may be admitted on probationary status if there is sufficient evidence of potential to complete college studies. See Probationary Admission section below.
- Students who have documents from a foreign country must request a foreign credential pre-evaluation to determine eligibility through their admissions advisor.

All applicants must present preliminary evidence of prior education at the required interview with an admissions advisor. Unofficial transcripts are acceptable. Applicants with no prior military experience or who have not completed any postsecondary courses must complete the Foundations to Academic Success Course through the Division of Extended Learning prior to enrolling at National University.

All applicants to the University must also:

1. Complete an application for admission
2. Execute an enrollment agreement
3. Pay a nonrefundable application fee of \$60

If the University determines that a student does not meet stated admissions requirements, his/her studies will be interrupted. A policy exception must be approved for the above admissions requirements before the applicant can be accepted for admission to the University.

International Admissions

Applicants who require a Certificate of Eligibility for Non-immigrant (F-1) Student Status, should contact the International Admissions Office at 858.541.7747 or isa@nu.edu.

A non-refundable application fee of \$65 is required for all international students. Prospective international students must establish means of financial support, provide official transcripts of previous education in order to establish academic eligibility, and fulfill an English Language Proficiency requirement.

The University is required to maintain student records and to furnish the information to appropriate U.S. federal agencies upon request.

Transcript Evaluation

Official documents (e.g. transcripts, mark sheets, diplomas) are required for admission. Transcripts from international institutions of higher education may require a credit recommendation by a recognized evaluation service selected by National University. Applicants are responsible for any required evaluation fees. The final decision on awarding credit is made by National University, which carefully considers the evaluation service's recommendations. More information is available by e-mailing foreignevaluations@nu.edu or by contacting the Office of the Registrar.

Provisional Acceptance

Undergraduate students may take courses during provisional acceptance while the Office of the Registrar awaits receipt of official transcripts from:

- All regionally accredited colleges and universities previously attended.

- All examinations taken including CLEP, AP, DSST, and/or Excelsior College Exams.
- Official Military DD-295 or Official Military JST Transcript (Army, Navy, Marine, or Coast Guard).
- Community College of the Air Force transcript.
- High school transcripts (required if the student has not earned an Associate's degree from a regionally accredited institution or has less than 60 semester units [90 quarter units] of transferable coursework from previous collegiate level institutions or if the student has not attended any higher education institution). High school proficiency certificates may be submitted by students who have obtained high school equivalency through an alternative route. Coursework not included in total transferable units include remedial, pass/fail, repeats, and excess vocational, and PE.

If the Office of the Registrar does not receive all required documentation within 60 days of the date of admission, the students' studies are temporarily interrupted until the Registrar receives all official documents. If the student's studies are temporarily interrupted this can affect financial aid eligibility. The Office of the Registrar will send a courtesy notification every 20 days to students in provisional status advising them of any outstanding documentation needed for their file to be complete. Students should also view their To-Do list on the student web portal to view outstanding documents. Coursework satisfactorily completed during the provisional acceptance period counts toward graduation if it is consistent with specific degree program requirements.

Conditional Admission

Applicants who are within six months of completing a high school diploma may apply and be conditionally admitted into a National University undergraduate program. The official admission of such students will occur when they produce, in a sealed envelope, an official transcript that shows conferral of the high school completion. Baccalaureate courses may not be taken until proof of the student's high school conferral is provided. When the Office of the Registrar receives this official documentation, students will be considered for full admission into a National University program.

Probationary Admission

Applicants who have a cumulative grade point average below 2.0 and who are ineligible for admission must apply for a policy exception. Students should work directly with an admissions advisor to submit all of the following required documentation:

- Transcripts from all institutions the student has attended. High school transcripts are required. Unofficial transcripts are acceptable.
- A copy of student's Mathematics and English ACCUPLACER exam scores.
- A letter of intent explaining student's purpose and goals for attending the University and academic strategies student intends to employ to ensure academic success.

If it is determined that there is sufficient evidence of potential to complete college studies, the student will be admitted on probation for a specific number of courses in which the student must meet all conditions. The number of courses and other conditional requirements are individualized according to each student's situation. Students are not eligible to receive financial aid during the probationary admission period. Upon satisfactory completion of all conditions, the student will be officially admitted to the University. If the student does not meet the conditions during the probationary period, he/she will not be admitted to the University.

F-1 students are not eligible for probationary admission.

Mathematics and English Evaluation

It is strongly recommended that all entering undergraduate students take the ACCUPLACER Mathematics and English evaluation as part of the admissions process. The results of the evaluation are printed immediately and a copy is provided to students.

First-time undergraduate students can take the ACCUPLACER evaluation tests once at no charge. Subsequent examinations can be repeated after 14 days for a \$5 fee. The ACCUPLACER may be repeated a maximum of three (3) times.

Mathematics Placement

Students may request transfer credit for lower-division college-level mathematics courses completed elsewhere with a grade of "C-" or better. Remedial-level courses will not transfer or count for credit. It is recommended that students with-

out transferable mathematics credits complete the pre-collegiate mathematics sequence, MTH 12A and MTH 12B, prior to starting college-level mathematics. Students may test out of one or both of these classes through successful placement by ACCUPLACER.

MTH 12A and MTH 12B are remedial-level courses and do not grant collegiate credit. Grading for these courses is Satisfactory/Unsatisfactory only.

English Placement

Students may request transfer credit for lower-division college-level English courses completed elsewhere with a grade of "C-" or better. Remedial-level courses will not transfer or count for credit. It is strongly recommended that students without transferable English credits take the ACCUPLACER exam to determine whether they should complete the pre-collegiate English course, ENG 013, prior to college-level English. Students may test out of ENG 013 through successful placement by Accuplacer.

ENG 013 is a remedial-level course and does not grant collegiate credit. Grading for this course is Satisfactory/Unsatisfactory only.

Transcript Requests of Other Institutions

Transfer credit earned at other institutions cannot be considered without official transcripts. To expedite the evaluation process, it is recommended that students request transcripts directly from all of their previous institutions or the evaluation process may be delayed.

Official transcripts should be sent by the issuing institution directly to:

Office of the Registrar
National University
9980 Carroll Canyon Road
San Diego, California 92131-1133

The Office of the Registrar will not accept hand-carried transcripts or transcripts "issued to student" as official documents unless they are in a sealed envelope from the issuing institution. Electronic transcripts sent directly from the issuing institution to records@nu.edu will be considered official. Electronic transcripts not sent from the issuing institution or sent to a different nu.edu email address will not be considered official.

Upon request, the University will process the initial request for all domestic transcripts (excluding test scores), including payment of associated fees, on the student's behalf. If a transcript has not arrived within four weeks, the Office of the Registrar will submit a second request. Thereafter, it becomes the student's responsibility to ensure that the University receives the document(s). Students must provide documents that are outstanding to ensure receipt within the required time frame.

Once student has been officially admitted, any subsequent transcripts are the sole responsibility of the student.

The University will not process requests for foreign transcripts/documents. Students who have attended institutions in foreign countries or who have a high school proficiency must acquire official transcripts/documents themselves.

Transcripts from other institutions that have been presented for admission or evaluation become a part of the student's academic file and are not returned or copied for distribution.

Evaluation

Evaluation is the official determination of the required course of study for a student's degree and is the final step in the admission process. After the Office of the Registrar receives all official transcripts and other documents required for admission, the student's records are evaluated for transferability of credit. The course of study that a student discussed with an advisor at the initial admissions interview is only an estimate of the course requirements for a degree. The Office of the Registrar makes the official determination regarding the applicability of previous coursework toward meeting the requirements of a particular degree program. Students will be notified by e-mail when they may view their Academic Advisement Report (AAR) online through the student portal. As students progress through their program, the AAR will show coursework already completed and courses remaining to be completed. The AAR helps students and advisors determine progress toward completion of program requirements. The AAR is not the official notification of completion of program requirements. An official audit of program requirements is conducted by the Office of the Registrar when a student applies for graduation.

Applications for financial aid cannot be processed until evaluation has occurred. Federal regulations require the University to determine the appropriate grade level for funding purposes.

SOURCES OF CREDIT

Transfer Credit

National University accepts credits from regionally accredited institutions. It may also accept credits from institutions that are accredited by an agency which is a member of Council for Higher Education Accreditation (CHEA), provided that the academic quality of the institutions can be verified and the credits otherwise comply with National University guidelines. National University may also accept credits from collegiate institutions which are accredited by non-CHEA member agencies provided they are recognized by the Department of Education. In either case, the below process must be followed to request transfer credit consideration.

Transfer of credits from agencies which are not CHEA members are subject to additional scrutiny to validate their academic programs adhere to the standards of institutions accredited by CHEA members. Credits transferred from collegiate institutions will only be accepted if they apply to the student's degree or certificate program and if they are comparable in nature, content, and level of credit to similar coursework offered by National University. Transfer students must have been in good standing and eligible to return to the last institution in which they were enrolled. Remedial college credits do not meet collegiate standards and will not be accepted as transfer credits by National University.

National University makes transfer credit decisions based upon its assessment of the collegiate institution and the circumstances and performance of the student. For students transferring from non-regionally accredited institutions, National University may accept fewer transfer credits, require the student to have earned minimum grades, or accept transfer credit on a provisional basis to be validated by satisfactory coursework in residence. Under no circumstances will National University accept transfer credit for a course in which the student earned a "D+" or lower grade.

The maximum transfer credit allowed for an Associate's degree is 58.5 quarter units. The maximum allowed for a Bachelor's degree is 135 quarter units.

Requests for Transfer Credit Consideration

Any student who would like to request consideration of non-regionally accredited coursework must submit the following by completing a policy exception e-form (available on the Student Portal).

- Institution's catalog for the years the student attended
- Listing of what courses the student would like to use in transfer, including direct course equivalencies whenever possible.
- Petition letter outlining student's request

It is recommended that the student work with an admissions advisor for assistance.

Collegiate

The maximum number of collegiate lower-division credits acceptable for transfer to an associate degree program is 58.5 quarter units (39 semester units). For a baccalaureate degree program, no more than 103.5 lower-division quarter units (69 semester units) are allowed.

The maximum number of upper-division collegiate credits acceptable for transfer is 40.5 quarter units (27 semester units). A total of 36 quarter units (24 semester units) may be accepted from the extension division of a regionally accredited university. In either case, only credits accepted by the previous institution toward degree requirements are transferable.

The maximum credit allowed in transfer for vocational/technical courses is 18 quarter units (12 semester units). The maximum credit allowed in transfer for physical education is 9 quarter units (6 semester units).

Prior Learning Credit Transfer

National University recognizes knowledge is acquired in many different ways. In addition to the traditional classroom setting, mastery of college-level knowledge and skills may occur as a result of nontraditional learning experiences such as employment, military training and experience, non-collegiate training programs, advanced high school courses, and self-development. The University awards applicable credits earned for nontraditional prior learning, however, credit is not

awarded simply for experience but for measurable college-level learning which includes knowledge, skills and competencies students have obtained as a result of their prior learning experiences. College credit may be granted on a case-by-case basis for prior learning only when it can be documented and falls within regular credit course offerings. The maximum number of credits acceptable for non-collegiate learning is 58.5 quarter units (39 semester units) for an associate degree or a cumulative total of 67.5 quarter units (45 semester units) for a baccalaureate degree. This maximum total is cumulative of all non-collegiate coursework. The credits may be from the following sources:

- A maximum of 67.5 quarter units (45 semester units) may be earned at the lower-division by College-Level Examination Program (CLEP) examinations
- A maximum of 45 quarter units (30 semester units) may be earned at the lower-division level for Advanced Placement Examinations (AP) or International Baccalaureate Examinations (IB)
- A maximum of 22.5 quarter units (15 semester units) may be earned for:
 - » DANTES independent study/credit by examination courses
 - » Excelsior College Examinations
 - » Council for Adult Experiential Learning (CAEL) Portfolio
 - » Credit recommended in the National Guide to Credit Recommendations for Non-Collegiate Courses (American Council on Education [ACE])
 - » Local, state, and federal law enforcement training recommended by ACE and such credit as is listed on a transcript from a regionally accredited college
 - » Departmental examinations at National University (Credit by Examination)
- A maximum of 45 quarter units (30 semester units) may be allowed for military experience and military schools that have been evaluated by ACE. An additional 9 quarter units of correspondence credit is available to active or veteran Marine Corps students.
- A maximum of 45 quarter units (30 semester units) of lower-division credit may be allowed for clinical courses for a registered nurse who is a graduate of a three-year hospital nursing school. Up to 22.5 quarter units (15 semester units) of additional lower-division credit may be granted for academically equivalent coursework.

College Level Examination Program (CLEP)

The University awards credit for successful completion of CLEP subject examinations. CLEP examination credit can be applied to meet general education, preparation for the major or general lower-division elective credit. National University awards credit for CLEP examinations in accordance with published American Council on Education (ACE) guidelines. The ACE guidelines provide a minimum score required as well as a recommendation on the amount of transfer credit that may be applied. In order to receive credit for CLEP examinations, an official CLEP transcript must be received by the Office of the Registrar. CLEP information can be found at the College Board website: www.collegeboard.com/clep. The total number of units awarded for CLEP exams cannot exceed 67.5 quarter units (45 semester units) towards a bachelor's degree.

For information on testing sites contact the Testing Center at 858.541.7951 or testingservices@nu.edu.

Students who have taken a CLEP general examination prior to 2002 may use the credit towards general education requirements, as it applies, up to a maximum of 27 quarter units or 18 semester hours. National University does not accept transfer credits for the mathematics general CLEP examination.

Advanced Placement (AP) Exams

National University awards college credit, as recommended by ACE, for AP exams passed with a score of 3, 4, or 5. An official transcript must be received in order for credit to be awarded. Further information on the AP Exams can be found at www.collegeboard.com. Credits from the AP Exams will transfer as outlined in the chart. The AP Code for National University is 0470.

International Baccalaureate (IB)

National University awards college credit to students who successfully obtain the International Baccalaureate Diploma demonstrating the completion of Higher Level Examinations. Credit may also be awarded to students who score a 4, 5, 6, or 7 on individual Higher Level Exams. No credit is awarded for IB standard level

passes. An official transcript must be received in order to award credit. Further information on the IB programs can be found at www.ibo.org. The chart shows how the credit from IB Examinations will be transferred.

Defense Activity for Non-Traditional Education Support (DANTES)

DANTES Subject Standardized Tests (DSST) demonstrates college-level learning acquired outside of the college classroom. The tests cover material usually taught in one-semester or one-year post-secondary course. Credit for successful completion of DSST can be applied toward general education, preparation for the major or general elective credit. Most tests grant three semester units (4.5 quarter units) of credit. The total number of units awarded for subject exams cannot exceed 22.5 quarter units (15 semester units).

DSST are available to military personnel through the Base Education Services Officer. Further information can be found at <http://getcollegecredit.com>.

Note: The DANTES code for National University is 7858.

Excelsior College Examinations

The Excelsior College Examinations assess college-level competence acquired in non-campus settings in more than 40 arts and sciences, business, education, and nursing subjects. Credit for successful completion of an Excelsior College Examination can be applied toward general education, preparation for the major or general lower-division elective credit. Most examinations are for three or six semester units (4.5 or 9 quarter units) of credit. The total number of units awarded for subject exams cannot exceed 22.5 quarter units (15 semester units).

Excelsior College Examination information is available through the Testing Center in San Diego. Students should contact the Testing Center at 858.541.7951 or testingservices@nu.edu for further information.

CAEL Portfolio

CAEL Portfolio National University has developed a portfolio-based system of demonstrating that a student has achieved the course outcomes for University undergraduate courses. Credit may apply towards both the lower-division and upper-division unit requirements of the University's undergraduate degree programs

CLEP EXAMINATION	MINIMUM SCORE	UNITS (QTR)	TRANSFER CREDIT ALLOWED FOR
American Government	50	4.5	POL 201
American Literature	50	4.5	1 General Ed Area D: Humanities
Analyzing & Interpreting Literature	50	4.5	LIT 100
Biology	50	9	BI0 100 & 1 Area A-G
Calculus	50	6	MTH 220
Chemistry	50	9	CHE 101 & 1 General Ed Area A-G
College Algebra	50	4.5	MTH 215
College Composition	50	9	ENG 100, ENG 101 & ENG 240
College Composition Modular	50	4.5	ENG 100 & ENG 101
College Mathematics	50	9	1 General Ed Area B & 1 open elective
English Literature	50	4.5	2 General Ed Area D: Humanities
Financial Accounting	50	4.5	ACC 201
French Language - Level 1	50	9	2 General Ed Area D: Language
French Language - Level 2	59	13.5	2 General Ed Area D: Language & 1 General Ed Area A-G
German Language - Level 1	50	9	2 General Ed Area D: Language
German Language - Level 2	60	13.5	2 General Ed Area D: Language & 1 General Ed Area A-G
History of the United States I	50	4.5	HIS 220A
History of the United States II	50	4.5	HIS 220B
Human Growth and Development	50	4.5	1 General Ed Area E
Humanities	50	4.5	1 General Ed Area D: Humanities
Information Systems	50	4.5	1 General Ed Area A-G
Introduction to Educational Psychology	50	4.5	1 Open Elective
Introductory Business Law	50	4.5	1 Open Elective
Introductory Psychology	50	4.5	PSY 100
Introductory Sociology	50	4.5	SOC 100
Natural Sciences	50	9	2 General Ed Area A-G
Precalculus	50	4.5	1 General Ed Area B
Principles of Macroeconomics	50	4.5	ECO 204
Principles of Management	50	4.5	1 Open Elective
Principles of Marketing	50	4.5	1 Open Elective
Principles of Microeconomics	50	4.5	ECO 203
Social Sciences and History	50	9	2 General Ed Area E
Spanish Language - Level 1	50	9	SPN 100 & SPN 101
Spanish Language - Level 2	63	13.5	SPN 100, SPN 101, SPN 200
Western Civilization I	50	4.5	1 General Ed Area D: Humanities
Western Civilization II	50	4.5	1 General Ed Area D: Humanities

unless specified otherwise in policy or limited by the state or jurisdiction of a student's residence. In the Portfolio program, students demonstrate that what they already know is equivalent to what they would have learned in an equivalent college course. The program is designed to be as flexible as possible to meet students' needs. Students may have acquired this knowledge through past employment, independent reading and study, training programs or in-service courses, volunteer service, cultural or artistic pursuits, hobbies and recreational pastimes, community or religious activities, organizational memberships, adult education, non-credit courses, study abroad, military training not evaluated for credit by ACE, or other experiences. A portfolio enables students to identify and articulate this knowledge, and potentially earn credit for it. Students learn the process of identifying areas of course-equivalent learning and portfolio development skills through the PRLX 2100X course offered through the Division of Extended Learning. The resulting portfolio is submitted for review by Subject Matter Experts for potential award of credit. For further information regarding the Portfolio program, contact extlearning@nu.edu.

Military Education Credit

To be awarded credit for courses taken at military service schools on an equivalency basis, students must submit, an "Application for the Evaluation of Educational Experiences during Military Service" (DD-295), Community College of the Air Force transcript, or a military JST transcript for those serving in the Army, Navy, Marine Corps or Coast Guard.

Students must present appropriate transcripts, certificates, or other official documents before an evaluation can be made.

Credits for military school courses apply directly to undergraduate work as it relates to the level and content of the particular degree program. The maximum amount of transfer credit granted for military education is 45 quarter units. An additional nine (9) units of correspondence coursework may be granted for active or veteran students who served in the Marine Corps. National University will only accept credit for military courses that have been recommended for credit by the American Council on Education (ACE).

Other Non-Collegiate Credit

National University accepts credit, to the maximum specified above, from coursework recognized by the National Guide to Credit Recommendations for Non-Collegiate Courses (American Council on Education [ACE]). Students must present appropriate transcripts, certificates, or other official documents before an evaluation can be made.

Credits for non-collegiate approved courses apply directly to undergraduate work as it relates to the level and content of the particular degree program.

NATIONAL UNIVERSITY CREDIT BY EXAMINATION

Credit by Examination

Currently enrolled students can obtain credit for undergraduate courses through departmental examinations, called Credit by Examination, when their training or work experience seems to provide proficiency in the subject matter of an approved course. Only a limited number of courses are approved for Credit by Examination.

ADVANCED PLACEMENT (AP) EXAM	MINIMUM SCORE	UNITS (QTR)	TRANSFER CREDIT ALLOWED FOR
Biology	3	12	BIO 100, BIO 100A, 2 Area A-G
Calculus AB	3	4.5	MTH 220
Calculus BC	3	4.5	MTH 221
Chemistry	3	12	CHE 101, CHE 101A, 2 Area A-G
Chinese Language and Culture	3	9	2 Area D: Humanities
Computer Science A	3	6	1 Area D: Language
English Language/Composition	3	9	ENG 100, ENG 101 & ENG 240
English Literature/Composition	3	9	ENG 100, ENG 101 & LIT 100
European History	3	9	2 Area E
French Language and Culture	3	9	2 Area D: Language
German Language and Culture	3	9	2 Area D: Language
Human Geography	3	4.5	1 Area E
Italian Language and Culture	3	12	2 Area D: Humanities
Japanese Language and Culture	3	9	2 Area D: Humanities
Latin	3	12	2 Area D: Humanities
Economics: Macro	3	4.5	ECO 204
Economics: Micro	3	4.5	ECO 203
Music Theory	3	7.5	2 Area D: Arts
Physics 1	3	4.5	PHS 171
Physics 2	3	4.5	PHS 172
Physics C: Electricity and Magnetism	3	6	PHS 232
Physics C: Mechanics	3	6	PHS 231
Psychology	3	4.5	PSY 100
Spanish Language and Culture	3	9	2 Area D: Language
Spanish Literature and Culture	3	13.5	3 Area D: Humanities
Statistics	3	4.5	MTH 210
Comparative Government & Politics	3	4.5	1 Area E
United States Government & Politics	3	4.5	POL 201
United States History	3	9	HIS 220A & HIS 220B
World History	3	9	HIS 233 & HIS 234

Students cannot challenge courses that are in the same area as an advanced course taken at National University or another regionally accredited institution. Students cannot challenge a course they have previously attempted regardless of grade earned. Students can apply for credit by exam by completing the e-forms link on the Student Portal. Students must submit their e-form after they are formally evaluated by the Office of the Registrar to determine eligibility for the exam. Approval for the exam must be granted before the exam can be taken. Students must pay the required \$100 Credit by Examination fee to the Student Accounts.

All Credit by Examinations must support the objectives of the student's degree program and cannot exceed 13.5 quarter units in an associate degree program. Credit from Credit by Examination counts toward graduation, but no grade points are assigned or included in calculating grade point averages. The credit cannot be used to meet residency requirements.

Undergraduate Course Waivers

Students may request to waive a course based on previous training or experience. If the student can demonstrate mastery of a subject, the department chair must submit a recommendation to allow the student to waive the particular course. If the course in question has an available credit by examination (or other approved test) then the student must pass the examination and may not request for a waiver.

A course waived exempts a student from that course. Units are not awarded for a waived course, so the student may need to take a different course such as an elective in order to meet the overall unit requirements for the degree. Waiver requests must be submitted at least four (4) weeks prior to the class scheduled start date.

Language Proficiency Testing

National University offers competency proficiency testing through an agreement with the University of Pennsylvania Penn Language Center for students who need foreign language proficiency verification. National University will allow students, who have met the Intermediate level of foreign language proficiency through this test, to waive the Area D language requirement in General Education. This service is made available to the students at a reasonable cost. (Note: Students will need to meet the overall unit requirement for General Education).

The foreign language competency test consists of four components which measures a student's ability to communicate, read, and write in a foreign language. The duration of the test varies depending on the language, and could take approximately 1.5–2 hours. The test contains an oral interview between test candidate and the tester, a reading comprehension assignment, and a writing sample.

University of Pennsylvania Penn Language Center will keep a permanent record of the results of the competency testing. Credit by exam is not available. Website: www.pls.sas.upenn.edu/testing.

Servicemembers Opportunity College (SOC) Agreement

National University is a member of Servicemembers Opportunity Colleges (SOC) Consortium and participates in the SOCAD, SOCNV, SOCMAR, and SOC-COAST bachelor programs, as well as the SOCNV and SOCMAR associate degree programs for active duty personnel and their adult dependents.

The SOC network programs provide active duty personnel with a means to earn an undergraduate degree from National University if they are transferred before completion of the required coursework.

National University issues a SOC Student Agreement to active-duty service members admitted, provided that National University is designated as student's home college. A home college is defined as the institution where a student is making academic progress toward degree completion.

To receive a SOC Agreement, students must:

- Apply to National University online or by submitting application documents to an admissions advisor
- Send all official transcripts and other required documents, such as the DD295 or JST transcript to National University Office of the Registrar for evaluation
- Satisfactorily complete nine (9) quarter units in residence.
- Submit a SOC eform request on the SOAR student portal.

Participation in the SOC network begins when a Student Agreement is issued. This agreement guarantees that National University will accept transfer credit from SOC member colleges and will confer the undergraduate degree upon successful completion of all academic requirements. A SOC Student Agreement is valid for a period of five years. If the student requests to change their academic degree plan, a new SOC contract will be created according to the catalog in effect at the time of the request. To be eligible for an associate or bachelor's degree from National University under the terms of the Student Agreement, students must complete at least 18 quarter units in residence at National University. Military students should contact militaryevaluations@nu.edu for further information.

INTERNATIONAL BACCALAUREATE HIGHER LEVEL	SCORE REQUIRED	UNITS (QTR)	TRANSFER CREDIT ALLOWED FOR (IB HL) EXAMS
Biology	4-7	9	BIO 161 & BIO 162
Business & Management	4-7	9	Open Elective Units
Chemistry	4-7	9	CHE 141 & CHE 142
Computer Science	4-7	9	Open Elective Units
Design Technology	4-7	9	Open Elective Units
Economics	4-7	9	ECO 203 & ECO 204
Film	4-7	9	Open Elective Units
French A2	4-7	9	2 General Ed Area D: Language
Geography	4-7	9	2 General Ed Area A-G
German A2	4-7	9	2 General Ed Area D: Language
History	4-7	9	1 General Ed Area E & 1 General Ed Area A-G
Japanese A2	4-7	9	2 General Ed Area D: Language
Language A: Language and Literature	4-7	9	General Ed Area A1 & LIT 100
Mathematics or Further Mathematics	4-7	9	1 General Ed Area B & 1 General Ed Area A-G
Music	4-7	9	Open Elective Units
Physics	4-7	9	PHS 171 & PHS 172
Spanish A2	4-7	9	SPN 200 & SPN 201
Spanish B	4-7	9	SPN 200 & SPN 201
Theatre Arts	4-7	9	2 General Ed Area D: Arts
Visual Arts	4-7	9	Open Elective Units

	DSST EXAMINATIONS	MINIMUM SCORE	UNITS (QTR)	TRANSFER CREDIT ALLOWED FOR
Lower-Division	A History of the Vietnam War	400	4.5	1 General Ed Area E
	Art of the Western World	400	4.5	1 General Ed Area D: Art
	Astronomy	400	4.5	Open Elective
	Business Mathematics	400	4.5	1 General Ed Area B
	Computing and Information Technology	400	4.5	–Open Elective
	Criminal Justice	400	4.5	2 Open Elective
	Environment and Humanity: The Race to Save the Planet	400	4.5	1 General Ed Area F Lecture
	Ethics in America	400	4.5	1 General Ed Area D: Humanities
	Foundations of Education	400	4.5	Open Elective
	Fundamentals of College Algebra	400	4.5	1 General Ed Area B
	Fundamentals of Counseling	400	4.5	Open Elective
	General Anthropology	400	4.5	Open Elective
	Health and Human Development	400	4.5	1 General Ed Area G
	Human Resource Management	400	4.5	Open Elective
	Human Cultural Geography	400	4.5	1 General Ed Area E
	Introduction to Business	400	4.5	BUS 100
	Introduction to Computing	400	4.5	ITM 200
	Introduction to the Modern Middle East	400	4.5	1 General Ed Area E
	Introduction to World Religions	400	4.5	1 General Ed Area D: Humanities
	Lifespan Developmental Psychology	400	4.5	1 General Ed Area E
	Management Information Systems	400	4.5	ITM 210
	Organizational Behavior	400	4.5	Open Elective
	Personal Finance	400	4.5	Open Elective
	Personnel/Human Resource Management	400	4.5	Open Elective
	Physical Geology	46	4.5	EES 103
	Principles of Financial Accounting	400	4.5	ACC 201
Principles of Physical Science I	400	4.5	PHS 102	
Principles of Public Speaking	400	4.5	COM 103	
Principles of Statistics	400	4.5	MTH 210	
Principles of Supervision	400	4.5	Open Elective	
Technical Writing	400	4.5	Open Elective	
Upper-Division	A History of the Vietnam War	400	4.5	1 General Ed Area E
	Business Ethics and Society	400	4.5	1 BUS Elective
	Business Law II	52	4.5	LAW 305
	Fundamentals of Cybersecurity	400	4.5	Open Elective
	History of the Soviet Union	400	4.5	1 General Ed Area E
	Introduction to Law Enforcement	400	4.5	CJA Elective
	Money and Banking	400	4.5	ECO 447
	Principles of Finance	400	4.5	FIN 310
	Substance Abuse (former Drug & Alcohol Abuse)	400	4.5	COH 318
	The Civil War and Reconstruction	400	4.5	HIS 220A

National University extends the Student Agreement process to service members of the military branches noted above and their adult dependents.

Approval For the Training of Veterans

National University is approved for the training of veterans under Title 38 of the U.S. Code, Chapters 30, 31, 32, 34, and 35. The University is also authorized for active duty tuition assistance.

Questions regarding pre-evaluations and degree plans of military students may be submitted to student's academic advisor or the Military Evaluations Team (militaryevaluations@nu.edu or 858.642.8250 or 858.642.8270).

Course Applicability For Veteran Students Using VA Benefits (Applies to all GI Bill Educational Programs)

U.S. Department of Veterans Affairs pays GI Bill benefits for students in pursuit of one educational degree at a time. Only courses that satisfy the minimum requirements outlined by the curriculum guide or graduation evaluation form can be certified for VA purposes. A curriculum guide or graduation evaluation form should be kept in the student's file. When a student takes a course that does not fulfill a program requirement, it cannot be certified for VA purposes. Excessive free electives, for example, cannot be certified.

National University students are responsible for notifying the Veterans Affairs' Department of any change of status, class schedule changes, or unsatisfactory progress.

GRADES AND GRADING SYSTEM

Students who have more than three absences, excused or unexcused, cannot be awarded a satisfactory grade.

Definition of Grades

A Outstanding Achievement
Significantly Exceeds Standards

B Commendable Achievement
Exceeds Standards

C Acceptable Achievement
Meets Standards

D Marginal Achievement
Below Standards

F Failing

I Incomplete
A grade of "I" may only be issued when a student has attended at least two-thirds of the class sessions and is unable to complete the requirements due to uncontrollable and unforeseen circumstances. Students must communicate these circumstances (in writing) to the instructor prior to the final day of the course. If an instructor decides that an "Incomplete" is warranted, he/she issues a grade of "I" and notates the conditions for removal of the "Incomplete" in the student's record. Students receive notification via e-mail about the assignment of an "Incomplete," including the conditions for its removal. The information remains in place until the "Incomplete" is removed or the time limit for removal has passed. An "Incomplete" is not issued when the only way the student can make up the work is to attend a major portion of the class the next time it is offered. Students must resolve "Incomplete" grades no later than six months after the official course end date. Students can be required to remove an "Incomplete" in a shorter period of time at the discretion of the instructor. The Office of the Registrar sends a courtesy e-mail reminder regarding the "Incomplete" on record when four months have elapsed since the course end date, provided the instructor has not specified a shorter end date. An "Incomplete" that is not removed within the stipulated time becomes an "F" or a "U" based on the grading criteria of the course. No grade points are assigned. The "F" is calculated in the grade point average.

U Unsatisfactory
A permanent grade indicating that a credit attempt was not acceptable. An "Unsatisfactory" grade merits no grade points and is not computed in the grade point average.

W Withdrawal
Signifies that a student has withdrawn from a course after midnight of the ninth day of the class session. A "Withdrawal" is not allowed after the 21st day of the session. This is a permanent mark with no grade points assigned.

S Satisfactory
Credit is granted but no grade points are assigned.

IP In Progress
A designation representing a project course that allows up to 12 months from course start date for completion. No grade points are assigned for the "IP" grade.

The following grades are assigned for selected project/practicum courses identified in the course description section of this catalog:

H Honors
Signifies Outstanding Achievement. No grade points are assigned.

S Satisfactory
Signifies Acceptable Achievement. No grade points are assigned.

U Unsatisfactory
Signifies Unacceptable Achievement. No credit is granted and no grade points are assigned.

Plus/Minus Grading

National University uses a plus/minus grading system. The grade of A+ is not issued. In the plus/minus system, the grade points per credit used in the calculation of the grade point average are specified below. Instructors may elect not to use the plus/minus system provided that they clearly state this in the course outline.

Computing Grade Point Averages

To compute a student's grade point average, the total number of credit units is divided into the total number of grade points. Course units count only once toward graduation requirements. "I," "W," "U," "IP," "H," and "S" designations carry no grade points and are not considered when computing grade point average. When a course is repeated, all grades remain part of the permanent record but only the most recent grade is calculated in the grade point average. If an undergraduate student changes their plan of study, all completed coursework will be utilized to calculate cumulative grade point average regardless of applicability to current program of study. GPA is truncated to two decimal places. Only courses completed in residence are utilized in calculating GPA.

Grade Points Awarded

A = 4.0	A- = 3.7
B+ = 3.3	B = 3.0
B- = 2.7	C+ = 2.3
C = 2.0	C- = 1.7
D+ = 1.3	D = 1.0
D- = 0.7	F = 0.0

ACADEMIC STANDING

Students attending National University are expected to maintain satisfactory academic progress in their degree program. Academic progress is defined by a quantitative measure. The quantitative academic progress is assessed by the cumulative grade point average (GPA) achieved at National University. Academic progress is processed four times annually at the end of each quarter (see Calendar and Class Schedule for dates).

Grade Point Average (GPA) Requirements

Undergraduate students must maintain a "C" (2.0) grade point average for coursework taken at National University.

All coursework completed at National University in fulfillment of major requirements must average 2.0 or higher.

All coursework completed for the minor or the concentration must average 2.0 or higher. If the required grade point average is not maintained, the minor or concentration is not awarded. If the degree requires a concentration, then the student must repeat coursework that was completed with a grade of "C-" or below until the required 2.0 GPA is obtained.

Academic Probation

Students whose cumulative GPA falls below 2.0 for coursework taken at National University are placed on Academic Probation. Students on academic probation are allowed one quarter (see Calendar and Class Schedule for dates) to improve their cumulative GPA to 2.0. Students placed on Academic Probation who attempt units and fail to improve their cumulative GPA to the 2.0 by the end of the subsequent quarter, following placement on Academic Probation, will be placed on Academic Disqualification status. Students placed on Academic Probation who do not attempt units remain in Academic Probation status until units are attempted. Students are removed from Academic Probation status when they have improved their cumulative GPA to 2.0 or better. Academic probation is permanently notated on official transcripts.

Academic Disqualification

Students on Academic Probation who fail to raise their cumulative GPA to 2.0 will be academically disqualified from the University. To be considered for reinstatement, a student must complete 12 semester units (18 quarter units) of transferable coursework at a regionally accredited institution with a GPA of no less than 2.3 and then petition for reinstatement. Academic disqualification is permanently notated on official transcripts.

Academic Dismissal

If the faculty determines that a student should be academically dismissed for reasons other than grades, they will refer the matter to the Office of Student Affairs, which will initiate an administrative hearing process. The hearing process to be followed is identical to the one invoked for disciplinary actions, outlined in the Policies and Procedures section of this catalog.

CATALOG RIGHTS

Any student whose record reflects a break in enrollment for a period of 12 or more consecutive months is not eligible to retain his/her catalog rights. All other students are defined as having continuous enrollment and, as such, remain subject to the requirements of the academic program that were listed in the catalog at the time of their admission. Students who interrupt studies for a period of greater than 12 or more months must re-apply for admission. Re-admitted students are subject to all catalog requirements in existence at the time of re-enrollment. Active duty military students with an active SOC agreement may maintain catalog rights for up to five (5) years.

Students who change their major after having been admitted to the University must follow the program requirements in effect at the time of such change. Students who choose to add or drop a minor are not subject to a catalog change, unless the minor is not offered in the original catalog. If the minor was not offered in the original catalog, the student must meet both major and minor requirements under the catalog in effect at the time of the requested plan change.

Students can elect to move assigned catalogs and follow the requirements listed in the current catalog; however, students cannot combine requirements from their previous catalog with those in the current catalog. Students may only move to the most current active catalog.

Students who have been disqualified and are later approved for reinstatement (after a 12-month absence) are subject to the requirements of the catalog in effect at the time they are reinstated and re-admitted to the University.

GRADUATION REQUIREMENTS FOR UNDERGRADUATE DEGREES

Unit and GPA Requirements Total Number of Units

The minimum number of units required to earn an associate degree is 90 quarter units.

The minimum number of units required to earn a baccalaureate degree is 180 quarter units. Students may be required to complete more than 180 quarter units depending upon their program of study.

Upper-Division Units

The total number of upper-division units (numbered 300 through 599) required for a baccalaureate degree is 76.5 quarter units.

Residency Requirements

To qualify for a certificate, students must complete two-thirds of the certificate program at National University.

To qualify for an associate degree, students must complete each of the following requirements at National University:

- A minimum of 18 quarter units. A minimum of 18 quarters units are required for students with an active SOC Agreement.
- At least half of the courses/units required for the major or core requirements if the associate degree has a major or core requirements.
- At least two-thirds of the courses/units required for the minor or concentration, if a student has selected a minor or concentration, or if a concentration is required as part of the degree requirements.
- To qualify for a baccalaureate degree, students must complete each of the following requirements at National University:
 - A minimum of 45 quarter units, at least 36 units of which must be in upper-division courses (numbered 300–599). A minimum of 18 quarters units are required for students with an active SOC Agreement.
 - At least half of the upper-division units required for the major.
 - At least two-thirds of the upper-division units required for the minor or concentration, if a student has selected a minor or concentration, or if a concentration is required as part of the degree requirements.

Courses taken through credit by examination and credits students transfer to the University do not apply towards residency requirements.

GPA Requirements

Students must meet the following GPA requirements for their degree.

- Minimum overall cumulative grade point average of 2.0
- Minimum cumulative grade point average of a 2.0 within their major or core coursework (unless otherwise specified)
- Minimum cumulative grade point average of 2.0 within their minor or concentration coursework (unless otherwise specified.)

General Education Requirements

All undergraduate students must complete the University General Education requirements specific to their degree level. Unless otherwise specified in the program, students must meet the requirements located in the General Education section of this catalog. The General Education curriculum furnishes students with the basic knowledge necessary to pursue any degree program. Students who fulfill the curriculum gain a strong interdisciplinary liberal arts framework geared toward problem solving.

The general education program consists of a minimum of 34.5 quarter units for Associate degrees and 70.5 quarter units for Bachelor degrees. As part of the General Education unit requirements, all students must complete at least 4.5 units of diversity enriched coursework. Students pursuing bachelor degrees must also complete at least 4.5 units of upper-division General Education.

CSU General Education Certifications and IGETC

National University will accept the following General Education certifications: California State University (CSU) General Education Breadth Certification and the Inter-Segmental General Education Transfer Curriculum (IGETC). All requirements for CSU General Education and IGETC must be completed and certified prior to transfer to National University. The University will not accept partial certifications. Students transferring with full certifications are typically required to take one to three upper-division general education courses at National in order to fulfill the General Education unit requirements. Students must provide an official transcript with the signed certification included or a separate certification form from the community college attended.

National University has general education requirements in the following areas: English Communication, Mathematical Concepts and Quantitative Reasoning, Information Literacy, Arts, Humanities, and Languages, Social and Behavioral Sciences, Physical and Biological Sciences, and Lifelong Learning and Self Development.

The required number of units in each section can be found in the General Education section of this catalog.

Courses taken to achieve minimum collegiate-level competency in the areas of writing and mathematical concepts and systems do not satisfy any portion of the general education requirement.

MAJOR, MINOR, AND CONCENTRATION REQUIREMENTS

Preparation for the Major

Some majors require a set of introductory and/or skills courses designed to prepare students for upper-division study. Many courses taken for this purpose can also be used to satisfy general education requirements.

Major

Students must complete a departmental major for any bachelor's degree. Most majors consist of an integrated area of specialized study at the upper-division level and contain at least nine courses, which total at least 40.5 quarter units.

Coursework taken to meet major requirements cannot be used to meet minor or general education requirements. At least half of the required upper-division courses for the major must be completed in residence. Students with an active SOC Agreement have a residency requirement of at least 18 quarter units.

Minor

Students may take any minor with any baccalaureate degree program. Students must verify, prior to requesting a change of degree plan, that the particular combination being requested has not been duplicated by the major or specifically prohibited by the baccalaureate program. Students must also meet any entry requirements and prerequisites for the requested minor.

Completion of a minor is not required. A minor consists of a minimum of six upper-division courses that total at least 27 quarter units, unless otherwise specified. Courses in the minor cannot be used to meet the major requirements. Courses in the minor can be used to satisfy preparation for the major and general education requirements as appropriate. At least two-thirds of the units in the minor must be completed in residence. Students with an active SOC Agreement have a residency requirement of at least 18 quarter units.

Concentration

A concentration may be required by the degree program or an optional choice for the student. A concentration is an area of specialization related to the major that allow students to delve deeper into a focused study area. Unless otherwise specified, completion of a concentration is not required. Courses in the concentration cannot be used to meet major requirements. Courses in the concentration can be used to satisfy preparation for the major and general education requirements as appropriate. At least two thirds of the units in the concentration must be completed in residence.

Graduation with Honors

Graduation with honors is available to students whose academic record indicates superior achievement. Earned honors are noted on diplomas and official University transcripts.

Honors for associate and baccalaureate degrees are determined only by courses taken at National University. Honors are awarded according to the following grade point averages:

- Summa Cum Laude - 3.90
- Magna Cum Laude - 3.70
- Cum Laude - 3.50

Only those students who complete 45 quarter units or more in residence in their program are considered for honors awards.

In the calculation of eligibility for honors the cumulative GPA is truncated to two decimal places. For example, if the cumulative GPA of record is a 3.695 this figure is truncated to 3.69 and the honors designation would be Cum Laude.

HONOR SOCIETIES

Alpha Phi Sigma Honor Society

Alpha Phi Sigma is a criminal justice honor society affiliated with the Academic of Criminal Justice Sciences whose goals are to honor and promote academic excellence, community service, educational leadership, and unity.

Order of the Sword and Shield Honor Society

Order of the Sword and Shield is a national honor society that recognizes the scholastic and professional achievements of students and alumni from institutions granting degrees in the fields of homeland security, intelligence and protective security.

Pinnacle Honor Society for Undergraduate Students

Pinnacle is a national collegiate honorary society founded for the single purpose of recognizing the nation's most outstanding adult and other non-traditional students. Honored students receive letters of congratulation, certificate of membership, lapel pins, diploma seals and honor cords. Students accepted for membership to the Pinnacle Honor Society are nationally recognized for their academic achievement, community service, leadership, and ethical standards. Each commencement season, the Office of Student Affairs invites undergraduate students to join Pinnacle based on their qualifying grade point average. Students will be asked to complete an application which is then reviewed for eligibility determination.

Pi Lambda Theta Honor Society

Pi Lambda Theta is the international honor society and professional association for students in the field of education. The Dean of the Sanford College of Education nominates students to Pi Lambda Theta who have met rigorous requirements. Membership in this honor society offers students access to scholarships, research grants, career search, and leadership conferences, as well as support from the National Board of Professional Teacher Standards. A gold cord worn during commencement exercises designates Pi Lambda Theta graduates.

Psi Chi Honor Society

Psi Chi is an international honor society whose purpose shall be to encourage, stimulate, and maintain excellence in scholarship of the individual members in all fields, particularly in psychology and to advance the science of psychology. Undergraduate and graduate students accepted for membership in Psi Chi are recognized for their academic achievement and devotion to the field of psychology. Psi Chi is a member of the Association of College Honor Societies and is an affiliate of the American Psychological Association (APA) and the Association for Psychological Science (APS). Nominees can be identified by the platinum and blue cord they wear during the ceremony.

Sigma Beta Delta Honor Society

Sigma Beta Delta, founded in 1994, is an honor society which recognizes scholarship and achievement by students of business, management, or administration who have attained superior records at universities with regional accreditation. The society characterizes itself by three principles: wisdom, honor, and the pursuit of meaningful aspirations. It recognizes these qualities as being important for success in the academic realm, as well as providing guidelines which lead to a fulfilling personal and professional life and a life distinguished by honorable service to humankind. The Dean of the School of Business and Management invites qualified students to join Sigma Beta Delta. Membership provides lifetime recognition, eligibility for fellowship awards, networking opportunities and a lifetime subscription to the Society's "Aspirations" newsletter. Dark green and gold cords worn during commencement exercises designate Sigma Beta Delta graduates.



MARY ALICE GUNTER
THOMAS H. ESTES
JAN SCHWAB

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ACADEMIC INFORMATION FOR GRADUATE DEGREES AND CREDENTIALS

ADMISSION PROCEDURES

Admissions Advising

National University offers year-round admission. Persons seeking admission to graduate and credential studies at National University are unique in their specific circumstances and needs. Applicants are interviewed by an admissions advisor, who discusses applicants' specific requirements for admission at the initial interview.

All prospective and registered students receive a unique nine-digit student number.

Faculty Advising

Upon admission to the University, students may contact a faculty advisor to assist them in making appropriate decisions about educational and career-related issues. Faculty advisors, who are listed under each degree program within this catalog, provide students the benefit of experience in professional practice and insight gathered from years of formal study in higher education. Students should direct requests for information about curriculum content, course requirements, profit examinations, and program goals to their faculty advisor as well. Faculty advisors help students meet University academic regulations and standards.

Qualifications

Applicants for admission to a graduate or post-baccalaureate program, other than the Doctor of Nursing Practice, must meet one of the following five requirements:

1. Hold a bachelor's degree or higher from a regionally accredited college or university with an overall grade point average of 2.5 or better, or a grade point average of 2.75 or higher within the last 90 quarter units.
2. Hold a bachelor's degree or higher from a regionally accredited college or university with an overall grade point average of 2.0 to 2.49 and a satisfactory score on one of the following tests:
 - » Minimum score of 550 on the Graduate Management Admission Test (GMAT)
 - » Minimum scores of 152 (verbal) and 147 (quantitative) on the Graduate Record Examination (GRE)
 - » Minimum score of 408-413 on the Miller Analogies Test
 - » An approved, standardized program-specific exam
3. Hold a bachelor's degree or higher from a regionally accredited college or university with an overall grade point average of 2.0 to 2.49 and have successfully completed at least 13.5 quarter units of graduate level coursework with grades of "B" or better at a regionally accredited institution.
4. Holders of a bachelor's degree or higher from a regionally accredited college or university with an overall grade point average of 2.0 to 2.49 may be admitted on a probationary status. See the Probationary Admission section below for additional information.
5. Applicants who are within six months of completing a baccalaureate degree may be eligible to apply for admission to National University. See Admission Prior to Completion of a Bachelor's Degree for more information. If an applicant is registered for graduate level courses and it is determined that they did not complete the bachelor's requirements the offer of admission will be rescinded.

Applicants for admission to the Doctor of Nursing Practice must meet the admission criteria listed in the School of Health and Human Services.

National University's College Board Institutional Code is 4557.

International Admissions

Applicants who require a Certificate of Eligibility for Non-immigrant (F-1) Student Status, should contact the International Admissions Office 858.541.7747 or isa@nu.edu.

A non-refundable application fee of \$65 is required for all international students. Prospective international students must establish means of financial support, provide official transcripts of previous education in order to establish academic eligibility, and fulfill an English Language Proficiency requirement.

The University is required to maintain student records and to furnish the information to appropriate U.S. federal agencies upon request.

Applicants whose higher education was completed in a foreign country must request a foreign pre-evaluation through an admissions advisor to determine eligibility for a graduate program. Applicants who are seeking any California credential must have their official documents evaluated by an approved agency and an official evaluation report must be received by the Office of the Registrar notating that they have earned an equivalent to a four year United States bachelor's degree.

Graduates of Bologna-compliant degree programs may be eligible for admission to graduate programs at National University under the following criteria:

- The graduate program to which you are seeking admission must be in the same or similar field of study as that in which you earned your undergraduate degree.
- The awarding institution must be a university. Students from vocational or technical institutions are not eligible for admission.
- Applicants must submit an official equivalency report from WES (www.wes.org) or IERF (www.ierf.org) indicating the Bologna-compliant undergraduate degree is comparable to a U.S. undergraduate degree. All applicable fees are the student's responsibility.
- Approval of admission eligibility as determined by the Office of the Registrar.

International students approved to enroll from Bologna-compliant degree programs will be required to meet all additional graduate admission requirements as listed in the University Catalog. The Office of the Registrar is responsible for making the final determination regarding admission eligibility after receipt and review of the official evaluation report and admission documents as is the standard procedure for all international students.

Transcript Evaluation

Official documents (e.g. transcripts, mark sheets, diplomas) are required for admission. Transcripts from international institutions of higher education may require a credit recommendation by a recognized evaluation service selected by National University. Applicants are responsible for any required evaluation fees. The final decision on awarding credit is made by National University, which carefully considers the evaluation service's recommendations. More information is available by e-mailing foreignevaluations@nu.edu or by contacting the Office of the Registrar.

All applicants must present preliminary evidence of prior education at the required interview with an admission advisor. Unofficial transcripts are acceptable.

All applicants to the University must also:

1. Complete an application for admission.
2. Execute an enrollment agreement.
3. Pay a non-refundable application fee of \$60.
4. Complete the program admission process.

All post-baccalaureate applicants, regardless of citizenship, whose preparatory education was principally in a language other than English, must demonstrate competence in English. Students who do not possess a bachelor's degree from a post-secondary institution where English is the language of instruction are encouraged to take the English ACCUPLACER evaluation as part of the admissions process.

The English ACCUPLACER evaluation for graduate students is for advisory purposes only and does not delay the admissions process. The results of the English evaluation are printed immediately and a copy is provided to the student. Based on the student's score, the admissions advisor recommends appropriate English courses.

Any exceptions to the above admissions requirements must be considered via a Policy Exception request.

Probationary Admission

Students whose undergraduate GPA was 2.0 to 2.49 may be accepted on probationary status. Students are ineligible for official admission and will not be processed for degree evaluation or financial aid until students have completed a minimum of 4.5 or a maximum of 13.5 quarter units of graduate study with a cumulative GPA of 3.0. Students admitted on probationary status are not permitted to schedule more than 13.5 quarter units during the probationary period. If the first required course in a student's degree program is taken using Satisfactory/Unsatisfactory (S/U) grading criteria, the student may schedule the S/U course and additional courses that issue a letter grade. Students are not permitted to enroll in other courses until official grades have been posted to their record and their probationary status has been lifted. Students should be aware that this may mean a break in enrollment of one term (month) due to the time-frame for submission of grades by instructors.

Students who fail to achieve a minimum cumulative GPA of 3.00 during the probationary period are not eligible for admission to the University. Probationary admission students are not eligible for financial aid.

F-1 students are not eligible for probationary admission.

Admission in the Term Prior to Bachelor's Degree Completion

Undergraduate students in their final semester or term before graduation who want to be admitted to National University for graduate study may be admitted into a post-baccalaureate program if their record to date provides evidence that they will complete the degree as anticipated. They must have a 2.50 (or equivalent) overall cumulative GPA. Students who are determined to not have completed the requirements for a bachelor's degree will have their offer of admission rescinded.

Graduate coursework completed prior to completion of a bachelor's degree will not be eligible for graduate credit at National University or any other institution.

All domestic students must provide a copy of their diploma or final transcript to an Admissions Advisor before commencing post baccalaureate or graduate level work. International students must provide their final documentation for verification prior to or at orientation.

Provisional Acceptance

Students who have completed a baccalaureate degree and want to be admitted to a post-baccalaureate degree program when official transcripts are not immediately available can be provisionally accepted. Students are responsible for obtaining, from the college or university where they earned their baccalaureate degree, an official transcript in a sealed envelope. Students are considered for eligibility when the Office of the Registrar receives official documentation.

Post-baccalaureate students may take courses during provisional acceptance while the Office of the Registrar awaits receipt of official transcripts. If the Office of the Registrar does not receive the required documentation within 60 days of the date of admission, the student's studies are temporarily interrupted until all official documents are received. If the student's studies are temporarily interrupted this can affect financial aid eligibility. The Office of the Registrar will send a courtesy notification every 20 days to students in provisional status, advising them of what documentation remains outstanding. Students should also view their To-Do list, which can be found on the student web portal, to determine outstanding documents. Coursework completed satisfactorily during provisional acceptance will count toward graduation if it is consistent with specific degree program requirements.

Official Transcript and Bachelor's Degree Verification Requirements

Post-baccalaureate students are required to secure a copy of their transcript in a sealed envelope from the college or university where they completed their baccalaureate degree. The Office of the Registrar will not accept hand-carried official transcripts or transcripts "issued to student" as official documents unless in a sealed envelope from the issuing institution.

Official transcripts should be sent by the issuing institution directly to:

Office of the Registrar
National University
9980 Carroll Canyon Road
San Diego, California 92131

Transcripts from other institutions that have been presented for admission or evaluation become a part of the student's academic file and are not returned or copied for distribution.

Evaluation

Once eligibility for admission to a post-baccalaureate program has been determined, students are eligible for official evaluation. Students will be notified by e-mail when they have been evaluated so the student may view their Academic Advisement Report (AAR) online. The course of study that a student discussed with an advisor at the initial admissions interview is only an estimate of the course requirements for a degree. AAR is the official notification of the coursework and other requirements that are required for the program. As students progress through the program, the AAR will show coursework already completed and coursework remaining. The AAR helps students and advisors to determine progress toward completion of program requirements but does not serve as official completion of program requirements. An official audit of program requirements is conducted by the Office of the Registrar when a student applies for graduation.

Applications for financial aid cannot be processed until evaluation has occurred.

SOURCES OF CREDIT

Course Waivers and Unit Transfer Limits

Students who believe that they have taken graduate level coursework at a regionally accredited institution that is applicable to their current program may submit an e-form waiver through the student portal with the assistance of an admissions advisor. An official course description for each course must be attached to the e-form request. Course descriptions can usually be obtained directly from the issuing institution, copied from an institution's catalog, or found online through an institution's course catalog. The Office of the Registrar must receive official transcripts from the transferring institution before a course waiver request may be submitted. If a course description is not sufficient for determining transferability, students may be required to submit a course syllabus.

Students can transfer a maximum of 13.5 quarter units at the graduate level provided that the units have not been used to satisfy the requirements of an awarded degree. Regardless of the number of units transferred to the graduate program, students must meet residency requirements of their particular program in order to be eligible for graduation. Waiver for course content only will not be approved if the waiver approval will require a student to take electives to fulfill program unit deficiency. Students should refer to their particular degree program to determine the maximum amount of transfer credit that can be applied. All courses considered for graduate transfer credit must have been taken in a graduate level degree program or notated as graduate level on the issuing institution's transcript.

To be considered for a course waiver, the transferring course must have been completed with a grade of "B" (3.0) or better. No courses can be accepted in transfer as a waiver or credit where the grade earned was a "B-" or below.

Waiver for course content only will not be approved if the waiver approval will require a student to take electives to fulfill program unit deficiency. If the transfer only qualifies for a waiver, the student does not have to complete the course, but credit is not awarded. The Academic Advisement Report (AAR) will show that course requirement has been met but that zero (0) units have been awarded.

Students who discontinue and apply for readmission must resubmit for approval of previously applied course waivers. This may require additional graduate-level coursework to be taken in order to satisfy requirements for the student's degree.

Course Applicability for Veteran Students Using VA Benefits (Applies to all GI Bill Educational Programs)

U.S. Department of Veterans Affairs pays GI Bill benefits for students in pursuit of one educational degree at a time. Only courses that satisfy the minimum requirements outlined by the curriculum guide or graduation evaluation form can be certified for VA purposes. A curriculum guide or graduation evaluation form should be kept in the student's file. When a student takes a course that does not fulfill a program requirement, it cannot be certified for VA purposes. Excessive free electives, for example, cannot be certified.

National University students are responsible for notifying the Veterans Affairs' Department of any change of status, class schedule changes, or unsatisfactory progress.

Prerequisite Waivers

Some graduate degree programs require students to complete undergraduate-level prerequisites. If a student has completed equivalent coursework at a regionally accredited institution, then he/she must submit an e-form course waiver request. The Office of the Registrar will review the course content and make a determination

on the waiver request. No graduate transfer credit will be awarded if the course was taken as part of an undergraduate level degree or classified as an undergraduate class by the institution attended.

Special Consideration Waivers Based on Non-Graduate Level Coursework

Students who have a course waiver approved based on a course taken through extended learning or continuing education will typically not be awarded any units. Waiver for course content only will not be approved if the waiver approval will require a student to take electives to fulfill program unit deficiency. National University may consider approving and awarding credit if the issuing institution recognizes the credits as meeting graduate level academic standards, notates on the transcript that the course is granted graduate level academic credit, and confirms in an official letter from their Office of the Registrar that the course would be accepted to meet a requirement in their own graduate programs.

When a student has acquired mastery of a subject through a concentration of undergraduate courses or through considerable experience or training, the lead faculty member may recommend that a course be waived. The lead faculty will determine the required documentation that needs to be submitted in support of the waiver.

Time Limit

External coursework that is more than seven years old cannot be transferred into post-baccalaureate credential or degree programs. Similarly, coursework completed at National University more than seven years ago cannot be applied to post-baccalaureate credential or degree programs for re-enrolling students.

Coursework that is more than seven years old must be repeated, or, with the approval of the College/School dean, a more recent, suitable course may be substituted.

Challenge by Examination

Students in the Sanford College of Education (SCOE) and School of Business and Management (SOBM) have the option to take a Challenge by Examination for one or more of the following classes—subject to the limitations noted in the respective degree programs: (SCOE) EDX 1201X, EDT 655, HED 1101X and (SOBM) ACC 501, ACC 601M, MGT 605, MKT 602, MGT 608, MNS 601, ECO 602, ECO 607, FIN 609A, ACC 604, FIN 501.

In order to test out of these courses, students must follow the same procedures as outlined in Academic Information for Undergraduate Degrees under the heading “Challenge by Examination.” The fee for each challenge exam is \$50. No credit is awarded. Additional coursework may need to be taken to make up the graduate level units in the degree program. Contact an advisor or a local representative for more information.

Credit by Examination is not allowed at the graduate level.

GRADES AND GRADING SYSTEM

Students who have more than three absences, excused or unexcused, cannot be given a satisfactory grade.

A Outstanding Achievement

B Commendable Achievement

C Marginal Achievement

D Unsatisfactory Achievement

F Failing

I Incomplete

A grade of “I” may only be issued when a student has attended at least two-thirds of the class sessions and is unable to complete the requirements due to uncontrollable and unforeseen circumstances. Students must communicate these circumstances (in writing) to the instructor prior to the final day of the course. If an instructor decides that an “Incomplete” is warranted, he/she issues a grade of “I” and notates the conditions for removal of the “Incomplete” in the student’s record. Students receive notification via e-mail about the assignment of an “Incomplete,” including the conditions for its removal. The information remains in place until the “Incomplete” is removed or the time limit for removal has passed. An “Incomplete” is not issued when the

only way the student can make up the work is to attend a major portion of the class the next time it is offered. Students must resolve “Incomplete” grades no later than six months after the official course end date. Students can be required to remove an “Incomplete” in a shorter period of time at the discretion of the instructor. The Office of the Registrar sends a courtesy e-mail reminder regarding the “Incomplete” on record when four months have lapsed since the course end date, provided the instructor has not specified a shorter end date.

An “I” that is not removed within the stipulated time becomes an “F” or a “U” based on the grading criteria of the course. No grade points are assigned. The “F” is calculated in the grade point average.

U Unsatisfactory

A permanent grade given indicating that a credit attempt was not acceptable. An “Unsatisfactory” grade merits no grade points and is not computed in the grade point average

W Withdrawal

Signifies that a student has withdrawn from a course after midnight of the ninth day of the session. A “Withdrawal” is not allowed after the (21st) day of the session. This is a permanent mark with no grade points assigned.

S Satisfactory

Credit is granted and no grade points are assigned. This is a grade assigned for satisfactory work in practicum, residencies, and field experience courses.

IP In Progress

A designation representing a project/thesis/research/practicum/internship/field study course that allows up to 12 months from class start date for completion. No grade points are assigned for the “IP” grade.

The following grades are assigned for selected project/practicum courses identified in the course description section of this catalog:

H Honors

Signifies outstanding work. No grade points are assigned.

S Satisfactory

Signifies acceptable work. No grade points are assigned.

U Unsatisfactory

Signifies unacceptable work. No credit is awarded and no grade points are assigned.

Plus/Minus Grading

National University uses a plus/minus grading system. The grade of A+ is not issued. In the plus/minus system, the grade points per credit used in the calculation of the grade point average are specified below. Instructors may elect not to use the plus/minus system provided that they clearly state this in the course outline.

Computing Grade Point Averages

To compute a student’s grade point average (GPA), the total number of credit units is divided into the total number of grade points. Course units count only once toward graduation requirements. “H,” “I,” “IP,” “S,” “U,” and “W” carry no grade points and are not considered in computing the grade point average. When a course is repeated, the original grade is excluded from the GPA calculation but remains part of the permanent record. GPA is truncated to two decimal places.

Grade Points Awarded

A = 4.0	A- = 3.7
B+ = 3.3	B = 3.0
B- = 2.7	C+ = 2.3
C = 2.0	C- = 1.7
D+ = 1.3	D = 1.0
D- = 0.7	F = 0.0

ACADEMIC STANDING

Graduate students must maintain a cumulative grade point average (GPA) of 3.0 for all graduate work. The cumulative GPA is calculated by taking into account all graduate-level course work that has not been applied to a completed degree. Once a degree has been completed, a cumulative GPA is assigned for the course work in that degree, and the cumulative GPA calculator is reset for any future course

work. If a graduate student has two or more degree and/or credential plans that are not yet completed, all the course work in those plans is used to calculate the cumulative GPA.

Students who receive a “D” or “F” grade in a required course must repeat the course. The “D” or “F” grade is calculated in the cumulative GPA until the course is satisfactorily repeated. The original grade(s) is excluded from the GPA calculation but remains as part of the student’s official academic record.

*** Note:** Academic probation, disqualification, dismissal, and/or reinstatement are permanently noted on student’s transcripts.

Academic Probation

Students whose cumulative GPA falls below a 3.0 for coursework completed at National University are placed on Academic Probation. Students are allowed one quarter to improve their cumulative grade point average to the required 3.0. The University strongly recommends that coursework in which a letter grade of “C” or below was earned be repeated while on Academic Probation. If the courses are not repeated, the student may fail to raise the cumulative GPA to the required 3.0 and will be subject to Academic Disqualification. No courses with a grading basis of Satisfactory/ Unsatisfactory should be taken while on Academic Probation as this may impact student’s ability to improve their cumulative GPA to the minimum required.

Removal From Probation

Students placed on Academic Probation will be removed from probation status once they have improved their grade point average to a cumulative GPA of 3.0 or higher.

Satisfactory grades received while on probation count toward fulfillment of degree requirements.

Disqualification

Students on Academic Probation who fail to raise their GPA to 3.0 or higher will be disqualified from their academic program. Disqualified students cannot attend National University for the subsequent quarter following the term in which the student was disqualified. After a three-month leave from the University, students can apply for reinstatement.

Note: International students on an F-1 student visa must apply for reinstatement within 15 days of the date of disqualification due to immigration regulations regarding student visas.

Reinstatement

Students who have been academically disqualified and want to be considered for reinstatement must petition for reinstatement. The petition must explain the reason for the academic disqualification and the steps the student has taken to remedy the issues. Students must include supporting documentation. Students who are readmitted to the University, will be placed on a “Conditional Reinstatement” status. The decision rendered will indicate the conditions and time frame requirements of the reinstatement. Students who meet the conditions and achieve the required 3.0 cumulative GPA will be placed on Permanent Probation status.

Students who fail to meet the conditions will be dismissed from the University and are ineligible for re-admission.

Academic Dismissal

Post-baccalaureate students who were disqualified from, and reinstated to, their academic program on a status of Permanent Probation must maintain a cumulative GPA of 3.0 or better. A cumulative GPA that falls below a 3.0 will result in Academic Dismissal from the institution. The student is not eligible for reinstatement.

If the faculty determines that a student should be academically dismissed for reasons other than grades, they will refer the matter to the Office of Student Affairs, which will initiate a hearing process. The hearing process to be followed is identical with the one invoked for disciplinary actions.

CATALOG RIGHTS

Any student whose record reflects a break in enrollment for a period of 12 or more consecutive months is not eligible to retain his/her catalog rights. All other students are defined as having continuous enrollment and, as such, remain subject to the requirements of the academic program that were listed in the catalog at the time of their admission. Students who interrupt studies for a period of 12 or more

months must re-apply for admission. Re-admitted students are subject to all catalog requirements in existence at the time of re-enrollment.

Students who request to change their academic program after admission must follow the catalog requirements in effect on the date they request the change. Students can elect to change to the current catalog. However, students must meet all prerequisites and major requirements for their academic program that are in effect in the current catalog. Students cannot combine requirements from their previous catalog with those in the current catalog.

Students who are disqualified and are approved for reinstatement after an absence of 12 months are subject to the requirements of the catalog in effect at the time they are re-admitted to the University.

Additional Residency Requirements for Credential and Certificate Programs

Students in certificate programs must complete two-thirds of the required coursework at National University.

Credential candidates must complete a minimum of 31.5 quarter units in residence at National University to be recommended for a credential to the Commission on Teacher Credentialing. Courses taken online are considered to be in residence.

All credential programs must be completed with a GPA of 3.0 (“D” and “F” grades are not accepted).

The credential residency requirement does not apply to candidates for the following programs:

- Level II Special Education
- California Reading Certificate
- Early Childhood Special Education Certificate
- Professional (Tier II) Administrative Services Credential
- An additional credential if one is previously held

GRADUATION REQUIREMENTS FOR GRADUATE DEGREES

Each master’s degree has been structured to delineate the program prerequisites, core requirements, area (s) of specialization, and electives that constitute the requirements for the degree. Each degree has a designated field of study (core) that consists of at least six courses, which total at least 27 quarter units. Not all degrees have areas of specialization.

UNIT AND GPA REQUIREMENTS

Residency

Graduate degrees require the completion of a minimum of 45 quarter units. Students must earn a minimum of 40.5 quarter units at National University and must complete half of the core requirements and three-fourths of the area of specialization in residence.

Field of Study and Area of Specialization GPA Requirements

Students must meet the following GPA requirements for their degree.

1. Minimum overall cumulative grade point average of 3.0
2. Minimum cumulative grade point average of a 3.0 within their core requirements
3. Minimum cumulative grade point average of 3.0 within their area of specialization (if one is required or selected)

GRADUATION WITH DISTINCTION

Graduate students whose grade point average is a 3.85 or better will graduate “With Distinction.” Prerequisites completed at the undergraduate level are not included in the calculation of the grade point average for graduate honors.

In the calculation of eligibility for honors, the official cumulative GPA is truncated to two decimal places. Students must have a cumulative GPA of 3.85 or higher to be eligible for the Honors designation.

Earned honors are noted on diplomas and official University transcripts. Only students who complete 40.5 quarter units or more of their programs in residence are considered for honor awards.

HONOR SOCIETIES

Alpha Phi Sigma Honor Society

Alpha Phi Sigma is a criminal justice honor society affiliated with the Academic of Criminal Justice Sciences whose goals are to honor and promote academic excellence, community service, educational leadership, and unity.

Order of the Sword and Shield Honor Society

Order of the Sword and Shield is a national honor society that recognizes the scholastic and professional achievements of students and alumni from institutions granting degrees in the fields of homeland security, intelligence and protective security.

Pi Lambda Theta Honor Society

Pi Lambda Theta is the international honor society and professional association for students in the field of education. The Dean of the Sanford College of Education nominates students to Pi Lambda Theta who have met rigorous requirements. Membership in this honor society offers students access to scholarships, research grants, career search, and leadership conferences, as well as support from the National Board of Professional Teacher Standards. A gold cord worn during commencement designates Pi Lambda Theta graduates.

Psi Chi Honor Society

Psi Chi is an international honor society whose purpose shall be to encourage, stimulate, and maintain excellence in scholarship of the individual members in all fields, particularly in psychology and to advance the science of psychology.

Undergraduate and graduate students accepted for membership in Psi Chi are recognized for their academic achievement and devotion to the field of psychology.

Psi Chi is a member of the Association of College Honor Societies and is an affiliate of the American Psychological Association (APA) and the Association for Psychological Science (APS). Nominees can be identified by the platinum and blue cord they wear during the ceremony.

Sigma Beta Delta Honor Society

Sigma Beta Delta, founded in 1994, is an honor society which recognizes scholarship and achievement by students of business, management, or administration who have attained superior records at universities with regional accreditation. The society characterizes itself by three principles: wisdom, honor, and the pursuit of meaningful aspirations. It recognizes these qualities as being important for success in the academic realm, as well as providing guidelines which lead to a fulfilling personal and professional life and a life distinguished by honorable service to humankind. The Dean of the School of Business and Management invites qualified students to join Sigma Beta Delta. Membership provides lifetime recognition, eligibility for fellowship awards, networking opportunities and a lifetime subscription to the Society's "Aspirations" newsletter. Dark green and gold cords worn during commencement designate Sigma Beta Delta graduates.

GENERAL EDUCATION

82 General Education Program Requirements



ASSOCIATE OF ARTS AND ASSOCIATE OF SCIENCE GENERAL EDUCATION REQUIREMENTS

The following General Education requirements apply to all Associate of Arts and Associate of Science degrees except the Associate of Arts in General Education (formerly the Associate of Arts). This program has specific General Education requirements. Please see the specific information in the program for more information.

The General Education program for the Associate of Arts and Associate of Science degrees promotes the intellectual growth of all students in National University's Associate level undergraduate degree programs. The general education curriculum assumes that undergraduates will not concentrate on a major field of study until they have completed a general education program that provides instruction in writing and mathematical skills as well as introducing the student to subject matter in the Humanities, Information Literacy, Science and Social Science disciplines. Students will also address the cultural diversity of contemporary society.

Students in the general education program are advised to focus on writing and speech communication first. Students are then counseled to explore mathematical and other formal systems to develop abstract reasoning abilities and are encouraged to take a course in informational literacy. Finally, all students are required to have exposure to the natural sciences, the humanities, fine arts, language, and the social and behavioral sciences. Many of these courses include an examination of the human condition in a multicultural society.

The general education curriculum emphasizes communications, mathematics and sciences, humanities, arts, language, and social/behavioral sciences. Thus, the curriculum provides coherence to Associate level undergraduate education.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate skills for self-development that contribute to lifelong learning.
- Demonstrate literacy in written and oral communication.
- Apply information literacy skills in developing research projects and presentations.
- Demonstrate a capacity for responsible citizenship in a diverse society.
- Demonstrate awareness of past and present human and cultural diversity.
- Identify ethical issues raised in different disciplines.
- Demonstrate scientific and quantitative literacy skills in appraising information and solving problems.
- Demonstrate the ability to use the elements of critical thinking to analyze issues, solve problems, and make decisions.
- Demonstrate the ability to work successfully in a team.

Degree Requirements

The general education curriculum furnishes students with the basic knowledge necessary to pursue any Associate level degree program. Students who fulfill the curriculum gain an interdisciplinary liberal arts framework geared toward problem solving. This emphasis promotes self-directed research in many academic areas that have traditionally been kept separate.

Diversity Requirement

The diversity component serves the general education program goal of increasing respect for, and awareness of, diverse peoples and cultures. A plus [+] after any course on the list of approved general education courses signifies a diversity-enriched course. Students must complete at least one diversity-enriched course in the general education program.

General Education Program Requirements

The general education program consists of a minimum of 34.5 quarter units. Of the 34.5 quarter units, students must complete at least 4.5 units in diversity enriched coursework.

AREA A: ENGLISH COMMUNICATION

(Minimum 10.5 quarter units)

Category 1—Writing

(6 quarter units)

ENG 100 Effective College English I (3 quarter units)
Prerequisite: Satisfactory performance on Accuplacer

ENG 101 Effective College English II (3 quarter units)
Prerequisite: ENG 100

Category 2—Oral Communication

(4.5 quarter units)

COM 101 Intro to Oral Communication
Prerequisite: ENG 100 and ENG 101

COM 103 Public Speaking

COM 120 Intro to Interpersonal Comm

AREA B: MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING

(Minimum 4.5 quarter units)

MTH 204 Mathematics for Science
Prerequisite: MTH 12A and MTH 12B

MTH 209A Fundamentals of Mathematics I
Prerequisite: Placement Evaluation

MTH 210 Probability and Statistics
Prerequisite: Placement Evaluation

MTH 215 College Algebra & Trigonometry
Prerequisite: Placement Evaluation

MTH 216A College Algebra I (3 quarter units)
Prerequisite: Placement Evaluation

MTH 216B College Algebra II (3 quarter units)
Prerequisite: MTH 216A

MTH 220 Calculus I
Prerequisite: MTH 215 or Placement Evaluation

MTH 301 Fundamentals of Mathematics II
Prerequisite: MTH 209A

CSC 208 Calculus for Comp. Science I
Prerequisite: MTH 215

MNS 205 Intro to Quantitative Methods
Prerequisite: Placement Evaluation

BST 322 Intro to Biomedical Statistics

AREA C: INFORMATION LITERACY

(Minimum 4.5 quarter units)

ILR 260 Information Literacy
Prerequisite: ENG 100 and ENG 101

AREA D: ARTS, HUMANITIES, AND LANGUAGE

(Minimum 4.5 quarter units)

ART 100 Introduction to Art History
Prerequisite: ENG 100 and ENG 101

ASL 120 American Sign Language I

ASL 220 American Sign Language II
Prerequisite: ASL 120

ASL 320 American Sign Language III
Prerequisite: ASL 220

ART 200 Visual Arts

FYA 101 First-Yr Sem: Arts & Human
Prerequisite: ENG 100 and ENG 101

HIS 233* World Civilizations I
Prerequisite: ENG 100 and ENG 101

HIS 234* World Civilizations II
Prerequisite: ENG 100 and ENG 101

JRN 200 History of Journalism

LIT 100 Introduction to Literature
Prerequisite: ENG 100 and ENG 101

LIT 345 Mythology
Prerequisite: ENG 240 and LIT 100

MUS 100	Fundamentals of Music
MUS 300	Film Music
MUS 327+	World Music <i>Prerequisite: ENG 100 and ENG 101</i>
ACEX 2101X	Philosophy of Coaching
PHL 100	Introduction to Philosophy <i>Prerequisite: ENG 100 and ENG 101</i>
PHL 337	Ethics <i>Prerequisite: ENG 100 and ENG 101</i>
SPN 100	Beginning Spanish I
SPN 101	Beginning Spanish II <i>Prerequisite: SPN 100</i>
SPN 200	Intermediate Spanish I <i>Prerequisite: SPN 101</i>
THR 200	Theater Arts

+ Diversity Enriched Offering.

* Minnesota residents must complete other Humanities classes to satisfy Minnesota degree standards.

AREA E: SOCIAL AND BEHAVIORAL SCIENCES

(Minimum 4.5 quarter units)

COM 100	Intro to Mass Communication
COM 220	Media Literacy
COM 380+	Democracy in the Info. Age <i>Prerequisite: ENG 100 and ENG 101</i>
ECO 203	Principles of Microeconomics
ECO 204	Principles of Macroeconomics
EDA 200	Schools of the World
FYS 102	First-Yr Sem: Social Sciences <i>Prerequisite: ENG 100 and ENG 101</i>
HIS 220A+	United States History I <i>Prerequisite: ENG 100 and ENG 101</i>
HIS 220B+	United States History II <i>Prerequisite: ENG 100 and ENG 101</i>
HIS 300	Roots of Western Civilization <i>Prerequisite: ENG 100 and ENG 101</i>
ACEX 2100X	History of Sport
POL 100	Introduction to Politics <i>Prerequisite: ENG 100 and ENG 101</i>
POL 201	American Politics <i>Prerequisite: ENG 100 and ENG 101</i>
PSY 100	Introduction to Psychology
SOC 100+	Principles of Sociology <i>Prerequisite: ENG 100 and ENG 101</i>
SOC 260	Cultural Anthropology <i>Prerequisite: ENG 100 and ENG 101</i>
SOC 350+	Cultural Diversity <i>Prerequisite: ENG 100 and ENG 101</i>

+ Diversity Enriched Offering.

AREA F: PHYSICAL AND BIOLOGICAL SCIENCES

(Minimum 6 quarter units)

Note: One science lab is required.

BIO 100	Survey of Bioscience
BIO 100A	Survey of Bioscience Lab (1.5 quarter units) <i>Prerequisite: BIO 100 for non-science majors (GE) or BIO 163 for science majors</i>
BIO 161	General Biology 1

BIO 162	General Biology 2 <i>Prerequisite: BIO 161</i>
BIO 201	Human Anatomy & Physiol I <i>Recommended: Prior completion of: BIO 100, BIO 100A, CHE 101 and CHE 101A or equivalent courses.</i>
BIO 201A	Human Anatomy & Physiol Lab I (1.5 quarter units) <i>Prerequisite: BIO 201</i>
BIO 202	Human Anatomy & Physiol II <i>Recommended: Prior completion of: BIO 201 and BIO 201A, BIO 100 and BIO 100A, CHE 101 and CHE 101A or equivalent courses</i>
BIO 202A	Human Anatomy & Physiol Lab II (1.5 quarter units) <i>Prerequisite: BIO 202</i>
BIO 203	Introductory Microbiology <i>Recommended: Prior completion of: BIO 201 and BIO 201A, BIO 202 and BIO 202A, BIO 100 and BIO 100A, CHE 101 and CHE 101A or equivalent courses</i>
BIO 203A	Introductory Microbiology Lab (1.5 quarter units) <i>Prerequisite: BIO 203</i>
CHE 101	Introductory Chemistry <i>Recommended Preparation: MTH 204 or MTH 215 or MTH 216A and MTH 216B</i>
CHE 101A	Introductory Chemistry Lab (1.5 quarter units) <i>Prerequisite: CHE 101 or CHE 141 for science majors</i>
CHE 141	General Chemistry 1 <i>Prerequisite: MTH 215 or equivalent, CHE 101</i>
CHE 142	General Chemistry 2 <i>Prerequisite: CHE 141</i>
EES 103	Fundamentals of Geology
EES 103A	Fundamentals of Geology Lab (1.5 quarter units) <i>Prerequisite: EES 103</i>
PHS 104	Introductory Physics <i>Prerequisite: 2 years of high school algebra and MTH 204 or MTH 215 or MTH 216A and MTH 216B</i>
PHS 104A	Introductory Physics Lab (1.5 quarter units) <i>Prerequisite: PHS 104 or PHS 171 for science majors</i>
PHS 171	General Physics 1 <i>Prerequisite: MTH215 or MTH216A and MTH216B</i>
PHS 172	General Physics 2 <i>Prerequisite: PHS 171</i>

Note: It is strongly recommended that students in the BIO 201 - 203A series complete this series in numerical sequence BIO 201 + 201A, 202 + 202A, 203 + 203A.

AREA G: LIFELONG LEARNING AND SELF DEVELOPMENT

(Minimum 4.5 quarter units)

ART 250	Self-Reflection via Visual Art <i>Recommended Preparation: ART 100 and ART 200</i>
COH 100	Personal Health
COH 201	Integrative Health
COH 317	Public Health Nutrition
COH 318	Drug Use and Abuse
COH 319	Human Sexuality
ENG 201	Fiction Writing I <i>Prerequisite: LIT 100</i>
ENG 202	Poetry Writing I <i>Prerequisite: LIT 100</i>
ENG 203	Screenwriting I <i>Prerequisite: LIT 100 or ART 315</i>
ENG 375	Nature Writing <i>Prerequisite: ENG 100 and ENG 101</i>
FFL 100	Foundation to Academic Success

FYP 103	First-Yr Sem: Psychology <i>Prerequisite: ENG 100 and ENG 101</i>
GLS 150	Global Issues and Trends
MUS 200	Music Composition
NSG 280	Human Lifecycle Development
PHL 238	Logical & Critical Thinking

GENERAL EDUCATION FOR BACHELOR DEGREES

The general education program promotes the intellectual growth of all students in National University's undergraduate degree programs. The general education curriculum assumes that undergraduates will not concentrate on a major field of study until they have completed a thorough general education program that is writing-intensive and addresses the cultural diversity of contemporary society.

Students in the general education program are advised to focus on writing and speech communication first. Students are then counseled to explore mathematical and other formal systems to develop abstract reasoning abilities and are required to take a course in informational literacy and report writing. Finally, all students are required to have a significant exposure to the natural sciences, the humanities and fine arts, and the social and behavioral sciences and modern language. Many of these courses include an examination of the human condition in a multicultural society.

The general education curriculum emphasizes communications, mathematics and sciences, humanities and social/behavioral sciences. Thus, the curriculum provides coherence to undergraduate education, affording the student the opportunity to:

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate skills for self-development that contribute to lifelong learning.
- Demonstrate literacy in written and oral communication.
- Apply information literacy skills in developing research projects and presentations.
- Demonstrate a capacity for responsible citizenship in a diverse society.
- Demonstrate awareness of past and present human and cultural diversity.
- Identify ethical issues raised in different disciplines.
- Demonstrate scientific and quantitative literacy skills in appraising information and solving problems.
- Demonstrate the ability to use the elements of critical thinking to analyze issues, solve problems, and make decisions.
- Demonstrate the ability to work successfully in a team.

The general education curriculum furnishes students with the basic knowledge necessary to pursue any degree program. Students who fulfill the curriculum gain a strong interdisciplinary liberal arts framework geared toward problem solving. This emphasis promotes self-directed research in many academic areas that have traditionally been kept separate.

Diversity Requirement

The diversity component serves the general education program goal of increasing respect for, and awareness of, diverse peoples and cultures. A plus [+] after any course on the list of approved general education courses signifies a diversity-enriched course. Students must complete at least one diversity-enriched course in the general education program.

CSU General Education Certifications and IGETC

National University will accept the following General Education certifications: California State University (CSU) General Education Breadth Certification and the Inter-Segmental General Education Transfer Curriculum (IGETC). All requirements for CSU General Education and IGETC must be completed and certified prior to transfer to National University. The University will not accept partial certifications. Students transferring with full certifications are typically required to take one to three upper-division general education courses at National in order to fulfill the General Education unit requirements. Students must provide an official transcript with the certification included or a separate certification form from the community college attended.

General Education Program Requirements

The general education program consists of a minimum of 70.5 quarter units. Of the 70.5 quarter units, students must complete at least 4.5 units at the upper-division level and 4.5 units in diversity enriched coursework. All undergraduate students working toward any associate or bachelor's degree must meet the University's diversity requirement. A maximum of 13.5 upper-division units may be utilized to meet general education requirements.

National University has general education requirements in the following areas:

AREA A: ENGLISH COMMUNICATION

(Minimum 15 quarter units)

Category 1—Writing

(10.5 quarter units required)

ENG 100 Effective College English I (3 quarter units)
Prerequisite: Satisfactory performance on Accuplacer

ENG 101 Effective College English II (3 quarter units)
Prerequisite: ENG 100

ENG 240 Advanced Composition
Prerequisite: ENG 100 and ENG 101

or

ENG 334A Technical Writing
Prerequisite: ENG 100 and ENG 101, (Only Business, Engineering and Nursing majors may fulfill the requirement by taking ENG 334A)

Category 2—Oral Communication

(4.5 quarter units required)

COM 101 Intro. to Oral Communication
Prerequisite: ENG 100 and ENG 101

COM 103 Public Speaking

COM 120 Intro to Interpersonal Comm

AREA B: MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING

(Minimum 4.5 quarter units)

MTH 204 Mathematics for Science
Prerequisite: MTH 12A and MTH 12B or Accuplacer test placement

MTH 209A Fundamentals of Mathematics I
Prerequisite: Accuplacer test placement evaluation or MTH 12A and MTH 12B

MTH 210 Probability and Statistics
Prerequisite: Accuplacer test placement evaluation or MTH 12A and MTH 12B

MTH 215 College Algebra & Trigonometry
Prerequisite: Accuplacer test placement evaluation or MTH 12A and MTH 12B

MTH 216A College Algebra I (3 quarter units)
Prerequisite: Accuplacer test placement evaluation or MTH 12A and MTH 12B

MTH 216B College Algebra II (3 quarter units)
Prerequisite: MTH 216A

MTH 220 Calculus I
Prerequisite: MTH 215 or Accuplacer test placement

MTH 301 Fundamentals of Mathematics II
Prerequisite: MTH 209A or Accuplacer test placement evaluation

CSC 208 Calculus for Comp. Science I
Prerequisite: MTH 215

MNS 205 Intro to Quantitative Methods
Prerequisite: Placement Evaluation

BST 322 Intro to Biomedical Statistics

AREA C: INFORMATION LITERACY

(Minimum 4.5 quarter units)

ILR 260 Information Literacy
Prerequisite: ENG 100 and ENG 101

AREA D: ARTS, HUMANITIES, AND LANGUAGES

(Minimum 18 quarter units in at least 2 areas)

ARTS

ART 100	Introduction to Art History <i>Prerequisite: ENG 100 and ENG 101</i>
ART 200	Visual Arts
FYA 101	First-Yr Sem: Arts & Human <i>Prerequisite: ENG 100 and ENG 101</i>
MUS 100	Fundamentals of Music
MUS 300	Film Music
MUS 327+	World Music <i>Prerequisite: ENG 100 and ENG 101</i>
THR 200	Theater Arts

+ Diversity Enriched Offering

HUMANITIES

HIS 233*	World Civilizations I <i>Prerequisite: ENG 100 and ENG 101</i>
HIS 234*	World Civilizations II <i>Prerequisite: ENG 100 and ENG 101</i>
JRN 200	History of Journalism
LIT 100	Introduction to Literature <i>Prerequisite: ENG 100 and ENG 101</i>
LIT 345	Mythology <i>Prerequisite: ENG 240 and LIT 100</i>
ACEX 2101X	Philosophy of Coaching
PHL 100	Introduction to Philosophy <i>Prerequisite: ENG 100 and ENG 101</i>
PHL 337	Ethics <i>Prerequisite: ENG 100 and ENG 101</i>

* Minnesota residents must complete other Humanities classes to satisfy Minnesota degree standards.

LANGUAGES

ASL 120	American Sign Language I
ASL 220	American Sign Language II <i>Prerequisite: ASL 120</i>
ASL 320	American Sign Language III <i>Prerequisite: ASL 220</i>
SPN 100	Beginning Spanish I
SPN 101	Beginning Spanish II <i>Prerequisite: SPN 100</i>
SPN 200	Intermediate Spanish I <i>Prerequisite: SPN 101</i>

Students may also satisfy Area D Foreign Language requirements with 9 quarter units of the following computer languages:

CSC 242	Intro to Programming Concepts <i>Prerequisite: MTH 215</i>
CSC 252	Programming in C++ <i>Prerequisite: CSC 242</i>
CSC 262	Programming in JAVA <i>Prerequisite: MTH 215</i>

AREA E: SOCIAL AND BEHAVIORAL SCIENCES

(Minimum 13.5 quarter units)

COM 100	Intro to Mass Communication
COM 220	Media Literacy

COM 380+ Democracy in the Info. Age
Prerequisite: ENG 100 and ENG 101

ECO 203 Principles of Microeconomics

ECO 204 Principles of Macroeconomics

EDA 200 Schools of the World

FYS 102 First-Yr Sem: Social Sciences
Prerequisite: ENG 100 and ENG 101

HIS 220A+ United States History I
Prerequisite: ENG 100 and ENG 101

HIS 220B+ United States History II
Prerequisite: ENG 100 and ENG 101

HIS 300 Roots of Western Civilization
Prerequisite: ENG 100 and ENG 101

ACEX 2100X History of Sport

POL 201 American Politics
Prerequisite: ENG 100 and ENG 101

PSY 100 Introduction to Psychology

SOC 100+ Principles of Sociology
Prerequisite: ENG 100 and ENG 101

SOC 260 Cultural Anthropology
Prerequisite: ENG 100 and ENG 101

SOC 350+ Cultural Diversity
Prerequisite: ENG 100 and ENG 101

+ Diversity Enriched Offering.

AREA F: PHYSICAL AND BIOLOGICAL SCIENCES

(Minimum 6 quarter units required.)

Note: One science lab is required.

BIO 100 Survey of Bioscience

BIO 100A Survey of Bioscience Lab (1.5 quarter units)
Prerequisite: BIO 100 for non-science majors (GE) or BIO 163 for science majors

BIO 161 General Biology 1

BIO 162 General Biology 2
Prerequisite: BIO 161

BIO 201 Human Anatomy & Physiol I
Recommended: Prior completion of: BIO 100, BIO 100A, CHE 101 and CHE 101A or equivalent courses.

BIO 201A Human Anatomy & Physiol Lab I (1.5 quarter units)
Prerequisite: BIO 201

BIO 202 Human Anatomy & Physiol II
Recommended: Prior completion of: BIO 201 and BIO 201A, BIO 100 and BIO 100A, CHE 101 and CHE 101A or equivalent courses

BIO 202A Human Anatomy & Physiol Lab II (1.5 quarter units)
Prerequisite: BIO 202

BIO 203 Introductory Microbiology
Recommended: Prior completion of: BIO 201 and BIO 201A, BIO 202 and BIO 202A, BIO 100 and BIO 100A, CHE 101 and CHE 101A or equivalent courses

BIO 203A Introductory Microbiology Lab (1.5 quarter units)
Prerequisite: BIO 203

CHE 101 Introductory Chemistry
Recommended Preparation: MTH 204 or MTH 215 or MTH 216A and MTH 216B

CHE 101A Introductory Chemistry Lab (1.5 quarter units)
Prerequisite: CHE 101 or CHE 141 for science majors

CHE 141 General Chemistry 1
Prerequisite: MTH 215 or equivalent and CHE 101

CHE 142	General Chemistry 2 <i>Prerequisite: CHE 141</i>
EES 103	Fundamentals of Geology
EES 103A	Fundamentals of Geology Lab (1.5 quarter units) <i>Prerequisite: EES 103</i>
PHS 104	Introductory Physics <i>Prerequisite: 2 years of high school algebra and MTH 204 or MTH 215 or MTH 216A and MTH 216B</i>
PHS 104A	Introductory Physics Lab (1.5 quarter units) <i>Prerequisite: PHS 104 or PHS 171 for science majors</i>
PHS 171	General Physics 1 <i>Prerequisite: MTH215 or MTH216A and MTH216B</i>
PHS 172	General Physics 2 <i>Prerequisite: PHS 171</i>

AREA G: LIFELONG LEARNING AND SELF DEVELOPMENT

(Minimum 4.5 quarter units)

COH 100	Personal Health
COH 201	Integrative Health
COH 317	Public Health Nutrition
COH 318	Drug Use and Abuse
COH 319	Human Sexuality
ENG 201	Fiction Writing I <i>Prerequisite: LIT 100</i>
ENG 202	Poetry Writing I <i>Prerequisite: LIT 100</i>
ENG 203	Screenwriting I <i>Prerequisite: LIT 100 or ART 315</i>
ENG 375	Nature Writing <i>Prerequisite: ENG 100 and ENG 101</i>
FFL 100	Foundation to Academic Success
FYP 103	First-Yr Sem: Psychology <i>Prerequisite: ENG 100 and ENG 101</i>
GLS 150	Global Issues and Trends
MUS 200	Music Composition
NSG 280	Human Lifecycle Development
PHL 238	Logical & Critical Thinking

AREA A-G: GENERAL EDUCATION

(Minimum 4.5 quarter units)

If a student has not met the upper-division unit requirement in the completion of the above general education areas, an upper-division course from the following list must be taken. (Upper-division courses applicable to General Education are numbered 300-399). If a student has already met the upper-division unit requirement in the completion of the above general education areas, any course below or any course in Areas A through G may satisfy this Area.

ART 315	Film as Art <i>Prerequisite: ENG 100 and ENG 101</i>
ART 329+	World Art <i>Prerequisite: ENG 100 and ENG 101</i>
BRO 210	History of Television <i>Prerequisite: ENG 100, ENG 101 and COM 100 or COM 103</i>
COM 360+	Representation in the Media <i>Prerequisite: ENG 100 and ENG 101</i>
COM 380+	Democracy in the Info. Age <i>Prerequisite: ENG 101 and ENG 100</i>
EES 301	Earth & Planetary Sciences
EES 322	Oceanography
EES 335	Environmental Science

ENG 375	Nature Writing <i>Prerequisite: ENG 100 and ENG 101</i>
FYM 104	First-Yr Sem: Math & Sci <i>Prerequisite: ENG 100 and ENG 101</i>
HIS 300	Roots of Western Civilization <i>Prerequisite: ENG 100 and ENG 101</i>
JRN 350	Youth and the News
LIT 311	British Literature I <i>Prerequisite: LIT 100 and ENG 240</i>
LIT 312	British Literature II <i>Prerequisite: LIT 100 and ENG 240</i>
LIT 321	American Literature I <i>Prerequisite: LIT 100 and ENG 240</i>
LIT 322	American Literature II <i>Prerequisite: LIT 100 and ENG 240</i>
MUS 326+	American Music <i>Prerequisite: ENG 100 and ENG 101</i>
PHL 320+	World Religions <i>Prerequisite: ENG 100 and ENG 101</i>
PHL 375	Environmental Ethics <i>Prerequisite: ENG 100 and ENG 101</i>
PHS 102	Survey of Physical Science
PSY 300	Social Psychology of Sport <i>Prerequisite: ENG 100, ENG 101 and PSY 100</i>
PSY 301	Child Development <i>Prerequisite: ENG 100 and ENG 101</i>
SCI 300+	Geography
SOC 325	Popular Culture <i>Prerequisite: ENG 100 and ENG 101</i>
SOC 327	Arab Culture <i>Prerequisite: ENG 100 and ENG 101</i>
SOC 336+	American Film and Society <i>Prerequisite: ENG 100 and ENG 101</i>
SOC 344	Marriage, Sex and the Family <i>Prerequisite: ENG 100 and ENG 101</i>
SOC 350+	Cultural Diversity <i>Prerequisite: ENG 100 and ENG 101</i>
SOC 352	Modern Chinese Culture <i>Prerequisite: ENG 100 and ENG 101</i>

+ Diversity Enriched Offering.

Remedial courses taken to achieve minimum levels of collegiate-level competency in the areas of writing and mathematical concepts and systems do not satisfy any portion of the general education requirement.

COLLEGE OF LETTERS AND SCIENCES

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Dean, Carol P. Richardson
Ed. D. Music Education, University of Illinois at Urbana-Campaign

- 88 Degrees Offered**
- 89 Degrees Offered by Department**
- 90 Faculty**
- 94 Undergraduate Degrees**
- 121 Minors**
- 123 Graduate Degrees**
- 135 Graduate Certificates**
- 135 Undergraduate Certificates**



DEGREE PROGRAMS OFFERED

UNDERGRADUATE DEGREES

Associate of Arts

with a Major in:

- General Education 
with a Concentration in:
 - » Business Administration 

Associate of Arts

with a Major in:

- Creative Writing 

Associate of Science

with Majors in:

- Alcohol and Drug Abuse Counseling
- Human Biology

Bachelor of Arts

with Majors in:

- English 
with a Concentration in:
 - » Creative Writing 
- English with a Preliminary Single Subject Teaching Credential (California) 
- English with Single-Subject Matter Preparation 
- General Studies 
- Global Studies 
- History 
- Integrative Psychology 
- Interdisciplinary Studies 
- Interdisciplinary Studies with a Preliminary Multiple Subjects Teaching Credential (California) 
with a Concentration in:
 - » STEM (Science, Technology, Engineering, Mathematics)
- Mathematics with a Preliminary Single Subject Teaching Credential (California)
- Political Science 
- Psychology 
- Social Science with a Preliminary Single Subject Teaching Credential (California) 
- Sociology 
- Spanish
with Optional:
 - » Preliminary Single Subject Teaching Credential (California) 
- Sport Psychology 
- Strategic Communications 

Bachelor of Science

with Majors in:

- Biology
- Mathematics 
with a Concentration in:
 - » Single-Subject Teaching
- Organizational Behavior 

Foreign Credential Bridge Program

Transition Programs

- Bachelor of Arts in English to Master of Arts in English
- Bachelor of Arts in English to Master of Fine Arts in Creative Writing
- Bachelor of Arts in Political Science to Master of Public Administration
- Bachelor of Science in Biology to Master of Forensic Science
- Bachelor of Science in Organizational Behavior to Master of Arts in Human Behavior

MINORS

- Creative Writing 
- English 
- Global Studies 
- History 
- Mathematics 
- Political Science 
- Psychology 
- Sociology 

GRADUATE DEGREES

Master of Arts

with Fields of Study in:

- Counseling Psychology
with Specializations in:
 - » Licensed Professional Clinical Counseling
 - » Marriage and Family Therapy
- English 
with Specializations in:
 - » Gothic Studies
 - » Rhetoric
- Film Studies 
- Gerontology 
- History 
- Human Behavior 
- Performance Psychology 
- Strategic Communications 

Master of Fine Arts

with a Field of Study in:

- Creative Writing 

Master of Forensic Sciences

with Specializations in:

- Criminalistics
- Investigation 

Master of Science

with Fields of Study in:

- Biology
- Mathematics for Educators

The following programs are also listed in the Sanford College of Education Section:

- Bachelor of Arts
with Majors in:
 - » English with a California Preliminary Single Subject Teaching Credential (California) 
 - » Interdisciplinary Studies with a California Preliminary Multiple Subjects Teaching Credential 
 - » Mathematics with a California Preliminary Single Subject Teaching Credential (California) 
 - » Social Science with a Preliminary Single Subject Teaching Credential (California) 

UNDERGRADUATE CERTIFICATES

- Alcohol and Drug Abuse Counseling

GRADUATE CERTIFICATES

- Forensic and Crime Scene Investigations

 Entire program can be completed online.

 On-site program with possible online courses or prerequisites.

Not all courses or programs are available at every campus.

Consult an admissions advisor for online course availability.

DEPARTMENT OF ARTS AND HUMANITIES

Associate of Arts

with a Major in:

- Creative Writing 

Bachelor of Arts

with Majors in:

- English 
 - with a Concentration in:
 - » Creative Writing 
- English with a Preliminary Single Subject Credential (California)  
- English with Single-Subject Matter Preparation  
- Spanish
 - with Optional:
 - » Preliminary Single Subject Teaching Credential (California)  
- Strategic Communications 

Minors

- Creative Writing 
- English 

Master of Arts

- English 
 - with Specializations in:
 - » Gothic Studies
 - » Rhetoric
- Film Studies 
- Strategic Communications 

Master of Fine Arts

with a Field of Study in:

- Creative Writing 

DEPARTMENT OF MATHEMATICS AND NATURAL SCIENCES

Associate of Science

with a Major in:

- Human Biology

Bachelor of Arts

with a Major in:

- Mathematics with a Preliminary Single Subject Credential (California) 

Bachelor of Science

with Majors in:

- Biology
- Mathematics 
 - with a Concentration in:
 - » Single-Subject Teaching

Minor

- Mathematics 

Master of Forensic Sciences

with Specializations in:

- Criminalistics
- Investigation 

Master of Science

with Fields of Study in:

- Biology
- Mathematics for Educators

Graduate Certificate

- Forensic and Crime Scene Investigations

DEPARTMENT OF PSYCHOLOGY

Associate of Science

with a Major in:

- Alcohol and Drug Abuse Counseling

Bachelor of Arts

with Majors in:

- Integrative Psychology 
- Psychology 
- Sport Psychology 

Bachelor of Science

with a Major in:

- Organizational Behavior 

Minor

- Psychology 

Undergraduate Certificate

- Alcohol and Drug Abuse Counseling

Master of Arts

with Fields of Study in:

- Counseling Psychology
 - with Specializations in:
 - » Licensed Professional Clinical Counseling
 - » Marriage and Family Therapy
- Gerontology 
- Human Behavior 
- Performance Psychology 

DEPARTMENT OF SOCIAL SCIENCES

Associate of Arts

with a Major in:

- General Education 
 - with a Concentration in:
 - » Business Administration 

Bachelor of Arts

with Majors in:

- General Studies 
- Global Studies 
- History 
- Interdisciplinary Studies 
- Interdisciplinary Studies with a Preliminary Multiple Subjects Teaching Credential (California)  
- with a Concentration in:
 - » STEM (Science, Technology, Engineering, Mathematics)
- Political Science 
- Social Science with a Preliminary Single Subject Teaching Credential (California)  
- Sociology 

Minors

- Global Studies 
- History 
- Political Science 
- Sociology 

Master of Arts

with a Field of Study in:

- History 

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MISSION STATEMENT

The College of Letters and Sciences (COLS) prepares students for meaningful careers and lifelong learning by developing an education that fosters the key qualities of broad-mindedness, self-assurance and competency in oral and written communication, the ability to both understand and undertake academic research, the necessary intellectual skill and zeal to identify and pursue one's chosen area of study, and a commitment to world-citizenship.

The College of Letters and Sciences champions the philosophy of a strong liberal arts education. COLS comprises the liberal arts core of National University and is made up of a community of teaching scholars who are dynamically involved with the University at large, educating the majority of its undergraduates, cultivating and administering the general education curriculum, sponsoring innovative research centers and institutes, and offering numerous graduate degree programs.

SPECIAL PROGRAMS OFFERED

General Education Curriculum

The University's general education program links undergraduate work in writing, oral communication, critical thinking, mathematics and other skill areas with programs at the upper-division level.

A number of courses address issues of cultural diversity, while the traditional goal of promoting intellectual breadth along with skill-based fundamentals has been enhanced and made more flexible.

The purpose of National University's general education program is to meet the educational objectives of adult learners who seek to strengthen their professional work and advance their creative and analytical abilities.

Center for Cultural and Ethnic Studies

The Center for Cultural and Ethnic Studies hosts forums, workshops and cultural events with the goal of promoting diversity and intellectual curiosity at the University. These events are intended to encourage awareness of contemporary artistic, intellectual and cultural issues in daily life. In practice, the Center serves as a bridge between the University and other communities. Events provide a common platform for the exchange of research and ideas by National University faculty and scholars at other institutions, artists and community members. The work of the Center for Cultural and Ethnic Studies is to bring cultural, intellectual and artistic events of the highest caliber to the University.

COLLEGE OF LETTERS AND SCIENCES

UNDERGRADUATE DEGREES

■ ASSOCIATE OF ARTS

◆ MAJOR IN GENERAL EDUCATION

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The Associate of Arts (AA) degree is designed to give students a solid foundation for continuing professional and traditional studies as well as continued intellectual growth.

General Education Program Requirements

To receive the AA degree in General Education, students must complete at least 90 quarter units, 31.5 of which must be taken in residence at National University. Of the 90 units required, 70.5 must fall into the areas of General Education as listed below. A list of courses for each category can be found in the General Education section of the Catalog under General Education for Bachelor Degrees. In the absence of transfer credit, additional general elective courses may be taken to fulfill the total unit requirement for the degree.

The General Education Program consists of a minimum of 70.5 quarter units. Of the 70.5 units, students must complete at least 4.5 units at the upper-division level and 4.5 units in diversity enriched coursework. A plus [+] indicates a diversity enriched offering.

Students are urged to meet English and Mathematics requirements as early as possible in their college studies to avoid serious difficulties in other coursework. Refer to the section on Undergraduate Admission Procedures for specific information regarding application and placement evaluation.

AREA A: ENGLISH COMMUNICATION

(Minimum 15 quarter units)

AREA B: MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING

(Minimum 4.5 quarter units)

AREA C: INFORMATION LITERACY

(Minimum 4.5 quarter units)

AREA D: ARTS, HUMANITIES, AND LANGUAGE

(Minimum 18 quarter units over at least 2 areas)

AREA E: SOCIAL AND BEHAVIORAL SCIENCES

(Minimum 13.5 quarter units)

AREA F: PHYSICAL AND BIOLOGICAL SCIENCES

(Minimum 6 quarter units required)

Note: One science lab is required.

AREA G: LIFELONG LEARNING AND SELF DEVELOPMENT

(Minimum 4.5 quarter units)

AREA A-G: GENERAL EDUCATION

(Minimum 4.5 quarter units)

Available concentration for the Associate of Arts in General Education Degree:

▲ Concentration in Business Administration

Faculty Advisor: Gary Zucca; (209) 736-2949; gzucca@nu.edu

This concentration is designed for students enrolled in the Associate of Arts degree to provide a broad base of introductory business related disciplines. Students completing this degree and concentration are prepared for entry-level positions in business and/or articulation into a bachelor's degree program in business.

Requirements for Concentration

(8 courses; 36 quarter units)

MNS 205	Intro to Quantitative Methods <i>Prerequisite: Placement Evaluation</i>
ECO 203	Principles of Microeconomics
ECO 204	Principles of Macroeconomics
ACC 201	Financial Accounting Funds.
ACC 202	Managerial Accounting Funds. <i>Prerequisite: ACC 201</i>
FIN 310	Business Finance <i>Prerequisite: ACC 201</i>
LAW 304	Legal Aspects of Business I
MGT 309C	Prin. of Mgmt & Organizations

◆ MAJOR IN CREATIVE WRITING

Faculty Advisor: Amina Cain; (310) 662-2165; acain@nu.edu

The AA with Major in Creative Writing is designed to help students develop their interests and talents as creative writers and to give them the skills to continue to improve their writing. Students will be introduced to three different genres and given the opportunity for more advanced study in two of them. The program will provide a sound foundation for further work or study in creative writing.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Recognize the basic conventions of contemporary fiction, poetry, and screenwriting.
- Produce polished, completed works in two of the genres studied in the program (fiction, poetry, screenwriting).
- Analyze their own work critically and employ revision strategies to improve it.
- Critique the writing of others and offer constructive suggestions for improving it in a collegial setting.

Degree Requirements

To receive the Associate of Arts in Creative Writing, students must complete at least 90 quarter units, 31.5 of which must be taken in residence at National University. All students must complete a minimum 34.5 units of the Associate of Arts general education requirements. In the absence of transfer credit additional electives may need to be taken to meet the overall unit requirement of the degree. Please see Undergraduate Information section for admission and evaluation. All students receiving an undergraduate degree in Nevada are required by State Law to complete a course in Nevada Constitution.

Preparation for Major

(2 courses; 6 quarter units)

ENG 100* Effective College English I (3 quarter units)
Prerequisite: Satisfactory performance on Accuplacer

ENG 101* Effective College English II (3 quarter units)
Prerequisite: ENG 100

* May be used to meet a General Education requirement.

Requirements for Major

(9 courses; 40.5 quarter units)

LIT 100 Introduction to Literature
Prerequisite: ENG 100 and ENG 101

ENG 240 Advanced Composition
Prerequisite: ENG 100 and ENG 101

ENG 201 Fiction Writing I
Prerequisite: ENG 101

ENG 202 Poetry Writing I
Prerequisite: ENG 101

ENG 203 Screenwriting I
Prerequisite: ENG 101

Two (2) of the following courses:

ENG 301 Fiction Writing II
Prerequisite: ENG 201

ENG 302 Poetry Writing II
Prerequisite: ENG 202

ENG 303 Screenwriting II
Prerequisite: ENG 203

ENG 375 Nature Writing
Prerequisite: ENG 100 and ENG 101

Two (2) of the following courses:

ART 100 Introduction to Art History
Prerequisite: ENG 100 and ENG 101

ART 200 Visual Arts

BRO 210 History of Television
Prerequisite: ENG 100, ENG 101 and COM 100 or COM 103

COM 100 Intro to Mass Communication

MUL 245 Principles of Web Design
Prerequisite: ENG 100, ENG 101 and COM 100 or COM 103

MUL 255 Interactive Design
Prerequisite: ENG 100, ENG 101 and COM 100 or COM 103

MUS 100 Fundamentals of Music

PHL 100 Introduction to Philosophy
Prerequisite: ENG 100 and ENG 101

PSY 100 Introduction to Psychology

THR 200 Theater Arts

■ ASSOCIATE OF SCIENCE

◆ MAJOR IN ALCOHOL AND DRUG ABUSE COUNSELING ☑

Faculty Advisor: Donald Posson; (702) 531-7832; dposson@nu.edu

The Associate of Science in Alcohol and Drug Abuse Counseling is designed to meet California state standards for certification of alcohol and drug abuse counselors. This program is approved by CAADAC's education foundation CA Foundation for Advancement of Addiction Professionals. This program may not meet the requirements for certification in other states. For complete information on the CAADAC certification, or to order a CAADAC Handbook visit, www.caadac.org or call 916.368.9412.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Establish professional relationships with diverse clients with alcohol and drug abuse and/or dependence issues.
- Demonstrate entry level counseling skills in working with individuals, groups, and families relative to alcohol and drug abuse and/or dependence issues.
- Assess and diagnose clients using DSM IV-TR alcohol and drug abuse and dependence criteria.
- Develop a treatment plan based on a biopsychosocial assessment of the individual's strengths, weaknesses, problems, and needs.
- Develop case management plans for clients that bring services, agencies, resources, or people together with a planned framework of action.
- Provide client education to individuals, groups, and families on alcohol and drug abuse and dependence.
- Interact with counselors and other professionals in regard to client treatment and services.
- Adhere to established professional codes of ethics and standards of practice.
- Integrate knowledge of cultural diversity into chemically dependent clients' treatment plans.

Degree Requirements

To receive the degree, students must complete at least 90 quarter units, 31.5 of which must be taken in residence at National University, a minimum 34.5 units of General Education, and complete a 255 hour practicum experience working with clients at an approved practicum site. Students are urged to meet English requirements as early as possible in their college career to avoid serious difficulties in other course work. Refer to the section on undergraduate admission requirements for specific information regarding admission and evaluation. All students receiving an undergraduate degree in Nevada are required by State Law to complete a course in Nevada Constitution.

Upon application, students must sign the ADC Student Agreement before beginning their coursework. Students must obtain malpractice insurance prior to beginning their work with clients. Students attend live practicum classes one Saturday a month during the seven month clinical practicum at a National University campus. Students must attend live Internet class sessions. Students will have their choice of attending either the live Internet session or reviewing the recording of the session afterwards. Students must have a headset with a microphone that plugs into the USB port on the computer.

Recommended Preparation for Major

(5 courses; 19.5 quarter units)

ENG 100* Effective College English I (3 quarter units)
Prerequisite: Satisfactory performance on Accuplacer

ENG 101* Effective College English II (3 quarter units)
Prerequisite: ENG 100

COM 103* Public Speaking

MTH 204* Mathematics for Science
Prerequisite: MTH 12A, and MTH 12B, or Accuplacer test placement

ILR 260* Information Literacy
Prerequisite: ENG 100, and ENG 101

* May be used to meet a General Education requirement.

Prerequisites for Major

(2 courses; 9 quarter units)

- PSY 100* Introduction to Psychology
SOC 100* Principles of Sociology
Prerequisite: ENG 100 and ENG 101

* May be used to meet a General Education requirement.

Requirements for Major

(9 courses; 40.5 quarter units)

- ADC 205 Intro to Substance Abuse
Prerequisite: PSY 100 and SOC 100
- ADC 215 Physiology of Substance Abuse
Prerequisite: PSY 100 and SOC 100
- ADC 225 Law and Ethics
Prerequisite: PSY 100 and SOC 100
- ADC 235 Case Management
Prerequisite: PSY 100 and SOC 100
- ADC 245 Individual Counseling I
Prerequisite: PSY 100, SOC 100 and ADC 205
- ADC 255 Individual Counseling II
Prerequisite: ADC 245
- ADC 265 Group & Family Counseling
Prerequisite: PSY 100 and SOC 100
- ADC 275 Personal & Professional Growth
Prerequisite: PSY 100 and SOC 100
- ADC 285 Practicum in Substance Abuse
Prerequisite: Satisfactorily complete 5 courses in the major, and Program Lead Faculty approval

◆ MAJOR IN HUMAN BIOLOGY

Faculty Advisor: Ana Barral; (714) 429-5148; abarral@nu.edu

The Associate of Science in Human Biology (AS-HB) degree is designed to give students a solid foundation for continuing intellectual growth and further professional studies leading to a career in nursing or other health science-related fields.

Students planning to transition into a bachelor's degree or other health related field should check that program requirements prior to completing the AS-HB.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Discuss the social, physiological, and psychological aspects of human behavior at a basic level.
- Discuss the complexities of human biology on the continuum from the level of organism to the level of organized social being.
- Use computer technologies to augment productivity, apply statistical procedures and to gain access to multiple informational resource services.
- Communicate effectively with others using oral, visual, and written methods.

Degree Requirements

To receive the A.S.—HB degree, students must complete at least 90 quarter units, 31.5 of which must be taken in residence at National University. Of the 90 units required, 42 must fall into the areas of general education listed below. Students must complete 4.5 quarter units in diversity enriched coursework. A plus (+) indicates a diversity enriched offering. All undergraduate students working toward the Associate of Science in Human Biology must meet the University diversity requirement. The other 48 units can be comprised of elective courses and/or specific major program preparatory courses. All students receiving an undergraduate degree in Nevada are required by State Law to complete a course in Nevada Constitution.

Students are urged to meet English requirements as early as possible in their college studies to avoid serious difficulties in other coursework. Refer to the section on undergraduate admission procedures for specific information regarding application and placement evaluation.

Prerequisites for Major

(8 courses; 30 quarter units)

- ENG 100* Effective College English I (3 quarter units)
Prerequisite: Satisfactory performance on Accuplacer
- ENG 101* Effective College English II (3 quarter units)
Prerequisite: ENG 100
- COM 103* Public Speaking
- ILR 260* Information Literacy
Prerequisite: ENG 100 and ENG 101
- CHE 101* Introductory Chemistry
Recommended Preparation: MTH 204 or MTH 215 or MTH 216A and MTH 216B
- CHE 101A* Introductory Chemistry Lab (1.5 quarter units)
Prerequisite: CHE 101 or CHE 141 for science majors
- HIS 375# Nevada History, Gov't and Cons
Prerequisite: ENG 100 and ENG 101
- MTH 204* Mathematics for Science
Prerequisite: MTH 12A and MTH 12B or Accuplacer test placement

or

- MTH 215* College Algebra & Trigonometry
Prerequisite: Accuplacer test placement evaluation or MTH 12A and MTH 12B

Required for Nevada students only.

* May be used to meet a General Education requirement.

Requirements for Major

(9 courses; 31.5 quarter units)

It is strongly recommended that students complete the BIO 201 - 203A series in numerical sequence: BIO 201 + 201A, 202 + 202A, 203 + 203A.

- PSY 100 Introduction to Psychology
- SOC 100 Principles of Sociology
Prerequisite: ENG 100 and ENG 101
- BIO 201 Human Anatomy & Physiol I
Recommended: Prior completion of: BIO 100, BIO 100A, CHE 101 and CHE 101A or equivalent courses.
- BIO 201A Human Anatomy & Physiol Lab I (1.5 quarter units)
Prerequisite: BIO 201
- BIO 202 Human Anatomy & Physiol II
Recommended: Prior completion of: BIO 201 and BIO 201A, BIO 100 and BIO 100A, CHE 101 and CHE 101A or equivalent courses
- BIO 202A Human Anatomy & Physiol Lab II (1.5 quarter units)
Prerequisite: BIO 202
- BIO 203 Introductory Microbiology
Recommended: Prior completion of: BIO 201 and BIO 201A, BIO 202 and BIO 202A, BIO 100 and BIO 100A, CHE 101 and CHE 101A or equivalent courses
- BIO 203A Introductory Microbiology Lab (1.5 quarter units)
Prerequisite: BIO 203
- BST 322 Intro to Biomedical Statistics

■ BACHELOR OF ARTS

◆ MAJOR IN ENGLISH

Faculty Advisor: John Miller; (714) 429-5146; jmiller@nu.edu
Faculty Advisor: Colin Dickey; (310) 662-2131; cdickey@nu.edu

The Bachelor of Arts in English provides a strong background in the study of English. The program stresses literary analysis, diversity, critical thinking, and written and oral communication skills through a rigorous curriculum of literature, composition, language and linguistics, and communication studies. It is an excellent preparation for careers in teaching, media, advertising, writing, and pub-

lishing; for graduate or professional studies in English, communications, or law; and for advancement in any field in which communication skills are important. Students interested in creative writing may choose the Concentration in Creative Writing.

Note: Students interested in teaching English or Language Arts in middle or secondary schools should consider enrolling in the Single Subject Matter Preparation Program or the major in English with Single Subject Credential.

BA English/MA English and BA English/MFA Creative Writing Transition Programs

Students enrolled in the BA English program who have a cumulative GPA of at least 3.0 and are within six courses of completing the BA program may register for the BA English/MA English or BA English/MFA Creative Writing transition programs. They do so by asking their admission advisor to submit a plan change into the transition program. A complete description of Transition Program requirements can be found in the Policies and Procedures section of this Catalog.

Students in the BA English/MA English transition program may take any one 600-level ENG course (excluding ENG 689 or ENG 699) as an elective within the BA English program. For students in the BA English/MA English transition program, the University will waive one MA English course taken as part of the BA degree if the grade earned is a “B” or higher.

Students in the BA ENG/MFA Creative Writing transition program may take one or two courses from among the following:

- Any 600-level ENG courses (excluding ENG 689 and ENG 699)
- MCW 600, MCW 610 or MCW 635 (note that MCW 635 is an eight week course and should not be taken concurrently with other courses).

For students in the BA English/MFA Creative Writing transition program, the University will waive up to two MFA Creative Writing courses taken as part of the BA degree if the grade earned is a “B” or higher.

No graduate units will be awarded; instead the University will waive the MA English or MCW course taken as part of the BA degree. However, students must still meet the residency requirements for the MA English or MFA Creative Writing programs (40.5 quarter units). Students must apply to and begin the MA English or MFA Creative Writing programs within six months of completing the BA English program.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Knowledgeably discuss the major writers, works, movements, and periods of the British and American literary traditions.
- Evaluate the relationship of marginalized or oppositional voices to the evolution of literary traditions and histories.
- Analyze literary works within their historical and cultural contexts.
- Analyze works of literature in the context of the conventions and histories of their genres.
- Analyze the use and effects of literary and rhetorical features of literary texts.
- Identify major critical approaches to the interpretation literature.
- Compose sophisticated written works of literary analysis, incorporating appropriate close reading, research, and writing skills.

Degree Requirements

To receive the Bachelor of Arts in English degree, students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level, and a minimum 70.5 units of the University General Education requirements. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation. All students receiving an undergraduate degree in Nevada are required by State Law to complete a course in Nevada Constitution.

Preparation for Major

(1 course; 4.5 quarter units)

LIT 100* Introduction to Literature
Prerequisite: ENG 100 and ENG 101

* May be used to meet a General Education requirement.

Additional Preparation for Major in English with Concentration in Creative Writing

(2 courses; 9 quarter units)

Two (2) of the following courses:

ENG 201* Fiction Writing I
Prerequisite: ENG 101

ENG 202* Poetry Writing I
Prerequisite: ENG 101

ENG 203* Screenwriting I
Prerequisite: ENG 101

* May be used to meet a General Education requirement.

Requirements for Major

(9 courses; 40.5 quarter units)

Choose any **four (4)** of the following **five** survey courses:

LIT 311 British Literature I
Prerequisite: LIT 100 and ENG 240

or

LIT 312 British Literature II
Prerequisite: LIT 100 and ENG 240

or

LIT 321 American Literature I
Prerequisite: LIT 100 and ENG 240

or

LIT 322 American Literature II
Prerequisite: LIT 100 and ENG 240

or

LIT 360 Literary Theory
Prerequisite: LIT 100 and ENG 240

and

LIT 338 Shakespeare
Prerequisite: LIT 100 and ENG 240

LIT 365 Contemporary Literary Theory
Prerequisite: ENG 240 and LIT 100

LIT 463 20th Century World Literature
Prerequisite: LIT 100 and ENG 240

Any **one (1)** of the following **three** courses:

LIT 410 African American Literature
Prerequisite: LIT 100 and ENG 240

or

LIT 420 U.S. Latino Literature
Prerequisite: LIT 100 and ENG 240

or

LIT 460 Gender and Literature
Prerequisite: LIT 100 ENG 240 and

and

LIT 498 English Capstone Course
Prerequisite: Satisfactory completion of 8 upper-division LIT courses

Upper-Division Electives for English Major without Creative Writing Concentration

(7 courses; 31.5 quarter units)

Any **two (2)** additional upper-division LIT courses.

and

One (1) of the following courses:

ART 315	Film as Art <i>Prerequisite: ENG 100 and ENG 101</i>
COM 360	Representation in the Media <i>Prerequisite: ENG 100 and ENG 101</i>
COM 385	Interactive Storytelling <i>Prerequisite: ENG 101</i>
ENG 301	Fiction Writing II <i>Prerequisite: ENG 201</i>
ENG 302	Poetry Writing II <i>Prerequisite: ENG 202</i>
ENG 303	Screenwriting II <i>Prerequisite: ENG 203</i>
ENG 310	English Grammar <i>Prerequisite: ENG 101</i>
ENG 350	Fundamentals of Linguistics <i>Prerequisite: ENG 100 and ENG 101</i>
ENG 352	Origins of English <i>Prerequisite: ENG 100 and ENG 101</i>
ENG 375	Nature Writing <i>Prerequisite: ENG 100 and ENG 101</i>

and

Any **four (4)** additional Upper-Division courses in the College of Letters and Sciences.

▲ Concentration in Creative Writing

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Discuss the basic conventions of at least two different contemporary creative genres.
- Produce completed works of publishable quality in those genres.
- Read their own work critically and employ revision strategies to improve it to publishable standards.
- Critique the writing of others in a collegial setting and offer constructive suggestions for improving it to publishable quality.
- Produce a significant project of publishable quality in one genre.

Concentration Requirements

(8 courses; 36 quarter units)

Two (2) of the following courses:

ENG 301	Fiction Writing II <i>Prerequisite: ENG 201</i>
ENG 302	Poetry Writing II <i>Prerequisite: ENG 202</i>
ENG 303	Screenwriting II <i>Prerequisite: ENG 203</i>
ENG 375	Nature Writing <i>Prerequisite: ENG 100 and ENG 101</i>

and

One (1) of the following courses:

ENG 401	Fiction Workshop <i>Prerequisite: ENG 301</i>
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ENG 402	Poetry Workshop <i>Prerequisite: ENG 302</i>
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ENG 403	Screenwriting Workshop <i>Prerequisite: ENG 303</i>
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and

One (1) of the following courses:

LIT 401	Contemporary Fiction <i>Prerequisite: ENG 240 and LIT 100</i>
LIT 402	Contemporary Poetry <i>Prerequisite: ENG 240 and LIT 100</i>

and

Any **two (2)** additional Upper-Division LIT courses.

and

Any **two (2)** additional Upper-Division courses in the College of Letters and Sciences.

◆ MAJOR IN ENGLISH WITH A PRELIMINARY SINGLE SUBJECT TEACHING CREDENTIAL (CALIFORNIA) 1²

Faculty Advisor: Patricia Dickenson; (408) 236-1136; pdickenson@nu.edu
Faculty Advisor: John Miller; (949) 733-0632; jmiller@nu.edu

The Bachelor of Arts in English with a Preliminary Single Subject Credential provides a rigorous education that prepares candidates for a career as a teacher of English at the middle and secondary school levels. The program stresses literary analysis, diversity, and critical thinking and written and oral communication skills through a rigorous curriculum of literature, composition, language and linguistics, and communication studies. This program prepares candidates for professional work as single subject teachers in a changing cultural and economic environment.

For additional information on credential requirements, please see the Sanford College of Education Credential Information section of the catalog.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Knowledgeably discuss major writers, works, movements, and periods of the British and American literary traditions.
- Evaluate the relationship of marginalized or oppositional voices to the evolution of literary traditions and histories.
- Analyze literary works within their historical and cultural contexts.
- Analyze works of literature in the context of the conventions and histories of their genres.
- Analyze the use and effects of literary and rhetorical features of literary texts.
- Identify major critical approaches to the interpretation of literature.
- Compose sophisticated written works of literary analysis, incorporating appropriate close reading, research, and writing skills.
- Apply educational technology to meet the needs of all learners.
- Explain how to support growth in cognitive, social, physical and emotional domains.
- Create positive learning environments that ensure healthy human growth.
- Utilize systematic observations, documentation, and other assessment strategies to facilitate and account for learning and to support positive growth.
- Design, implement, and evaluate standards-based lesson plans for learning and achievement in content areas.
- Demonstrate professional standards and ethics.
- Utilize different teaching strategies to accomplish teaching and learning goals.

Degree Requirements

To receive a Bachelor of Arts in English with a Single Subject Teaching Credential, candidates must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which

must be completed at the upper-division level, and a minimum of 70.5 units of the University General Education. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements. All students receiving an undergraduate degree in Nevada are required by State Law to complete a course in Nevada Constitution.

Preparation for Major

(1 course; 4.5 quarter units)

LIT 100* Introduction to Literature
Prerequisite: ENG 100 and ENG 101

* May also be used to satisfy General Education requirement.

Requirements for Major

(25 courses; 108 quarter units)

English Requirements

(11 courses; 49.5 quarter units)

Any **four (4)** of the following **five** survey courses:

LIT 311 British Literature I
Prerequisite: ENG 240 and LIT 100

LIT 312 British Literature II
Prerequisite: ENG 240 and LIT 100

LIT 321 American Literature I
Prerequisite: ENG 240 and LIT 100

LIT 322 American Literature II
Prerequisite: ENG 240 and LIT 100

LIT 360 Literary Theory
Prerequisite: ENG 240 and LIT 100

and

Any **one (1)** of the following **three** courses:

LIT 410 African American Literature
Prerequisite: ENG 240 and LIT 100

LIT 420 U.S. Latino Literature
Prerequisite: ENG 240 and LIT 100

LIT 460 Gender and Literature
Prerequisite: ENG 240 and LIT 100

and

ENG 350 Fundamentals of Linguistics
Prerequisite: ENG 100 and ENG 101

LIT 338 Shakespeare
Prerequisite: ENG 240 and LIT 100

LIT 365 Contemporary Literary Theory
Prerequisite: ENG 240 and LIT 100

LIT 463 20th Century World Literature
Prerequisite: ENG 240 and LIT 100

LIT 498 English Capstone Course
Prerequisite: Satisfactory completion of 8 upper-division LIT courses

and

Any **one (1)** additional upper-Division Literature (LIT) course from available offerings.

Education Orientation, Theory and Methodology Requirements

(8 courses; 36 quarter units)

Students must complete TED 305 prior to TPA 1. All Teacher Education (TED) courses include a field experience component. It is strongly recommended students take the following courses in the order they are listed.

TED 305 Teaching as a Profession

TED 300 Fundamentals of Education
Prerequisite: TED 320 or TED 305 or TED 306

TED 430 Special Needs Students
Prerequisite: TED 305 or TED 320 or TED 306

TED 410 Survey of Multicultural Lit.
Prerequisite: TED 305 or TED 320 or TED 306

TED 310 Development and Learning
Prerequisite: TED 305 or TED 320 or TED 306

TED 420 Diversity in Schooling
Prerequisite: TED 305 or TED 320

TED 330B Reading and Language Arts
Prerequisite: TED 305 or TED 320

TED 450 Methods of Teaching English
Prerequisite: TED 305 or TED 320

Student Teaching Requirements

(4 courses; 13.5 quarter units)

TED 530A, 530B, 531A and 531B are field experience courses receiving a Satisfactory or Unsatisfactory grade and are not factored into cumulative GPA.

TED 530A Student Teaching I
Corequisite: TED 531A

TED 530B Student Teaching II
Prerequisite: TED 530A, Corequisite: TED 531B

TED 531A Student Teaching Seminar I (2.25 quarter units)
Corequisite: TED 530A

TED 531B Student Teaching Seminar II (2.25 quarter units)
Prerequisite: TED 530A with a minimum grade of S, and TED 531A with a minimum grade of S and Corequisite: TED 530B

Additional Courses for Satisfying SB2042 and CTC for California Teaching Credential

(2 courses; 9 quarter units)

Students must have senior standing to enroll in these two classes. The classes are considered graduate level. The grades earned must be a "B" or better. These courses will not transfer to any graduate level program (at National University or elsewhere).

EDX 6001X Computer Tech in Classroom

HEDX 2301X Intro Health Ed: K-12

♦ MAJOR IN ENGLISH WITH SINGLE-SUBJECT MATTER PREPARATION

Faculty Advisor: John Miller; (714) 429-5146; jmiller@nu.edu

The major in English with Single Subject Matter Preparation is designed to prepare students for careers teaching middle or secondary school English or language arts. The program is approved by the California Commission on Teacher Credentialing. Students, who complete this program, including the required portfolio, will not be required to take the California Subject Examination for Teachers (CSET) in English to receive their teaching credential. To fulfill the Single Subject Matter Preparation standards mandated by the state of California, the program requires additional study in certain areas beyond what is required by the regular major in English. In order to receive the equivalency letter, students must also submit a portfolio of work produced in program courses; the requirements of the portfolio are covered in ENG 300.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Knowledgeably discuss major writers, works, movements, and periods of the British and American literary traditions.
- Evaluate the relationship of marginalized or oppositional voices to the evolution of literary traditions and histories.
- Analyze literary works within their historical and cultural contexts.
- Analyze works of literature in the context of the conventions and histories of their genres.
- Analyze the use and effects of literary and rhetorical features of literary texts.
- Identify major critical approaches to the interpretation of works of literature.

- Compose sophisticated written works of literary analysis, incorporating appropriate close reading, research, and writing skills.
- Analyze popular media texts and their effects on consumers.
- Identify issues and challenges confronting middle and secondary school English teachers in the public schools.
- Discuss language structures, language acquisition, linguistic diversity and the development of literacy.

Degree Requirements

To receive a Bachelor of Arts in English with Single-Subject Matter Preparation candidates must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level, and a minimum 70.5 units of the University General Education requirements. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements. All students receiving an undergraduate degree in Nevada are required by State Law to complete a course in Nevada Constitution.

Preparation for Major

(5 courses; 22.5 quarter units)

- COM 103* Public Speaking
- ILR 260* Information Literacy
Prerequisite: ENG 100 and ENG 101
- LIT 100* Introduction to Literature
Prerequisite: ENG 100 and ENG 101
- THR 200* Theater Arts
- ENG 201* Fiction Writing I
Prerequisite: ENG 101

or

- ENG 202* Poetry Writing I
Prerequisite: ENG 101

or

- ENG 203* Screenwriting I
Prerequisite: ENG 101

* May be used to meet a General Education requirement.

Requirements for Major

(14 courses; 63 quarter units)

Note: ENG 300 should be taken as early in the student's program as possible; it requires a 31.5 hour observation in the public schools.

- COM 360 Representation in the Media
Prerequisite: ENG 100 and ENG 101
- ENG 300 English Practicum & Portfolio
- ENG 350 Fundamentals of Linguistics
Prerequisite: ENG 100 and ENG 101
- LIT 311 British Literature I
Prerequisite: ENG 240 and LIT 100
- LIT 312 British Literature II
Prerequisite: ENG 240 and LIT 100
- LIT 321 American Literature I
Prerequisite: ENG 240 and LIT 100
- LIT 322 American Literature II
Prerequisite: ENG 240 and LIT 100
- LIT 338 Shakespeare
Prerequisite: ENG 240 and LIT 100
- LIT 345 Mythology
Prerequisite: ENG 240 and LIT 100
- LIT 365 Contemporary Literary Theory
Prerequisite: ENG 240 and LIT 100
- LIT 463 20th Century World Literature
Prerequisite: ENG 240 and LIT 100

Any **one (1)** of the following courses:

- LIT 410 African American Literature
Prerequisite: LIT 100 and ENG 240
- LIT 420 U.S. Latino Literature
Prerequisite: LIT 100 and ENG 240
- LIT 460 Gender and Literature
Prerequisite: ENG 240 and LIT 100

and

- LIT 498 English Capstone Course
Prerequisite: Satisfactory completion of 8 upper-division LIT courses

and

Choose any **one (1)** additional upper-division Literature (LIT) course from available offerings.

Upper-Division Elective

(1 course; 4.5 quarter units)

Students can use any upper-division course in the College of Letters and Sciences to fulfill the Upper-Division Elective Requirement.

Portfolio Requirement

In order to receive the Single Subject Matter Preparation equivalency letter, all students must submit a portfolio of work completed in program classes.

Note: The portfolio is not a graduation requirement. The specific requirements of this portfolio are discussed in ENG 300. The portfolio itself is submitted upon completion of the program. Students who have completed required program coursework at other colleges or universities will need to submit work from those courses or eligible substitutions. Students or prospective students with questions about this requirement should contact the program Faculty Advisor.

◆ MAJOR IN GENERAL STUDIES

Faculty Advisor: Carl Boggs; (310) 826-0671; cboggs@nu.edu

The Bachelor of Arts in General Studies (BAGS) is designed to meet the needs of a growing number of students who have completed considerable study in diverse subject areas, both academic and applied. This program allows students to organize their varied explorations into a coherent degree program. The BAGS is unique among academic curricula, for it liberates students from the burden of repeating coursework in order to fulfill traditional degree requirements. The degree allows students to explore a wide variety of disciplines. It integrates both applied study (e.g., business, law, computer science, leadership) and arts and sciences to an extent not currently available in other degree programs. This is particularly important for adults who often interrupt their studies for prolonged periods and return with a different academic focus and career goal. The general studies degree allows nontraditional learners to continue moving forward without retracing a considerable portion of their study.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate critical thinking abilities on scholarly discourses within a specific range of disciplines.
- Demonstrate the ability with parenthetical citations within texts and other references.
- Develop oral and written communication skills.
- Demonstrate consistent proficiency with the mechanics of academic writing.
- Explain the role of education in occupational choices.
- Discuss ethical issues involved in research and academic writing.

Degree Requirements

To receive a Bachelor of Arts in General Studies degree, students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level, and a minimum 70.5 units of the University General Education requirements. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific

degree requirements. All students receiving an undergraduate degree in Nevada are required by State Law to complete a course in Nevada Constitution.

In addition to the above general education requirements, two depth areas are required. A depth area for the General Studies degree program is defined as 22.5 upper-division quarter units in a given discipline. The first depth area requirement is fulfilled by acquiring 22.5 upper-division quarter units in an Arts and Sciences discipline such as natural sciences, mathematics, literature, history, or social science. For example: If a student was pursuing a literature depth area, they would need five courses with a Literature prefix. The second depth area requirement is fulfilled by completing 22.5 upper-division quarter units in either a single Applied Studies or Arts and Science discipline. If a student selects the second depth area in the Applied Studies discipline, such as management, law, accounting, or marketing, all five courses must have the same prefix such as MGT if the management discipline was selected. However students do have the option of selecting a second depth area in Arts and Sciences rather than Applied Studies. If a second depth area in Arts and Sciences is selected, then students have the option of choosing five courses from various disciplines within the Arts and Sciences area. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation.

Requirements for Major

(13 courses; 58.5 quarter units)

BGS 301 Intro. to General Studies

BGS 385 Methods of Research

Prerequisite: BGS 301 and four additional courses from the major

Depth Area Requirement

(10 courses; 45 quarter units)

Each student in the BAGS program is required to complete two depth area requirements of 22.5 upper-division quarter units each. Students can choose from a variety of subject areas to satisfy the Arts and Sciences depth area requirements. These courses could be used alone or in combination with courses taken at other institutions.

Listed below are examples of subject areas that can be used to fulfill a depth area requirement:

Arts and Sciences

(5 courses; 22.5 quarter units)

- Literature
- Environmental Studies
- Fine and Performing Arts (including Art and Music)
- History
- Social Sciences (including Sociology and Political Science)
- Psychology
- Spanish
- Arabic
- Persian
- Chinese
- Natural Sciences
- Communication
- Global Studies
- Human Behavior
- Philosophy

Applied Study

(5 courses; 22.5 quarter units)

Students can also use courses from the listed areas to satisfy the depth area requirement in Applied Study. These courses could be used on their own or in combination with related courses at other institutions.

- Law
- Management

- Economics
- Accounting
- Information Technology Management
- Criminal Justice Administration
- Marketing
- Public Administration
- Leadership
- Finance

Capstone Requirement

(1 course; 4.5 quarter units)

BGS 499 Capstone Project

Prerequisite: Completion of other major requirements. Must be taken within last three classes prior to graduation.

Upper-Division Electives

(3 courses; 13.5 quarter units)

To fulfill their unit requirements, students can choose electives from any 300, 400, or 500 level courses for which they meet prerequisites.

◆ MAJOR IN GLOBAL STUDIES

Faculty Advisor: Raphi Rechitsky; (858) 642-8775; rrechitski@nu.edu

Offered only online, the Bachelor of Arts in Global Studies degree program provides a flexible integration of skills and competencies that prepares students for a variety of careers as well as graduate studies in international relations, development, education, social science, immigration, law and government and non-governmental sectors. In short, the program provides students with the ability to think locally and act globally.

The global environment in which economics, culture, and technology converge is diverse, changing, complex and interdependent. By combining course work from multiple disciplines, this program provides a framework to understand and effectively negotiate global realities, whether they are economic, political, cultural, or ecological. The program encourages students to apply cultural understanding and explore and develop potential markets for their ideas and talent. Students in this program learn to use global communications and information technologies to conduct and present research. Global Studies majors become knowledgeable in the cultures and practices of the world's communities. Graduates understand the roles that ecology, gender, race, class, religion, and ethnicity play in cultural environments and apply their understanding to everyday interactions among diverse cultures. Graduates also produce a portfolio that enables them to integrate the skills they have acquired and apply them in a culminating project to the solution of a real world problem. This portfolio, which graduates post on a website of their own design, includes course projects and the full-length culminating project.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Analyze issues as they impact the global environment.
- Explain the varied experiences of different social groups interacting with the global economy over the past several hundred years.
- Analyze a global problem such as poverty, hunger, the spread of disease, or environmental degradation from several disciplinary perspectives.
- Evaluate scholarship on globalization for its veracity and reliability.
- Describe the relationships between economic and cultural change in regions of the globe.
- Describe the relationships between economic changes and processes of nation-state formation over the last several hundred years.
- Synthesize theoretical perspectives and empirical data into a coherent argument.

Degree Requirements

To obtain a Bachelor of Arts in Global Studies, students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level, and a minimum 70.5 University General Education requirements. In the absence of transfer credit, additional general electives may be necessary

to satisfy total units for the degree. The following courses are specific degree requirements. Students should refer to the section on undergraduate admission procedures for specific information regarding admission and evaluation. All students receiving an undergraduate degree in Nevada are required by State Law to complete a course in Nevada Constitution.

If the foreign language requirement is not completed in General Education, the equivalent must be completed as preparation for the Global Studies major either by testing or by satisfactorily passing two courses in one of the following languages: Arabic, Chinese, French, German, Japanese, Portuguese, Russian, or Spanish. Other languages are acceptable upon approval of the director of the program. If a student opts to take the elective course GLS 440, Study Abroad, or IBU International Experience, additional fees, waivers, passports, visas, immunizations and other requirements may need to be fulfilled depending on the destination. It is the student's responsibility to find out about these additional requirements and to meet them.

Preparation for Major

(2 courses; 9 quarter units)

GLS 150*	Global Issues and Trends
HIS 234*	World Civilizations II <i>Prerequisite: ENG 100 and ENG 101</i>

* May be used to meet a General Education requirement.

Requirements for Major

(10 courses; 45 quarter units)

HIS 320	Culture of Global Capitalism <i>Prerequisite: ENG 100 and ENG 101</i>
SCI 300	Geography
PHL 320	World Religions <i>Prerequisite: ENG 100 and ENG 101</i>
POL 350	International Relations <i>Prerequisite: ENG 100 and ENG 101</i>
LIT 463	20th Century World Literature <i>Prerequisite: ENG 240 and LIT 100</i>
GLS 410	Gender and Global Society <i>Prerequisite: ENG 240</i>
GLS 420	Ecological Revolutions <i>Prerequisite: ENG 240</i>
GLS 430	The Global Economy <i>Prerequisite: ENG 240</i>
COM 385	Interactive Storytelling <i>Prerequisite: ENG 101</i>
GLS 499	Seminar and Portfolio Project <i>Prerequisite: ENG 240</i>

Upper-Division Electives

(6 courses; 27 quarter units)

ART 329	World Art <i>Prerequisite: ENG 100 and ENG 101</i>
GLS 310	Global Communications <i>Prerequisite: ENG 240</i>
GLS 330	Film in a Global Context <i>Prerequisite: ENG 240</i>
GLS 440	Study Abroad <i>Prerequisite: HIS 320</i>
IBU 540	International Experience
HIS 325	Modern World Migration <i>Prerequisite: ENG 100 and ENG 101</i>
HIS 434	Modern World, 1500 to Present <i>Prerequisite: ENG 100, ENG 101 and HIS 234</i>
MUS 327	World Music <i>Prerequisite: ENG 100 and ENG 101</i>

PHL 375	Environmental Ethics <i>Prerequisite: ENG 100 and ENG 101</i>
SOC 328	Intercultural Thinking <i>Prerequisite: ENG 100 and ENG 101</i>
POL 320	Politics of Social Movements <i>Prerequisite: ENG 100 and ENG 101</i>
POL 340	Comparative Politics <i>Prerequisite: ENG 100 and ENG 101</i>
EES 335	Environmental Science
COH 422	Global Health Promotion <i>Prerequisite: COH 401</i>
MKT 430	Intro to Global Marketing <i>Prerequisite: MKT 302A</i>

◆ MAJOR IN HISTORY

Faculty Advisor: Daniel Thorburn; (209) 475-1443; dthorbur@nu.edu

The Bachelor of Arts in History is a broad-based program that has specific goals including:

1. Engaging the mind and imagination of those who study history
2. Introducing students to worlds, times, places, and cultures—including their own—in ways they have never before considered
3. Promoting the acquisition of historical knowledge and critical thinking, reading, writing, and research skills.

Upon successful completion of the undergraduate history major, students should be able to demonstrate competency in the vital skills of historical explanation, discernment, and synthesis.

The study of the past broadens our perspective and allows us to discover the essential elements of human existence. The term historian covers a broad range of career options and job settings. In general, historians study, assess, and interpret the past to determine what happened and why. They examine court documents, diaries, letters, and newspaper accounts; they conduct research, write, teach, evaluate, and make recommendations. They interview individuals and study artifacts and archaeological evidence.

In addition to providing experience in logical argumentation, history courses offer research, writing, and analytical skills necessary for many fulfilling careers. Graduates with a degree in history often become educators themselves and teach in elementary schools, secondary schools, or in postsecondary institutions. Beyond teaching, historians also work as researchers in museums and local historical organizations that deal with cultural resources management and historic preservation and make valuable contributions to government and private think tanks. A history degree is excellent preparation for journalists, ad writers, editors and anyone interested in producing multimedia materials and documentaries. Historians have rewarding careers as information managers such as archivists, records managers, and librarians. Finally, training in history creates a strong intellectual foundation for people interested in advocacy such as lawyers and paralegals, litigation support, legislative staff work, and nonprofit foundations. Positions that attract history majors will likely require some of the following qualifications beyond the Bachelor of Arts in History: experience, extensive knowledge of a particular time period or region, and specialized writing and research skills.

BA History/MA History Transition Program

Students currently enrolled in the BA History program who have a cumulative GPA of at least 3.0 and are within six courses of completion of the BA program may register for the BA History/MA History transition program. They do so by asking their advisor to submit a plan change into the transition program, allowing them to take one MA History class as an elective during the BA History program. Students may choose any 600-level History course with the exception of HIS 600, HIS 692, HIS 695, HIS 696, HIS 697, HIS 698 or HIS 699. A complete description of Transition Program requirements can be found in the Policies and Procedures section of this Catalog.

For students in the BA History/MA History transition program, the University will waive one Master of Arts in History course taken as part of the bachelor's degree if the grade earned is a "B" or higher. No graduate units will be awarded; instead the University will waive the MA history course taken as part of the bachelor's degree. However, these students must still meet the residency requirements for

the Master of Arts in History program. Students must apply to and begin the MA in History program within six months of completing the BA in History program.

Students interested in the transition program to the MA History can have their advisor apply to the program's Faculty Advisor for a waiver of the HIS 600 prerequisite requirement for the transition class the student chooses. The Faculty Advisor will grant such waivers. Once students have completed the transition program and are matriculated into the MA History program, they will need to take HIS 600 as their initial course in the MA History program since it will be enforced as the prerequisite to all other courses in the program.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate knowledge of World History.
- Demonstrate knowledge of U.S. History.
- Analyze a variety of primary sources.
- Analyze secondary sources for their argument and use of supporting evidence, including how the argument may be influenced by the incompleteness of evidence or by biases that are part of surviving evidence.
- Discuss current concerns, new theories, new evidence and issues that shape the history of historical interpretation.
- Conduct historical research and support with appropriate primary and secondary source materials.

Degree Requirements

To receive a Bachelor of Arts with a Major in History, students must complete at least 180 quarter units as listed below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level and a minimum 70.5 units of the University General Education requirements. The following courses are degree requirements. In absence of transfer credit, additional general electives may be necessary to satisfy the total units required for the degree. Students should refer to the section on undergraduate admission procedures for specific information regarding admission and evaluation. All students receiving an undergraduate degree in Nevada are required by State Law to complete a course in Nevada Constitution.

If the foreign language requirement is not completed in General Education, the equivalent must be completed as preparation for the History major either by testing or by satisfactorily passing two courses in one of the following languages: Arabic, Chinese, French, German, Japanese, Portuguese, Russian, or Spanish. Other languages are acceptable upon approval of the director of the program.

Preparation for Major

(5 courses; 22.5 quarter units)

ENG 240*	Advanced Composition <i>Prerequisite: ENG 100 and ENG 101</i>
HIS 220A*+	United States History I <i>Prerequisite: ENG 100 and ENG 101</i>
HIS 220B*+	United States History II <i>Prerequisite: ENG 100 and ENG 101</i>
HIS 233*	World Civilizations I <i>Prerequisite: ENG 100 and ENG 101</i>
HIS 234*	World Civilizations II <i>Prerequisite: ENG 100 and ENG 101</i>

* May be used to satisfy general education requirements.

+ Diversity Enriched Offering.

Required for Major

(10 courses; 45 quarter units)

HIS 431	The Ancient World <i>Prerequisite: ENG 100, ENG 101 and HIS 233</i>
HIS 432	The Classical World <i>Prerequisite: ENG 100, ENG 101 and HIS 233</i>
HIS 433	The Post-Classical World <i>Prerequisite: ENG 100, ENG 101 and HIS 233</i>

HIS 434	Modern World, 1500 to Present <i>Prerequisite: ENG 100, ENG 101 and HIS 234</i>
HIS 400	Historical Theories & Methods <i>Prerequisite: ENG 240</i>
HIS 360	American Colonial Experience <i>Prerequisite: ENG 100, ENG 101 and HIS 220A</i>
HIS 361	Making and Sundering of Union <i>Prerequisite: ENG 100, ENG 101 and HIS 220A</i>
HIS 362	U.S. Between Wars, 1865-1917 <i>Prerequisite: ENG 100, ENG 101 and HIS 220B</i>
HIS 363	U.S. Since World War I <i>Prerequisite: ENG 100, ENG 101 and HIS 220B</i>
HIS 499	Capstone Research Project <i>Prerequisite: ENG 240 or equivalent, HIS 400 and completion of 31.5 quarter units of core courses in the major</i>

Upper-Division Electives

(6 courses; 27 quarter units)

Students must complete a minimum of 27 quarter units of electives to fulfill the upper-division unit requirements to earn the Bachelor of Arts in History. Students can select from the following strongly recommended and recommended electives OR choose from any upper-division course in the College of Letters and Sciences. Three elective courses must be in the History program (HIS). To ensure adequate preparation for the California State Examination for Teachers (CSET), students who wish to become middle-school and high-school history teachers in California should take all of their electives from the strongly recommended list.

Strongly Recommended

HIS 320	Culture of Global Capitalism <i>Prerequisite: ENG 100 and ENG 101</i>
SOC 350	Cultural Diversity <i>Prerequisite: ENG 100 and ENG 101</i>
HIS 410	California History <i>Prerequisite: ENG 100 and ENG 101</i>
PHL 320	World Religions <i>Prerequisite: ENG 100 and ENG 101</i>
POL 540	American Political System
SCI 300	Geography

Recommended

GLS 410	Gender and Global Society <i>Prerequisite: ENG 240</i>
GLS 420	Ecological Revolutions <i>Prerequisite: ENG 240</i>
GLS 430	The Global Economy <i>Prerequisite: ENG 240</i>
HIS 300	Roots of Western Civilization <i>Prerequisite: ENG 100 and ENG 101</i>
HIS 325	Modern World Migration <i>Prerequisite: ENG 100 and ENG 101</i>
HIS 339	The Middle East, 600-1600 C.E. <i>Prerequisite: ENG 100 and ENG 101</i>
HIS 341	History Through Theater <i>Prerequisite: ENG 100 and ENG 101</i>
HIS 342	History of Modern Middle East <i>Prerequisite: ENG 100 and ENG 101</i>
HIS 345	Latin American Studies <i>Prerequisite: ENG 100 and ENG 101</i>
HIS 346	Chinese History and Culture I <i>Prerequisite: ENG 100 and ENG 101</i>
HIS 348	Asian Studies <i>Prerequisite: ENG 100 and ENG 101</i>

HIS 349	African Studies <i>Prerequisite: ENG 100 and ENG 101</i>
HIS 355	Chinese History and Culture II <i>Prerequisite: ENG 100 and ENG 101</i>
HIS 370	History of the American S/W <i>Prerequisite: ENG 100 and ENG 101</i>
HIS 490	Guided Study (variable units)
MUS 326	American Music <i>Prerequisite: ENG 100 and ENG 101</i>
SOC 325	Popular Culture <i>Prerequisite: ENG 100 and ENG 101</i>
SOC 328	Intercultural Thinking <i>Prerequisite: ENG 100 and ENG 101</i>
SOC 336	American Film and Society <i>Prerequisite: ENG 100 and ENG 101</i>
GLS 310	Global Communications <i>Prerequisite: ENG 240</i>
GLS 330	Film in a Global Context <i>Prerequisite: ENG 240</i>
GLS 440	Study Abroad <i>Prerequisite: HIS 320</i>

◆ MAJOR IN INTEGRATIVE PSYCHOLOGY

Faculty Advisor: Brenda Shook; (916) 855-4108; bshook@nu.edu

The Bachelor of Arts in Integrative Psychology offers a complementary alternative to the traditional science-based psychology major and focuses on subjective human experience and the human condition. Subjective human experience is viewed as a reflection of people's values, emotions, inter- and intrapersonal relationships, and relationships between people and their physical and spiritual world. Courses focus on the whole person by developing knowledge and skills integral to health and growth, such as self-reflection, consciousness, and creativity, through existential-humanistic, phenomenological, transpersonal, and scientific perspectives. This major is aimed towards students who wish to work in their local and/or global community, to bring back to their world what it means to be human, and to increase acceptance and responsibility for their lives, the life of others, and the planet. Graduates of this program are well prepared to pursue advanced study. Students are also equipped to pursue careers in local and global communities where they can serve diverse populations and effect change in meaningful ways.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Articulate an understanding of human experience using major theories, concepts, and historical trends in psychology.
- Explain the dynamic relationships among nature, health, and humanity.
- Examine cultural and spiritual practices that influence self-awareness and well-being.
- Evaluate sociocultural contributions to personal growth, expression, and knowledge.
- Demonstrate skills in multiple modes of communication, presentations and projects utilizing different literary and methodological formats.
- Exhibit original learning by gathering and critically evaluating information using current technologies.
- Apply one's knowledge using holistic approaches to solve a real-world problem.

Degree Requirements

To receive a Bachelor of Arts in Integrative Psychology degree, students must complete at least 180 quarter units as articulated below, 76.5 units of which must be completed at the upper-division level, 45 units which must be completed in residence at National University and a minimum 70.5 units of the University General Education requirements. The following courses are specific degree requirements. In the absence of transfer credit, students may need to take additional general electives to satisfy the total units for the degree. Students should refer to the section on undergraduate admission procedures for specific information on admis-

sion and evaluation. All students receiving an undergraduate degree in Nevada are required by State Law to complete a course in Nevada Constitution.

Preparation for Major

(3 courses; 13.5 quarter units)

PSY 100*	Introduction to Psychology
MTH 210*	Probability and Statistics <i>Prerequisite: Accuplacer test placement evaluation or MTH 12A and MTH 12B</i>
COM 324	Critical Thinking and Ethics <i>Prerequisite: ENG 101</i>

Requirements for Major

(10 courses; 45 quarter units)

PSY 426	History & Philosophy of Psych <i>Prerequisite: ENG 100, ENG 101 and PSY 100</i>
PSY 466	Personal Growth & Development <i>Prerequisite: ENG 100 and ENG 101</i>
PSY 467	Multicultural Mental Health <i>Prerequisite: ENG 100 and ENG 101</i>
PSY 468	Spirituality and Global Health <i>Prerequisite: ENG 100 with a minimum grade of C and ENG 101 with a minimum grade of C</i>
PSY 470	Qualitative Analysis <i>Prerequisite: ENG 100 and ENG 101</i>
PSY 471	Intimate Relationships <i>Prerequisite: ENG 100 and ENG 101</i>
PSY 472	Social Construction <i>Prerequisite: ENG 100 and ENG 101</i>
PSY 473	Somatic Psychology <i>Prerequisite: ENG 100 and ENG 101</i>
PSY 474	Ecopsychology <i>Prerequisite: ENG 100 and ENG 101</i>
PSY 484	Senior Project <i>Prerequisite: ENG 100, ENG 101 and completion of all core courses</i>

Elective Area 1

(4 courses; 18 quarter units)

Students must select **four (4)** courses from **Area 1**.

PSY 441	Global Psychology <i>Prerequisite: PSY 100</i>
PSY 455	Psychology of Bereavement <i>Prerequisite: ENG 100, ENG 101 and PSY 100</i>
PSY 458	Health Psychology <i>Prerequisite: ENG 100, ENG 101 and PSY 100</i>
PSY 475	Psychology of Consciousness <i>Prerequisite: ENG 100 and ENG 101</i>
PSY 476	Symbolic Expression <i>Prerequisite: ENG 100 and ENG 101</i>
PSY 477	Play

Elective Area 2

(1 course; 4.5 quarter units)

Students must select **one (1)** course from **Area 2**.

ART 329	World Art <i>Prerequisite: ENG 100 and ENG 101</i>
MUS 327	World Music <i>Prerequisite: ENG 100 and ENG 101</i>
PHL 320	World Religions <i>Prerequisite: ENG 100 and ENG 101</i>

Elective Area 3

(1 course; 4.5 quarter units)

Students must select **one (1)** course from **Area 3**.

COM 305 Intercultural Communication
Prerequisite: ENG 101

COM 385 Interactive Storytelling
Prerequisite: ENG 101

GLS 310 Global Communications
Prerequisite: ENG 240

GLS 410 Gender and Global Society
Prerequisite: ENG 240

◆ MAJOR IN INTERDISCIPLINARY STUDIES

Faculty Advisor: Joshua Olsberg; (559) 256-4908; jolsberg@nu.edu

The Bachelor of Arts in Interdisciplinary Studies (BAIS) provides a broad, rigorous education that introduces students to essential knowledge, and connections across the disciplines and application of knowledge to life beyond the University. This degree gives students an enriched and provocative curriculum that prepares them for professional work in a changing cultural and economic environment.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate an understanding of interdisciplinary theory and the practice of critical thinking for the collection, validation, analysis, and synthesis of historical data and new information.
- Explain the integration of knowledge in a global context and engage in collaborative research across disciplines.
- Identify and appreciate the cultural perspectives of world views.
- Use information communication technology for knowledge sharing and the interdisciplinary approach.
- Demonstrate a deep and flexible understanding of subject matter.

Degree Requirements

To receive a Bachelor of Arts degree with a major in Interdisciplinary Studies, students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level and a minimum 70.5 units of the University General Education requirements. The following courses are specific degree requirements. If students intend to complete a teacher credentialing program, these courses will help prepare for the MSAT and Basic Skills requirement tests. In the absence of transfer credit, students may need to take additional general electives to satisfy the total units for the degree. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation. All students receiving an undergraduate degree in Nevada are required by State Law to complete a course in Nevada Constitution.

Preparation for Major

(3 courses; 13.5 quarter units)

ENG 310 English Grammar
Prerequisite: ENG 101

or

ENG 375* Nature Writing
Prerequisite: ENG 100 and ENG 101

HIS 220A*+ United States History I
Prerequisite: ENG 100 and ENG 101

or

HIS 220B*+ United States History II
Prerequisite: ENG 100 and ENG 101

LIT 100* Introduction to Literature
Prerequisite: ENG 100 and ENG 101

* May be used to meet a General Education requirement.

+ Diversity Enriched Offering.

Requirements for Major

(13 courses; 58.5 quarter units)

COM 380 Democracy in the Info. Age
Prerequisite: ENG 100 and ENG 101

SOC 336 American Film and Society
Prerequisite: ENG 100 and ENG 101

or

SOC 350 Cultural Diversity
Prerequisite: ENG 100 and ENG 101

BIS 301 Intro to Interdisc. Studies

BIS 401 Interdisciplinary Practice: In
Prerequisite: BIS 301 and four additional courses from the major

4.5 quarter units in literature (LIT) are required. The following courses are recommended:

LIT 321 American Literature I
Prerequisite: ENG 240 and LIT 100

LIT 322 American Literature II
Prerequisite: ENG 240 and LIT 100

LIT 338 Shakespeare
Prerequisite: ENG 240 and LIT 100

LIT 345 Mythology
Prerequisite: ENG 240 and LIT 100

LIT 446 Studies in Poetry
Prerequisite: ENG 240 and LIT 100

LIT 450 Studies in the Novel
Prerequisite: ENG 240 and LIT 100

LIT 460 Gender and Literature
Prerequisite: ENG 240 and LIT 100

4.5 quarter units in social sciences (HIS, POL, SOC) are required. The following courses are recommended:

HIS 320 Culture of Global Capitalism
Prerequisite: ENG 100 and ENG 101

HIS 341 History Through Theater
Prerequisite: ENG 100 and ENG 101

HIS 410 California History
Prerequisite: ENG 100 and ENG 101

SOC 325 Popular Culture
Prerequisite: ENG 100 and ENG 101

SOC 344 Marriage, Sex and the Family
Prerequisite: ENG 100 and ENG 101

SOC 430 Culture, Technology & Society
Prerequisite: ENG 100 and ENG 101

SOC 445 Contemporary Social Problems
Prerequisite: ENG 100 and ENG 101

SOC 540 Power and Social Change
Prerequisite: ENG 100 and ENG 101

4.5 quarter units in behavioral sciences (HUB, PSY) are required. The following courses are recommended:

HUB 420 Human Communication
Prerequisite: ENG 100, ENG 101 and PSY 100

HUB 440 Organizational Development
Prerequisite: ENG 100, ENG 101 and PSY 100

PSY 426 History & Philosophy of Psych
Prerequisite: ENG 100, ENG 101 and PSY 100

PSY 427 Biological Psychology
Prerequisite: ENG 100, ENG 101 and PSY 100

PSY 428 Developmental Psychology
Prerequisite: ENG 100, ENG 101 and PSY 100

- PSY 429 Intro to Personality Theory
Prerequisite: ENG 100, ENG 101 and PSY 100
- PSY 432 Social Psychology
Prerequisite: ENG 100, ENG 101 and PSY 100
- PSY 433 Cognitive Psychology
Prerequisite: ENG 100, ENG 101 and PSY 100

Students should choose no fewer than 4.5 quarter units in natural science and 4.5 quarter units in mathematics. A third 4.5 quarter unit course (either SCI, BIO, EES, or MTH) must also be selected. Some of the mathematics courses may have more than one prerequisite. The following courses are recommended:

- SCI 300 Geography
- BIO 330 Ecology
Prerequisite: BIO 161, BIO 162, BIO 163, BIO 100A, CHE 141, CHE 142, CHE 143 and CHE 101A
- BIO 411 Biodiversity
Recommended: Prior completion of: BIO 161, BIO 162, BIO 163 and BIO 100A or BIO 100 and BIO 100A or equivalent
- BIO 450 Natural History of California
Prerequisite: BIO 161, BIO 162, BIO 163 and BIO 100A or BIO 100 and BIO 100A
- MTH 301 Fundamentals of Mathematics II
Prerequisite: MTH 209A or Accuplacer test placement evaluation
- MTH 317 Mathematical Modeling
Prerequisite: MTH 215 or MTH 216A and MTH 216B and MTH 210
- MTH 410 Technology in Math Education
Prerequisite: MTH 215 or MTH 216A and MTH 216B or MTH 301
- MTH 411 Number Theory
Prerequisite: MTH 216B or MTH 215 or MTH 301
- MTH 412 History of Mathematics
Prerequisite: MTH 215 or MTH 301 or MTH 216A and MTH 216B
- MTH 417 Foundations of Geometry
Prerequisite: MTH 216A and MTH 216B or MTH 215 and MTH 311
- MTH 418 Statistical Analysis
Prerequisite: MTH 210 and MTH 220
- BIS 405 Genetic Anthropology
Prerequisite: BIS 301, Recommended: Prior completion of MTH 215

Nine quarter units from the humanities complex (ART, HIS, HUM, MUS, PHL, SOC, THR, GLS) are required. The following are recommended:

- ART 315 Film as Art
Prerequisite: ENG 100 and ENG 101
- ART 323 Modern Art
Prerequisite: ENG 100 and ENG 101
- ART 329 World Art
Prerequisite: ENG 100 and ENG 101
- GLS 410 Gender and Global Society
Prerequisite: ENG 240
- HIS 345 Latin American Studies
Prerequisite: ENG 100 and ENG 101
- HIS 348 Asian Studies
Prerequisite: ENG 100 and ENG 101
- HIS 349 African Studies
Prerequisite: ENG 100 and ENG 101
- HIS 370 History of the American S/W
Prerequisite: ENG 100 and ENG 101
- MUS 326 American Music
Prerequisite: ENG 100 and ENG 101
- MUS 327 World Music
Prerequisite: ENG 100 and ENG 101

- PHL 320 World Religions
Prerequisite: ENG 100 and ENG 101
- PHL 339 Study of a Major Philosopher
Prerequisite: ENG 100 and ENG 101
- PHL 375 Environmental Ethics
Prerequisite: ENG 100 and ENG 101
- PHL 337 Ethics
Prerequisite: ENG 100 and ENG 101
- SOC 328 Intercultural Thinking
Prerequisite: ENG 100 and ENG 101
- SOC 500 Cultural Pluralism in the USA
Prerequisite: ENG 100 and ENG 101

Capstone Course

- BIS 499 Interdisciplinary Studies Proj

Upper-Division Electives

(2 courses; 9 quarter units)

Students can select any 300, 400, or 500 level courses in arts and sciences to complete the total of 76.5 upper-division units for the degree. Students will need a Task Stream account for portfolio work. Please refer to your Faculty Advisor for more information (including fees).

♦ MAJOR IN INTERDISCIPLINARY STUDIES WITH A PRELIMINARY MULTIPLE SUBJECTS TEACHING CREDENTIAL (CALIFORNIA)

Faculty Advisor: Joshua Olsberg; (559) 256-4908; jolsberg@nu.edu

The Bachelor of Arts in Interdisciplinary Studies and a Preliminary Multiple Subjects Teaching Credential (California) provides a broad, rigorous education that prepares candidates for a career as a teacher at the elementary level. The program introduces candidates to essential knowledge, connections across the disciplines, and applies knowledge of life beyond the University. This degree program gives candidates an enriched and thought-provoking curriculum that incorporates content across subject areas and with specific educational methodology courses. This program prepares candidates for professional work as multiple subject teachers in a changing cultural and economic environment.

For additional information on credential requirements, please see the Sanford College of Education Credential Information section of the catalog.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate an understanding of interdisciplinary theory and the practice of critical thinking for the collection, validation, analysis, and synthesis of historical data and new information.
- Explain the integration of knowledge in a global context and engage in collaborative research across disciplines.
- Identify and appreciate the cultural perspectives of world view.
- Use information communications technology for knowledge sharing and the interdisciplinary approach.
- Demonstrate a deep and flexible understanding of subject matter.
- Apply educational technology to meet the needs of all learners.
- Explain how to support growth in cognitive, social, physical, and emotional domains.
- Utilize different teaching strategies to accomplish the teaching and learning goals.
- Create positive learning environment that ensures healthy human growth.
- Utilize systematic observations, documentation and other assessment strategies to facilitate and account for learning, and to support positive growth.
- Design, implement and evaluate standards-based lesson plans for learning and achievement in content areas.
- Demonstrate professional standards and ethics.

Degree Requirements

To receive a Bachelor of Arts in Interdisciplinary Studies with a Multiple Subjects Teaching Credential, candidates must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University and 76.5 of which must be completed at the upper-division level, including a minimum 70.5 units of the University General Education. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements. Candidates must demonstrate subject-matter competency through a state-approved examination. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation. All students receiving an undergraduate degree in Nevada are required by State Law to complete a course in Nevada Constitution.

Preparation for Major

(3 courses; 13.5 quarter units)

LIT 100* Introduction to Literature
Prerequisite: ENG 100 and ENG 101

HIS 410 California History
Prerequisite: ENG 100 and ENG 101

MTH 209A* Fundamentals of Mathematics I
Prerequisite: Accuplacer test placement evaluation or MTH 12A and MTH 12B

* May be used to meet a General Education requirement.

Requirements for Major

(22 courses; 99 quarter units)

Core Requirements

(14 courses; 63 quarter units)

BIS 301 Intro to Interdisc. Studies

ENG 350 Fundamentals of Linguistics
Prerequisite: ENG 100 and ENG 101

MTH 301 Fundamentals of Mathematics II
Prerequisite: MTH 209A or Accuplacer test placement evaluation

ART 329 World Art
Prerequisite: ENG 100 and ENG 101

TED 300 Fundamentals of Education
Prerequisite: TED 320 or TED 305 or TED 306

TED 410 Survey of Multicultural Lit.
Prerequisite: TED 305 or TED 320 or TED 306

TED 430 Special Needs Students
Prerequisite: TED 305 or TED 320 or TED 306

TED 310 Development and Learning
Prerequisite: TED 305 or TED 320 or TED 306

TED 355 Hist/Social Science Methods
Prerequisite: TED 305 or TED 320 or TED 306

TED 380 Arts/PE/Health Methods
Prerequisite: TED 305 or TED 320 or TED 306

BIS 401 Interdisciplinary Practice: In
Prerequisite: BIS 301 and four additional courses from the major

TED 330A Reading and Lang. Arts Methods
Prerequisite: TED 305 or TED 320 or TED 306

TED 440 Leadership and Assessment
Prerequisite: TED 305 or TED 320 or TED 306

BIS 499 Interdisciplinary Studies Proj

Student Teaching Requirements

(4 courses; 13.5 quarter units)

TED 530A, 530B, 531A and 531B are field experience courses receiving a Satisfactory or Unsatisfactory grade and are not factored into cumulative GPA.

TED 530A Student Teaching I
Corequisite: TED 531A

TED 530B Student Teaching II
Prerequisite: TED 530A, Corequisite: TED 531B

TED 531A Student Teaching Seminar I (2.25 quarter units)
Corequisite: TED 530A

TED 531B Student Teaching Seminar II (2.25 quarter units)
Prerequisite: TED 530A with a minimum grade of S, TED 531A with a minimum grade of S and Corequisite: TED 530B

Students will need a Task Stream account for portfolio work. Please refer to your Faculty Advisor for more information (including fees).

Upper-Division Requirements

(5 courses; 22.5 quarter units)

COM 380 Democracy in the Info. Age
Prerequisite: ENG 100 and ENG 101

or

HIS 320 Culture of Global Capitalism
Prerequisite: ENG 100 and ENG 101

TED 305 Teaching as a Profession

or

TED 306 21st Century Teaching Methods

TED 350 Math and Science Methods
Prerequisite: TED 305 or TED 320 or TED 306

or

TED 351 Teaching STEM Methods
Prerequisite: TED 305 or TED 306 or TED 320

and

Two (2) additional courses from the following:

SCI 300 Geography

BIS 405 Genetic Anthropology
Prerequisite: BIS 301, Recommended: Prior completion of: MTH 215

MTH 410 Technology in Math Education
Prerequisite: MTH 215 or MTH 216A and MTH 216B or MTH 301

TED 306 21st Century Teaching Methods

TED 351 Teaching STEM Methods
Prerequisite: TED 305 or TED 306 or TED 320

▲ Concentration in STEM (Science, Technology, Engineering, Mathematics)

A Concentration in STEM provides students with the depth and breadth of knowledge in science, technology, engineering and mathematics that prepares them to be successful in a digital classroom. Students will define, create and model team building and problem based learning in an interdisciplinary environment that demonstrates an understanding of the integration of knowledge within and across the disciplines.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate how to integrate Science, Technology, Engineering, and Mathematics (STEM) to meet the needs of all learners.
- Create and model interdisciplinary learning environments that reflect team building and problem based learning using technology.

Requirements for Concentration

(5 courses; 22.5 quarter units)

SCI 400 History of Science
Prerequisite: One 4.5 quarter unit science course from the natural sciences.

TED 306 21st Century Teaching Methods

MTH 410 Technology in Math Education
Prerequisite: MTH 215 or MTH 216A and MTH 216B or MTH 301

BIS 405 Genetic Anthropology
Prerequisite: BIS 301, Recommended: Prior completion of: MTH 215

TED 351 Teaching STEM Methods
Prerequisite: TED 305 or TED 306 or TED 320

Note: Students will need a Taskstream account for portfolio work. Please refer to your Faculty Advisor for more information (including fees).

◆ MAJOR IN MATHEMATICS WITH A PRELIMINARY SINGLE SUBJECT TEACHING CREDENTIAL (CALIFORNIA)

Faculty Advisor: Igor Subbotin; (310) 662-2150; isubboti@nu.edu

Faculty Advisor: Zhonghe Wu; (714) 429-5144; zwu@nu.edu

The Bachelor of Art in Mathematics with a Preliminary Single Subject Credential provides a rigorous education that prepares candidates for a career as a teacher of Mathematics at the middle and secondary school levels. The program stresses foundation in mathematics and its application. This program prepares candidates for professional work as single subject teachers in a changing cultural and economic environment.

For additional information on credential requirements, please see the Sanford College of Education Credential Information section of the catalog.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Employ a variety of reasoning skills and effective strategies for solving problems both within the discipline of mathematics and in applied settings that include non-routine situations.
- Use language and mathematical symbols to communicate mathematical ideas in the connections and interplay among various mathematical topics and their applications that cover range of phenomena across appropriate disciplines.
- Use current technology tools, such as computers, calculators, graphing utilities, video, and interactive programs that are appropriate for the research and study in mathematics.
- Employ algebra and number theory ideas and tools as a base of a fundamental language of mathematics research and communication.
- Develop fundamental knowledge in geometry.
- Model real world problems with a variety of algebraic and transcendental functions.
- Use advanced statistics and probability concepts and methods.
- Use educational technology to meet the needs of all learners including those with special needs linguistically and culturally diverse students.
- Explain how to support growth in cognitive, social, physical and emotional domains .
- Create a positive learning environment that ensures healthy human growth.
- Utilize systematic observations, documentation, and other assessment strategies in a responsible manner to facilitate and account for learning and to support positive growth.
- Design, implement, and evaluate standards-based lesson plans for learning and achievement in content areas.
- Demonstrate professional standards and ethics.
- Utilize different teaching strategies to accomplish the teaching and learning goals.

Degree Requirements

To receive a Bachelor of Arts in Mathematics with a Single Subject Teaching Credential, candidates must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level and a minimum 70.5 units of the University General Education requirements. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation. All students receiving an undergraduate degree in Nevada are required by State Law to complete a course in Nevada Constitution.

Preparation for Major

(6 courses; 27 quarter units)

MTH 210* Probability and Statistics
Prerequisite: Accuplacer test placement evaluation or MTH 12A and MTH 12B

MTH 215* College Algebra & Trigonometry
Prerequisite: Accuplacer test placement evaluation or MTH 12A and MTH 12B

or

MTH 216A* College Algebra I (3 quarter units)
Prerequisite: Accuplacer test placement evaluation or MTH 12A and MTH 12B

and

MTH 216B* College Algebra II (3 quarter units)
Prerequisite: MTH 216A

MTH 220* Calculus I
Prerequisite: Accuplacer test placement or MTH 216B or MTH 215

or

CSC 208* Calculus for Comp. Science I
Prerequisite: MTH 215

MTH 221 Calculus II
Prerequisite: MTH 220

MTH 222 Calculus III
Prerequisite: MTH 221

MTH 223 Calculus IV
Prerequisite: MTH 222

* May be used to meet a General Education requirement.

Requirements for Major

(21 courses; 90 quarter units)

Mathematics Requirements

(9 courses; 40.5 quarter units)

MTH 311 Topics from Geometry
Prerequisite: Accuplacer test placement or MTH 216B or MTH 215

MTH 325 Discrete Mathematics
Prerequisite: MTH 215 or MTH 216A and MTH 216B

or

CSC 331 Discrete Structures and Logic
Prerequisite: CSC 252 and CSC 310

MTH 411 Number Theory
Prerequisite: MTH 216B or MTH 215 or MTH 301

MTH 435 Linear Algebra
Prerequisite: MTH 220 and MTH 325

MTH 416 Algebraic Structures
Prerequisite: MTH 435 and MTH 325

MTH 417 Foundations of Geometry
Prerequisite: MTH 216A and MTH 216B or MTH 215 and MTH 311

MTH 418 Statistical Analysis
Prerequisite: MTH 210 and MTH 220

MTH 412 History of Mathematics
Prerequisite: MTH 215 or MTH 301 or MTH 216A and MTH 216B

MTH 410 Technology in Math Education
Prerequisite: MTH 215 or MTH 216A and MTH 216B or MTH 301

Education Theory and Methodology Requirements

(7 courses; 31.5 quarter units)

Students must complete TED 305 prior to TPA 1. All Teacher Education (TED) courses include a field experience component. It is strongly recommended students take the following courses in the order they are listed.

TED 305 Teaching as a Profession

TED 300	Fundamentals of Education <i>Prerequisite: TED 320 or TED 305 or TED 306</i>
TED 430	Special Needs Students <i>Prerequisite: TED 305 or TED 320 or TED 306</i>
TED 310	Development and Learning <i>Prerequisite: TED 305 or TED 320 or TED 306</i>
TED 420	Diversity in Schooling <i>Prerequisite: TED 305 or TED 320</i>
TED 330B	Reading and Language Arts <i>Prerequisite: TED 305 or TED 320</i>
TED 461	Mathematics Teaching Methods <i>Prerequisite: TED 305 or TED 320</i>

Student Teaching Requirements

(4 courses; 13.5 quarter units)

TED 530A, 530B, 531A and 531B are field experience courses receiving a Satisfactory or Unsatisfactory grade and are not factored into cumulative GPA.

TED 530A	Student Teaching I <i>Corequisite: TED 531A</i>
TED 530B	Student Teaching II <i>Prerequisite: TED 530A, Corequisite: TED 531B</i>
TED 531A	Student Teaching Seminar I (2.25 quarter units) <i>Corequisite: TED 530A</i>
TED 531B	Student Teaching Seminar II (2.25 quarter units) <i>Prerequisite: TED 530A with a minimum grade of S, TED 531A with a minimum grade of S and Corequisite: TED 530B</i>

Credentialing Requirement

(1 course; 4.5 quarter units)

Students must have senior standing to enroll in this class.

HEDX 2301X Intro Health Ed: K-12

◆ MAJOR IN POLITICAL SCIENCE

Faculty Advisor: Shak Hanish; (858) 642-8494; shanish@nu.edu

Political science, the systematic and rigorous study of politics and government, is becoming increasingly crucial in a complex and controversial world. Current cynicism about politics and public leadership belies a need for responsive, representative, effective, and capable public authority. Citizens still expect government to tackle such intimidating social problems, such as healthcare, community security, economic, and social justice and the balancing of conflicting rights and freedoms. Political science analyzes the ways societies use public authority to address collective problems. The political science program is designed to equip students with specialized research and analytical skills as well as familiarity with more generalized problem-solving skills sufficient to allow them to make valuable contributions to any vocation or enterprise they pursue and to insure that they will be prepared to solve public problems.

The Bachelor of Arts in Political Science will engage students in the study of social, economic, and political life, nationally and globally. A bachelor's degree in political science can lead to exciting careers in federal, state, and local governments; law, business, and international organizations; nonprofit associations and organizations; campaign management, electoral politics, and polling; journalism; and research and teaching.

BA Political Science/Master of Public Administration (MPA) Transition Program

Students who are currently enrolled in the BA Political Science program who have at least a cumulative GPA of 3.0 and are within six courses of completion of the BA program may register for the BA Political Science/MPA transition program. They may do this by asking their advisor to submit a plan change into the transition program allowing them to take two MPA classes as electives during the BA Political Science program. To be eligible, students must apply for and begin the MPA program within six months of completing their Political Science degree. A complete description of Transition Program requirements can be found in the Policies and Procedures section of this Catalog.

Students may choose up to two 600 level public administration (PAD) courses with the exception of PAD 631 and PAD 644.

For students in the BA Political Science/MPA transition program, the University will waive two graduate-level public administration courses taken as part of the bachelor's degree, but these students must still meet the residency requirements for the MPA.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Explain major theories, concepts, and methods of political science.
- Apply key political science perspectives and theories to real world situations.
- Apply the methods used by political scientists to undertake research and answer questions about politics and government.

Degree Requirements

To be awarded a Bachelor of Arts in Political Science, students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level and 70.5 units of the University General Education requirements. In the absence of transfer credit, students may need to take additional general electives to satisfy the total units for the degree. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation. All students receiving an undergraduate degree in Nevada are required by State Law to complete a course in Nevada Constitution.

Preparation for Major

(1 course; 4.5 quarter units)

POL 100* Introduction to Politics
Prerequisite: ENG 100 and ENG 101

* May be used to meet a General Education requirement.

Requirements for Major

(9 courses; 40.5 quarter units)

POL 320	Politics of Social Movements <i>Prerequisite: ENG 100 and ENG 101</i>
POL 330	Political Theory <i>Prerequisite: ENG 100 and ENG 101</i>
POL 340	Comparative Politics <i>Prerequisite: ENG 100 and ENG 101</i>
POL 350	International Relations <i>Prerequisite: ENG 100 and ENG 101</i>
POL 360	Public Policy <i>Prerequisite: ENG 100 and ENG 101</i>
POL 400	European Politics <i>Prerequisite: ENG 100 and ENG 101</i>
POL 410	Middle Eastern Politics <i>Prerequisite: ENG 100 and ENG 101</i>
POL 540	American Political System
POL 499	Capstone Seminar in Politics <i>Prerequisite: ENG 240 and completion of at least 27 units of core courses in the major</i>

Required Upper-Division Electives

(7 courses; 31.5 quarter units)

Choose from the following courses:

CJA 467	Intl. & Domestic Terrorism
COM 380	Democracy in the Info. Age <i>Prerequisite: ENG 100 and ENG 101</i>
GLS 410	Gender and Global Society <i>Prerequisite: ENG 240</i>
GLS 430	The Global Economy <i>Prerequisite: ENG 240</i>

HIS 320	Culture of Global Capitalism <i>Prerequisite: ENG 100 and ENG 101</i>
SOC 350	Cultural Diversity <i>Prerequisite: ENG 100 and ENG 101</i>
HUM 501	Global Civic Culture <i>Prerequisite: ENG 100 and ENG 101</i>
PAD 403	Government Relations
PHL 320	World Religions <i>Prerequisite: ENG 100 and ENG 101</i>
PHL 375	Environmental Ethics <i>Prerequisite: ENG 100 and ENG 101</i>
POL 490	Guided Study (variable units)
POL 539	Dynamics of World Politics
SOC 385	Methods of Social Inquiry <i>Prerequisite: ENG 100, ENG 101 and SOC 100</i>
SOC 445	Contemporary Social Problems <i>Prerequisite: ENG 100 and ENG 101</i>
SOC 540	Power and Social Change <i>Prerequisite: ENG 100 and ENG 101</i>

◆ MAJOR IN PSYCHOLOGY

Faculty Advisor: Nicole Polen-Petit; (916) 855-4303; npolen-petit@nu.edu

The Bachelor of Arts in Psychology program offers a comprehensive introduction to the contemporary discipline of psychology. Graduates of this program are well prepared to seek employment in personnel, vocational counseling, criminal justice, journalism, or entry-level counseling in the context of a county-funded agency or hospital. They are also prepared to seek admission to graduate programs at the master's or doctoral level.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Articulate major theories, concepts, and historical trends in psychology.
- Explain behavior, cognition, and emotion from multiple schools of thought and multicultural perspectives.
- Identify a problem in psychology, examine available evidence, analyze assumptions, and apply research methods to solve the problem. This includes the ability to interpret numbers and apply basic statistical procedures.
- Write papers in psychology using different literary formats, e.g., narrative, exposition, critical analysis, and APA format.
- Perform information searches relevant to psychology and organize and evaluate the soundness of the information.
- Use current technologies in both research and communication.

Degree Requirements

To receive a Bachelor of Arts in Psychology degree, students must complete at least 180 quarter units as articulated below, 76.5 units of which must be completed at the upper-division level, 45 units which must be completed in residence at National University and a minimum 70.5 units of the University General Education requirements. The following courses are specific degree requirements. In the absence of transfer credit, students may need to take additional general electives to satisfy the total units for the degree. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation. All students receiving an undergraduate degree in Nevada are required by State Law to complete a course in Nevada Constitution.

Portfolio

Students in the undergraduate psychology program will complete a portfolio. Each portfolio is comprised of specific artifacts completed and collected by the candidate via signature assignments throughout their program. The portfolio is submitted at the onset of Senior Project and is used to inform the candidate of their strengths and weaknesses upon entering the capstone course.

Preparation for Major

(2 courses; 9 quarter units)

MTH 210* Probability and Statistics
Prerequisite: Accuplacer test placement evaluation or MTH 12A and MTH 12B

PSY 100* Introduction to Psychology

* May be used to satisfy General Education requirements.

Requirements for Major

(11 courses; 49.5 quarter units)

PSY 426 History & Philosophy of Psych
Prerequisite: ENG 100, ENG 101 and PSY 100

PSY 427 Biological Psychology
Prerequisite: ENG 100, ENG 101 and PSY 100

PSY 428 Developmental Psychology
Prerequisite: ENG 100, ENG 101 and PSY 100

PSY 429 Intro to Personality Theory
Prerequisite: ENG 100, ENG 101 and PSY 100

PSY 430 Intro to Psychopathology
Prerequisite: ENG 100, ENG 101 and PSY 100

PSY 432 Social Psychology
Prerequisite: ENG 100, ENG 101 and PSY 100

PSY 433 Cognitive Psychology
Prerequisite: ENG 100, ENG 101 and PSY 100

PSY 441 Global Psychology
Prerequisite: PSY 100

HUB 441 Research Design and Analysis
Prerequisite: ENG 100, ENG 101, MTH 210 and PSY 100

CHD 440 Drugs, Values and Society

PSY 480 Senior Project
Prerequisite: All other courses required for the major must be completed prior to enrolling in this course.

or

PSY 491 Guided Study for Honors Student (variable units)
Prerequisite: Satisfactory completion of core courses with a GPA of 3.75 or higher

Upper-Division Electives

(5 courses; 22.5 quarter units)

Students not pursuing a minor must choose **five (5)** of the following courses:

BIO 420 Animal Behavior
Prerequisite: BIO 161, BIO 162, BIO 163 and BIO 100A

BIS 301 Intro to Interdisc. Studies

CJA 400 Gangs in America

CJA 431 Criminology

CJA 448 Violence and Society

HUB 400 Group Structure & Dynamics
Prerequisite: ENG 100, ENG 101 and PSY 100

HUB 401 Conflict Resolution
Prerequisite: ENG 100, ENG 101 and PSY 100

HUB 410 Psychology for Managers
Prerequisite: ENG 100, ENG 101 and PSY 100

HUB 420 Human Communication
Prerequisite: ENG 100, ENG 101 and PSY 100

HUB 440 Organizational Development
Prerequisite: ENG 100, ENG 101 and PSY 100

HUB 500 Cross-Cultural Dynamics
Prerequisite: ENG 100, ENG 101 and PSY 100

PSY 302 Foundation of Sport Psychology
Prerequisite: ENG 100, ENG 101 and PSY 100

PSY 340A	Counseling Techniques I <i>Prerequisite: ENG 100, ENG 101 and PSY 100</i>
PSY 431	Psychological Testing <i>Prerequisite: ENG 100, ENG 101 and PSY 100</i>
PSY 445	Applied Sport Psychology <i>Prerequisite: PSY 100 and PSY 302</i>
PSY 446	Positive Psychology <i>Prerequisite: ENG 100, ENG 101 and PSY 100</i>
PSY 454	Psychology of Religion <i>Prerequisite: PSY 100 with a minimum grade of C and ENG 100 with a minimum grade of C</i>
PSY 455	Psychology of Bereavement <i>Prerequisite: ENG 100, ENG 101 and PSY 100</i>
PSY 457	Forensic Psychology <i>Prerequisite: ENG 100 and PSY 100</i>
PSY 458	Health Psychology <i>Prerequisite: ENG 100, ENG 101 and PSY 100</i>
PSY 469	Human Sexuality
SOC 344	Marriage, Sex and the Family <i>Prerequisite: ENG 100 and ENG 101</i>
SOC 443	Sociology of Deviance <i>Prerequisite: ENG 100, ENG 101 and SOC 100</i>
SOC 445	Contemporary Social Problems <i>Prerequisite: ENG 100 and ENG 101</i>

Other electives must be approved by the department chair or regional full-time or associate faculty. Students may not take PSY 301 as an Upper-Division Elective.

◆ MAJOR IN SOCIAL SCIENCE WITH A PRELIMINARY SINGLE SUBJECT CREDENTIAL (CALIFORNIA)

Faculty Advisor: Daniel Thorburn; (209) 475-1443; dthorbur@nu.edu

The Bachelor of Arts with a Major in Social Science with a Preliminary Single Subject Credential combines rigorous coursework in history and the social sciences with training in educational methodology to prepare candidates for careers as teachers of social studies and history at the middle and secondary school levels. The program introduces students to a variety of fields in the social sciences and concentrates on World History, U.S. History, and California History. Students examine worlds, times, places and cultures--including their own--in ways they have never considered and they develop strong skills in critical thinking, reading, writing, and researching. The educational methodology and student teaching portions of the program prepare candidates for professional work as single subject social studies or history teachers in a changing cultural and economic environment.

For additional information on credential requirements, please see the Sanford College of Education Credential Information section of the catalog.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Assess the significance of major trends in World History.
- Assess the significance of major trends in U.S. History.
- Analyze a variety of primary sources.
- Analyze secondary sources for their arguments and use of supporting evidence.
- Discuss current concerns, new theories, new evidence, and issues that shape interpretation in history and the social sciences.
- Conduct research in history and the social sciences supported by appropriate primary and secondary source materials.
- Delineate the central demographic, economic, and political developments in the history of California from the eve of Spanish settlement to the present.
- Integrate educational technology to meet the needs of all learners.
- Describe how to support growth in cognitive, social, physical, and emotional domains.

- Demonstrate a thorough understanding of the learning needs of students through the creation of positive learning environments.
- Utilize systematic observations, documentation, and other effective assessment strategies in a responsible manner to facilitate and account for learning and to support positive growth.
- Design, implement, and evaluate standards-based lesson plans for learning and achievement in content areas.
- Demonstrate professional standards and ethics.
- Utilize different teaching strategies to accomplish teaching and learning goals.

Degree Requirements

To receive a Bachelor of Arts with a Major in Social Science with a Single Subject Teaching Credential, candidates must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level and a minimum 70.5 units of University General Education requirements. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements. All students receiving an undergraduate degree in Nevada are required by State Law to complete a course in Nevada Constitution.

Preparation for Major

(9 courses; 40.5 quarter units)

HIS 220A*	United States History I <i>Prerequisite: ENG 100 and ENG 101</i>
HIS 220B*	United States History II <i>Prerequisite: ENG 100 and ENG 101</i>
HIS 233*	World Civilizations I <i>Prerequisite: ENG 100 and ENG 101</i>
HIS 234*	World Civilizations II <i>Prerequisite: ENG 100 and ENG 101</i>
POL 100*	Introduction to Politics <i>Prerequisite: ENG 100 and ENG 101</i>
POL 201*	American Politics <i>Prerequisite: ENG 100 and ENG 101</i>
SCI 300*	Geography
ECO 203*	Principles of Microeconomics
ECO 204*	Principles of Macroeconomics

* May be used to meet a General Education requirement.

Requirements for Major

(24 courses; 103.5 quarter units)

Social Science Requirements

(11 courses; 49.5 quarter units)

HIS 431	The Ancient World <i>Prerequisite: ENG 100, ENG 101 and HIS 233</i>
HIS 432	The Classical World <i>Prerequisite: ENG 100, ENG 101 and HIS 233</i>
HIS 433	The Post-Classical World <i>Prerequisite: ENG 100, ENG 101 and HIS 233</i>
HIS 434	Modern World, 1500 to Present <i>Prerequisite: ENG 100, ENG 101 and HIS 234</i>
HIS 400	Historical Theories & Methods <i>Prerequisite: ENG 240</i>
HIS 360	American Colonial Experience <i>Prerequisite: ENG 100, ENG 101 and HIS 220A</i>
HIS 361	Making and Sundering of Union <i>Prerequisite: ENG 100, ENG 101 and HIS 220A</i>
HIS 362	U.S. Between Wars, 1865-1917 <i>Prerequisite: ENG 100, ENG 101 and HIS 220B</i>

- HIS 363 U.S. Since World War I
Prerequisite: ENG 100, ENG 101 and HIS 220B
- HIS 410 California History
Prerequisite: ENG 100 and ENG 101
- HIS 499 Capstone Research Project
Prerequisite: ENG 240 or equivalent, HIS 400 and completion of 31.5 quarter units of core courses in the major

Education Theory and Methodology Requirements

(7 courses; 31.5 quarter units)

- TED 305 Teaching as a Profession
- TED 300 Fundamentals of Education
Prerequisite: TED 320 or TED 305 or TED 306
- TED 310 Development and Learning
Prerequisite: TED 305 or TED 320 or TED 306
- TED 330B Reading and Language Arts
Prerequisite: TED 305 or TED 320
- TED 420 Diversity in Schooling
Prerequisite: TED 305 or TED 320
- TED 430 Special Needs Students
Prerequisite: TED 305 or TED 320 or TED 306
- TED 434 Methods of Teaching Social Sci
Prerequisite: TED 305

Student Teaching Requirements

(4 courses; 13.5 quarter units)

TED 530A, 530B, 531A and 531B are field experience courses receiving a Satisfactory or Unsatisfactory grade and are not factored into cumulative GPA.

- TED 530A Student Teaching I
Corequisite: TED 531A
- TED 530B Student Teaching II
Prerequisite: TED 530A, Corequisite: TED 531B
- TED 531A Student Teaching Seminar I (2.25 quarter units)
Corequisite: TED 530A
- TED 531B Student Teaching Seminar II (2.25 quarter units)
Prerequisite: TED 530A with a minimum grade of S, TED 531A with a minimum grade of S and Corequisite: TED 530B

Credentialing Requirements

(2 courses; 9 quarter units)

Students must have a senior standing to enroll in EDX 6001X. EDX 6001X is graduate level and the grade earned must be a "B" or better. EDX 6001X will not transfer to National University or any other university as a graduate level class.

HEDX 2301X Intro Health Ed: K-12

EDX 6001X Computer Tech in Classroom

◆ MAJOR IN SOCIOLOGY

Faculty Advisor: Thomas Green; (858) 642-8424; tgreen@nu.edu

Faculty Advisor: Lorna Zukas; (858) 642-8437; llueker@nu.edu

The Bachelor of Arts in Sociology program engages students in the study of social life, social change, and the social causes and consequences of human behavior. Students will investigate the structure of groups, organizations, and societies, and how people interact within these contexts. Since all human behavior is social, the subject matter of sociology ranges from the intimate family to global warfare; from organized crime to religious cults; from the divisions of social class, race, and gender to the shared beliefs of a common culture; and from the sociology of work to the sociology of beauty. In fact, few fields have such broad scope and relevance for research, theory, and application of knowledge.

Sociology majors develop analytical skills and the ability to understand issues within many distinctive perspectives. Sociology offers a range of research techniques that can be applied to virtually any aspect of social life: street crime and delinquency, corporate growth or downsizing, how people express emotions, welfare or education reform, health/HIV AIDS, how families differ and flourish,

or problems of peace, war, and terrorism. Because sociology addresses the most challenging issues of our time, it is a rapidly expanding field whose potential is increasingly tapped by those who craft policies and create programs. Sociologists understand social inequality, patterns of behavior, forces for social change and resistance, and how social systems work.

The program's stimulating curriculum in social theory, research methods, and key sociological concepts provides a solid base for students to learn to think abstractly, formulate problems, ask appropriate questions, search for answers, analyze situations and data, organize material, write well, and make oral presentations. Sociological training helps students bring breadth and depth of understanding to the global workplace and graduates frequently enter a variety of jobs in business, the health professions, criminal justice, social services, and government. Sociology provides training for professions such as law enforcement, education, medicine, social work, and counseling. Furthermore, sociology offers valuable preparation for careers in journalism, politics and policy analysis, public relations, business, or public administration, and program evaluation—fields that involve investigative skills and working with diverse groups.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Identify and distinguish between sociological research methods.
- Describe the roles of individuals and groups in the social construction of reality.
- Apply major sociological theories to real world situations.
- Identify the roles of gender, race, ethnicity and social class in social change at the micro social and macro social levels.

Degree Requirements

To be awarded a Bachelor of Arts in Sociology, students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level, and a minimum 70.5 units of the University General Education requirements. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements. Students are required to complete a capstone project as part of the degree program. It is strongly suggested that students save all graded work. Students should refer to the section on undergraduate admission procedures for specific information regarding admission and evaluation. All students receiving an undergraduate degree in Nevada are required by State Law to complete a course in Nevada Constitution.

Prerequisites for Major

(2 courses; 9 quarter units)

- SOC 100* Principles of Sociology
Prerequisite: ENG 100 and ENG 101
- MTH 210* Probability and Statistics
Prerequisite: Accuplacer test placement evaluation or MTH 12A and MTH 12B

* May be used to meet a General Education requirement.

Requirements for Major

(9 courses; 40.5 quarter units)

- SOC 344 Marriage, Sex and the Family
Prerequisite: ENG 100 and ENG 101
- SOC 443 Sociology of Deviance
Prerequisite: ENG 100, ENG 101 and SOC 100
- SOC 385 Methods of Social Inquiry
Prerequisite: ENG 100, ENG 101 and SOC 100
- SOC 455 Organizational Sociology
Prerequisite: ENG 100, ENG 101 and SOC 100
- SOC 365 Classical Social Theory
Prerequisite: SOC 100 and ILR 260
- SOC 500 Cultural Pluralism in the USA
Prerequisite: ENG 100 and ENG 101
- SOC 375 Contemporary Social Theory
Prerequisite: ENG 100, ENG 101 and SOC 100

SOC 540 Power and Social Change
Prerequisite: ENG 100 and ENG 101

SOC 499** Sociology Senior Project
Prerequisite: SOC 100 and ENG 240 or equivalent

** SOC 499 is taken toward the end of the program after completion of the 40.5 units of required courses for the major, and after completion of six or more electives.

Upper-Division Electives

(7 courses; 31.5 quarter units)

Students must complete a minimum of seven courses (31.5 quarter units) of electives from the list below.

* Students wishing to complete a minor in any field may substitute the minor-required courses to fulfill the elective requirements in Sociology. Suggested areas of minor are: Criminal Justice, Global Studies, and History.

CHD 440 Drugs, Values and Society

CJA 448 Violence and Society

GLS 410 Gender and Global Society
Prerequisite: ENG 240

GLS 310 Global Communications
Prerequisite: ENG 240

GLS 430 The Global Economy
Prerequisite: ENG 240

GLS 440 Study Abroad
Prerequisite: HIS 320

HUM 501 Global Civic Culture
Prerequisite: ENG 100 and ENG 101

MTH 412 History of Mathematics
Prerequisite: MTH 215 or MTH 301 or MTH 216A and MTH 216B

PHL 320 World Religions
Prerequisite: ENG 100 and ENG 101

PHL 375 Environmental Ethics
Prerequisite: ENG 100 and ENG 101

POL 320 Politics of Social Movements
Prerequisite: ENG 100 and ENG 101

SCI 300 Geography

SOC 325 Popular Culture
Prerequisite: ENG 100 and ENG 101

SOC 328 Intercultural Thinking
Prerequisite: ENG 100 and ENG 101

SOC 331 Sociology of Health & Illness
Prerequisite: ENG 100, ENG 101 and SOC 100

SOC 336 American Film and Society
Prerequisite: ENG 100 and ENG 101

SOC 350 Cultural Diversity
Prerequisite: ENG 100 and ENG 101

SOC 430 Culture, Technology & Society
Prerequisite: ENG 100 and ENG 101

SOC 445 Contemporary Social Problems
Prerequisite: ENG 100 and ENG 101

SOC 449 Sociology of Law
Prerequisite: ENG 100, ENG 101 and SOC 100

SOC 460 The Individual and Society
Prerequisite: ENG 100, ENG 101 and SOC 100

SOC 490 Guided Study (variable units)

◆ MAJOR IN SPANISH WITH OPTIONAL PRELIMINARY SINGLE SUBJECT TEACHING CREDENTIAL (CALIFORNIA)

Faculty Advisor: Luis Acebal; (530) 226-4003; lacebal@nu.edu

The Bachelor of Arts with a Major in Spanish consists of intensive proficiency-oriented coursework in Spanish language acquisition, as well as instruction in essential knowledge and understanding of history, culture, geography, and pol-

itics of the region. The program prepares students for a variety of career paths in government, military, business, and education. Each student has the option of choosing to complete seven courses of upper-division electives or pursuing a Preliminary Single Subject Teaching Credential (California).

Please see additional Credential admissions requirements under Teacher Education in the Sanford College of Education's Credential Programs section of the catalog.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Develop oral, written and reading proficiency in Spanish.
- Read and interpret representative texts and cultural productions in Spanish.
- Develop analytical and critical skills that build from textual, cultural and linguistic analysis to the exploration of society.
- Translate and interpret to and from Spanish.
- Differentiate the major aspects of Latin American and Hispanic culture and civilization from pre-Columbian times to the present.
- Demonstrate familiarity with the history and culture of the Spanish speaking world.
- A comprehensive familiarity with the history and culture of the region.

Degree Requirements

To receive the Bachelor of Arts Degree with a Major in Spanish, students must complete at least 180 quarter units as listed below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level and a minimum 70.5 units of the University General Education requirements. The following courses are degree requirements. In the absence of transfer credit, general electives may be necessary to satisfy the total units required for the degree. Students should refer to the section on undergraduate admission requirements for specific information regarding admission and evaluation.

Preparation for Major

(5 courses; 22.5 quarter units)

SPN 100* Beginning Spanish I

SPN 101* Beginning Spanish II
Prerequisite: SPN 100

SPN 200* Intermediate Spanish I
Prerequisite: SPN 101

SPN 201 Intermediate Spanish II
Prerequisite: SPN 200

LIT 100* Introduction to Literature
Prerequisite: ENG 100 and ENG 101

* May be used to meet a General Education requirement.

Requirements for Major

(10 courses; 45 quarter units)

SPN 300 Advanced Spanish I
Prerequisite: SPN 201

SPN 301 Advanced Spanish II
Prerequisite: SPN 300

SPN 310 Literary Readings in Spanish
Prerequisite: LIT 100 and SPN 301

SPN 320 Advanced Spanish Conversation
Prerequisite: SPN 201 or 3 semesters of college level Spanish language

SPN 330 Intro Lat Am Cultures
Prerequisite: SPN 301

SPN 350 Film and Culture
Prerequisite: SPN 301

SPN 420 Literature and Culture I
Prerequisite: SPN 310 and SPN 330

SPN 430	Literature and Culture II <i>Prerequisite: SPN 420</i>
SPN 450	Identity and Multiculturalism <i>Prerequisite: SPN 310 and SPN 330</i>
SPN 499	Spanish Capstone <i>Prerequisite: SPN 430</i>

Upper-Division Electives

(7 courses; 31.5 quarter units)

The following courses are strongly recommended:

HIS 345	Latin American Studies <i>Prerequisite: ENG 100 and ENG 101</i>
GLS 430	The Global Economy <i>Prerequisite: ENG 240</i>
GLS 440	Study Abroad <i>Prerequisite: HIS 320</i>
HUM 501	Global Civic Culture <i>Prerequisite: ENG 100 and ENG 101</i>
HIS 434	Modern World, 1500 to Present <i>Prerequisite: ENG 100, ENG 101 and HIS 234</i>
LIT 360	Literary Theory <i>Prerequisite: LIT 100</i>
LIT 460	Gender and Literature <i>Prerequisite: ENG 240 and LIT 100</i>
LIT 463	20th Century World Literature <i>Prerequisite: ENG 240 and LIT 100</i>
LIT 480	Literature of the Americas <i>Prerequisite: ENG 240 and LIT 100</i>
PHL 320	World Religions <i>Prerequisite: ENG 100 and ENG 101</i>
POL 340	Comparative Politics <i>Prerequisite: ENG 100 and ENG 101</i>
SOC 328	Intercultural Thinking <i>Prerequisite: ENG 100 and ENG 101</i>
SPN 490	Guided Study in Spanish

◆ OPTIONAL PRELIMINARY SINGLE SUBJECT TEACHING CREDENTIAL (CALIFORNIA)

The Bachelor of Art in Spanish with a Preliminary Single Subject Credential provides a rigorous education that prepares candidates for a career as a teacher of Spanish at the middle and secondary school levels. The program stresses foundation Spanish and its application. This program prepares candidates for professional work as single subject teachers in a changing cultural and economic environment. Students majoring in Spanish can enroll in this program at any time prior to the completion of SPN 490 or 491. This program prepares students with the knowledge, skills and dispositions required for entry into the teaching profession.

For additional information on credential requirements, please see the Sanford College of Education Credential Information section of the catalog.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate application of educational technology to meet the needs of all learning including those with special needs linguistically and culturally diverse students.
- Demonstrate knowledge of adolescence development in order to explain how to support growth in cognitive, social, physical, and emotional domains.
- Demonstrate a thorough understanding of the learning needs of students to create a positive learning environment that ensures healthy human growth.
- Utilize systematic observations, documentation, and other effective assessment strategies in a responsible manner to facilitate and account for learning and to support positive growth.

- Design, implement, and evaluate standards-based lesson plans for learning and achievement in content areas.

Education Orientation, Theory and Methodology Requirements

(7 courses; 31.5 quarter units)

TED 305	Teaching as a Profession
TED 300	Fundamentals of Education <i>Prerequisite: TED 320 or TED 305 or TED 306</i>
TED 430	Special Needs Students <i>Prerequisite: TED 305 or TED 320 or TED 306</i>
TED 310	Development and Learning <i>Prerequisite: TED 305 or TED 320 or TED 306</i>
TED 420	Diversity in Schooling <i>Prerequisite: TED 305 or TED 320</i>
LTL 504B	Teach Methods: Sec Schs
LTL 524S	Lang Teach & Assess: Spanish

Student Teaching Requirements

(4 courses; 13.5 units)

TED 530A, 530B, 531A and 531B are field experience courses receiving a Satisfactory or Unsatisfactory grade and are not factored into cumulative GPA. Please see student teaching and internship eligibility requirements under Clinical Practice in the Teacher Education area of the Sanford College of Education's Credential programs section of the catalog.

TED 530A	Student Teaching I <i>Corequisite: TED 531A</i>
TED 530B	Student Teaching II <i>Prerequisite: TED 530A, Corequisite: TED 531B</i>
TED 531A	Student Teaching Seminar I (2.25 quarter units) <i>Corequisite: TED 530A</i>
TED 531B	Student Teaching Seminar II (2.25 quarter units) <i>Prerequisite: TED 530A with a minimum grade of S, TED 531A with a minimum grade of S and Corequisite: TED 530B</i>

Credentialing Requirements

(2 courses; 9 quarter units)

Students must have senior standing to enroll in these two classes. The EDX 6001X class is considered graduate level. These courses will not transfer to any graduate level program (at National University or elsewhere).

EDX 6001X	Computer Tech in Classroom
HEDX 2301X	Intro Health Ed: K-12

Please see additional completion requirements for the Credential under Teacher Education in the Sanford College of Education's Credential section.

◆ MAJOR IN SPORT PSYCHOLOGY

Faculty Advisor: Sarah Castillo; (760) 268-1584; scastillo@nu.edu

The Bachelor of Arts in Sport Psychology program offers a comprehensive introduction to the contemporary discipline of sport psychology. Graduates of this program are well prepared to seek employment in entry-level coaching positions and admission to graduate psychology programs at the master's or doctoral level.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Discuss current trends in psychological research in both individual and team contexts within sport psychology.
- Analyze how psychological factors influence performance in sport, and techniques to increase performance and reduce anxiety.
- Examine the history of sport psychology and its role in contemporary psychological theories and systems.
- Discuss the influences of diversity and multiculturalism on group interactions and performance.
- Apply psychological theory to coaching situations.

- Communicate orally and in writing using proper sport and psychology terminology.
- Discuss the legal and ethical issues in sport psychology and performance enhancement.
- Discuss the physiological and motoric principles of performance in sport and physical activity.

Degree Requirements

To receive a Bachelor of Arts in Sport Psychology degree, students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level, and a minimum 70.5 units of the University General Education requirements. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation. All students receiving an undergraduate degree in Nevada are required by State Law to complete a course in Nevada Constitution.

Preparation for Major

(2 courses; 9 quarter units)

MTH 210* Probability and Statistics
Prerequisite: Accuplacer test placement evaluation or MTH 12A and MTH 12B

PSY 100* Introduction to Psychology

* May be used to meet a general education requirement.

Requirements for Major

(13 courses; 58.5 quarter units)

PSY 302 Foundation of Sport Psychology
Prerequisite: ENG 100, ENG 101 and PSY 100

PSY 448 History of Sport & Sport Psych
Prerequisite: PSY 100 and PSY 302

PSY 300 Social Psychology of Sport
Prerequisite: ENG 100, ENG 101 and PSY 100

HUB 441 Research Design and Analysis
Prerequisite: ENG 100, ENG 101, MTH 210 and PSY 100

PSY 303 Motor Learning
Prerequisite: ENG 100, ENG 101 and PSY 100

PSY 440 Sport Psychology for Coaches
Prerequisite: PSY 100 and PSY 302

PSY 443 Culture and Sport Psychology
Prerequisite: PSY 100 and PSY 302

BIO 385 Biomechanics of Sport
Prerequisite: BIO 100 and BIO 100A

BIO 386 Exercise Physiology
Prerequisite: BIO 100 and BIO 100A

PSY 340A Counseling Techniques I
Prerequisite: ENG 100, ENG 101 and PSY 100

PSY 445 Applied Sport Psychology
Prerequisite: PSY 100 and PSY 302

PSY 442 Sem Applied Sport Psychology
Prerequisite: satisfactory completion of 9 courses in the major

PSY 485 Sport Psychology Sr. Project
Prerequisite: satisfactory completion of ALL Major requirements

Upper-Division Electives

(3 courses; 13.5 quarter units)

Choose **three (3)** upper-division electives from available offerings within the College of Letters and Sciences. It is **STRONGLY RECOMMENDED** that students select **AT LEAST two (2)** of their required electives from the following courses:

PSY 427 Biological Psychology
Prerequisite: ENG 100, ENG 101 and PSY 100

PSY 428 Developmental Psychology
Prerequisite: ENG 100, ENG 101 and PSY 100

PSY 429 Intro to Personality Theory
Prerequisite: ENG 100, ENG 101 and PSY 100

PSY 430 Intro to Psychopathology
Prerequisite: ENG 100, ENG 101 and PSY 100

PSY 432 Social Psychology
Prerequisite: ENG 100, ENG 101 and PSY 100

PSY 433 Cognitive Psychology
Prerequisite: ENG 100, ENG 101 and PSY 100

PSY 446 Positive Psychology
Prerequisite: ENG 100, ENG 101 and PSY 100

◆ MAJOR IN STRATEGIC COMMUNICATIONS

Faculty Advisor: Louis Rumpf; (858) 642-8057; lrumpf@nu.edu

The Bachelor of Arts in Strategic Communications prepares students for leadership positions in corporate communication, public relations, advertising, and integrated marketing. The program offers a unique blend of human and professional communication theory and skills so students learn to communicate appropriately and effectively in interpersonal, intercultural, organizational, and mediated settings. Graduates can apply the strategic thinking and message creation skills they acquire to work in most industries. Skills taught will empower students to create print, presentations, and digital media messages. The program covers the theory and skills needed to exercise organizational leadership to produce communication campaigns and materials, disseminated through traditional, digital, internet, social, and emerging media. Students learn through academic work, case studies, and hands-on experience, creating messages across media platforms. Completion of the program enables graduates to succeed in positions that require strategic thinking, planning, project management, content creation, and leadership.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Develop communication campaign messaging strategies.
- Apply persuasion theory to communication campaigns and media messages.
- Create content that fulfills strategic communications campaign objectives.
- Explain strategic communication plans and present them online.
- Working in a group, create strategic communication messages.
- Apply research data to guide the development of strategic communication campaigns and messages.
- Develop multi-platform, multi-public message dissemination plans.
- Identify communication settings and apply appropriate theoretical precepts and practical skills to formulating messages.

Degree Requirements

To receive a Bachelor of Arts in Strategic Communications, students must complete at least 180 quarter units as follows: 76.5 units must be completed at the upper-division level, and 45 units must be completed in online residence through National University. Students must also complete a minimum 70.5 units of the University's General Education requirements. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements.

Prerequisites for Major

(2 courses; 7.5 quarter units)

ENG 101* Effective College English II (3 quarter units)
Prerequisite: ENG 100

COM 103* Public Speaking

* May be used to meet a General Education requirement.

Requirements for Major

(17 courses; 76.5 units)

Core Requirements

(14 courses; 63 units)

COM 300	Interpersonal Communication <i>Prerequisite: ENG 101</i>
COM 305	Intercultural Communication <i>Prerequisite: ENG 101</i>
COM 310	Communication Theory <i>Prerequisite: ENG 101</i>
COM 315	Communication Research Methods <i>Prerequisite: ENG 101</i>
COM 324	Critical Thinking and Ethics <i>Prerequisite: ENG 101</i>
COM 334	Persuasion <i>Prerequisite: ENG 101</i>
COM 402	Communication Technologies <i>Prerequisite: ENG 101</i>
COM 344	Organizational Communication <i>Prerequisite: ENG 101</i>
COM 354	Professional Presentations <i>Prerequisite: ENG 101</i>
COM 385	Interactive Storytelling <i>Prerequisite: ENG 101</i>
COM 394	Strategic Writing <i>Prerequisite: ENG 101</i>
COM 400	Mediated Messaging <i>Prerequisite: COM 385 and COM 394</i>
COM 404	Media Management <i>Prerequisite: COM 400</i>
COM 499	Communication Program Capstone <i>Prerequisite: Completion of 13 core and advanced core courses.</i>

Advanced Core Requirements

(3 courses, 13.5 units)

COM 441	Communication Strategies <i>Prerequisite: COM 334</i>
COM 442	Communication Campaigns <i>Prerequisite: COM 441</i>
COM 443	Interactive & Mobile Campaigns <i>Prerequisite: COM 442</i>

■ BACHELOR OF SCIENCE

◆ MAJOR IN BIOLOGY

Faculty Advisor: Michael Maxwell; (858) 642-8413; mmaxwell@nu.edu

The Bachelor of Science in Biology offers personal and academic fulfillment and growth as students discover the amazing world of biology. This degree prepares students for graduate and professional study, careers in life science education, research, health sciences, and applied biology. The BS Biology provides a solid foundation in all levels of biological organization, from molecules to ecosystems. Such a comprehensive curriculum is crucial to meeting modern challenges in science, which include new and emerging diseases, rapid advances in our understanding of genetics, physiology and biodiversity, threats to species and ecosystem functioning, and global population increase and sustainability. A degree in biology is common preparation for careers in the various medical professions, genetics, molecular and cell biology, biotechnology, microbiology, conservation biology, evolutionary biology, ecology, animal and plant science, as well as science writing, editing and education.

Students who wish to include an interdisciplinary approach to their academic training should look closely at the benefits provided by this major. In addition to meeting requirements for BS Biology, this degree allows for the integration of study in the life sciences with coursework in the physical and earth sciences, as well as applied fields such as forensics. Furthermore, in keeping with the commitment of the College of Letters and Sciences to the complete academic devel-

opment of its students, science courses involve writing and diversity components, as well as fundamental critical thinking components.

Bachelor of Science in Biology to Master of Forensic Science Transition Program

The BS Biology to MFS transition program allows students who are enrolled in the BS Biology with a cumulative grade point average of at least 3.0 and who are within completing their last six courses to register for two courses in the MFS program as electives for the bachelor's degree. The two graduate courses are restricted to those that do not require a prerequisite. Students must complete all transition program coursework with a grade of B or better. A complete description of Transition Program requirements can be found in the Policies and Procedures section of this Catalog.

The number of courses required to earn an MFS degree for transition program students is reduced from 12 to as few as 10 courses. Graduate-level coursework taken as part of the Biology program cannot be applied as graduate credit to the Master of Forensic Science program, nor will it transfer as graduate level credit to any other university because it becomes part of the undergraduate degree program. Students must enroll in and complete the first class in the Master's degree within 6 months of the conferral date of their undergraduate degree. The MFS program must be completed within 4 years with no break in enrollment of 12 months or more.

Program Learning Outcomes:

Upon successful completion of this program, students will be able to:

- Discuss biological processes at all of levels of organization: molecular, cellular and microbial, organismal, population, and ecosystem.
- Explain the importance of unifying concepts in biology, including cell theory, genetics, and evolution.
- Describe the structure and function of Earth's organisms, as well as their roles in the natural world.
- Apply the scientific method in laboratory-based and field-based inquiry.
- Demonstrate effective oral, visual, and written communication and quantitative skills, including the critical analysis of data and scientific literature.
- Demonstrate computer and technology literacy, including the ability to access databases within the context of course research and project development.
- Evaluate historical developments and research in biology, as well as current and contemporary research and challenges.

Degree Requirements

To receive a Bachelor of Science, Major in Biology, students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level, and a minimum 70.5 units of the University General Education requirements. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. Refer to the section on undergraduate admission requirements for specific information regarding admission and evaluation. All students receiving an undergraduate degree in Nevada are required by State Law to complete a course in Nevada Constitution.

* Completion of BIO 100, 100A, 201, 201A, 202, 202A, 203, 203A is equivalent to the course sequence BIO 161, 162, 163, 169A for fulfillment of the BS Biology degree.

Preparation for Major

(16-17 courses; 60-61.5 quarter units)

MTH 210* Probability and Statistics
Prerequisite: Accuplacer test placement evaluation or MTH 12A and MTH 12B

MTH 215* College Algebra & Trigonometry
Prerequisite: Accuplacer test placement evaluation or MTH 12A and MTH 12B

or

MTH 216A* College Algebra I (3 quarter units)
Prerequisite: Accuplacer test placement evaluation or MTH 12A and MTH 12B

and

MTH 216B*	College Algebra II (3 quarter units) <i>Prerequisite: MTH 216A</i>
CHE 141*	General Chemistry 1 <i>Prerequisite: MTH 215 or equivalent and CHE 101</i>
CHE 142*	General Chemistry 2 <i>Prerequisite: CHE 141</i>
CHE 143*	General Chemistry 3 <i>Prerequisite: CHE 142</i>
BIO 161*	General Biology 1
BIO 162*	General Biology 2 <i>Prerequisite: BIO 161</i>
BIO 163*	General Biology 3 <i>Prerequisite: BIO 161 and BIO 162</i>
PHS 171*	General Physics 1 <i>Prerequisite: MTH 215 or MTH 216A and MTH 216B</i>
PHS 172*	General Physics 2 <i>Prerequisite: PHS 171</i>
PHS 173*	General Physics 3 <i>Prerequisite: PHS 171 and PHS 172</i>
CHE 150	Introductory Organic Chemistry <i>Prerequisite: CHE 101 and CHE 101A or CHE 141, CHE 142, CHE 143 and CHE 149A</i>
CHE 150A	Introductory Organic Chem Lab (1.5 quarter units) <i>Prerequisite: CHE 150</i>
BIO 169A	General Biology Lab (1.5 quarter units) <i>Prerequisite: BIO 161 and BIO 162</i>
CHE 149A	General Chemistry Laboratory (1.5 quarter units) <i>Prerequisite: CHE 143</i>
PHS 179A	General Physics Lab (1.5 quarter units) <i>Prerequisite: PHS 171, PHS 172 and PHS 173</i>

* May be used to meet a General Education requirement.

Requirements for Major

(12 courses; 42 quarter units)

BIO 330	Ecology <i>Prerequisite: BIO 161, BIO 162, BIO 163, BIO 100A, CHE 141, CHE 142, CHE 143 and CHE 101A</i>
BIO 305	Genetics <i>Prerequisite: BIO 100A, BIO 161, BIO 162, BIO 163, CHE 101A, CHE 141, CHE 142 and CHE 143</i>
BIO 310	Evolution <i>Prerequisite: BIO 161, BIO 162, BIO 163 and BIO 100A</i>
BIO 406	Cellular Biology <i>Prerequisite: BIO 161, BIO 162, BIO 163, BIO 169A, CHE 141, CHE 142, CHE 143 and CHE 149A, Corequisite: BIO 406A</i>
BIO 406A	Cellular Biology Lab (1.5 quarter units) <i>Corequisite: BIO 406, Prerequisite: BIO 161, BIO 162, BIO 163, BIO 169A, CHE 141, CHE 142, CHE 143 and CHE 149A</i>
BIO 407	Molecular Biology <i>Prerequisite: BIO 161, BIO 162, BIO 163, BIO 100A, CHE 141, CHE 142, CHE 143 and CHE 101A, Corequisite: BIO 407A</i>
BIO 407A	Molecular Biology Lab (1.5 quarter units) <i>Corequisite: BIO 407, Prerequisite: BIO 161, BIO 162, BIO 163, BIO 100A, CHE 141, CHE 142, CHE 143, CHE 101A</i>
BIO 414	Invertebrate Zoology <i>Prerequisite: BIO 161, BIO 162, BIO 163, BIO 100A, CHE 141, CHE 142, CHE 143 and CHE 101A, Corequisite: BIO 414A</i>

BIO 414A	Invertebrate Zoology Lab (1.5 quarter units) <i>Corequisite: BIO 414</i>
BIO 416	Vertebrate Zoology <i>Prerequisite: BIO 161, BIO 162, BIO 163, BIO 100A, CHE 141, CHE 142, CHE 143 and CHE 101A, Corequisite: BIO 416A</i>
BIO 416A	Vertebrate Zoology Laboratory (1.5 quarter units) <i>Corequisite: BIO 416</i>
BIO 440	Botany <i>Prerequisite: BIO 161, BIO 162, BIO 163, BIO 100A, CHE 141, CHE 142, CHE 143 and CHE 101A</i>

Upper-Division Electives

(7 courses; 31.5 quarter units)

Students may select only 300, 400, or 500 level in the College of Letters and Sciences to complete the total of 76.5 quarter units of upper-division for the degree. Suggested upper-division courses are given below.

BIO 420	Animal Behavior <i>Prerequisite: BIO 161, BIO 162, BIO 163 and BIO 100A</i>
BIO 430	Immunology <i>Prerequisite: BIO 406 and BIO 407</i>
BIO 450	Natural History of California <i>Prerequisite: BIO 161, BIO 162, BIO 163 and BIO 100A, or BIO 100 and BIO 100A</i>
BIO 460	Marine Biology <i>Prerequisite: BIO 161 with a minimum grade of C, BIO 162 with a minimum grade of C and BIO 163 with a minimum grade of C</i>
BIO 461	Marine Biology Field Studies <i>Recommended Preparation: BIO 162 with a minimum grade of C</i>
BIO 470	Bioinformatics <i>Corequisite: BIO 470A, Prerequisite: BIO 161 with a minimum grade of C-, BIO 162 with a minimum grade of C- and BIO 163 with a minimum grade of C-</i>
BIO 470A	Bioinformatics Lab (1.5 quarter units) <i>Corequisite: BIO 470</i>
BIO 480	Studies in Field Biology
CHE 350	Organic Chemistry I <i>Prerequisite: CHE 142</i>
CHE 351	Organic Chemistry II <i>Prerequisite: CHE 350</i>
CHE 360	Biochemistry I <i>Prerequisite: CHE 350, CHE 350A, CHE 351 and CHE 351A</i>
CHE 361	Biochemistry II <i>Prerequisite: CHE 360</i>
EES 322	Oceanography
EES 335	Environmental Science
EES 336	Natural Resource Conservation
MTH 317	Mathematical Modeling <i>Prerequisite: MTH 215 or MTH 216A and MTH 216B and MTH 210</i>
SCI 303	GIS: Geographic Info Systems
SCI 400	History of Science <i>Prerequisite: One 4.5 quarter unit science course from the natural sciences.</i>
SCI 490	Guided Study (variable units)

Approved transition program students may select up to two FSC courses from below to meet up to 9 quarter units of the elective requirement.

FSC 630	Forensic Pathology I
FSC 633	Advanced Forensic Toxicology
FSC 634	Forensic Serology and DNA

FSC 635 Forensic Anthropology

FSC 642 Forensic Pathology II
Prerequisite: FSC 630

◆ MAJOR IN MATHEMATICS

Faculty Advisor: Igor Subbotin; (310) 662-2150; isubboti@nu.edu

The Bachelor of Science in Mathematics provides a strong foundation in mathematics and its applications. Designed to help address our nation's increasing need for mathematical scientists, technicians and especially teachers, the program emphasizes reflective and conceptual understanding and technique.

First, it provides the fundamental mathematical knowledge to formulate and solve problems. Computer science courses are encouraged, since the use of computers has been instrumental in the expansion of these opportunities. Students who want a basic mathematics degree can culminate their program with the project courses.

Second, the program trains mathematics teachers who want to provide quality mathematical instruction to students in primary or secondary schools. The single-subject teaching concentration was created for this purpose.

The Department of Mathematics and Natural Sciences is committed to the complete academic development of its students. Consequently, where practical, all mathematics and science courses are writing intensive and incorporate a diversity component. Students are advised that all mathematics courses encourage critical thinking by their very nature. Moreover, all mathematics courses require that the student purchase and use a scientific calculator for the operations of the subject matter. Some courses require a more advanced graphing calculator and computer software.

Single-Subject Mathematics Preparation Program

The Single-Subject Mathematics Preparation Program is approved by the Commission on Teacher Credentialing. Students who complete the program will not be required to take the California Subject Examination for Teachers (CSET) in mathematics in order to receive their teaching credential. The program emphasizes a strong foundation in mathematical content together with activities designed to help future teachers assume leadership roles in an increasingly complex educational world.

Interested students should complete the following application process:

- Send a letter to the Department Chair requesting admission to the program and copies of transcripts to the Lead Mathematics Faculty for evaluation.
- Upon enrollment, submit two essays for the Mathematics Portfolio (Instructions for the development and completion of a Mathematics Portfolio are sent upon receipt of the request letter. The portfolio is completed for review by the Department Chair or Lead Faculty two months before the last class.)
- In addition to the major program requirements, students must complete two classes MTH 304 and MTH 410.

The study of mathematics must encompass the discipline in its broadest sense. The future mathematician should develop in an academic environment that stresses scholarship, diversity, and growth through a rigorous and focused curriculum of advance mathematics that incorporates: problem solving, mathematics as communication, reasoning, and mathematical connections. The Bachelor of Science in Mathematics program is dedicated to providing such sound preparation and training to a diverse population of nontraditional learners whose goal is to work professionally in mathematics or teach Mathematics in California public schools.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Employ a variety of reasoning skills and effective strategies for solving problems both within the discipline of mathematics and in applied settings that include non-routine situations.
- Use language and mathematical symbols to communicate mathematical ideas in the connections and interplay among various mathematical topics and their applications that cover range of phenomena across appropriate disciplines.
- Use current technology tools, such as computers, calculators, graphing utilities, video, and interactive programs that are appropriate for the research and study in mathematics.

- Employ algebra and number theory ideas and tools as a base of a fundamental language of mathematics research and communication.
- Develop fundamental knowledge in geometry.
- Model real world problems with a variety of algebraic and transcendental functions.
- Use advanced statistics and probability concepts and methods.

Degree Requirements

To receive a Bachelor of Science in mathematics degree, students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level, and a minimum 70.5 units of the University General Education requirements. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements. Refer to the section on undergraduate admission procedures for specific information regarding admission and evaluation. All students receiving an undergraduate degree in Nevada are required by State Law to complete a course in Nevada Constitution.

Preparation for Major

(6 courses; 27 quarter units)

- MTH 210* Probability and Statistics
Prerequisite: Accuplacer test placement evaluation or MTH 12A and MTH 12B
- MTH 215* College Algebra & Trigonometry
Prerequisite: Accuplacer test placement evaluation or MTH 12A and MTH 12B
- MTH 220* Calculus I
Prerequisite: Accuplacer test placement or MTH 216B or MTH 215
- MTH 221 Calculus II
Prerequisite: MTH 220
- MTH 222 Calculus III
Prerequisite: MTH 221
- MTH 223 Calculus IV
Prerequisite: MTH 222

* May be used to meet a General Education requirement.

Requirements for Major

(17 courses; 76.5 quarter units)

- MTH 311 Topics from Geometry
Prerequisite: Accuplacer test placement or MTH 216B or MTH 215
- MTH 325 Discrete Mathematics
Prerequisite: MTH 215 or MTH 216A and MTH 216B
- MTH 435 Linear Algebra
Prerequisite: MTH 220 and MTH 325
- MTH 433 Differential Equations
Prerequisite: MTH 223 and MTH 435 or CSC 209 and CSC 310
- MTH 411 Number Theory
Prerequisite: MTH 216B or MTH 215 or MTH 301
- MTH 416 Algebraic Structures
Prerequisite: MTH 435 and MTH 325
- MTH 417 Foundations of Geometry
Prerequisite: MTH 216A and MTH 216B or MTH 215 and MTH 311
- MTH 418 Statistical Analysis
Prerequisite: MTH 210 and MTH 220
- MTH 432 Advanced Calculus
Prerequisite: MTH 223
- MTH 412 History of Mathematics
Prerequisite: MTH 215 or MTH 301 or MTH 216A and MTH 216B
- MTH 440 Numerical Analysis
Prerequisite: MTH 220
- MTH 441 Abstract Algebra
Prerequisite: MTH 416

MTH 442	Functions of Complex Variables <i>Prerequisite: MTH 223</i>
MTH 438	Applied Mathematical Modeling <i>Prerequisite: MTH 433, MTH 416 and MTH 432</i>
MTH 460	Problem Solving Strategies <i>Prerequisite: MTH 416 and MTH 417</i>
MTH 461	Methods of Teaching Math <i>Prerequisite: MTH 311, MTH 412, MTH 210 and MTH 460</i>
MTH 450A	Mathematics Project Course I <i>Prerequisite: Completion of Mathematics Core for B.S. and interview with Department Chair.</i>

Additional Requirement for Single Subject Preparation Students Only (2 courses; 9 quarter units)

MTH 304	Math Practicum and Portfolio <i>Prerequisite: MTH 215 or MTH 216A and MTH 216B or placement evaluation</i>
MTH 410	Technology in Math Education <i>Prerequisite: MTH 215 or MTH 216A and MTH 216B or MTH 301</i>

◆ MAJOR IN ORGANIZATIONAL BEHAVIOR

Faculty Advisor: Maureen O'Hara; (858) 642-8464; mohara@nu.edu

The BSOB prepares students for successful engagement within 21st Century companies and civil society organizations. Students master relevant theory, concepts, and skills which prepare them for specific roles (e.g. manager, trainer), interventions (e.g. conflict resolution, diversity training), and organizational-level activities (e.g. program development, change, and evaluation) critical to many contemporary careers. In a fast moving and interconnected global context, the program's emphasis on the application of psychological principles in organizational development and change is also critical in helping people lead meaningful and productive lives and in enhancing their contribution to the organization's mission and to the larger community.

Students are systematically trained and mentored in role-related competencies including assessment and research, performance enhancement, culture and diversity integration, leadership and mentoring, employee wellness, creativity and innovation, organizational design, professional ethics, critical thinking and analysis, communication and presentation skills, and adapting in a global community.

Competencies include collection, analysis and display of data, effective communication, diagnosing and implementing change processes, working in diverse workplaces, personal wellness and stress management, conflict resolution, crisis management, effective remote and in-person team facilitation, use of group collaboration technology, creativity and dynamics of innovation, human resource training and development, decision making, leadership, coaching, and ethics.

These competencies prepare students for occupations such as performance trainers, coaches, facilitators, assessors, diversity trainers, change managers, management analysts, mediators, peace workers, team leaders, wellness and employees assistance, technology implementation designers, creativity consultants, in settings such as health care, public safety, military tech start-ups, local government, non-profit NGOs, refugee aid community outreach. The BSOB provides a sound basis for continued study at the Masters and Doctoral levels.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Communicate effectively using appropriate technology, professional reports and research papers in APA style.
- Apply ethics, responsibility, and legal obligations to personal and professional decision making.
- Analyze group dynamics in process and apply group practice to cooperative/collaborative team tasks.
- Apply the principles of human resource development, wellness, performance coaching and training to employee wellbeing, and organizational effectiveness.

- Employ entry level skills and techniques in diagnosing, planning, implementing, and managing organizational change and technological innovation.
- Demonstrate mastery in interpersonal communication and conflict resolution skills in diverse settings with diverse populations using oral and written forms.
- Recognize multiple cultural perspectives and assess their implications for work place success.
- Apply basic methods of collection and interpretation of behavioral and organizational data and use appropriate methods for analysis and display.
- Compare and contrast major psychological concepts of leadership, power, innovation and social transformation.
- Develop a personal approach to work-life balance in today's workplaces.

Degree Requirements

To receive a Bachelor of Science in Organizational Behavior, students must complete at least 180 quarter units as articulated below, 76.5 of which must be completed at the upper-division level, 45 of which must be completed in residence at National University and complete a minimum 70.5 units of the University General Education requirements. In the absence of transfer credit additional general electives may be needed to fulfill the total unit requirement for the degree. All students receiving an undergraduate degree in Nevada are required by State Law to complete a course in Nevada Constitution.

Bachelor of Sciences in Organizational Behavior/Master of Human Behavior (BSOB/MAHUB) Transition Program

Students who are currently enrolled in the BSOB degree program and have at least a GPA of 3.0 and are within six courses of graduation, may request the BSOB/MAHUB transition program through their advisor and once approved may then take two of the following three MAHUB classes as electives during the BSOB program: HUB601A, HUB646, and HUB601D. To be eligible, students must apply for and begin the MAHUB program within six months of completing the BSOB program. Students may choose up to two graduate-level MAHUB courses for which all prerequisites are met (if any required). The number of courses required to earn a MAHUB is reduced from 12 to as few as 10 courses. Graduate-level coursework taken as part of the transition program cannot be transferred as graduate level credit to this or any other university. Students must complete the graduate level coursework taken as part of the BSOB degree with a grade of "B" or better. Students must complete the MAHUB program within four years with no break exceeding 12 months. A complete description of Transition Program requirements can be found in the Policies and Procedures section of this Catalog.

Requirements for Major

(9 courses; 40.5 quarter units)

HUB 440	Organizational Development <i>Prerequisite: ENG 100, ENG 101, and PSY 100</i>
HUB 410	Psychology for Managers <i>Prerequisite: ENG 100, ENG 101, and PSY 100</i>
HUB 500	Cross-Cultural Dynamics <i>Prerequisite: ENG 100, ENG 101, and PSY 100</i>
MGT 422	Team Bldg, Interpers Dynamics
or	
HUB 400	Group Structure & Dynamics <i>Prerequisite: ENG 100, ENG 101, and PSY 100</i>
HRM 409B	Survey in HRM & OD
or	
PSY 432	Social Psychology <i>Prerequisite: ENG 100, ENG 101, and PSY 100</i>
MGT 400	Ethics in Law, Business & Mgmt
HUB 401	Conflict Resolution <i>Prerequisite: ENG 100, ENG 101, and PSY 100</i>
or	
HUB 420	Human Communication <i>Prerequisite: ENG 100, ENG 101, and PSY 100</i>

- HUB 441 Research Design and Analysis
Prerequisite: ENG 100, ENG 101, MTH 210, and PSY 100
- PSY 480 Senior Project
Prerequisite: All other courses required for the major must be completed prior to enrolling in this course.

Upper-Division Electives

(7 courses; 31.5 quarter units)

Students can select from the following courses to meet elective requirements: Any upper-division course with prefix: HUB, PSY, SOC, LED, COM, MGT.

- CJA 400 Gangs in America
- CJA 446 CJ Management and Leadership
- HCA 400 Foundations of HC Leadership
Recommended Preparation: Completion of all Coursework in Preparation for the Major
- HCA 401 Intro to HA HR Management
Recommended: Prior completion of: all Coursework in Preparation for the Major

■ FOREIGN CREDENTIAL BRIDGE PROGRAM (FOR STUDENTS WITH FOREIGN CREDENTIALS)

The Foreign Credential Bridge Program (FCBP) is designed as a prequalifying year of undergraduate study for students who have earned a recognized three-year bachelor's degree outside of the United States and who wish to earn a master's degree from National University. Students with such foreign credentials who apply to a master's program must complete this fourth year of undergraduate courses prior to beginning graduate level coursework. Eligibility for the FCBP is made by the office of the Registrar. Students must request a pre-evaluation of their foreign credentials through an Admissions Advisor or through the International Programs Office (for those with student visas).

Degree Requirements

This bridge program requires a residency minimum of 48 quarter units of study. Students must fulfill the requirements in the areas listed below. These requirements may be met by coursework taken in the bachelor's degree or at another regionally accredited institution. If they are so fulfilled, the content of the area will be waived, but the student will still need to meet the overall unit requirement of the program through open elective credit.

AREA A: ENGLISH COMMUNICATION

(15 quarter units required)

CATEGORY 1—Writing

(10.5 quarter units required)

- ENG 100 Effective College English I (3 quarter units)
Prerequisite: Satisfactory performance on Accuplacer
- ENG 101 Effective College English II (3 quarter units)
Prerequisite: ENG 100
- ENG 240 Advanced Composition
Prerequisite: ENG 100 and ENG 101

or

- ENG 334A Technical Writing
Prerequisite: ENG 100 and ENG 101 (Only Business, Engineering and Nursing majors may fulfill the requirement by taking ENG 334A)

CATEGORY 2—Oral Communication

(4.5 quarter units required)

- COM 101 Intro to Oral Communication
Prerequisite: ENG 100 and ENG 101
- COM 103 Public Speaking

AREA B: MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING

(Minimum 4.5 quarter units)

- MTH 210 Probability and Statistics
Prerequisite: Accuplacer test placement evaluation or MTH 12A and MTH 12B

- MTH 215 College Algebra & Trigonometry
Prerequisite: Accuplacer test placement evaluation or MTH 12A and MTH 12B
- MTH 216A College Algebra I (3 quarter units)
Prerequisite: Accuplacer test placement evaluation MTH 12A and MTH 12B
- MTH 216B College Algebra II (3 quarter units)
Prerequisite: MTH 216A

AREA D: ARTS AND HUMANITIES

(13.5 quarter units required)

- ART 100 Introduction to Art History
Prerequisite: ENG 100 and ENG 101
- ART 200 Visual Arts
- HIS 233 World Civilizations I
Prerequisite: ENG 100 and ENG 101
- HIS 234 World Civilizations II
Prerequisite: ENG 100 and ENG 101
- LIT 100 Introduction to Literature
Prerequisite: ENG 100 and ENG 101
- LIT 345 Mythology
Prerequisite: LIT 100 and ENG 240
- MUS 100 Fundamentals of Music
- MUS 327 World Music
Prerequisite: ENG 100 and ENG 101
- PHL 100 Introduction to Philosophy
Prerequisite: ENG 100 and ENG 101

AREA E: SOCIAL AND BEHAVIORAL SCIENCES

(13.5 quarter units required)

- COM 380 Democracy in the Info. Age
Prerequisite: ENG 101 and ENG 100
- ECO 203 Principles of Microeconomics
- ECO 204 Principles of Macroeconomics
- HIS 220A United States History I
Prerequisite: ENG 100 and ENG 101
- HIS 220B United States History II
Prerequisite: ENG 100 and ENG 101
- HIS 300 Roots of Western Civilization
Prerequisite: ENG 100 and ENG 101
- SOC 350 Cultural Diversity
Prerequisite: ENG 100 and ENG 101
- POL 201 American Politics
Prerequisite: ENG 100 and ENG 101
- PSY 100 Introduction to Psychology
- SOC 100 Principles of Sociology
Prerequisite: ENG 100 and ENG 101
- SOC 260 Cultural Anthropology
Prerequisite: ENG 100 and ENG 101

AREA F: PHYSICAL AND BIOLOGICAL SCIENCES

(6 quarter units required)

Note: One science lab is required at 1.5 quarter units.

- BIO 100 Survey of Bioscience
- BIO 100A Survey of Bioscience Lab (1.5 quarter units)
Prerequisite: BIO 100 for non-science majors (GE) or BIO 163 for science majors
- CHE 101 Introductory Chemistry
Recommended Preparation: MTH 204 or MTH 215 or MTH 216A and MTH 216B
- CHE 101A Introductory Chemistry Lab (1.5 quarter units)
Prerequisite: CHE 101 or CHE 141 for science majors

EES 103	Fundamentals of Geology
EES 103A	Fundamentals of Geology Lab (1.5 quarter units) <i>Prerequisite: EES 103</i>
PHS 104	Introductory Physics <i>Prerequisite: 2 years of high school algebra and MTH 204 or MTH 215 or MTH 216A and MTH 216B</i>
PHS 104A	Introductory Physics Lab (1.5 quarter units) <i>Prerequisite: PHS 104 or PHS 171 for science majors</i>
BIO 201	Human Anatomy & Physiol I <i>Recommended: Prior completion of: BIO 100, BIO 100A, CHE 101, CHE 101A or equivalent courses.</i>
BIO 201A	Human Anatomy & Physiol Lab I (1.5 quarter units) <i>Prerequisite: BIO 201</i>
BIO 202	Human Anatomy & Physiol II <i>Recommended: Prior completion of: BIO 201 and BIO 201A, BIO 100 and BIO 100A, CHE 101 and CHE 101A or equivalent courses</i>
BIO 202A	Human Anatomy & Physiol Lab II (1.5 quarter units) <i>Prerequisite: BIO 202</i>
BIO 203	Introductory Microbiology <i>Recommended: Prior completion of: BIO 201 and BIO 201A, BIO 202 and BIO 202A, BIO 100 and BIO 100A, CHE 101 and CHE 101A or equivalent courses</i>
BIO 203A	Introductory Microbiology Lab (1.5 quarter units) <i>Prerequisite: BIO 203</i>

MINORS

● MINOR IN CREATIVE WRITING

Faculty Advisor: Colin Dickey; (310) 662-2131; cdickey@nu.edu

The Minor in Creative Writing is designed for students in other majors who wish to develop their creative writing skills.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Discuss the basic conventions of at least two different contemporary creative genres.
- Produce polished, completed works in those genres.
- Read their own work critically and employ revision strategies to improve it.
- Critique the writing of others and offer constructive suggestions for improving it in a collegial setting.
- Produce a significant project in one genre.

Preparation for Minor

(2-3 courses; 9-13.5 quarter units)

LIT 100* Introduction to Literature
Prerequisite: ENG 100 and ENG 101

* May be used to meet a General Education requirement.

Students will also need to take one or more of the following prerequisites for the upper-division requirements:

ENG 201* Fiction Writing I
Prerequisite: ENG 101

ENG 202* Poetry Writing I
Prerequisite: ENG 101

ENG 203* Screenwriting I
Prerequisite: ENG 101

* May be used to meet a General Education requirement.

Requirements for Minor

(6 courses; 27 quarter units)

Two (2) of the following courses:

ENG 301 Fiction Writing II
Prerequisite: ENG 201

ENG 302 Poetry Writing II
Prerequisite: ENG 202

ENG 303 Screenwriting II
Prerequisite: ENG 203

ENG 375 Nature Writing
Prerequisite: ENG 100 and ENG 101

One (1) of the following courses:

LIT 401 Contemporary Fiction
Prerequisite: ENG 240 and LIT 100

LIT 402 Contemporary Poetry
Prerequisite: ENG 240 and LIT 100

One (1) of the following courses:

ENG 401 Fiction Workshop
Prerequisite: ENG 301

ENG 402 Poetry Workshop
Prerequisite: ENG 302

ENG 403 Screenwriting Workshop
Prerequisite: ENG 303

Two (2) of the following courses:

ART 315 Film as Art
Prerequisite: ENG 100 and ENG 101

COM 360 Representation in the Media
Prerequisite: ENG 100 and ENG 101

COM 385 Interactive Storytelling
Prerequisite: ENG 101

or

Upper-Division ENG courses.

or

Upper-Division JRN courses.

or

Upper-Division LIT courses.

● MINOR IN ENGLISH

Faculty Advisor: John Miller; (714) 429-5146; jmiller@nu.edu

The Minor in English is designed to provide students with a grounding in some of the major periods, movements, and authors of British and American literature, and the opportunity to pursue further study of topics of interest to them.

Requirements for Minor

(6 courses; 27 quarter units)

Choose at least **three (3)** of the following courses:

LIT 311 British Literature I
Prerequisite: ENG 240 and LIT 100

LIT 312 British Literature II
Prerequisite: ENG 240 and LIT 100

LIT 321 American Literature I
Prerequisite: ENG 240 and LIT 100

LIT 322 American Literature II
Prerequisite: ENG 240 and LIT 100

LIT 338 Shakespeare
Prerequisite: ENG 240 and LIT 100

Choose the remaining course(s) from available Upper-Division LIT courses or from the following courses:

ART 315	Film as Art <i>Prerequisite: ENG 100 and ENG 101</i>
ENG 301	Fiction Writing II <i>Prerequisite: ENG 201</i>
ENG 302	Poetry Writing II <i>Prerequisite: ENG 202</i>
ENG 303	Screenwriting II <i>Prerequisite: ENG 203</i>
ENG 350	Fundamentals of Linguistics <i>Prerequisite: ENG 100 and ENG 101</i>
ENG 375	Nature Writing <i>Prerequisite: ENG 100 and ENG 101</i>

● MINOR IN GLOBAL STUDIES

Faculty Advisor: Raphi Rechitsky; (858) 642-8775; rrechitsky@nu.edu

The Global Studies Minor provides students an opportunity to complement their major with a focus on global inter-connections that affect the wealth and well-being of people throughout the world. Students gain appreciation and understanding of the processes of globalization, knowledge that is essential to understanding our society.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate cultural and global awareness to be responsible citizens in a diverse society.

Requirements for Minor

(6 courses; 27 quarter units)

Choose **six (6)** of the following courses:

GLS 310	Global Communications <i>Prerequisite: ENG 240</i>
GLS 330	Film in a Global Context <i>Prerequisite: ENG 240</i>
GLS 410	Gender and Global Society <i>Prerequisite: ENG 240</i>
GLS 420	Ecological Revolutions <i>Prerequisite: ENG 240</i>
GLS 430	The Global Economy <i>Prerequisite: ENG 240</i>
HIS 320	Culture of Global Capitalism <i>Prerequisite: ENG 100 and ENG 101</i>
PHL 320	World Religions <i>Prerequisite: ENG 100 and ENG 101</i>
SCI 300	Geography
MUS 327	World Music <i>Prerequisite: ENG 100 and ENG 101</i>
POL 320	Politics of Social Movements <i>Prerequisite: ENG 100 and ENG 101</i>
POL 350	International Relations <i>Prerequisite: ENG 100 and ENG 101</i>
LIT 463	20th Century World Literature <i>Prerequisite: ENG 240 and LIT 100</i>
GLS 440	Study Abroad <i>Prerequisite: HIS 320</i>

or

IBU 540	International Experience
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● MINOR IN HISTORY

Faculty Advisor: Daniel Thorburn; (209) 475-1443; dthorbur@nu.edu

Requirements for Minor

(6 courses; 27 quarter units)

Choose any **six (6)** of the following courses:

HIS 360	American Colonial Experience <i>Prerequisite: ENG 100, ENG 101 and HIS 220A</i>
HIS 361	Making and Sundering of Union <i>Prerequisite: ENG 100, ENG 101 and HIS 220A</i>
HIS 362	U.S. Between Wars, 1865-1917 <i>Prerequisite: ENG 100, ENG 101 and HIS 220B</i>
HIS 363	U.S. Since World War I <i>Prerequisite: ENG 100, ENG 101 and HIS 220B</i>
HIS 431	The Ancient World <i>Prerequisite: ENG 100, ENG 101 and HIS 233</i>
HIS 432	The Classical World <i>Prerequisite: ENG 100, ENG 101 and HIS 233</i>
HIS 433	The Post-Classical World <i>Prerequisite: ENG 100, ENG 101 and HIS 233</i>
HIS 434	Modern World, 1500 to Present <i>Prerequisite: ENG 100, ENG 101 and HIS 234</i>

● MINOR IN MATHEMATICS

Faculty Advisor: Igor Subbotin; (310) 662-2150; isubboti@nu.edu

Requirements for Minor

(6 courses; 27 quarter units)

Students must select **six (6)** Upper-Division (300-400 level) courses in mathematics beyond MTH 221. Students can complete this minor to fulfill requirements for a Bachelor of Arts in Interdisciplinary Studies.

● MINOR IN POLITICAL SCIENCE

Faculty Advisor: Shak Hanish; (858) 642-8494; shanish@nu.edu

Preparation for Minor

POL 100*	Introduction to Politics <i>Prerequisite: ENG 100 and ENG 101</i>
POL 201*	American Politics <i>Prerequisite: ENG 100 and ENG 101</i>

* May be used to meet a General Education requirement.

Requirements for Minor

(6 courses; 27 quarter units)

Choose **six (6)** courses from the following:

POL 320	Politics of Social Movements <i>Prerequisite: ENG 100 and ENG 101</i>
POL 330	Political Theory <i>Prerequisite: ENG 100 and ENG 101</i>
POL 340	Comparative Politics <i>Prerequisite: ENG 100 and ENG 101</i>
POL 350	International Relations <i>Prerequisite: ENG 100 and ENG 101</i>
POL 360	Public Policy <i>Prerequisite: ENG 100 and ENG 101</i>
POL 400	European Politics <i>Prerequisite: ENG 100 and ENG 101</i>
POL 410	Middle Eastern Politics <i>Prerequisite: ENG 100 and ENG 101</i>
POL 539	Dynamics of World Politics
SOC 385	Methods of Social Inquiry <i>Prerequisite: ENG 100, ENG 101 and SOC 100</i>

SOC 540 Power and Social Change
Prerequisite: ENG 100 and ENG 101

● MINOR IN PSYCHOLOGY

Faculty Advisor: Nicole Polen-Petit; (916) 855-4303; npolen-petit@nu.edu

The minor in psychology represents current trends in the field of psychology and is designed to augment the major in numerous disciplines such as nursing, health, sociology, criminal justice, biology, business, management, and education.

Requirements for Minor

(6 courses; 27 quarter units)

Choose **six (6)** from the following courses:

- PSY 426 History & Philosophy of Psych
Prerequisite: ENG 100, ENG 101 and PSY 100
- PSY 427 Biological Psychology
Prerequisite: ENG 100, ENG 101 and PSY 100
- PSY 428 Developmental Psychology
Prerequisite: ENG 100, ENG 101 and PSY 100
- PSY 430 Intro to Psychopathology
Prerequisite: ENG 100, ENG 101 and PSY 100
- PSY 432 Social Psychology
Prerequisite: ENG 100, ENG 101 and PSY 100
- PSY 441 Global Psychology
Prerequisite: PSY 100
- PSY 455 Psychology of Bereavement
Prerequisite: ENG 100, ENG 101 and PSY 100
- PSY 457 Forensic Psychology
Prerequisite: ENG 100 and PSY 100
- PSY 458 Health Psychology
Prerequisite: ENG 100, ENG 101 and PSY 100

● MINOR IN SOCIOLOGY

Faculty Advisor: Thomas Green; (858) 642-8424; tgreen@nu.edu

Faculty Advisor: Lorna Zukas; (858) 642-8437; llueker@nu.edu

Requirements for Minor

(6 courses; 27 quarter units)

To minor in Sociology, students must successfully complete **six (6)** of the following courses with a grade of "C" or better.

- SOC 325 Popular Culture
Prerequisite: ENG 100 and ENG 101
- SOC 328 Intercultural Thinking
Prerequisite: ENG 100 and ENG 101
- SOC 344 Marriage, Sex and the Family
Prerequisite: ENG 100 and ENG 101
- SOC 443 Sociology of Deviance
Prerequisite: ENG 100, ENG 101 and SOC 100
- SOC 445 Contemporary Social Problems
Prerequisite: ENG 100 and ENG 101
- SOC 365 Classical Social Theory
Prerequisite: SOC 100 and ILR 260
- SOC 375 Contemporary Social Theory
Prerequisite: ENG 100, ENG 101 and SOC 100
- SOC 385 Methods of Social Inquiry
Prerequisite: ENG 100, ENG 101 and SOC 100
- SOC 455 Organizational Sociology
Prerequisite: ENG 100, ENG 101 and SOC 100
- SOC 500 Cultural Pluralism in the USA
Prerequisite: ENG 100 and ENG 101
- SOC 540 Power and Social Change
Prerequisite: ENG 100 and ENG 101

GRADUATE DEGREES

■ MASTER OF ARTS IN COUNSELING PSYCHOLOGY

Faculty Advisor: Brian Tilley; (760) 268-1550; btilley@nu.edu

The Master of Arts in Counseling Psychology degree provides the academic pathway for students who are committed to the practice of professional counseling. The program includes two core course sequences, Core Sequence I and III, that all MA Counseling Psychology students must take and one core sequence, Core Sequence II, which offers an option for MFT-focused coursework or PCC-focused coursework. Each student must choose one of the following options for Core Sequence II:

The MA Counseling Psychology – MFT Sequence Option emphasizes marriage and family therapy and is designed for students who are committed to the practice of individual, couples, family, adolescent, and child psychotherapy. This version of the degree meets the academic requirements necessary to sit for the Marriage and Family Therapist (MFT) License mandated by the Board of Behavioral Sciences in the state of California. Students who wish to also take the PCC specialization must take the three PCC-focused courses and complete the additional practicum hours required for the PCC license in order to meet the educational requirements for both licenses.

The MA Counseling Psychology – PCC Sequence Option emphasizes counseling techniques and theories, including those related to career development, and is designed for students who are committed to the practice of individual and group counseling. This version of the degree meets the academic requirements to be eligible for licensing as a professional clinical counselor (PCC) by the Board of Behavioral Sciences in the state of California. Students may take courses from the MFT Area of Specialization if they want to qualify for both licenses or want to qualify to work with couples, families, and/or children as a PCC. Students who wish to also take the MFT specialization must take the three MFT track courses in order to meet the educational requirements for both licenses.

The degree with either sequence may not meet requirements in other states. Students should consult the licensing boards of the appropriate states for information about licensure outside of California. The degree also prepares students for the pursuit of doctoral studies in practitioner-oriented programs such as counseling or clinical psychology.

Application Requirements

Students interested in enrolling in this program should contact the appropriate campus for further information regarding the application process.

To be considered for admission, applicants must meet the University graduate admission requirements listed in the general information section of the catalog, as well as the MAC program criteria. All applicants are evaluated for the psychotherapy profession, regardless of career goals. Students must submit an application packet, pass a personal interview, and attend the program orientation before they may begin classes.

Students for whom English is not their primary language must take the Test of English as a Foreign Language (TOEFL) exam and receive one of the below scores before beginning the program:

- Paper-based - 550
- Computer-based - 213
- Internet Based - 79

Students must submit their TOEFL score with their application.

Students should consult the regional faculty to determine at what point in the sequence they may enter the program. Entrance points may differ in each region.

Program Fees

For students in the MFT Specialization: \$350 for materials that assist students in the preparation for the California Marriage and Family Therapist examination for licensure.

Program Requirements

- Students must complete a minimum of 10 hours of individual, marital, family, and group psychotherapy before taking PSY 611B and another 15 hours before graduation for a total of 25 hours.
- Students must obtain a total of 225 hours (MFT) or 280 hours (PCC) of face-to-face counseling experience at an approved practicum site with a

designated practicum site supervisor during the practicum class. Students who want to complete both MFT and PCC practicum requirements will need to meet the 280 hours requirement.

- Students who do not have an undergraduate degree in psychology must take PSY 501A and PSY 501B as the first two courses in their program. Under exceptional circumstances requests for independent studies in courses without experiential clinical work may be considered for approval by the department.
- Students seeking licensure in California must register with the Board of Behavioral Sciences (BBS) after graduation and fulfill all BBS licensing requirements for the license relevant to the student's MAC specialization.
- Students are also urged to join a professional association. Students in the MFT track should consider joining the California Association of Marriage and Family Therapists. Students in the PCC track should consider joining the American Counseling Association and/or the California Association for Licensed Professional Clinical Counselors. Students must obtain malpractice insurance, which may be obtained through the relevant association listed above or another professional organization.
- Students must complete all coursework within seven years. Any courses taken more than seven years ago must be repeated.
- Students in the Master of Arts in Counseling Psychology who have a GPA of 3.0 may take a regular evening course simultaneously with PSY 680A or PSY 680B.

The program is guided by the standards of the California Board of Behavioral Sciences for academic training relevant to licensing as a Marriage and Family Therapist in the State of California (MFT Sequence) or as a Licensed Professional Clinical Counselor (PCC Sequence), and by contemporary scientific, professional, and public practice. At the completion of the program students will achieve the following outcomes required for successful practice of Marriage and Family Therapy (MFT Sequence) or Professional Clinical Counseling (PCC Sequence):

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate core psychological concepts and therapeutic skills that underpin counseling, psychotherapy, and mental health counseling.
- Critically evaluate the relevant methods of research used in the study of behavior and their limitations.
- Understand and demonstrate current professional standards of ethics, values, and laws related to the practice of professional psychotherapists.
- Demonstrate cultural competence in addressing the mental health needs of people of diverse backgrounds and circumstances, including an appreciation for the wide cultural diversity among California's multiple diverse communities.
- Evaluate psychological distress and/or impairment, mental disorders, and problems in living in diverse individuals and systems within various mental health settings.
- Develop culturally appropriate strategies, treatment plans, and professional relationships for successful interventions with diverse client groups in various clinical contexts.
- Apply related therapeutic interventions with diverse clients using a variety of psychotherapeutic models.
- Apply a working knowledge of a range of topics important to mental health practice including (but not limited to) psychopharmacology, addictive and compulsive disorders, structured psychological assessment, relational violence, gender and sexuality, and trauma/crisis.
- Understand norms and principles of public mental health work including (but not limited to) case management, collaborative treatment, evidence-based practice, strength-based model, resiliency, and recovery-oriented care to work with clients.
- Integrate professional development through self-reflection emphasizing personal capacities such as self-awareness, integrity, sensitivity, flexibility, insight, compassion, imagination, and personal presence.

Degree Requirements

To receive the Master of Arts in Counseling Psychology, students must complete at least 90 quarter units of graduate work. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree and if the units were not used in earning another advanced degree. Students for whom English is a second language must take and pass an English Language Proficiency exam prior to beginning any coursework. Students should refer to the section on graduate admission for specific information regarding additional application and evaluation requirements.

Prerequisites for Major

(2 courses; 9 quarter units)

Students who hold a bachelor's degree in Psychology may request these courses to be waived. Please contact the Lead Faculty.

PSY 501A Foundations in Counseling I

PSY 501B Foundations in Counseling II

Core Requirements – Sequence I

(6 courses; 27 quarter units)

Students will take classes from this sequence then take 3 area of specialization courses, Core Course Sequence II.

PSY 605 Lifespan Development
Prerequisite: Bachelor's Degree in Psychology or PSY 501A and PSY 501B

PSY 620 Perspectives on Psychology
Prerequisite: Bachelor's Degree in Psychology or PSY 501A and PSY 501B

PSY 610 Case Management
Prerequisite: Bachelor's Degree in Psychology or PSY 501A and PSY 501B

PSY 611A Counseling Paradigms I
Prerequisite: Bachelor's Degree in Psychology or PSY 501A and PSY 501B

PSY 612A Clinical Assessment I

PSY 612B Clinical Assessment II
Prerequisite: PSY 612A

Core Requirements – Sequence II: PCC Option

Students interested in becoming a Licensed Professional Clinical Counselor will take these courses between Core Sequence I and III.

PSY 653 Research and Evaluation

PSY 624A Testing and Assessment

CED 612 Career & Academic Counseling

Core Requirements—Sequence II: MFT Option

Students interested in becoming a Licensed Marriage and Family Therapist will take these courses between Core Sequence I and III.

PSY 636 Child and Adolescent Therapy

PSY 632A Family Therapy

PSY 632B Couples Therapy

Core Requirements – Sequence III

(11 courses; 49.5 quarter units)

PSY 627 Legal & Ethical Issues

PSY 611B Counseling Paradigms II

PSY 680A Counseling Practicum I
Prerequisite: PSY 611B with a minimum grade of S

PSY 628 Group Therapy

PSY 637 Cultural Competencies

CHD 640 Treatment of Addictions

PSY 626 Human Sexuality

PSY 679 Psychology of Trauma

PSY 680B	Counseling Practicum II <i>Prerequisite: PSY 680A</i>
PSY 678	Clinical Biopsychology
PSY 638	Wellbeing & Wellness

■ MASTER OF ARTS IN ENGLISH

Faculty Advisor: Franz Potter; (714) 429-5410; fpotter@nu.edu

The Master of Arts in English program provides a comprehensive program of graduate study in English, including core courses in literature and a rich array of electives covering the large area of academic study under the umbrella term English. The program is ideal for teachers who desire a content M.A. beyond the credential. It is also excellent preparation for doctoral studies in English, teaching in the two-year college, or other careers requiring a high degree of literacy.

The program's core requirements include five seminars—theory, research, and three core literature courses: a literary period course, a major author course, and a theme course. Students have the opportunity to select their course content from a variety of available topics including, but not limited to, Medieval Literature, 18th Century Novels, English and American Romanticism and Hemingway. Those wanting a deeper study of English or American literature can select additional seminars in literary periods, major authors, or themes as their electives.

Courses in film studies, creative writing, and rhetoric are also offered as electives for students with interests in those areas. In the MA English program, we study film as literature, and we share a rich selection of film studies courses with the MA Film Studies program. Students wanting a specific specialization in either Rhetoric or Gothic Studies should refer to the catalog description of those specializations.

The curriculum covers major approaches to literature, including theoretical, historical, comparative, thematic, multicultural, and genre studies. The program provides students with the critical vocabulary, tools, and research ability to produce literary scholarship of professional quality and to participate in the ongoing scholarly discussions of issues in the field of literary study. In their capstone project, students write a scholarly paper to the standards of a scholarly journal of their choice, and a number of our graduates have succeeded in publishing their capstone projects.

NOTE: The program includes a number of variable-content courses under the same course number. Variable content course topics will be found in SOAR and will also appear on student transcripts. For example, our ENG 620A and ENG 620B offerings include seminars in Medieval English literature, 17th-Century English Poetry, English and American Romanticism, Literary Realism, Modernism, Harlem Renaissance, Greatest Generation, Dark Romanticism, and Postmodernism, among others. Variable content courses can be taken more than once, with different content, to fulfill degree requirements.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Research and apply relevant criticism in sustained analyses and interpretations of specific works of fiction, non-fiction, and poetry.
- Evaluate the relevance and validity of different theoretical approaches (e.g., historicist, biographical, etc.) to the understanding of specific works of literature.
- Engage in informed critical discussion, both oral and written, of theoretical issues pertaining to the study of literature.
- Engage in informed critical discussion, both oral and written, of the works and criticism of a specific literary period or movement.
- Participate in rigorous critiques of the scholarly works of others.
- Revise and expand a scholarly paper to submit for publication in a scholarly or literary journal.

Degree Requirements

To receive the Master of Arts in English, students must complete at least 45 quarter units. A total of 4.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree and provided the units were not used in earning another advanced degree. Students should refer to the General Catalog section on graduate admission requirements for specific information regarding admission and evaluation.

Core Requirements

(6 courses; 27 quarter units)

ENG 600	Seminar in Literary Theory
ENG 689	Intro to Grad English Studies
ENG 620A	Literary Period or Movement I

or

ENG 620B	Literary Period or Movement II
ENG 680A	Seminar in a Theme I

or

ENG 680B	Seminar in a Theme II
ENG 690A	Major Author Seminar I

or

ENG 690B	Major Author Seminar II
ENG 699	English Capstone Course

or

ENG 663	Capstone Project in Rhet Crit <i>Prerequisite: ENG 656, ENG 657, ENG 655, ENG 668, or ENG 680A Pictures that Speak</i>
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A total of **five (5)** core courses and **four (4)** electives, as described in the Degree Requirements for the Program, must be completed before enrolling in the Capstone course.

Specialization Requirements

(4 courses; 18 quarter units)

Select from the following courses:

ENG 610	Multicultural Literature
ENG 620A	Literary Period or Movement I
or	
ENG 620B	Literary Period or Movement II
MCW 630	Seminar in Fiction
ENG 640	Seminar in Poetry
MCW 645	Seminar in Poetry
MCW 650	Seminar in Creative Nonfiction

ENG 655	Composition Pedagogy
ENG 656	History of Rhetoric
ENG 657	Modern Rhetoric
ENG 665	Film Theory
ENG 666	Film History: The Silents
ENG 667	Film History: American Film
ENG 668	Film Genre Studies
ENG 669	World Film
ENG 670	Comparative Literary Studies
ENG 690A	Major Author Seminar I

or

ENG 690B	Major Author Seminar II
ENG 680A	Seminar in a Theme I
ENG 680B	Seminar in a Theme II
ENG 685	Great Directors: American
ENG 686	Great Directors: International

▲ Specialization in Gothic Studies

The Master of Arts in English with a Specialization in Gothic Studies provides a balanced and comprehensive program of graduate study in literature as well as a rigorous examination of the historical, theoretical and critical reception of the

Gothic, from its origins in the eighteenth century through to a range of contemporary works in both literature and film. The program is appropriate for students seeking preparation for doctoral study or college-level teaching in English and related fields, or general cultural enrichment.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Research relevant criticism in sustained analyses and interpretations of specific works of fiction, non-fiction, and poetry.
- Evaluate the relevance and validity of different theoretical approaches (e.g., historicist, biographical, etc.) to the understanding of specific texts.
- Compare informed critical discussions of theoretical issues pertaining to textual analysis.
- Synthesize current theory and practice in the study of Gothic literature.
- Evaluate the complexities of canon formation.
- Assess informed critical discussions, both oral and written, the works and criticism of the Gothic literary period and movement.

Requirements for Specialization

(4 courses; 18 quarter units)

ENG 620A	Literary Period or Movement I: Dark Romanticism or Sensation Novel
ENG 620B	Literary Period or Movement II: American Gothic
ENG 640	Seminar in Poetry : Graveyard Poetry
ENG 668	Film Genre Studies: Horror Films or Fear or Film Noir
ENG 680A	Seminar in a Theme I: Gothic Literature or Modern Gothic or Vampires
ENG 680B	Seminar in a Theme II: Gothic Prisons, Romantic Spaces, or Female Gothic
ENG 690A	Major Author Seminar I: Ann Radcliffe
ENG 690B	Major Author Seminar II: E.A. Poe

▲ Specialization in Rhetoric

The Master of Arts in English with a Specialization in Rhetoric provides a program of graduate study in literature as well as a wide range of cultural production, from classical oration to contemporary cinema, with particular attention paid to how language and image are used to produce various effects and meanings. Students study literary texts and other cultural artifacts across a variety of media forms, developing readings that are grounded in contextual understanding. They complete course work in literary studies, classical and modern rhetoric, composition pedagogy, media studies, and film studies. The prescribed curriculum contains several variable-topic courses, allowing students to pursue broad program goals in topic areas matched to their individual interests. The program is appropriate for students seeking preparation for doctoral study or college-level teaching in English and related fields, or general cultural enrichment.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Produce sustained textual analyses and interpretations that are informed by relevant published criticism.
- Evaluate the relevance and validity of different theoretical approaches to the understanding of specific texts.
- Produce rigorous critiques of the scholarly works of others.
- Analyze the processes of canon formation.
- Interrogate and synthesize key theories and practices within Composition Studies.
- Analyze how language and image are used to produce various effects and meanings across a variety of media forms.
- Produce a work of rhetorical criticism suitable for publication in a scholarly journal.

Requirements for Specialization

(4 courses; 18 quarter units)

ENG 656	History of Rhetoric
ENG 657	Modern Rhetoric
ENG 655	Composition Pedagogy
ENG 668	Film Genre Studies

or

ENG 680A	Seminar in a Theme I: Pictures that Speak
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■ MASTER OF ARTS IN FILM STUDIES

Faculty Advisor: Ramie Tateishi; (858) 642-8398; rtateishi@nu.edu

The Master of Arts in Film Studies curriculum covers the central aspects of film studies, including theory, history, film genre, national film histories, and individual directors. The degree provides the student with the critical vocabulary, tools, and research abilities required to produce professional scholarship in the discipline on topics of current and historical academic interest.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Analyze, synthesize, and evaluate film theory, aesthetics, history, and individual American and international directors.
- Research and write in the areas of film theory, aesthetics, history, and individual American and international directors.
- Critique specific films using technical film vocabulary, critical approaches, and film research tools.
- Evaluate the relevance and validity of different theoretical approaches to film studies.
- Engage in informed critical discussion, both oral and written, of theoretical issues pertaining to the study of film.
- Engage in informed critical discussion, both oral and written, of the works and criticism of a specific film or literary period or movement.
- Revise and expand a paper to submit for publication in a scholarly or film journal.

Degree Requirements

To receive the Master of Arts in Film Studies, students must complete at least 45 quarter units. A total of 4.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree and provided units were not used in earning another advanced degree. Students should refer to the section in the General Catalog on graduate admission requirements for specific information regarding application and evaluation.

Core Requirements

(8 Courses; 36 quarter units)

ENG 665	Film Theory
ENG 666	Film History: The Silents
ENG 667	Film History: American Film
ENG 668	Film Genre Studies
ENG 669	World Film
ENG 685	Great Directors: American
ENG 686	Great Directors: International
ENG 698	Film Studies Capstone Course

Prerequisite: A total of seven core courses and two elective courses as described in the Degree Requirements for the Program must be completed before enrolling in the Capstone course.

Program Electives

(2 courses; 9 quarter units)

ENG 668	Film Genre Studies
ENG 669	World Film
ENG 685	Great Directors: American
ENG 686	Great Directors: International

Note: The two Program Electives may be selected from variable-content courses within the program, which are ENG 668, ENG 669, ENG 685, and ENG 686. The topics of these courses can be found in SOAR and will also appear on students' transcripts. The Program Electives may consist of any two of these variable-content courses, provided that the topics of these two elective courses are different than the ones used to satisfy the Core Requirements.

■ MASTER OF ARTS IN GERONTOLOGY

Faculty Advisor: Allyson Washburn; (415) 412-7842; awashburn@nu.edu

The Master of Arts in Gerontology fosters development of the conceptual and clinical foundations necessary to design and provide strengths-based services to our aging population and to develop methods of inquiry and innovative practices to address the evolving needs of the growing numbers of aging persons in their communities. The intended enrollees in the Master of Arts in Gerontology program are mid-career professionals who want to increase their proficiency in this area of specialization or who want to re-specialize, having worked in allied fields.

Coursework in the Master of Arts in Gerontology program can be tailored for:

1. Those currently providing or those who plan to provide direct services to older adults
2. Those whose practice and/or scholarly work will focus on older adults or on issues relating to aging
3. Those whose work for public and/or private organizations will address the needs and concerns of older adults.

Graduates with a Master of Arts in Gerontology will be prepared to work in a variety of settings including:

- Community, human service, and religious organizations
- Health care and long-term care institutions
- Federal, state, and local government agencies
- Retirement communities
- Academic and other educational and research settings
- Professional organizations
- Business and industry

Learning experiences in the Master of Arts in Gerontology program are based in an advocacy/participatory system of inquiry and case-based pedagogy suitable for adult mid-career professionals. Online tools are used to help build and sustain learning communities through collaborative inquiry.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Design and implement strengths-based strategies to address the challenges and opportunities facing societies and families as members age
- Develop strategies for working with older adults that take into consideration age-related physical, cognitive, and emotional changes
- Solve problems facing older individuals or organizations serving them using knowledge of assessment and evidence-based practice, as well as an understanding of relevant legal and ethical issues
- Examine their own presumptions and biases about older adults and develop a deep appreciation for the paradoxes inherent in the aging process
- Use contemporary modes of information technology and communications media in case management, program assessment, and advocacy
- Advocate for public policies that improve the health and well-being of older adults and their families
- Conduct applied research that addresses challenges or opportunities for older adults and their communities

Degree Requirements

To earn the Master of Arts in Gerontology, students must complete at least 54 quarter units of graduate work, including an integrative project for 9 quarter units. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree and provided the units were not used in earning another advanced degree. Refer to the section on graduate admission requirements for specific information regarding application and evaluation.

Core Requirements

(7 courses; 31.5 quarter units)

- AGE 601 Foundations of Gerontology I
AGE 602 Foundations of Gerontology II

Choose **three (3)** of the following courses:

- AGE 610 Wellness/Engagement in Aging
Prerequisite: AGE 602
- AGE 611 Psychology of Older Adults
Prerequisite: AGE 602
- AGE 612 Public Policy and Aging
Prerequisite: AGE 601
- AGE 613 Counseling Older Adults
Prerequisite: AGE 602
- AGE 614 Cross-cultural Practice
Prerequisite: AGE 601
- AGE 615 Managing Aging Services
Prerequisite: AGE 601

Project Requirements

- AGE 620 Integrative Project A
Prerequisite: AGE 601 with a minimum grade of B- and AGE 602 with a minimum grade of B-
- AGE 630 Integrative Project B
Prerequisite: AGE 601 with a minimum grade of B-, AGE 602 with a minimum grade of B- and AGE 620 with a minimum grade of B-

Elective Requirements

(5 courses; 22.5 quarter units)

- AGE 616 Physical Change and Aging
- HUB 601D Creative Leadership
- HUB 601B Communication for Managers
- BER 600 Intro to Bereavement Studies
- BER 604 Dying Patient and the Family
Prerequisite: BER 600
- HCA 626 Healthcare Information Systems
Prerequisite: HCA 620
- HCA 628 HA Human Resources Management
Prerequisite: HCA 622

■ MASTER OF ARTS IN HISTORY

Faculty Advisor: Duncan Campbell; (858) 642-8419; dcampbell2@nu.edu

The Master of Arts in History offers a broad yet focused program of graduate training in historical research and writing. The program is well-suited for teachers who would like a discipline-based Master's degree beyond the credential. It is also excellent preparation for a career with the State Department, teaching History at the community college, doctoral studies in History, or any career in the public or private sectors requiring advanced research, analytical and writing skills.

The graduate curriculum offers balanced coverage of the major theoretical, regional, comparative, thematic, topical, global, and epochal approaches to the research and writing of History. Students choose one of two tracks through the program which result in a significant Master's project.

A research track equips students with the advanced research, analytical, and writing skills needed to produce historical scholarship of professional quality and to participate in the transformative and trenchant discussions of professional historians. At the conclusion of their course of study, students will write a traditional Master's thesis. This will be the result of extensive historical research. Students interested in producing original scholarship and perhaps attending a PhD program should follow the thesis track.

Students who are currently history teachers or who aim to teach at the secondary or community college level and have little interest in doctoral studies or advanced research can choose a teaching option, which exposes students to contemporary, cutting-edge debates in American, European, and world history. At the conclusion of their course of study, students present a Master's Portfolio centering on recent and classic scholarship in specific fields of study related to the students' teaching interests.

Specific Program Admission Requirements

To be admitted to the Master of Arts in History program, students must have a Bachelor of Arts in History or a closely-related field in the social sciences or humanities. Students with a minor in history may be admitted after approval by the Program Lead Faculty.

Additional Program and Thesis Information

All students are encouraged to select a Research or Portfolio Advisor early in their program from the program faculty based on areas of interest and planned thesis or portfolio but they must choose an Advisor approved by the Program Lead Faculty no later than the start of their fifth course. The student's program Faculty Advisor and faculty members teaching HIS 695 will give final approval to the student's research prospectus.

Once their research or portfolio proposal has been approved, students initiate monthly contact with their Advisor, document their progress, and provide drafts of each chapter for review. Students should consult regularly with their Advisor regarding course selection and the progress they are making on their research or portfolio proposal. The program Faculty Advisor and faculty member teaching HIS 699 will give final acceptance to the Master's thesis or portfolio as satisfying part of the requirements for the Master of Arts in History degree. Students are awarded an IP grade at the conclusion of HIS 699 and, if needed, have up to nine months after the end of HIS 699 to submit a completed thesis, multimedia project, or portfolio.

The expected (normative) time to completion of all requirements for the MA History program is two (2) years.

***** Please Note:** HIS 699 should be taken at the end of the program.

To be considered for graduation a MA History candidate must submit the completed Master's Thesis or Master's Portfolio to the course instructor and the Faculty Advisor within one year of the start of HIS 699. The course instructor and the Faculty Advisor are responsible for evaluating the thesis or portfolio and determining whether the candidate has met the requirements for the MA in History as specified in the Thesis or Portfolio guidelines.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Analyze the relationship between fact, method, theory, and interpretation of historical accounts.
- Evaluate and interpret historical texts, in a multifaceted and nuanced manner.
- Analyze the various ethical and professional issues that emanate from historical scholarship.
- Develop a scholarship-based understanding of key historiographic theories and philosophies to a variety of historical subjects.
- Pose questions and conduct historical research that engages disciplinary perspectives, uses relevant resources, and contributes to scholarly understanding.
- Create sophisticated and professionally-informed written works or web-sites in a prose and visual style that is clear and effective.

Degree Requirements

(10 courses; 45 quarter units)

To receive the Master of Arts in History, students must complete at least 45 quarter units. A total of 4.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree, and provided the units were not used in earning another advanced degree. Coursework transferred from other universities must first have the approval of the Program Faculty Advisor. Students should refer to the General Catalog section on graduate admission requirements for specific information regarding admission and evaluation.

Core Requirements

(6 courses; 27 quarter units)

HIS 600 Seminar in History and Theory

and

Choose **two (2)** of the following courses:

HIS 618A Seminar in Modern Europe I
Prerequisite: HIS 600

HIS 618B Seminar in Modern Europe II
Prerequisite: HIS 600

HIS 620A Seminar in US History I
Prerequisite: HIS 600

HIS 620B Seminar in US History II
Prerequisite: HIS 600

and

Choose **one (1)** of the following courses:

HIS 630 Seminar in World History
Prerequisite: HIS 600

HIS 658 Seminar in Modern China
Prerequisite: HIS 600

HIS 668 Seminar in Modern Middle East
Prerequisite: HIS 600

HIS 678 Seminar in Modern Africa
Prerequisite: HIS 600

HIS 688 Seminar in Latin America

Thesis/Portfolio Core Requirements

HIS 695 Directed Research Methods
Prerequisite: HIS 600, HIS 618A or HIS 618B, HIS 620A or HIS 620B, HIS 630

HIS 699 Thesis
Prerequisite: HIS 695 Select four courses from the following: HIS 618A or HIS 618B, HIS 620A or HIS 620B, HIS 640, HIS 645A, HIS 645B, HIS 649A, HIS 649B, HIS 658, HIS 668, HIS 678 and HIS 688

Program Electives

(4 courses; 18 quarter units)

HIS 618A Seminar in Modern Europe I
Prerequisite: HIS 600

or

HIS 618B Seminar in Modern Europe II
Prerequisite: HIS 600

HIS 620A Seminar in US History I
Prerequisite: HIS 600

or

HIS 620B Seminar in US History II
Prerequisite: HIS 600

HIS 640 Seminar in Comparative History
Prerequisite: HIS 600

HIS 645A Special Topics in History I
Prerequisite: HIS 600

HIS 645B Special Topics in History II
Prerequisite: HIS 600

HIS 649A Seminar in a Period/Movement I
Prerequisite: HIS 600

HIS 649B Seminar in a Period/Movement I
Prerequisite: HIS 600

HIS 658 Seminar in Modern China
Prerequisite: HIS 600

HIS 668	Seminar in Modern Middle East <i>Prerequisite: HIS 600</i>
HIS 678	Seminar in Modern Africa <i>Prerequisite: HIS 600</i>
HIS 688	Seminar in Latin America
HIS 692	Methods and Sources <i>Prerequisite: HIS 600</i>
HIS 697	Guided Thesis/Project Research <i>Prerequisite: HIS 600, HIS 692 and HIS 695</i>
HIS 696	History and Applied Media <i>Prerequisite: HIS 600 and HIS 695</i>
HIS 698	Media/Technology Project <i>Prerequisite: HIS 695 and HIS 696, Select four courses from the following: HIS 618A or HIS 618B, HIS 620A or HIS 620B, HIS 630, HIS 640, HIS 645A, HIS 645B, HIS 649A, HIS 649B, HIS 658, HIS 668, HIS 678 and HIS 688</i>

■ MASTER OF ARTS IN HUMAN BEHAVIOR

Faculty Advisor: Charles Tatum; (858) 642-8476; ctatum@nu.edu

The Master of Arts in Human Behavior is designed for people desiring greater knowledge of the behavioral sciences. The degree exposes the student to a wide array of behavioral topics covering personal, social and organizational issues. The program is intended for students who have specific ambitions in the fields of supervision, management, and administration, but should also appeal to students undergoing life transitions, seeking personal or career growth, or requiring preparation for doctoral-level training.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Synthesize and apply communication theory and practice in real-world situations.
- Develop a personal and professional code of ethics based on knowledge and understanding of moral and ethical principles and values.
- Assimilate adult development and human sexuality theories and principles into personal and interpersonal growth.
- Analyze and apply behavioral and organizational change processes to personal, social, and organizational settings.
- Integrate theories of leadership into applied areas of supervision, management, and administration.
- Demonstrate practical competence in the use of behavioral theory, research and assessment.
- Produce written materials (papers, essays, projects, journals, etc.) that analyze, integrate, and critique critical theories, issues and research in human behavior.
- Demonstrate oral fluency (class debates, group discussions, individual presentations, etc.) in articulation of the theory and practice of behavioral science.
- Demonstrate multi-cultural awareness and appreciation of human diversity.

Degree Requirements

To receive the Master of Arts in Human Behavior, students must complete at least 54 quarter units of graduate work. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree and provided the units were not used in earning another advanced degree. Students should refer to the section on graduate admission requirements for specific information regarding application and evaluation.

For students in the Bachelor of Science in Organizational Behavior transition program, the university will waive up to two MA in Human Behavior courses taken as part of the bachelor's degree (see BS in Organizational Behavior transition program), but these students must still meet the residency requirements for the MA in Human Behavior. The number of courses waived is dependent on the courses taken and grades earned in the transition program. A complete description of Transition Program requirements can be found in the Policies and Procedures section of this Catalog.

Core Requirements

(10 courses; 45 quarter units)

HUB 648	Personal Growth & Comm.
HUB 646	Personal and Pro. Ethics
HUB 641	Stages of Adult Development
HUB 639	Issues in Sexuality
HUB 601A	Organizational Behavior
HUB 642	Theories of Behavior Change
HUB 601D	Creative Leadership
HUB 650	Behavioral Research
HUB 670	Research Applications <i>Prerequisite: HUB 650</i>
HUB 680	Integrative Project <i>Prerequisite: HUB 650 and HUB 670</i>

Program Electives

(2 courses; 9 quarter units)

Students can select graduate elective courses from the following course prefixes: AGE, CHD, HRM, HUB, MKT, MGT and SOC (HUB 660, CHD 601 and SOC 604 are highly recommended). In addition, some education and psychology courses are acceptable with the approval of the Chair of the Department of Psychology. (Note: Due to enrollment restrictions, special permission by the Chair of the Department of Psychology is required to take CHD 640 or any courses designated PSY 600 or above).

■ MASTER OF ARTS IN PERFORMANCE PSYCHOLOGY

Faculty Advisor: Doug Barba; (760) 268-1588; dbarba@nu.edu

The Master of Arts in Performance Psychology program focuses upon the intersection of performance psychology techniques, counseling, peak performance, and sport science. The coursework covers theory, research, and applied techniques across the fields of business, exercise physiology, the fine arts, military and combat psychology, and sport psychology. Coursework contributes to students' academic requirements for certification by the Association for Applied Sport Psychology (AASP), which is the premier sport, exercise and health psychology organization in North America offering sport psychology certification to its members.

By participating in practical and tailored hands-on learning experiences, graduates are able to apply their knowledge to settings including university and professional athletes, fine arts performance settings, corporate settings, children in school and community sports organizations, coaching, and teaching.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Analyze the means by which psychological factors influence performance.
- Analyze empirical and theoretical research related to the major.
- Apply theoretically sound performance enhancement assessments and techniques with individual performers and teams representing various competitive arenas.
- Integrate theoretical perspectives from counseling and sport psychology and related fields into performance settings.
- Apply counseling skills to working relationships with clients and athletes.
- Apply ethical principles in a professional and culturally appropriate manner.

Degree Requirements

To receive a Master of Arts in Performance Psychology degree, students must complete at least 63 quarter units. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree and provided the units were not used in earning another advanced degree. Students should refer to the section on graduate admission procedures for specific information on admission and evaluation.

Core Requirements

(14 courses; 63 quarter units)

PSY 602	Sport/Performance Psychology
HUB 601A	Organizational Behavior
HUB 641	Stages of Adult Development
PSY 603	Performance Psy Alt Population
PSY 614	Counseling in Performance Psy
PSY 613	Performance Consulting Skills <i>Prerequisite: PSY 602 and PSY 603</i>
HUB 650	Behavioral Research
HUB 642	Theories of Behavior Change
PSY 604	Performance Psy Corporate Pops
PSY 607	Ethics in Performance Psy
PSY 606	Motor Behavior
PSY 609	Psychopathology
PSY 639	Consulting Practice Dev.
PSY 615	Fieldwork <i>Prerequisite: Successful completion of all core requirements</i>

■ MASTER OF ARTS IN STRATEGIC COMMUNICATIONS

Faculty Advisor: Federica Fornaciari; (858) 642-8486; ffornaciari@nu.edu

The Master of Arts in Strategic Communications prepares students to assume professional positions in organizations that must meet the challenges of operating in an increasingly complex and interdependent global environment. It equips graduates with both theoretical and practical approaches to developing strategic communications programs that enable organizations to meet their goals and objectives. Each course provides an essential stepping stone on the way to planning, executing, and evaluating effective strategic communications efforts.

The objective of the program is to develop effective, strategically sophisticated professionals who possess the full complement of analytical and practical tools to lead communication efforts. It fosters strategic thinking, logical analysis, and solution generation. Upon completion of the degree, graduates will have the skills to develop and implement communications initiatives using both traditional and emerging channels such as social networks, blogs, podcasts, and mobile media.

Graduates will acquire an array of intellectual, managerial, and communication skills and competencies, including: an understanding of communications opportunities; the ability to carry out analyses of organizational communications needs; the knowledge to conduct audience analysis, as well as formative and evaluative research; the training to develop, implement, and evaluate appropriate strategies and tactics to reach multiple publics; and professional-level writing and presentation skills.

At the completion of the Master of Arts in Strategic Communications, graduates will emerge with a deep understanding of the theories of communication and persuasion, an ability to lead and participate in the team development of organizational communication strategies, and the practical skills to plan, produce, and evaluate strategic communications programs and campaigns.

This degree requires that students be able to write in English at an advanced level. If writing skills need improvement, the student may be required to enroll in a writing course before continuing in the program. Applicants for whom English is a second language are encouraged to take the Accuplacer English as a Second Language Placement Test.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Produce multi-public, multi-channel communication campaign planning documents.
- Manage communication campaigns by producing budgets, task lists, and schedules.
- Apply formative research to develop communication campaigns and messages.
- Create persuasive campaigns that meet professional ethical standards.

- Evaluate communication campaigns by conducting summative research.
- Deliver professional communication presentations online.
- Demonstrate leadership and collaborative skills by participating in group tasks and presentations as leader and team member.

Degree Requirements

To receive a Master of Arts in Strategic Communications, students must complete at least 45 quarter units of graduate work, of which a minimum of 40.5 quarter units must be taken in residence at National University. Students can transfer up to 4.5 quarter units at the graduate level from a regionally accredited institution in the areas of communication or business, provided the units have not been used to satisfy the requirements of an awarded degree. Students wishing to transfer credits into the program should contact the program faculty advisor. Refer to the section in the graduate admission requirements for additional specific information regarding application and matriculation.

Core Requirements

(9 courses; 40.5 quarter units)

COM 600	Comm in Global Environment
COM 610	Integrated Marketing Comm
COM 615	Research Methods
COM 620	Crisis Communications
COM 625	Campaign & Program Management
COM 630	Campaign & Program Evaluation <i>Prerequisite: COM 610 and COM 615</i>
COM 640	Persuasion
COM 650	Legal and Ethical Issues
COM 660	Capstone Project

Elective

(1 course; 4.5 quarter units)

Students may take any graduate-level course with the approval of the program lead faculty, provided that they have completed all prerequisites for that course.

■ MASTER OF FINE ARTS IN CREATIVE WRITING

Faculty Advisor: Frank Montesonti; (310) 662-2159; fmontesonti@nu.edu

The Master of Fine Arts in Creative Writing is a studio degree where students produce creative work and refine it through workshops that focus on developing craft in fiction, creative nonfiction, poetry, or screenwriting. In online workshops, students write constructive critiques of the work of their classmates, read modern texts from the writer's perspective, and participate in generative writing activities.

Courses are taught by established writers in the field who share their perspective and expertise in the craft. Participating in seminars and workshops, students build valuable skills in their chosen concentration. The culmination of the program is the thesis project, a publishable quality final project in the student's chosen specialty that demonstrates a critical application of knowledge in the field which should make an independent contribution to existing work in that area. During the thesis process, students work one-on-one with a faculty mentor in drafting and revising a publishable quality thesis.

This program is excellent preparation for a professional career in writing, working in the areas of publishing or filmmaking, and is the minimal academic qualification appropriate for those who desire to teach creative writing at the college or university level.

Students are expected to focus in one genre, but are required to take seminar workshops in different genres in order to broaden the scope of their reading and writing. Students are encouraged to take graduate courses in English Literature as electives, as the critical study of literature goes hand in hand with its composition. Interested students may submit to, or volunteer to work on, the student literary journal, the GNU.

The Master of Fine Arts in Creative Writing program is entirely online with no on-ground residency requirement.

Application Requirements

To be considered for admission, applicants must meet the University graduate admission requirements listed in the general information. In addition, applicants in creative writing should submit portfolios of their writing directly to: fmontesonti@nu.edu. The portfolio should include 20-30 pages of fiction or literary nonfiction (usually two to three short stories or essays), 10-20 pages of poetry, a completed screenplay, or a substantial sample of work in several forms. Based on the portfolio, applicants may be advised to complete one or more of the following undergraduate courses prior to enrolling in the advanced writing workshops:

- ENG 401 Fiction Workshop
- ENG 402 Poetry Workshop
- ENG 403 Screenwriting Workshop

BA English to MFA Transition Program

Students who are in the process of completing a BA with a major in English and concentration in creative writing at National University may be eligible for the BA to MFA transition program. Requirements for the transition program are listed under the Bachelor's Degree with a major in English in the catalog. A complete description of Transition Program requirements can be found in the Policies and Procedures section of this Catalog.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Evaluate various aesthetic theories of fiction, literary nonfiction, poetry, or screenwriting.
- Formulate practical and theoretical models of teaching and learning the writing of fiction, literary nonfiction, poetry and screenwriting.
- Critique specific works of literature and screenwriting.
- Develop publishable-quality writing in fiction, literary nonfiction, poetry, or screenwriting.
- Evaluate different literary formats.
- Implement craft principles of plot, characterization, style, point of view, narrative technique, and language in the creation of fiction.
- Implement craft principles of plot, characterization, style, point of view, narrative technique, and language in the creation of literary nonfiction.
- Implement craft principles of language, style, themes, technique, rhythm, and form in the creation of poetry.
- Implement craft principles of plot, characterization, style, point of view, narrative technique, language, form, dialogue, and other issues of screenwriting.

Degree Requirements

To receive the MFA in Creative Writing, students must complete at least 58.5 quarter units; a total of 13.5 quarter units may be granted for equivalent work completed at another institution, as it applies to this degree, and provided the units were not used in earning another advanced degree. Students should refer to the General Catalog section on graduate admission requirements for specific information regarding admission and evaluation.

Core Requirements

(5 courses; 22.5 quarter units)

Students are required to take MCW 600 and MCW 610, one seminar in their chosen specialty, and two additional courses of their choice in different areas.

Students are encouraged to begin the program with:

MCW 610 Textual Strategies

and

Choose **three (3)** of the following courses:

MCW 630 Seminar in Fiction

MCW 645 Seminar in Poetry

MCW 650 Seminar in Creative Nonfiction

MCW 685 Basics of Screenwriting

Students should preferably conclude the core requirements with:

MCW 600 Pedagogy of Creative Writing

MCW 600 and MCW 610 are four week courses; all other MCW courses are eight weeks in duration.

Core Specialized Study

(2 courses; 9 quarter units)

Students are expected to take two advanced workshops in their specialty. All advanced creative writing courses are conducted by teachers who are accomplished creative writers sensitive to the efforts of writing. Classes are conducted as workshops, with student work comprising much of the text for the course.

MCW 630A Advanced Workshop in Fiction

Prerequisite: MCW 630

and

MCW 630B Adv Workshop in Fiction

Prerequisite: MCW 630

or

MCW 640A Advanced Workshop in Poetry

Prerequisite: MCW 645

and

MCW 640B Advanced Workshop in Poetry

Prerequisite: MCW 645

or

MCW 650A Adv Workshop in Lit Nonfiction

Prerequisite: MCW 650

and

MCW 650B Adv Workshop in Lit Nonfiction

Prerequisite: MCW 650

or

MCW 680A Adv Workshop in Screenwriting

Prerequisite: MCW 685

and

MCW 680B Adv Workshop in Screenwriting

Prerequisite: MCW 685 and MCW 680A

Elective Requirements

(4 courses; 18 quarter units)

A minimum of **two (2)** electives should be chosen from the list below. All graduate courses with the prefix ENG except the capstone courses are approved electives for the MCW program.

MCW 635 Writing for Young Adults

ENG 600 Seminar in Literary Theory

ENG 610 Multicultural Literature

ENG 620A Literary Period or Movement I

ENG 620B Literary Period or Movement II

ENG 640 Seminar in Poetry

ENG 655 Composition Pedagogy

ENG 656 History of Rhetoric

ENG 657 Modern Rhetoric

ENG 660 Seminar in Literary Hypermedia

ENG 665 Film Theory

ENG 666 Film History: The Silents

ENG 667 Film History: American Film

ENG 668 Film Genre Studies

ENG 669 World Film

ENG 670	Comparative Literary Studies
ENG 680A	Seminar in a Theme I
ENG 680B	Seminar in a Theme II
ENG 685	Great Directors: American
ENG 686	Great Directors: International
ENG 689	Intro to Grad English Studies
ENG 690A	Major Author Seminar I
ENG 690B	Major Author Seminar II

The remaining **two (2)** electives may be from the above list or if the student wants to take more workshop courses, additional advanced MCW writing workshops that the student has not already taken as part of her/his specialized study may be taken as electives. These include:

MCW 630A	Advanced Workshop in Fiction <i>Prerequisite: MCW 630</i>
MCW 630B	Adv Workshop in Fiction <i>Prerequisite: MCW 630</i>
MCW 640A	Advanced Workshop in Poetry <i>Prerequisite: MCW 645</i>
MCW 640B	Advanced Workshop in Poetry <i>Prerequisite: MCW 645</i>
MCW 650A	Adv Workshop in Lit Nonfiction <i>Prerequisite: MCW 650</i>
MCW 650B	Adv Workshop in Lit Nonfiction <i>Prerequisite: MCW 650</i>
MCW 680A	Adv Workshop in Screenwriting <i>Prerequisite: MCW 685</i>
MCW 680B	Adv Workshop in Screenwriting <i>Prerequisite: MCW 685 and MCW 680A</i>

Thesis Courses

(2 courses; 9 quarter units)

The thesis must be a mature, substantial body of work e.g. a collection of stories, essays, or poems, a novel, or a full-length screenplay. The thesis will include an aesthetic statement (minimum 2,000 words) in which the writer discusses her/his evolution as an artist and the evolution of the work. The student will choose a mentor for the thesis, and will work with the mentor in an individualized manner, decided upon through conference with the mentor.

MCW 660	Thesis I (Practicum) <i>Prerequisite: Requires completion of MFA CW portfolio all core, specialized study and elective courses</i>
MCW 670	Thesis II (Revision) <i>Prerequisite: MCW 660</i>

Language Requirement

There is no language requirement for this program. It is possible, however, to pursue a series of electives in a particular language when such study is demonstrably essential to the student's creative work. The candidate must work out a specific program in conjunction with the lead program faculty.

■ MASTER OF FORENSIC SCIENCES

Faculty Advisor: Ismail Sebetan; (858) 642-8419; isebetan@nu.edu

The Master of Forensic Sciences (MFS) is a specialized professional degree designed for law enforcement, lab personnel, attorneys, investigators, and other professionals seeking to upgrade their existing skills, as well as individuals who are interested in pursuing a career in the forensic sciences, law, law enforcement, private or governmental laboratories, jails and corrections, and the Medical Examiner's Office. The field of forensics focuses on the application of scientific methods to the resolution of legal problems.

The Master of Forensic Sciences degree program offers two areas of specialization. Students are required to take one specialization.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Explain basic human anatomy, component of death investigation and techniques used for analysis of diseases and trauma, identification of unknown dead bodies; and to professionally interact with the forensic pathologist and medico-legal death investigators.
- Apply the technical procedures and methods of collection, preservation, chain of custody, analysis, comparison and report preparation of the biological, trace and toxicological evidentiary evidence.
- Analyze the basic principles and the role of crime scene investigators in forensic and legal procedures.
- Apply the basic principles of forensic photography, and explain the legal issues related to forensic photography and courtroom or trial presentation.
- Evaluate the legal and psychological issues involved in competency to stand trial, diminished capacity, and insanity defenses.
- Apply profiling knowledge and crime scene analysis methods to crime scene variables.
- Utilize theories, techniques and practices to all criminal and civil investigation.
- Use investigative techniques in the processing and interpretation of evidence of computer and multimedia forensics.
- Analyze the legal, ethical, and constitutional tensions between the interests of society, and the rights of individuals in connection with various criminal procedures and contexts.
- Integrate scientific research methodology to explore issues in forensic science.

Degree Requirements

To receive an MFS, students must complete at least 54 quarter units of graduate coursework. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree and provided the units were not used in earning another advanced degree. Students should refer to the section on graduate admission requirements for specific information regarding application and evaluation.

Students must have an undergraduate degree in a laboratory science in order to enroll in the MFS with a specialization in criminalistics. The MFS with a specialization in investigation does not have a specific major requirement for the undergraduate degree.

For students in the BS in Criminal Justice Administration/MFS transition program, the University will waive the forensic sciences course(s) taken as part of the bachelor's degree (see BS in Criminal Justice transition program), but these students must still meet the residency requirements for the MFS. A complete description of Transition Program requirements can be found in the Policies and Procedures section of this Catalog.

Core Requirements

(8 courses; 36 quarter units)

FSC 630	Forensic Pathology I
FSC 642	Forensic Pathology II <i>Prerequisite: FSC 630</i>
FSC 643	Forensic Psychology
FSC 648**	Forensic Photography
FSC 631	Major Case Investigation
FSC 647	Crime Scene Investigation
FSC 654	Criminal Profiling
FSC 662*	Supervised Research Project <i>Prerequisite: Satisfactory completion of 8 FSC core courses.</i>

** Students will be required to obtain their own photographic equipment, which must meet the requirements of the course. All digital cameras to be used must meet the same standards as film based forensic cameras, which includes: interchangeable lenses, manual settings for shutter and aperture, and the ability to use an external, off camera electronic flash attachment.

* This is a two-month, one-meeting-per week course with a significant research component. Grading is by H, S or U. Students who do not complete the Research Project within the two month period are eligible, at the discretion of the instructor, to receive a grade of "IP" with a maximum of a one-time six-month extension. Students who do not complete the project at the end of the extension period will need to retake FSC 662. No grade of "I" (Incomplete) can be given for this course.

▲ Specialization in Criminalistics

This AOS in Criminalistics requires that students have an undergraduate degree in physical science (chemistry, biology or chemistry/biology, laboratory science) or approval of the lead faculty. The specialization courses include Trace Evidence; Advanced Forensic Toxicology, Forensic Serology and DNA; and Forensic Anthropology; as well as coursework in: Crime Scene Investigation; Forensic Pathology; Forensic Photography; Forensic Psychology; Major Case Investigation; and Criminal Profiling. The program culminates in a supervised master's research project directed by full-time faculty and a committee of associate and core adjunct faculty selected by the students from their program.

Requirements for Specialization

(4 courses; 18 quarter units)

FSC 632	Trace Evidence
FSC 633	Advanced Forensic Toxicology
FSC 634	Forensic Serology and DNA
FSC 635	Forensic Anthropology

▲ Specialization in Investigation

This AOS in investigation is designed to provide graduate education in the most current and advanced forensic investigative techniques available in the field, with a wide understanding of the concepts underlying the forensic sciences. This program is suitable for those students who are interested in pursuing a career in forensic crime and death investigations. The program also allows individuals who are currently working in forensic investigation areas to develop and upgrade their individual educational skills. The specialization courses include Advanced Criminalistics, Digital Evidence, Law, Criminal Procedure, and Fingerprint Analysis. The program also includes forensic-related writing and research. The program culminates in a supervised master's research project directed by full-time faculty and a committee of associate and core adjunct faculty selected by students from their program.

Program Requirements

(4 courses; 18 quarter units)

FSC 620	Advanced Criminalistics
FSC 621	Digital Evidence
FSC 622	Law and Criminal Procedure
FSC 623	Fingerprint Analysis

Program Electives

(2 courses; 9 quarter units)

For electives, students can take courses with the pre-approval of the Faculty Advisor who should be consulted prior to scheduling of any elective. The following courses are recommended:

FSC 661	Internship in Forensic Science (1.5 quarter units)
FSC 651	Topics in Forensic Sciences

■ MASTER OF SCIENCE IN BIOLOGY

Faculty Advisor: Mario Mota; (858) 642-8474; mmota@nu.edu

The Master of Science in Biology trains students in graduate-level research and analysis in the fascinating field of biology. The program prepares students for careers in biological research, project management, life science education, scientific writing, and advanced degrees at the doctorate level. The MS Biology develops students as biologists who participate in arriving at solutions to modern challenges, including advances in biotechnology and genomics, physiology, biodiversity, and threats to species and ecosystem functioning.

The MS Biology curriculum provides comprehensive coverage of the hierarchical levels of biological organization, from molecules to ecosystems. Over the course of the program, students formulate an original research question, examine the question at various biological levels, and conduct research to produce a Master's thesis suitable for peer-reviewed presentation. Students develop thesis projects

in consultation with program faculty. The thesis process provides training in advanced research methods and design, analysis, and scientific writing to enable students to participate in the field of biology as professional scholars.

Application Requirements

To be considered for admission, applicants must meet the University qualifications for graduate programs. In addition, students must have a Bachelor's degree in the biological sciences, or a closely-related field.

Additional Program Information and Requirements

All students are expected to begin the program of study by first enrolling in BIO 600, and taking subsequent seminar courses in numerical sequence (BIO 610-650). This sequence is designed to have students formulate a working thesis topic and repeatedly examine it at different levels of biological organization, to iteratively generate new ideas and perspectives on the topic. All students are expected to select a thesis advisor early in the program, based on areas of interest and faculty availability. Students must obtain approval of their choice of thesis advisor from the Program Lead Faculty by the end of their fifth course in the program. Each student is expected to consult regularly with the thesis advisor regarding the thesis topic.

The Master's thesis in biology is an original research contribution, based on data collected by the student under the supervision of the thesis advisor (i.e., laboratory and/or field work), or based on data and information extracted and analyzed from existing literature and sources. Students must present a thesis proposal to their thesis advisor before the end of the course BIO 660 (Research Design). This proposal must be approved for thesis work by the end of the course BIO 680 (Thesis Formulation). Thesis work primarily occurs during the course sequence BIO 691-693. Thesis progress is overseen by the thesis advisor. The thesis advisor, with two other faculty members, form the thesis committee that evaluates the finished thesis. Students are expected to identify their complete thesis committee before the end of the course BIO 680 (Thesis Formulation).

Thesis research, analysis, and write-up is expected to occur during the course sequence BIO 691-693. BIO 693 is eligible for "In Progress" grading, which allows for this particular course to extend up to 12 months for completion. The student's thesis is to be submitted to the thesis committee for review by the end of BIO 693.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Evaluate primary research in biology, including the identification of strengths and weaknesses of studies, as well as the framing of alternative explanations of data and results.
- Propose testable scientific hypotheses in biology.
- Design a viable research program in biology that tests scientific questions and hypotheses, including the design of experiments.
- Conduct original research in biology, in a laboratory or field setting, or literature-based research.
- Analyze research results and data.
- Create written work for evaluation by scientific peers.

Degree Requirements

To receive a Master of Science in Biology, students must complete at least 49.5 quarter units of graduate coursework, and must complete an original Master's thesis. A total of 9.0 graduate quarter units may be granted for equivalent graduate work completed at another institution, as it applies to this degree and provided the units were not used in earning another advanced degree. Students should refer to the section on graduate admission requirements for specific information regarding admission and evaluation.

Core Requirements

(11 courses; 49.5 quarter units)

BIO 600	Contemporary Issues in Biology
BIO 610	Seminar in Molecular Biology <i>Prerequisite: BIO 600</i>
BIO 620	Seminar in Cell Biology <i>Prerequisite: BIO 610</i>
BIO 630	Seminar in Organismal Biology <i>Prerequisite: BIO 620</i>
BIO 640	Seminar in Ecology <i>Prerequisite: BIO 630</i>

BIO 650	Seminar in Evolution <i>Prerequisite: BIO 640</i>
BIO 660	Research Design <i>Prerequisite: BIO 650</i>
BIO 680	Thesis Formulation <i>Prerequisite: BIO 660</i>
BIO 691	Thesis Research 1 <i>Prerequisite: BIO 680</i>
BIO 692	Thesis Research 2 <i>Prerequisite: BIO 691</i>
BIO 693	Thesis Research 3 <i>Prerequisite: BIO 692</i>

■ MASTER OF SCIENCE IN MATHEMATICS FOR EDUCATORS

Faculty Advisor: Igor Subbotin; (310) 662-2150; isubboti@nu.edu

The Master of Science in Mathematics for Educators is a strong graduate program in mathematics designed for people holding teaching single subject credentials in mathematics or a bachelor's degree in mathematics and very close areas.

This program is appropriate for students who want a broad background in pure mathematics including those who desire to be prepared for teaching in a community college or in the first two years of a college program. It is also aimed at high-school teachers who would like to expand their mathematics background and improve their credentials. The program will give students greater expertise in both mathematics and mathematics education.

This program does not confer any state certification as a teacher.

Over the course of the program, students formulate an original research question, examine the question at various mathematics and mathematics education branches, and conduct research to produce a Master's thesis suitable for peer-reviewed presentation. Students develop thesis projects in consultation with program faculty. The thesis process provides training in research methods and design, analysis, and scientific writing to enable students to participate in the field of mathematics and mathematics education at the entrance professional research level.

Application Requirements

To be considered for admission, applicants must meet the University qualifications for graduate programs. In addition, students must have teaching credentials in mathematics and/or a bachelor's degree in mathematics or very close areas.

Additional Program Information and Requirements

All students are expected to begin the program of study by first enrolling in MTH 610 course, and taking subsequent MTH 620-670 courses. This sequence is designed to have students formulate a working thesis topic and repeatedly examine it at different levels and branches of mathematics and mathematics education, to iteratively generate new ideas and perspectives on the topic. All students are expected to select a thesis advisor early in the program, based on areas of interest and faculty availability. Students must obtain approval of their choice of thesis advisor from the Program Lead Faculty by the end of their sixth course in the program. Each student is expected to consult regularly with the thesis advisor regarding the thesis topic.

The Master's thesis in this program is an original research contribution, based on information gathered by the student under the supervision of the thesis advisor and based on data and information extracted and analyzed from existing literature and sources. Students must present a thesis proposal to their thesis advisor before the end of the course MTH 670. This proposal must be approved for thesis work by the end of the course MTH 681 (Research in Mathematics and Mathematics Education I). Thesis work primarily occurs during the course sequence MTH 681-683. Thesis progress is overseen by the thesis advisor. The thesis advisor, with two other faculty members, forms the thesis committee that evaluates the finished thesis. Students are expected to identify their complete thesis committee before the end of the course MTH 681 (Research in Mathematics and Mathematics Education I).

Thesis research, analysis, and write-up are expected to occur during the course sequence MTH 681-683. MTH 683 is eligible for "In Progress" grading, which allows for this particular course to extend up to 12 months for completion. The

student's thesis is to be submitted to the thesis committee for review by the end of MTH 683.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Based on acquired advanced mathematical abilities analyze and evaluate main principles of general mathematics and mathematics education.
- Evaluate primary research in mathematics education and related areas, including the identification of strengths and weaknesses of studies.
- Analyze the research results and data on curricular materials, content, teaching methods, and new trends in mathematics education.
- Propose and employ new robust and theoretically grounded approaches, methods and curricular related researches in teaching mathematics.
- Conduct original research in mathematics education and related mathematical content areas.

Degree Requirements

To receive a Master of Science in Mathematics for Educators, students must complete at least 45 quarter units of graduate coursework. A total of 4.5 graduate quarter units may be granted for equivalent graduate work completed at another institution, as it applies to this degree and provided the units were not used in earning another advanced degree. Students should refer to the section on graduate admission requirements for specific information regarding admission and evaluation.

Program Prerequisites

(5 courses; 22.5 units)

MTH 411	Number Theory <i>Prerequisite: MTH 216B or MTH 215 or MTH 301</i>
MTH 435	Linear Algebra <i>Prerequisite: MTH 220 and MTH 325</i>
MTH 416	Algebraic Structures <i>Prerequisite: MTH 435 and MTH 325</i>
MTH 417	Foundations of Geometry <i>Prerequisite: MTH 216A and MTH 216B or MTH 215 and MTH 311</i>
MTH 418	Statistical Analysis <i>Prerequisite: MTH 210 and MTH 220</i>

Core Requirements

(10 courses; 45 quarter units)

MTH 610	Topics in Modern Algebra <i>Recommended Preparation: MTH 416, MTH 435 and MTH 411</i>
MTH 620	Number Systems <i>Prerequisite: MTH 610</i>
MTH 630	Fundamentals of Geometry <i>Prerequisite: MTH 620, Recommended Preparation: MTH 417</i>
MTH 640	Real Analyses <i>Prerequisite: MTH 630 and MTH 620</i>
MTH 650	Topics in Functional Analysis <i>Prerequisite: MTH 640</i>
MTH 660	Mathematical Statistics <i>Recommended Preparation: MTH 438, Prerequisite: MTH 650</i>
MTH 670	Mathematics Curriculum <i>Prerequisite: MTH 610, MTH 620, MTH 630 and MTH 660</i>
MTH 681	Research in Math and Math Ed I <i>Prerequisite: MTH 670</i>
MTH 682	Research in Math and Math Ed 2 <i>Prerequisite: MTH 681</i>
MTH 683	Research in Math and Math Ed 3 <i>Prerequisite: MTH 682</i>

UNDERGRADUATE CERTIFICATES

■ UNDERGRADUATE CERTIFICATE IN ALCOHOL AND DRUG ABUSE COUNSELING

Faculty Advisor: Donald Posson; (702) 531-7832; dposson@nu.edu

The Certificate in Alcohol and Drug Abuse Counseling is designed to meet California state standards for certification of alcohol and drug abuse counselors. This program is approved by CAADAC's education foundation CA Foundation for Advancement of Addiction Professionals. This program may not meet the requirements for certification in other states. For complete information on the CAADAC certification, or to order a CAADAC Handbook visit, www.caadac.org or call 916.368.9412.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Establish professional relationships with diverse clients with alcohol and drug abuse and/or dependence issues.
- Demonstrate entry level counseling skills in working with individuals, groups, and families relative to alcohol and drug abuse and/or dependence issues.
- Assess and diagnose clients using DSM IV-TR alcohol and drug abuse and dependence criteria.
- Develop a treatment plan based on a biopsychosocial assessment of the individual's strengths, weaknesses, problems, and needs.
- Develop case management plans for clients that bring services, agencies, resources, or people together with a planned framework of action.
- Evaluate the effectiveness of treatment approaches.
- Provide client education to individuals, groups, and families on alcohol and drug abuse and dependence.
- Interact with counselors and other professionals in regard to client treatment and services.
- Adhere to established professional codes of ethics and standards of practice.

Degree Requirements

To receive the certificate, students must complete at least 45 quarter units, 31.5 of which must be taken in residence at National University and complete a 255 hour practicum experience working with clients at an approved practicum site. Refer to the section on undergraduate admission requirements for specific information regarding application, placement evaluation and matriculation.

Upon application students must sign the ADC Student Agreement before beginning their coursework. Students must obtain malpractice insurance prior to beginning their work with clients. Students attend live practicum classes one Saturday a month during the seven month clinical practicum at a National University campus. Students must attend live internet class sessions. Students will have their choice of attending either the live internet session or reviewing the recording of the session afterwards. Students must have a headset with a microphone that plugs into the USB port on the computer.

Prerequisites for Certificate

(1 course; 4.5 quarter units)

SOC 100 Principles of Sociology
Prerequisite: ENG 100 and ENG 101

Core Requirements

(10 courses; 45 quarter units)

PSY 100 Introduction to Psychology

ADC 205 Intro to Substance Abuse
Prerequisite: PSY 100 and SOC 100

ADC 215 Physiology of Substance Abuse
Prerequisite: PSY 100 and SOC 100

ADC 225 Law and Ethics
Prerequisite: PSY 100 and SOC 100

ADC 235 Case Management
Prerequisite: PSY 100 and SOC 100

ADC 245 Individual Counseling I
Prerequisite: PSY 100, SOC 100 and ADC 205

ADC 255 Individual Counseling II
Prerequisite: ADC 245

ADC 265 Group & Family Counseling
Prerequisite: PSY 100 and SOC 100

ADC 275 Personal & Professional Growth
Prerequisite: PSY 100 and SOC 100

ADC 285 Practicum in Substance Abuse
Prerequisite: Satisfactorily complete 5 courses in the major, and Program lead faculty approval

SUBJECT MATTER AUTHORIZATION IN INTRODUCTORY MATHEMATICS FOR SINGLE OR MULTIPLE SUBJECT TEACHING CREDENTIAL

Faculty Advisor: Igor Subbotin; (310) 662 -2150; isubboti@nu.edu

Holders of a Single or Multiple Subject Teaching Credential issued by the California Commission on Teacher Credentialing (CTC) may add a Subject Matter Authorization in Introductory Mathematics. Introductory subjects authorize the holder to teach the subject matter content typically included in curriculum guidelines and textbooks approved for study in grades 9 and below. A teacher with an introductory authorization can teach a class in which the curriculum is for grades 9 and below (but the students in the class may be in grades 10-12).

For additional information on credential requirements, please see the Sanford College of Education Credential Information section of the catalog.

Degree Requirements

An applicant will qualify for an Introductory Mathematics subject matter authorization upon the completion of 48 quarter units of non-remedial collegiate coursework as specified. The introductory subject matter authorization (included within the forty eight quarter units) requires a minimum of four quarter units (or three semester units) in each of the specific content areas listed under the subject below:

Introductory Mathematics requirements include:

- Algebra
- Advanced Algebra
- Geometry
- Probability or Statistics
- Development of the Real Number System or Introduction to Mathematics

The following are required:

1. Course work must be college level mathematics or higher.
2. Algebra courses must be for credit, applicable towards a degree, and, if completed at the community college level, transferable to a four-year institution to be acceptable. Note: Elementary algebra courses may not be used to meet these requirements. If the course in question is titled elementary algebra or similar then the student will need to submit a course description/syllabus to verify the acceptability.
3. As both algebra and advanced algebra are required, there are several options available to meet both areas. The requirement is algebra content at two different levels.
 - a. An individual completes a college algebra course; the "advanced" course may be another level of algebra such as linear algebra. An individual may not use another college algebra course, an elementary algebra course, or the same level algebra course completed at another college or university.
 - b. An individual completes a college or other level algebra course (other than elementary algebra); the "advanced" course may be a "higher" level math course such as trigonometry or calculus.
4. Courses in calculus will clear the specific course requirements (one for each content area being cleared) in algebra, advanced algebra, geometry, and development of the real number system but the applicant must still have the required 48 quarter units. Note: Calculus courses will not clear the probability and statistics content area.

5. If the applicant has only one or two courses in calculus and no course work in algebra, geometry, or real number systems, the applicant will need to either submit course descriptions so that it can be confirmed whether or not those areas were covered by the calculus course(s) or complete additional course work in the required content areas.
6. Personal enrichment-type mathematics courses are not acceptable.
7. One mathematics-based computer course is acceptable as additional units toward the required 48 quarter units.

The following courses are strongly recommended to satisfy the requirements for the Introductory Mathematics authorization. The listed sequences are general, and are subject to change depending on the applicant's transcript and choice. ALL APPLICANTS must submit his/her transcript (s) via an Admissions or Credential Advisor for faculty evaluation before starting any course work. The transcript will then be analyzed by the Mathematics Lead Faculty and an appropriate sequence will be identified and communicated to the applicant in writing and placed in the student's educational record.

Introductory Mathematics Requirement Areas

Algebra and Advanced Algebra

(2 courses; 9 quarter units)

Sequence 1

- MTH 204 Mathematics for Science
Prerequisite: Accuplacer test placement evaluation or MTH 12A and MTH 12B
- MTH 215 College Algebra & Trigonometry
Prerequisite: Accuplacer test placement evaluation or MTH 12A and MTH 12B

OR

Sequence 2

- MTH 215 College Algebra & Trigonometry
Prerequisite: Accuplacer test placement evaluation or MTH 12A and MTH 12B
- MTH 220 Calculus I
Prerequisite: MTH 215 or MTH 216B or Accuplacer test placement

Geometry

(1 course; 4.5 quarter units)

- MTH 301 Fundamentals of Mathematics II
Prerequisite: MTH 209A or Accuplacer test placement evaluation
- or
- MTH 311 Topics from Geometry
Prerequisite: MTH 215 or MTH 216B or Accuplacer test placement

Probability and Statistics

(1 course; 4.5 quarter units)

- MTH 210 Probability and Statistics
Prerequisite: Accuplacer test placement evaluation or MTH 12A and MTH 12B

Development of the Real Number System or Introduction to Mathematics

(1 course; 4.5 quarter units)

- MTH 209A Fundamentals of Mathematics I
Prerequisite: Accuplacer test placement evaluation or MTH 12A and MTH 12B
- or
- MTH 411 Number Theory
Prerequisite: MTH 215 or MTH 216B or MTH 301

Elective Course Requirements

(5-6 courses; 22.5-27 quarter units)

The following are recommended elective courses that could be selected as needed to reach a total of 48 quarter units.

- MTH 220 Calculus I
Prerequisite: MTH 215 or MTH 216B or Accuplacer test placement
- MTH 221 Calculus II
Prerequisite: MTH 220
- MTH 222 Calculus III
Prerequisite: MTH 221
- MTH 223 Calculus IV
Prerequisite: MTH 222
- MTH 317 Mathematical Modeling
Prerequisite: MTH 215 or MTH 216A and MTH 216B and MTH 210
- MTH 325 Discrete Mathematics
Prerequisite: MTH 215 or MTH 216A and MTH 216B
- MTH 410 Technology in Math Education
Prerequisite: MTH 215 or MTH 216A and MTH 216B or MTH 301
- MTH 412 History of Mathematics
Prerequisite: MTH 215 or MTH 301 or MTH 216A and MTH 216B
- MTH 418 Statistical Analysis
Prerequisite: MTH 210 and MTH 220
- MTH 435 Linear Algebra
Prerequisite: MTH 220 and MTH 325
- MTH 417 Foundations of Geometry
Prerequisite: MTH 216A and MTH 216B or MTH 215 and MTH 311

GRADUATE CERTIFICATES

■ GRADUATE CERTIFICATE IN FORENSIC AND CRIME SCENE INVESTIGATIONS

Faculty Advisor: Ismail Sebetan; (858) 642-8419; isebetan@nu.edu

The Certificate in Forensic & Crime Scene Investigation (FCSI) is designed to prepare individuals to enter the field of forensic & crime scene investigation and for those currently in the field as law enforcement personnel, criminal investigators, evidence technicians, forensic nurses, prosecutors, attorneys, judges and other members of the multidisciplinary team involved in criminal investigation who would like to further develop their skills and expertise.

Students who wish to pursue a master's degree can apply some or all the academic credits awarded in the certificate program toward the MFS degree, assuming they meet the GPA and other requirements of that degree program.

Degree Requirements

Students who wish to pursue a master's degree can apply some or all the academic credits awarded in the certificate program toward the MFS degree, assuming they meet the GPA and other requirements of that degree program.

Certificate Requirements

(7 courses; 31.5 quarter units)

- FSC 630 Forensic Pathology I
- FSC 642 Forensic Pathology II
Prerequisite: FSC 630
- FSC 647 Crime Scene Investigation
- FSC 620 Advanced Criminalistics
- FSC 621 Digital Evidence
- FSC 622 Law and Criminal Procedure
- FSC 623 Fingerprint Analysis

SCHOOL OF BUSINESS AND MANAGEMENT

P (858) 642-8400 • F (858) 642-8740 • E sobm@nu.edu

Interim Dean, Kenneth Goldberg
DPA, University of LaVerne

- 138 Degrees Offered**
- 139 Degrees Offered by Department**
- 140 Faculty**
- 142 Undergraduate Degrees**
- 152 Minors**
- 153 Graduate Degrees**
- 163 Undergraduate Certificates**
- 165 Graduate Certificates**



DEGREE PROGRAMS OFFERED

UNDERGRADUATE DEGREES

Associate of Science

with a Major in:

- Business 

Bachelor of Arts

with Majors in:

- Integrated Marketing Communication 
- Management 
 - » Alternative Dispute Resolution 
 - » Business Law 
 - » Economics 
 - » Entrepreneurship 
 - » Human Resource Management 
 - » Marketing 
 - » Project Management 

Bachelor of Business Administration

with Concentrations in:

- Accountancy 
- Alternative Dispute Resolution 
- Business Law 
- Economics 
- Entrepreneurship 
- Finance 
- Human Resource Management 
- Marketing 
- Project Management 

Bachelor of Science

with Majors in:

- Accountancy 
 - » Accounting Professional Skills
- Financial Management 
- Organizational Leadership 

MINORS

- Accountancy 
- Business Administration 
- Business Studies 
- Economics 

TRANSITION PROGRAMS

- Bachelor of Arts in Management to Master of Global Management
- Bachelor of Business Administration to Master of Business Administration
- Bachelor of Science in Accountancy to Master of Business Administration

GRADUATE DEGREES

Global Master of Business Administration (offered in Spanish)

Master of Accountancy

with Area of Specialization in:

- » Accounting Professional Skills

Master of Arts

with Fields of Study in:

- Cause Leadership 
- Human Resource Management 
 - » Organizational Leadership 

Master of Business Administration

with Areas of Specialization in:

- Accounting Professional Skills 
- Financial Management 
- Human Resources Management 
- International Business 
- Integrated Marketing Communication 
- Management Accounting 
- Marketing 
- Mobile Marketing and Social Media 
- Organizational Leadership 
- Supply Chain Management 

Master of Global Management

Master of Science

with Fields of Study in:

- Business Analytics
- Organizational Leadership 
 - » Community Development 

UNDERGRADUATE CERTIFICATES

- Accountancy
- Basic Human Resource Management
- Basic Sales and Marketing
- Finance
- Human Resource Management
- Marketing

GRADUATE CERTIFICATE

- Accountancy

 Entire program can be completed online.

Not all courses or programs are available at every campus.

Consult an admissions advisor for online course availability.

DEPARTMENT OF ACCOUNTING

Bachelor of Science

with a Major in:

- Accountancy [📄](#)
- with a Concentration in:*
- » Accounting Professional Skills

Master of Accountancy [📄](#)

with Area of Specialization in:

- Accounting Professional Skills

Minor

- Accountancy [📄](#)

Undergraduate Certificate

- Accountancy

Graduate Certificate

- Accountancy

DEPARTMENT OF FINANCE AND ECONOMICS

Associate of Science

with a Major in:

- Business [📄](#)

Bachelor of Business Administration [📄](#)

with Concentrations in:

- Accountancy [📄](#)
- Alternative Dispute Resolution [📄](#)
- Business Law [📄](#)
- Economics [📄](#)
- Entrepreneurship [📄](#)
- Finance [📄](#)
- Human Resource Management [📄](#)
- Marketing [📄](#)
- Project Management [📄](#)

Bachelor of Science

with Majors in:

- Financial Management [📄](#)
- Organizational Leadership [📄](#)

Minors

- Business Administration [📄](#)
- Business Studies [📄](#)
- Economics [📄](#)

Undergraduate Certificate

- Finance

DEPARTMENT OF LEADERSHIP AND HUMAN RESOURCE MANAGEMENT

Bachelor of Science

with a Major in:

- Organizational Leadership [📄](#)

Master of Arts

with Fields of Study in:

- Cause Leadership [📄](#)
- Human Resource Management [📄](#)
- with Area of Specialization in:*
- » Organizational Leadership [📄](#)

Master of Science

with Fields of Study in:

- Business Analytics
- Organizational Leadership [📄](#)
- with Area of Specialization in:*
- » Community Development [📄](#)

Undergraduate Certificates

- Basic Human Resource Management
- Human Resource Management

DEPARTMENT OF MANAGEMENT AND MARKETING

Bachelor of Arts

with Majors in:

- Integrated Marketing Communication [📄](#)
- Management [📄](#)
- with Concentrations in:*
- » Alternative Dispute Resolution [📄](#)
- » Business Law [📄](#)
- » Economics [📄](#)
- » Entrepreneurship [📄](#)
- » Human Resource Management [📄](#)
- » Marketing [📄](#)
- » Project Management [📄](#)

Global Master of Business Administration (offered in Spanish) [📄](#)

Master of Business Administration [📄](#)

with Areas of Specialization in:

- Accounting Professional Skills [📄](#)
- Financial Management [📄](#)
- Human Resources Management [📄](#)
- International Business [📄](#)
- Integrated Marketing Communication [📄](#)
- Management Accounting [📄](#)
- Marketing [📄](#)
- Mobile Marketing and Social Media [📄](#)
- Organizational Leadership [📄](#)
- Supply Chain Management [📄](#)

Master of Global Management [📄](#)

Undergraduate Certificates

- Basic Sales and Marketing
- Marketing

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SCHOOL OF BUSINESS AND MANAGEMENT

UNDERGRADUATE DEGREES

■ ASSOCIATE OF SCIENCE

◆ MAJOR IN BUSINESS

Faculty Advisor: Michael Pickett; (909) 919-7631; mpickett@nu.edu

To receive an Associate of Science in Business degree, students must complete at least 90 quarter units consisting of all courses as articulated below along with the required minimum 34.5 units of the Associate of Science General Education. In the absence of transfer credit, students may need to take additional general electives to satisfy total units for the degree. Refer to the section on undergraduate admission procedures for specific information regarding application and evaluation.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Describe the types of business organizations and their basic functions.
- Describe the legal structure and tax implications of different types of business organizations such as sole proprietorship, partnership and corporation.
- Explain the functions of basic management relating to planning and implementing an organization's strategic behavior.
- Explain the changing nature of business in a global economy.
- Explain the basic accounting, finance, and management functions of business organizations.
- Explain how marketing decisions can help maximize profits.
- Describe the legal and ethical issues surrounding the business community.

Degree Requirements

To receive an Associate of Science in Business degree, students must complete at least 90 quarter units consisting of all courses as articulated below along with the required minimum 34.5 units of the Associate of Science General Education. In the absence of transfer credit, students may need to take additional general electives to satisfy total units for the degree. Refer to the section on undergraduate admission procedures for specific information regarding application and evaluation. All students receiving an undergraduate degree in Nevada are required by State Law to complete a course in Nevada Constitution.

Prerequisites for Major

(2 courses; 9 quarter units)

ILR 260* Information Literacy
Prerequisite: ENG 100 and ENG 101

MNS 205* Intro to Quantitative Methods
Prerequisite: Placement Evaluation

* May be used to meet a General Education requirement.

Requirements for Major

(8 courses; 36 quarter units)

Students must complete administrative exam.

Foundation Courses

BUS 100 Intro to Business

ACC 201 Financial Accounting Funds.

ACC 202 Managerial Accounting Funds.
Prerequisite: ACC 201

ECO 100 Intro to Economics

Core Courses

LAW 304 Legal Aspects of Business I

MKT 200 Basic Marketing

FIN 310 Business Finance
Prerequisite: ACC 201

MGT 309C Prin. of Mgmt & Organizations

■ BACHELOR OF ARTS

◆ MAJOR IN INTEGRATED MARKETING COMMUNICATION

Faculty Advisor: Susan Silverstone; (858) 642-8430; ssilvers@nu.edu

This program is a blend of the concepts of marketing principles, which include advertising, sales promotion, public relations, and direct marketing working together as a unified force with the integration of communication using the latest communication technology. Graduates will be able to demonstrate an ability to seek and integrate high-quality research for the purpose of evaluating their own insights into the professional and academic study of communication and media studies, while also understanding the roles that communication plays in developing individuals and social institutions. The BA in Integrated Marketing Communication prepares learners for careers in marketing, sales, advertising, fundraising, PR, and other persuasive fields. It combines a business degree with advanced communication skills for traditional and Web 2.0 platforms—including print, broadcast, social, personal, and mobile media.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Apply appropriate theoretical precepts and practical skills in communication.
- Demonstrate effective communication skills consistent with a professional marketing environment.
- Develop a strategic communication program, gathering and utilizing data from the conduct of appropriate market research.
- Evaluate global marketing strategies for products and services, utilizing contemporary buyer behavior.
- Apply persuasion theory to the development of media messages.
- Develop multi-platform, multi-public message dissemination plans.
- Integrate program content to develop a basic marketing plan that contains all essential elements, including ethical considerations.

Degree Requirements

To receive a Bachelor of Arts in Integrated Marketing Communication, students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level, and a minimum of 70.5 units of the University General Education requirements. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements. All students receiving an undergraduate degree in Nevada are required by State Law to complete a course in Nevada Constitution.

Prerequisites for Major

(2 courses; 7.5 quarter units)

ENG 101* Effective College English II (3 quarter units)
Prerequisite: ENG 100

MKT 302A Marketing Fundamentals

* May be used to meet a General Education requirement.

Core Requirements

(16 courses; 72 quarter units)

COM 305 Intercultural Communication
Prerequisite: ENG 101

COM 402 Communication Technologies
Prerequisite: ENG 101

COM 365 Integrated Marketing Comm
Prerequisite: ENG 101, COM 402 and MKT 302A or COM 315

COM 324 Critical Thinking and Ethics
Prerequisite: ENG 101

COM 334 Persuasion
Prerequisite: ENG 101

COM 354	Professional Presentations <i>Prerequisite: ENG 101</i>
MKT 430	Intro to Global Marketing <i>Prerequisite: MKT 302A</i>
MKT 434	Intro to Market Research <i>Prerequisite: MKT 302A</i>
MKT 443	Introduction to Advertising <i>Prerequisite: MKT 302A</i>
MKT 441	Channel and Value Networks <i>Prerequisite: MKT 302A</i>
MKT 445	e-Marketing <i>Prerequisite: MKT 302A</i>
MKT 446	Introduction to Services Mkt <i>Prerequisite: MKT 302A</i>
COM 441	Communication Strategies <i>Prerequisite: COM 334</i>
COM 442	Communication Campaigns <i>Prerequisite: COM 441</i>
COM 443	Interactive & Mobile Campaigns <i>Prerequisite: COM 442</i>
MKT 480	Marketing Project <i>Prerequisite: Completion of 31.5 quarter units of upper-division core requirements, MKT 302A</i>

◆ MAJOR IN MANAGEMENT

Faculty Advisor: Richard Weaver; (858) 642-8490; rweaver@nu.edu

The Bachelor of Arts in Management provides students a business related degree with an emphasis on managing organizations and personnel in a multicultural and global setting. To achieve maximum flexibility, the major in management program minimizes prerequisites, enabling students to take the required courses in any sequence. Students are also offered several areas of concentration.

The Bachelor of Arts in Management/Master of Global Management (BAM/MGM) Transition Program

The Bachelor of Arts in Management/Master of Global Management (BAM/MGM) Transition Program allows currently enrolled BAM students with a cumulative grade point average of at least a 3.0, who are within completing their last six courses, to register for two MGM courses as electives for their BAM degree. Students can take the following two courses: MGT 601M and IBU 606. The number of courses to complete to earn the MGM is reduced from 13 to 11 courses. To be eligible for the Transition Program, students must apply for the MGM and begin their program of study within six months after completing their final BAM course. Students must complete the 13-course MGM program (including the two courses in the Transition Program) within four years with no break exceeding 12 months. Students must complete graduate-level course work taken as part of the BAM degree with a grade of B or better. The course work will not transfer as graduate-level credit to National University or any other institution as it is part of an undergraduate degree program. A complete description of Transition Program requirements can be found in the Policies and Procedures section of this Catalog.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Describe the basic functions of management and their practical implications on the operations of the organization.
- Analyze and evaluate management, leadership, and motivation theories.
- Identify organizational behavior, communications, and change theories and their practical implications.
- Explain the effect of international business environmental factors (legal, economic, and cultural) on the conduct of global business.
- Explain the principles and theories of ethical decision-making and their practical implications in the everyday conduct of business.

Degree Requirements

To receive a Bachelor of Arts in Management, students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level,

and a minimum 70.5 units of the University General Education requirements. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements. Refer to the section of undergraduate admission procedures for specific information regarding admission and evaluation. All students receiving an undergraduate degree in Nevada are required by State Law to complete a course in Nevada Constitution.

Preparation for Major

(2 courses; 9 quarter units)

ECO 203* Principles of Microeconomics

ECO 204* Principles of Macroeconomics

* May be used to meet a General Education requirement.

Requirements for Major

(11 courses; 49.5 quarter units)

LAW 304 Legal Aspects of Business I

BIM 400 Info Mgmt in Organizations

MGT 309C Prin. of Mgmt & Organizations

MGT 400 Ethics in Law, Business & Mgmt

MKT 302A Marketing Fundamentals

MGT 430 Survey of Global Business
Prerequisite: ECO 203 and ECO 204

MGT 451 Production & Ops Management I

ODV 420 Intro to Organizational Behavior

LED 400 Introduction to Leadership

HRM 409B Survey in HRM & OD

MGT 442 Strategic Business Management

Upper-Division Electives

(5 courses; 22.5 quarter units)

Students may choose to take any one of the concentrations listed below or appropriate elective courses to satisfy the total upper-division units for the degree in the following prefix areas: ACC, BKM, ECO, FIN, HRM, LAW, MGT, MKT, MNS, LED and ODV. Students planning to do an internship for academic credit must take BUS 491 as an elective.

▲ Concentration in Alternative Dispute Resolution

Faculty Advisor: Jack Hamlin; (858) 642-8405; jhamlin@nu.edu

This concentration is designed for those students majoring in business administration or management who may seek entry into the Alternative Dispute Resolution (ADR) field. ADR is in high demand in the business community, local, state and federal governments, and neighborhood communities. The successful completion of the ADR program will provide students with the necessary skills to become effective negotiators, mediators and facilitators and to promote peace and understanding between diverse cultures.

Requirements for Concentration

(4 courses; 18 quarter units)

Choose **four (4)** courses from the following:

ADR 400 Alternative Dispute Resolution

ADR 405 Negotiation Fundamentals

ADR 410 Facilitation Fundamentals

ADR 415 Mediation Fundamentals

ADR 420 Communication & Conflict

ADR 425 Issues in Conflict Management

ADR 430 Ethics and Neutrality

▲ Concentration in Business Law

Faculty Advisor: Bryan Hance; (310) 662-2115; bhance@nu.edu

This concentration is designed for students undertaking the Bachelor of Business Administration (BBA) or BA Management (BAM) degree. The concentration will

provide students who have an interest in a career in law, business or government, with an understanding of the complex legal issues that exist in today's business environment.

Requirements for Concentration

(6 courses; 27 quarter units)

Choose **six (6)** courses from the following:

LAW 400	Current Legal Issues
LAW 304	Legal Aspects of Business I
LAW 305	Legal Aspects of Business II
LAW 440	Comparative International Law
LAW 445	Administrative Law for Business
LAW 455	Public Contracting
ADR 400	Alternative Dispute Resolution
ADR 405	Negotiation Fundamentals

▲ Concentration in Economics

Faculty Advisor: Wali Mondal; (858) 642-8415; wmondal@nu.edu

Economics is often called the foundation of business disciplines. This concentration is designed for those students who are interested in learning how a society makes economic decisions in allocating its scarce resources. Students will also learn how individuals, businesses and the government work together toward achieving the goals of a society. The concentration is designed for students who can progress to higher levels of economic knowledge after taking the principles of macroeconomics and the principles of microeconomics. The concentration has been designed to provide adequate levels of quantitative skills with a view to analyzing economic data. This analytical ability will help students succeed in graduate studies in all business disciplines including Finance, Management and Marketing. The concentration will also prepare students for a successful experience in the law school or other professional training.

Students earning a BAM degree with concentration in Economics may find a wide array of employment opportunities in local, state and federal government, in private sector, and in international organizations including the United Nations organizations and the Peace Corps.

For guidance and recommendations concerning the concentration in Economics, please contact the above-named Faculty.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Apply ethical and legal principles to business environment.
- Demonstrate skills and knowledge in the areas of business math, economics, accounting, finance, and operations management needed to make sound business decisions.
- Apply knowledge in the fields of management, business knowledge management, and marketing to different business environments.
- Integrate the knowledge acquired in the program to analyze a business, identify its strengths and weaknesses, and determine what changes can be made for improvement.
- Conduct independent research relevant to business-related issues.
- Demonstrate written and oral presentation skills expected of a business school graduate.
- Develop a global business perspective based on the knowledge of foreign business environments and cultures.

Requirements for Concentration

(5 courses; 22.5 quarter units)

Core Requirements

(3 courses; 13.5 quarter units)

ECO 301	Intermediate Microeconomics <i>Prerequisite: ECO 203 and ECO 204</i>
ECO 302	Intermediate Macroeconomics <i>Prerequisite: ECO 204</i>

ECO 303 Data Analysis

Prerequisite: ECO 203 and ECO 204

Electives

(2 courses; 9 quarter units)

Select **two (2)** of the following courses:

ECO 304	Economic Growth <i>Prerequisite: ECO 203 and ECO 204</i>
ECO 410	Seminar on Capitalism <i>Prerequisite: ECO 203 and ECO 204</i>
ECO 415	Labor Economics <i>Prerequisite: ECO 203 and ECO 204</i>
ECO 420	International Economics <i>Prerequisite: ECO 203 and ECO 204</i>
ECO 447	Money and Banking <i>Prerequisite: ECO 203 and ECO 204</i>

▲ Concentration in Entrepreneurship

Faculty Advisor: Gary Zucca; (209) 736-2949; gzucca@nu.edu

This concentration is designed for those students who seek to gain practical knowledge in starting, managing, or running a business. The concentration is aimed at providing students with the specialized knowledge of entrepreneurship, e-business, small business management, and family business. Entrepreneurship is one of the core concentrations in many schools of business. Completing this concentration will enable students to compete in the marketplace for employment or to start new business ventures.

According to the U.S. Department of Commerce, California is a leader in small business and family business. This concentration will enable students to gain knowledge on various aspects of small business and family business including venture capital, risk management, registration of new business, security issues, bankruptcy, estate planning, and philanthropy. This knowledge, combined with knowledge gained in the BBA program will significantly enhance the earning potential of a student. Students are strongly advised to contact the above-named Faculty Advisor for guidance and recommendations regarding academic preparation for this minor.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Assess the various legal structures of small and family business and evaluate the feasibility of an entrepreneurial project by analyzing the organizational, marketing, and financial, aspects of a business concept.
- Apply the principles of e-commerce by developing a plan to integrate technology into a small or family business.
- Evaluate a family business with regard to its legal structure, management and leadership, and succession planning.

Requirements for Concentration

(4 courses; 18 quarter units)

MGT 481	Foundations of Entrepreneurship
MGT 482	Small Business Management
MGT 483	E-Business
MGT 484	Family Business Management

▲ Concentration in Human Resource Management

Faculty Advisor: Bernadette Baum; (858) 642-8404; bbaum@nu.edu

This concentration provides education, knowledge and skills that apply to every level of an organization. This degree program is excellent preparation for students attracted to a career in the increasingly important field of human resource management.

Requirements for Concentration

(6 courses; 27 quarter units)

Students must successfully complete the following courses for a concentration in Human Resource Management. Students must complete at least **four (4)** of the

courses in residence at National University. It is recommended that students take these courses in the order listed below at or near the end of their program after completing the upper-division BA/Management core courses.

HRM 433	Pay & Benefit Admin, & HR Tech
HRM 439	Legal, Reg, & Labor Relation C
ODV 410	OD, Career Systems, & Training
HRM 432	Recruit, Selection, Promo, Ret

and

Two (2) upper-division elective courses in the following prefix areas: HRM, LED, ODV.

▲ Concentration in Marketing

Faculty Advisor: Mary Beth McCabe; (619) 563-7316; mmccabe@nu.edu

This concentration is organized around a managerial framework that gives students an understanding of the concepts of marketing as well as the application of these concepts in making decisions and managing marketing activities. There is a wide range of opportunities in marketing, including marketing management, marketing research, purchasing manager/buyer, market analysis, product/branch manager, retailing, sales promotion, and international marketing.

Students must successfully complete the following courses for a concentration in marketing, with at least four of them in residence at National University. It is recommended that students take these courses toward the end of their program after completing the upper division BBA core courses.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Develop marketing research tools that can gather data on customers.
- Evaluate global marketing strategies for products and services using consumer and business behavior.
- Apply marketing concepts, including promotional strategies, to management decision making.

Requirements for Concentration

(6 courses; 27 quarter units)

MKT 420	Principles of Consumer Behavior <i>Prerequisite: MKT 302A</i>
MKT 430	Intro to Global Marketing <i>Prerequisite: MKT 302A</i>
MKT 434	Intro to Market Research <i>Prerequisite: MKT 302A</i>
MKT 443	Introduction to Advertising <i>Prerequisite: MKT 302A</i>

Plus any **two (2)** of the following courses:

MKT 440A	Sales Techniques & Methodology <i>Prerequisite: MKT 302A</i>
MKT 441	Channel and Value Networks <i>Prerequisite: MKT 302A</i>
MKT 442A	Intro to Public Relations
MKT 445	e-Marketing <i>Prerequisite: MKT 302A</i>
MKT 446	Introduction to Services Mkt <i>Prerequisite: MKT 302A</i>
MKT 447	Marketing for Entrepreneurs <i>Prerequisite: MKT 302A</i>

▲ Concentration in Project Management

Faculty Advisor: Michael Pickett; (909) 919-7631; mpickett@nu.edu

This concentration is designed for students who seek specialized knowledge in the field of project management by preparing them for careers in industry. The undergraduate curriculum prepares people who choose a career in the discipline

and elect to go on to their professional certification in Project Management and/or their MBA.

Project Management is one of the most emphasized management roles by organizations as a career path. The concentration can position a student to realize job opportunities that increase his or her potential for future earnings.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate the ability to utilize project management tools and techniques to best satisfy project requirements.
- Effectively apply the principles of scope management, risk management, cost planning and control, quality planning and management, resource allocation and management, time management and project scheduling, and change management in the project environment.

Requirements for Concentration

(7 courses; 31.5 quarter units)

Students must successfully complete the following courses for a concentration in Project Management. Students must complete at least five of the courses in residence at National University (two of which must be PMB 400 and PMB 410). It is recommended that students take the courses needed for the Concentration in Project Management at or near the end of their program.

Prerequisite

(1 course; 4.5 quarter units)

MGT 451	Production & Ops Management I
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Concentration Core Requirements

(6 courses; 27 quarter units)

MGT 422	Team Bldg, Interpers Dynamics
PMB 400	Project Management Essentials
PMB 410	Project Planning and Control
PMB 420	Program Management
PMB 430	Project Accting Fundamentals
PMB 440	Contract Management <i>Prerequisite: MGT 451 and PMB 400</i>

■ BACHELOR OF BUSINESS ADMINISTRATION

Faculty Advisor: Nelson Altamirano; (858) 642-8428; naltamirano@nu.edu

The Bachelor of Business Administration (BBA) degree prepares students for career opportunities and advancement in business and industry. Successful completion of lower- and upper-division BBA requirements ensures that graduates comprehend the relationships among marketing, quantitative theory, accountancy, economic principles and financial, human and organizational management. The BBA gives students an opportunity to specialize in designated fields by pursuing concentrations and minors, or to choose an individualized set of general BBA electives.

Bachelor of Business Administration/Master of Business Administration (BBA/MBA) Transition Program

Students must complete graduate-level coursework taken as part of the BBA degree with a grade of B or better. This coursework, which counts as electives, will not transfer as graduate-level credit to National University or any other institution as it is part of an undergraduate degree program. Grades earned in graduate level courses will be calculated as part of the student's undergraduate grade point average. Students must be within completing their last six courses in their undergraduate program and have a cumulative GPA of at least a 3.00 to be eligible. Lastly, students must apply for and begin the MBA program within six months after completing their final BBA course. Students must complete their MBA program within four years with no break exceeding 12 months. A complete description of Transition Program requirements can be found in the Policies and Procedures section of this Catalog.

Students in the BBA transition program may take up to three MBA classes as electives during the BBA. Students may choose from the following courses: MKT 602, MGT 605, ECO 607, IBU 606.

The number of courses required to earn an MBA degree for transition program students is reduced from 14 to as few as 11 courses, depending on classes selected and grades earned.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Apply ethical and legal principles to a business environment.
- Demonstrate skills and knowledge in the areas of business math, economics, accounting, finance, and operations management needed to make sound business decisions.
- Apply knowledge in the fields of management, information systems, and marketing to different business environments.
- Apply the knowledge acquired in the program for the analysis of strengths, weaknesses, and potential improvements in a business.
- Demonstrate written, presentation and research skills expected of a business-school graduate.
- Develop a global business perspective based on the knowledge of foreign business environments and cultures.

Degree Requirements

To receive a BBA, students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level, and a minimum 70.5 units of the University General Education requirements. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements. Refer to the section on undergraduate admission procedures for specific information regarding admission and evaluation. All students receiving an undergraduate degree in Nevada are required by State Law to complete a course in Nevada Constitution.

Preparation for Major

(6 courses; 27 quarter units)

MNS 205*	Intro to Quantitative Methods <i>Prerequisite: Placement Evaluation</i>
ECO 203*	Principles of Microeconomics
ECO 204*	Principles of Macroeconomics
ACC 201	Financial Accounting Funds.
ACC 202	Managerial Accounting Funds. <i>Prerequisite: ACC 201</i>
LAW 304	Legal Aspects of Business I

* May be used to meet a General Education requirement.

Requirements for Major

(9 courses; 40.5 quarter units)

BIM 400	Info Mgmt in Organizations
MGT 309C	Prin. of Mgmt & Organizations
MGT 400	Ethics in Law, Business & Mgmt
FIN 310	Business Finance <i>Prerequisite: ACC 201</i>
MNS 407	Management Science <i>Prerequisite: MNS 205</i>
MKT 302A	Marketing Fundamentals
MGT 430	Survey of Global Business <i>Prerequisite: ECO 203 and ECO 204</i>
MGT 451	Production & Ops Management I
BUS 480	Capstone: Integrated Bus Policy <i>Prerequisite: Completion of at least 9 BBA preparation and upper-division core courses</i>

Upper-Division Electives

(6 courses; 27 quarter units)

Students may choose to take one of the BBA Concentrations listed below and/or appropriate elective courses to satisfy the total units for the degree with the following prefixes: ACC, BKM, BUS, ECO, FIN, HRM, LAW, LED, MGT, MKT, ODV or HUB.

Recommended Electives

BUS 491	Internship Project <i>Prerequisite: 31.5 quarter units in business or business related courses and a 2.5 GPA</i>
FIN 446	International Financial Mgmt <i>Prerequisite: FIN 310</i>
FIN 440	Financial Institutions <i>Prerequisite: FIN 310</i>
HRM 409B	Survey in HRM & OD
HRM 432	Recruit, Selection, Promo, Ret
HRM 439	Legal, Reg, & Labor Relation C
IBU 540	International Experience
LAW 305	Legal Aspects of Business II <i>Prerequisite: LAW 304</i>
MGT 422	Team Bldg, Interpers Dynamics
MKT 430	Intro to Global Marketing <i>Prerequisite: MKT 302A</i>
MKT 434	Intro to Market Research <i>Prerequisite: MKT 302A</i>
MKT 443	Introduction to Advertising <i>Prerequisite: MKT 302A</i>

▲ Concentration in Accountancy

Faculty Advisor: Consolacion Fajardo; (916) 855-4137; cfajardo@nu.edu

This concentration is designed for those majoring in business administration with its broad base of business-related disciplines, but who also wish to gain the intermediate-level accounting knowledge and skills appropriate for careers in the accounting and finance departments of a business, nonprofit, or government entity.

Students are encouraged to seek a nationally recognized accounting designation such as the CMA (Certified Management Accountant) or CFM (Certified in Financial Management). Those who are considering a CPA designation (Certified Public Accountant) are best served by enrolling in the B.S. in Accountancy degree program.

Students are strongly advised to contact the above-named Faculty Advisor for guidance and recommendations as to academic preparation that will best meet their career objectives.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Use information technologies and computerized accounting software for financial accounting and reporting.
- Apply generally accepted accounting principles to measure and report information related to accounting for assets, liabilities, and equities, revenue and expenses, and cash flows of business enterprises and governmental and not-for-profit entities.
- Interpret cost data and prepare managerial accounting reports.

Requirements for Concentration

(6 courses; 27 quarter units)

Students must successfully complete the required courses as specified below.

Note: All students must have successfully completed ACC 201 with a grade of "C" or better before enrolling in any of the six required accounting courses

ACC 300	Applied Tech for Accountants <i>Prerequisite: ACC 201</i>
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ACC 434	Government and Nonprofit Acct <i>Prerequisite: ACC 201</i>
ACC 433A	Managerial Accounting I <i>Prerequisite: ACC 201</i>
ACC 433B	Managerial Accounting II <i>Prerequisite: ACC 433A</i>
ACC 410A	Intermediate Accounting I <i>Prerequisite: ACC 201</i>
ACC 410B	Intermediate Accounting II <i>Prerequisite: ACC 410A</i>

▲ Concentration in Alternative Dispute Resolution

Faculty Advisor: Jack Hamlin; (858) 642-8405; jhamlin@nu.edu

This concentration is designed for those students majoring in business administration or management who may seek entry into the Alternative Dispute Resolution (ADR) field. ADR is in high demand in the business community, local, state and federal governments, and neighborhood communities. The successful completion of the ADR program will provide students with the necessary skills to become effective negotiators, mediators and facilitators and to promote peace and understanding between diverse cultures.

Requirements for Concentration

(4 courses; 18 quarter units)

Choose **four (4)** courses from the following:

ADR 400	Alternative Dispute Resolution
ADR 405	Negotiation Fundamentals
ADR 410	Facilitation Fundamentals
ADR 415	Mediation Fundamentals
ADR 420	Communication & Conflict
ADR 425	Issues in Conflict Management
ADR 430	Ethics and Neutrality

▲ Concentration in Business Law

Faculty Advisor: Bryan Hance; (310) 662-2115; bhance@nu.edu

This concentration is designed for students undertaking the Bachelor of Business Administration (BBA) or BA Management (BAM) degree. The concentration will provide students who have an interest in a career in law, business or government, with an understanding of the complex legal issues that exist in today's business environment.

Requirements for Concentration

(6 courses; 27 quarter units)

Choose **six (6)** courses from the following:

LAW 400	Current Legal Issues
LAW 304	Legal Aspects of Business I
LAW 305	Legal Aspects of Business II <i>Prerequisite: LAW 304</i>
LAW 440	Comparative International Law
LAW 445	Administrative Law for Business
LAW 455	Public Contracting
ADR 400	Alternative Dispute Resolution
ADR 405	Negotiation Fundamentals

▲ Concentration in Economics

Faculty Advisor: Wali Mondal; (858) 642-8415; wmondal@nu.edu

Economics is often called the foundation of business disciplines. This concentration is designed for those students who are interested in learning how a society makes economic decisions in allocating its scarce resources. Students will also learn how individuals, businesses and the government work together toward achieving the goals of a society. The concentration is designed for students who can progress to higher levels of economic knowledge after taking the principles

of macroeconomics and the principles of microeconomics. The concentration has been designed to provide adequate levels of quantitative skills with a view to analyzing economic data. This analytical ability will help students succeed in graduate studies in all business disciplines including Finance, Management and Marketing. The concentration will also prepare students for a successful experience in the law school or other professional training.

Students earning a BAM degree with concentration in Economics may find a wide array of employment opportunities in local, state and federal government, in private sector, and in international organizations including the United Nations organizations and the Peace Corps.

For guidance and recommendations concerning the concentration in Economics, please contact the above-named Faculty.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Apply ethical and legal principles to business environment.
- Demonstrate skills and knowledge in the areas of business math, economics, accounting, finance, and operations management needed to make sound business decisions.
- Apply knowledge in the fields of management, business knowledge management, and marketing to different business environments.
- Integrate the knowledge acquired in the program to analyze a business, identify its strengths and weaknesses, and determine what changes can be made for improvement.
- Conduct independent research relevant to business-related issues.
- Demonstrate written and oral presentation skills expected of a business school graduate.
- Develop a global business perspective based on the knowledge of foreign business environments and cultures.

Requirements for Concentration

(5 courses; 22.5 quarter units)

Concentration Requirements

(3 courses; 13.5 quarter units)

ECO 301	Intermediate Microeconomics <i>Prerequisite: ECO 203 and ECO 204</i>
ECO 302	Intermediate Macroeconomics <i>Prerequisite: ECO 204</i>
ECO 303	Data Analysis <i>Prerequisite: ECO 203 and ECO 204</i>

Electives

(2 courses, 9 quarter units)

Select **two (2)** courses from the following:

ECO 304	Economic Growth <i>Prerequisite: ECO 203 and ECO 204</i>
ECO 410	Seminar on Capitalism <i>Prerequisite: ECO 203 and ECO 204</i>
ECO 415	Labor Economics <i>Prerequisite: ECO 203 and ECO 204</i>
ECO 420	International Economics <i>Prerequisite: ECO 203 and ECO 204</i>
ECO 447	Money and Banking <i>Prerequisite: ECO 203 and ECO 204</i>

▲ Concentration in Entrepreneurship

Faculty Advisor: Gary Zucca; (209) 736-2949; gzucca@nu.edu

This concentration is designed for those students who seek to gain practical knowledge in starting, managing, or running a business. The concentration is aimed at providing students with the specialized knowledge of entrepreneurship, e-business, small business management, and family business. Entrepreneurship is one of the core concentrations in many schools of business. Completing this

concentration will enable students to compete in the marketplace for employment or to start new business ventures.

According to the U.S. Department of Commerce, California is a leader in small business and family business. This concentration will enable students to gain knowledge on various aspects of small business and family business including venture capital, risk management, registration of new business, security issues, bankruptcy, estate planning, and philanthropy. This knowledge, combined with knowledge gained in the BBA program will significantly enhance the earning potential of a student. Students are strongly advised to contact the above-named Faculty Advisor for guidance and recommendations regarding academic preparation for this minor.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Assess the various legal structures of small and family business and evaluate the feasibility of an entrepreneurial project by analyzing the organizational, marketing, and financial, aspects of a business concept.
- Apply the principles of e-commerce by developing a plan to integrate technology into a small or family business.
- Evaluate a family business with regard to its legal structure, management and leadership, and succession planning.

Requirements for Concentration

(4 courses; 18 quarter units)

MGT 481	Foundations of Entrepreneurship
MGT 482	Small Business Management
MGT 483	E-Business
MGT 484	Family Business Management

▲ Concentration in Finance

Faculty Advisor: Farhang Mossavar-Rahmani; (858) 642-8409; fmossava@nu.edu

Career opportunities in finance are in three interrelated areas: financial institutions, including banks, insurance companies, credit unions and similar organizations; investments, including the sale of securities or security analysis; and financial management in all types of commercial and not-for-profit organizations. This concentration prepares students for future managerial responsibilities in these areas with an emphasis on the financial management of organizations.

Students must successfully complete the following courses for a concentration in finance. Students must complete at least four of the courses in residence at National University. It is recommended that students take these courses toward the end of their program after completing the upper-division BBA core courses.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Apply theoretical and practical aspects of finance.
- Demonstrate oral and written communication skills needed by financial managers.

Requirements for Concentration

(6 courses; 27 quarter units)

FIN 440	Financial Institutions <i>Prerequisite: FIN 310</i>
FIN 442	Investments <i>Prerequisite: FIN 310 and FIN 440</i>
FIN 443	Working Capital Management <i>Prerequisite: FIN 310</i>
FIN 444	Risk Management & Insurance <i>Prerequisite: FIN 310</i>
FIN 446	International Financial Mgmt <i>Prerequisite: FIN 310</i>
FIN 447	Financial Planning <i>Prerequisite: FIN 310 and FIN 442</i>

▲ Concentration in Human Resource Management

Faculty Advisor: Bernadette Baum; (858) 642-8404; bbaum@nu.edu

This concentration provides education, knowledge and skills that apply to every level of an organization. This degree program is excellent preparation for students attracted to a career in the increasingly important field of human resource management.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Describe various types of compensation and incentive programs and their effectiveness in attracting, motivating, and retaining qualified individuals.
- Identify the responsibilities of managers and supervisors in the prevention of liability arising from employment relationships.
- Define the interrelationship of the three areas of HR development.
- Identify staffing needs and recruitment processes from information obtained from a job analysis.

Requirements for Concentration

(6 courses; 27 quarter units)

Students must successfully complete the following courses for a concentration in Human Resource Management. Students must complete at least four of the courses in residence at National University. It is recommended that students take these courses in the order listed below at or near the end of their program after completing the upper-division BA/Management core courses.

HRM 433	Pay & Benefit Admin, & HR Tech
HRM 439	Legal, Reg, & Labor Relation C
ODV 410	OD, Career Systems, & Training
HRM 432	Recruit, Selection, Promo, Ret

and

Two (2) upper-division elective courses in the following prefix areas: HRM, LED, ODV.

▲ Concentration in Marketing

Faculty Advisor: Mary Beth McCabe; (619) 563-7316; mmccabe@nu.edu

This concentration is organized around a managerial framework that gives students an understanding of the concepts of marketing as well as the application of these concepts in making decisions and managing marketing activities. There is a wide range of opportunities in marketing, including marketing management, marketing research, purchasing manager/buyer, market analysis, product/branch manager, retailing, sales promotion, and international marketing.

Students must successfully complete the following courses for a concentration in marketing, with at least four of them in residence at National University. It is recommended that students take these courses toward the end of their program after completing the upper division BBA core courses.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Develop marketing research tools that can gather data on customers.
- Evaluate global marketing strategies for products and services using consumer and business behavior.
- Apply marketing concepts, including promotional strategies, to management decision making.

Requirements for Concentration

(6 courses; 27 quarter units)

MKT 420	Principles of Consumer Behavior <i>Prerequisite: MKT 302A</i>
MKT 430	Intro to Global Marketing <i>Prerequisite: MKT 302A</i>
MKT 434	Intro to Market Research <i>Prerequisite: MKT 302A</i>

MKT 443 Introduction to Advertising
Prerequisite: MKT 302A

Plus any **two (2)** of the following courses:

MKT 440A Sales Techniques & Methodology
Prerequisite: MKT 302A

MKT 441 Channel and Value Networks
Prerequisite: MKT 302A

MKT 442A Intro to Public Relations

MKT 445 e-Marketing
Prerequisite: MKT 302A

MKT 446 Introduction to Services Mkt
Prerequisite: MKT 302A

MKT 447 Marketing for Entrepreneurs
Prerequisite: MKT 302A

▲ Concentration in Project Management

Faculty Advisor: Michael Pickett; (909) 919-7631; mpickett@nu.edu

This concentration is designed for students who seek specialized knowledge in the field of project management by preparing them for careers in industry. The undergraduate curriculum prepares people who choose a career in the discipline and elect to go on to their professional certification in Project Management and/or their MBA.

Project Management is one of the most emphasized management roles by organizations as a career path. The concentration can position a student to realize job opportunities that increase his or her potential for future earnings.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate the ability to utilize project management tools and techniques to best satisfy project requirements.
- Effectively apply the principles of scope management, risk management, cost planning and control, quality planning and management, resource allocation and management, time management and project scheduling, and change management in the project environment.

Requirements for Concentration

(7 courses; 31.5 quarter units)

Students must successfully complete the following courses for a concentration in Project Management. Students must complete at least five of the courses in residence at National University (two of which must be PMB 400 and PMB 410). It is recommended that students take the courses needed for the Concentration in Project Management at or near the end of their program.

Prerequisite

(1 course; 4.5 quarter units)

MGT 451 Production & Ops Management I

Concentration Core Requirements

(6 courses; 27 quarter units)

MGT 422 Team Bldg, Interpers Dynamics

PMB 400 Project Management Essentials
Prerequisite: MGT 451

PMB 410 Project Planning and Control
Prerequisite: MGT 451 and PMB 400

PMB 420 Program Management
Prerequisite: MGT 451 and PMB 400

PMB 430 Project Accting Fundamentals
Prerequisite: MGT 451 and PMB 400

PMB 440 Contract Management
Prerequisite: MGT 451 and PMB 400

■ BACHELOR OF SCIENCE

◆ MAJOR IN ACCOUNTANCY

Faculty Advisor: Consolacion Fajardo; (916) 855-4137; cfajardo@nu.edu

The major in Accountancy academically prepares students for a wide range of accounting-related careers, including public accounting, corporate accounting, internal audit, accounting in not-for-profit organizations, and job opportunities with state, local, and federal government agencies. The curriculum aligns with content specifications for various professional exams including CPA, CMA, and CIA. All students are advised to contact a full-time faculty member for a brief interview by phone or personal visit for the purpose of reviewing the student's career objectives.

Bachelor of Science in Accountancy to Master of Business Administration (BS ACC/MBA) Transition Program

Students who are currently enrolled in the Bachelor of Science in Accountancy program, have at least a cumulative GPA of 3.0, and are within six courses of graduation may register for the BS ACC/MBA transition program. Students in the BS ACC/MBA transition program may take up to three MBA classes as electives during the BS ACC. Students can select any three graduate-level accounting courses for which required course prerequisites (if any) have been met, or may select from the following MBA core courses: IBU 606, ECO 607, MKT 607, and MGT 605. Students must complete graduate-level coursework taken as part of the BS ACC degree with a grade of B or better. This coursework, which counts as electives in the BS ACC, will not transfer as graduate-level credit to National University or any other institution as it is part of an undergraduate degree program. Grades earned in graduate level courses will be calculated as part of the student's undergraduate grade point average. Students must apply for and begin the MBA program within six months after completing their final BS ACC course. The number of courses required to earn a MBA degree for transition program students is reduced from 14 to as few as 11 courses, depending on classes selected and grades earned. Students must complete their MBA program within four years with no break exceeding 12 months. A complete description of Transition Program requirements can be found in the Policies and Procedures section of this Catalog.

Online Course Availability

All of the coursework in this program can be taken online. Most online courses offer one or two live voice/visual evening sessions per week, in which instructors orally explain important concepts, visually illustrate problem-solving techniques, and respond to student questions. These sessions are recorded so that students who are unable to attend at the scheduled time can play back the video recording at a convenient time.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Utilize current technologies for presenting and analyzing accounting information.
- Demonstrate mastery of a common body of accounting knowledge.
- Develop ethical sensitivity to accounting scenarios.
- Employ effective communication of accounting information.
- Demonstrate awareness of International Financial Reporting Standards.
- Research issues to support critical assessment of accounting information.
- Operate effectively in group settings to enhance student learning.

Degree Requirements

To receive a Bachelor of Science with a major in Accountancy, students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level, and a minimum 70.5 units of the University General Education requirements. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements. Refer to the section of undergraduate admission requirements for specific information regarding admission and evaluation. All students receiving an undergraduate degree in Nevada are required by State Law to complete a course in Nevada Constitution.

Preparation for Major

(4 courses; 18 quarter units)

MNS 205* Intro to Quantitative Methods
Prerequisite: Placement Evaluation

ECO 203* Principles of Microeconomics

ECO 204* Principles of Macroeconomics

ACC 201** Financial Accounting Funds.

* May be used to meet a General Education requirement.

** Eligible for Credit-By-Exam waiver: contact Faculty Advisor.

Prerequisite For All Accounting Courses

Students must have completed ACC 201 or its equivalent with a minimum grade of "C" within two years of taking any of the following accounting courses, unless a grade of 75 or better is received on an appropriate challenge exam.

Core Business Requirements

(5 courses; 22.5 quarter units)

LAW 304 Legal Aspects of Business I

BIM 400 Info Mgmt in Organizations

MGT 309C Prin. of Mgmt & Organizations

FIN 310 Business Finance
Prerequisite: ACC 201

and

MGT 430 Survey of Global Business
Prerequisite: ECO 203 and ECO 204

or

MKT 302A Marketing Fundamentals

or

MNS 407[^] Management Science
Prerequisite: MNS 205

[^] Recommended for students considering the CPA or CMA designation.

Core Accounting Requirements

(12 courses; 54 quarter units)

ACC 300 Applied Tech for Accountants
Prerequisite: ACC 201

ACC 434 Government and Nonprofit Acct
Prerequisite: ACC 201

ACC 433A Managerial Accounting I
Prerequisite: ACC 201

ACC 433B Managerial Accounting II
Prerequisite: ACC 433A

ACC 410A Intermediate Accounting I
Prerequisite: ACC 201

ACC 410B Intermediate Accounting II
Prerequisite: ACC 410A

ACC 410C Intermediate Accounting III
Prerequisite: ACC 410B

ACC 431 Advanced Accounting
Prerequisite: ACC 410C

ACC 432A Taxation-Individual
Prerequisite: ACC 431

ACC 432B Taxation-Business
Prerequisite: ACC 432A

ACC 435A Auditing I
Prerequisite: ACC 431

ACC 435B Auditing II
Prerequisite: ACC 435A

Required Electives

(2 courses; 9 quarter units)

ACC 515 Accounting Ethics

ACC 550 Business Professional Develop.

As an alternative of the required electives, students may enroll in the Concentration in Accounting Professional Skills.

▲ Concentration in Accounting Professional Skills

Faculty Advisor: Sharon Lightner; (858) 642-8663; slightner@nu.edu

Faculty Advisor: Russell Parkman; (858) 642-8462; rparkman@nu.edu

This concentration is designed for students to obtain additional coursework and skills necessary for many professional opportunities in the field of accounting. For instance, to be a licensed CPA in the state of CA, students need 180 quarter units (150 semester units). Units may be obtained at the undergraduate or graduate level. The only units that are specified is 4.5 quarter units (3 semester units) of Accounting Ethics. The specialization introduces accounting ethics into our curriculum in addition to other courses that will assist students in preparing for professional exams, interviewing for internships or jobs, networking, and obtaining data analytic skills.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Identify key issues and recognize alternative viewpoints when presented with ethical problems and dilemmas.
- Evaluate ethical decision processes between professional accountants and major stakeholders in various areas or professional accounting.
- Enhance skills to effectively recruit and network within a professional accounting environment.
- Demonstrate and apply accounting knowledge to real world situations or professional examination boards.
- Manage, communicate and analyze information using advance technology skills.

Requirements for Concentration

(4 courses; 18 quarter units)

ACC 515 Accounting Ethics

and

ACC 550 Business Professional Develop.

Choose **two (2)** of the following courses:

ACC 520 Professional Exam Review 1
Recommended: Prior completion of: Should have completed approximately 72 quarter units of accounting and/or business.

ACC 525 Professional Exam Review 2
Prerequisite: ACC 520

ACC 555 Data Analytics

ACC 591 Accounting Internship

◆ MAJOR IN FINANCIAL MANAGEMENT

Faculty Advisor: Farhang Mossavar-Rahmani; (858) 642-8409;

fmossava@nu.edu

The Major in Financial Management is designed to prepare students for positions in the field of corporate financial management and related areas. The program provides both practical and theoretical training in financial decision-making and the creation of wealth through the art and science of managing financial resources. Students also develop a broad perspective of the global economic and financial environment.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Explain the financial objectives of an organization and apply quantitative, qualitative and problem-solving skills in order to achieve those objectives.
- Describe ethical, legal, and global issues that impact an organization's financial position.
- Discuss the theoretical and practical aspects of corporate finance.
- Explain the structure and operation of financial markets domestically and internationally.

- Demonstrate oral and written communication skills needed by financial managers.
- Examine the financial position of an organization and make financial decisions.

Degree Requirements

To receive a Bachelor of Science with a major in Financial Management, students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level, and a minimum 70.5 units of the University General Education requirements. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements. Refer to the section of undergraduate admission procedures for specific information regarding admission and evaluation. All students receiving an undergraduate degree in Nevada are required by State Law to complete a course in Nevada Constitution.

Preparation for Major

(6 courses; 27 quarter units)

ECO 203*	Principles of Microeconomics
ECO 204*	Principles of Macroeconomics
ACC 201	Financial Accounting Funds.
ACC 202	Managerial Accounting Funds. <i>Prerequisite: ACC 201</i>
MNS 205*	Intro to Quantitative Methods <i>Prerequisite: Placement Evaluation</i>
LAW 304	Legal Aspects of Business I

* May be used to satisfy General Education requirements.

Requirements for Major

(16 courses; 72 quarter units)

Core Business Requirements

(5 courses; 22.5 quarter units)

MGT 309C	Prin. of Mgmt & Organizations
FIN 310	Business Finance <i>Prerequisite: ACC 201</i>
MKT 302A	Marketing Fundamentals
ACC 410A	Intermediate Accounting I <i>Prerequisite: ACC 201</i>
ACC 410B	Intermediate Accounting II <i>Prerequisite: ACC 410A</i>

Core Finance Courses

(11 courses; 49.5 quarter units)

FIN 440	Financial Institutions <i>Prerequisite: FIN 310</i>
FIN 442	Investments <i>Prerequisite: FIN 310 and FIN 440</i>
FIN 443	Working Capital Management <i>Prerequisite: FIN 310</i>
FIN 444	Risk Management & Insurance <i>Prerequisite: FIN 310</i>
FIN 446	International Financial Mgmt <i>Prerequisite: FIN 310</i>
FIN 447	Financial Planning <i>Prerequisite: FIN 310 and FIN 442</i>
FIN 449	Analysis of Financial Statement <i>Prerequisite: FIN 310</i>
FIN 453	Finance and Banking <i>Prerequisite: FIN 310</i>
FIN 454	Capital Structure & Financing <i>Prerequisite: FIN 310</i>

FIN 455 Valuation of a Corporation
Prerequisite: FIN 310

FIN 456 Financial Project (Capstone)
Prerequisite: FIN 310, FIN 440, FIN 442, FIN 443, FIN 444, FIN 446, FIN 447, FIN 449, FIN 453, FIN 454 and FIN 455

◆ MAJOR IN ORGANIZATIONAL LEADERSHIP

Faculty Advisor: Michelle Browning; (661) 674-5706; mbrownin@nu.edu

The Bachelor of Science in Organizational Leadership provides students who are interested in starting, or who are currently working in, business enterprises with theoretical and applied knowledge of leadership theories and frameworks. Building understanding of the difference between leading small organizations and more traditional large corporations and agencies will be examined.

The premise that leadership is a process and can be learned through understanding theory, analyzing scenarios, case studies and complex problems will provide the opportunity for students to acquire their learning experientially.

The Bachelor of Science in Organizational Leadership is designed to give students the opportunity to develop the skills needed to be an effective leader in team and group settings within organizations. It is intended to help students move from an authoritarian paradigm to one of collaboration and integration.

CAEL Portfolio

In partnership with the Council on Adult and Experiential Learning (CAEL), National University has developed a portfolio-based system of demonstrating that a student has achieved the course outcomes for University undergraduate courses. Credit may apply towards both the lower division and upper division credit requirements of the University's undergraduate degree programs unless specified otherwise in policy or limited by the state or jurisdiction of a student's residence. In our Portfolio program, students demonstrate that what they already know is equivalent to what they would have learned in an equivalent college course. The program is designed to be as flexible as possible to meet students' needs. Students may have acquired this knowledge through past employment, independent reading and study, training programs or in-service courses, volunteer service, cultural or artistic pursuits, hobbies and recreational pastimes, community or religious activities, organizational memberships, adult education, non-credit courses, study abroad, military training not evaluated for credit by ACE, or other experiences. A portfolio enables students to identify and articulate this knowledge, and potentially earn credit for it. Students learn the process of identifying areas of course-equivalent learning and portfolio development skills through the PRLX2100X course offered through the Division of Extended Learning. The resulting portfolio is submitted for review by Subject Matter Experts for potential award of credit. For further information regarding the Portfolio program, please contact extlearning@nu.edu.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Develop a personal leadership approach.
- Identify challenges and advantages of diverse groups in organizations within a global environment.
- Analyze negotiating styles of leaders, and compare and contrast the concepts of leadership and power.
- Examine the strategies leaders use to motivate and evaluate members of groups and teams.
- Evaluate the ethical implications of leadership decisions and strategies.
- Compare and analyze strategies and frameworks used by leaders to make decisions and initiate change within organizations.
- Explain how the classic studies have informed the understanding and application of leadership and organizational theory.
- Communicate orally and in writing using proper business communication formats.

Degree Requirements

To receive a Bachelor of Science in Organizational Leadership, students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level, and a minimum 70.5 units of the University General

Education requirements. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements. Refer to the section on undergraduate admission procedures for specific information regarding application and evaluation. All students receiving an undergraduate degree in Nevada are required by State Law to complete a course in Nevada Constitution.

Non-Leadership Course Requirements (4 courses; 18 quarter units)

LAW 304 Legal Aspects of Business I
MGT 309C Prin. of Mgmt & Organizations
HRM 409B Survey in HRM & OD

or

ODV 410 OD, Career Systems, & Training
COM 334 Persuasion
Prerequisite: ENG 101

or

COM 354 Professional Presentations
Prerequisite: ENG 101

or

MKT 442A Intro to Public Relations

Leadership Courses in the Major (10 courses; 45 quarter units)

LED 400* Introduction to Leadership
LED 410* Leading Diverse Groups & Teams
LED 420* Adaptive Leadership in Change
LED 430* Conflict/Negotiation for Ldrs
LED 440* Ldrship Overview of Org. Func.
LED 450* Advanced Group Dynamic Theory
Prerequisite: LED 400 and LED 410
LED 460* Ethics and Decision Making
LED 470 Classic Studies of Leadership
LED 480 Research for Leaders
Prerequisite: LED 410 and LED 420
LED 490 Leadership Capstone Project
Prerequisite: Completion of six of the preceding courses

* Prior Learning Credit eligible course.

Upper-Division Electives (2 courses, 9 quarter units)

Select from upper-division courses with the following prefixes: ECO, FIN, HCM, HRM, MGT, ODV and SOC.

● MINORS

● MINOR IN ACCOUNTANCY

Faculty Advisor: Consolacion Fajardo; (916) 855-4137; cfajardo@nu.edu

The Minor in Accountancy program is designed for students whose objective is to prepare for entry in the accounting field. Those aspiring to sit for the CPA or CMA exams should take the Bachelor of Science Major in Accountancy program.

Requirements for Minor

(7 courses; 31.5 quarter units)

To receive a Minor in Accountancy students must complete the following **six (6)** courses for which the upper division accounting required prerequisites have been successfully completed.

Minor Prerequisite

(1 course; 4.5 quarter units)

ACC 201 Financial Accounting Funds.

Requirements for Minor

(6 courses; 27 quarter units)

ACC 300 Applied Tech for Accountants
Prerequisite: ACC 201
ACC 434 Government and Nonprofit Acct
Prerequisite: ACC 201
ACC 433A Managerial Accounting I
Prerequisite: ACC 201
ACC 433B Managerial Accounting II
Prerequisite: ACC 433A
ACC 410A Intermediate Accounting I
Prerequisite: ACC 201
ACC 410B Intermediate Accounting II
Prerequisite: ACC 410A

● MINOR IN BUSINESS ADMINISTRATION

Faculty Advisor: Nelson Altamirano; (858) 642-8428; naltamirano@nu.edu

Requirements for Minor

(11 courses; 49.5 quarter units)

Prerequisites for Minor

(5 courses; 22.5 quarter units)

ACC 201 Financial Accounting Funds.
ACC 202 Managerial Accounting Funds.
Prerequisite: ACC 201
ECO 203* Principles of Microeconomics
ECO 204* Principles of Macroeconomics
MNS 205* Intro to Quantitative Methods
Prerequisite: Placement Evaluation

* May be used to satisfy General Education requirements.

Core Requirements

(6 courses; 27 quarter units)

FIN 310 Business Finance
Prerequisite: ACC 201
MGT 309C Prin. of Mgmt & Organizations
MNS 407 Management Science
Prerequisite: MNS 205
HRM 409B Survey in HRM & OD
MKT 302A Marketing Fundamentals
MGT 430 Survey of Global Business
Prerequisite: ECO 203 and ECO 204

● MINOR IN BUSINESS STUDIES

Faculty Advisor: Nelson Altamirano; (858) 642-8428; naltamirano@nu.edu

Requirements for Minor

(11 courses; 49.5 quarter units)

Prerequisites for Minor

(5 courses; 22.5 quarter units)

ACC 201 Financial Accounting Funds.
ACC 202 Managerial Accounting Funds.
Prerequisite: ACC 201
ECO 203* Principles of Microeconomics
ECO 204* Principles of Macroeconomics
MNS 205* Intro to Quantitative Methods
Prerequisite: Placement Evaluation

* May be used to meet a General Education requirement.

Core Requirements

(6 courses; 27 quarter units)

MGT 309C	Prin. of Mgmt & Organizations
FIN 310	Business Finance <i>Prerequisite: ACC 201</i>
LAW 410	Intro to Law & Legal Analysis
MGT 430	Survey of Global Business <i>Prerequisite: ECO 203 and ECO 204</i>
MKT 302A	Marketing Fundamentals
MNS 407	Management Science <i>Prerequisite: MNS 205</i>

● MINOR IN ECONOMICS*Faculty Advisor: Wali Mondal; (858) 642-8415; wmondal@nu.edu*

The minor in Economics is designed for students with no background in Economics. Students will learn how a society makes economic decisions in allocating its scarce resources. Students will also learn how individuals, businesses and the government work together towards achieving the goals of a society. The minor consists of courses which are applied in nature so that students with a diverse background may find it beneficial. Students with a background in Economics may find a wide array of employment opportunities in local, state and federal government, in private sector, and in international organizations including the United Nations organizations and the Peace Corps. The minor will also help students succeed in graduate studies in all business disciplines including Finance, Management and Marketing, and will help those willing to pursue law degree or other professional training. For guidance and recommendations concerning the minor in Economics, please contact the above named faculty.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Apply ethical and legal principles to business environment.
- Demonstrate skills and knowledge in the areas of business math, economics, accounting, finance, and operations management needed to make sound business decisions.
- Apply knowledge in the fields of management, business knowledge management, and marketing to different business environments.
- Integrate the knowledge acquired in the program to analyze a business, identify its strengths and weaknesses, and determine what changes can be made for improvement.
- Conduct independent research relevant to business-related issues.
- Demonstrate written and oral presentation skills expected of a business school graduate .
- Develop a global business perspective based on the knowledge of foreign business environments and cultures.

Requirements for Minor

(8 courses; 36 quarter units)

Prerequisites for Minor

(2 courses; 9 quarter units)

ECO 203* Principles of Microeconomics

ECO 204* Principles of Macroeconomics

* May be used to meet a General Education requirement.

Core Requirements

(6 courses; 27 quarter units)

ECO 304	Economic Growth <i>Prerequisite: ECO 203 and ECO 204</i>
ECO 305	Business Economics <i>Prerequisite: ECO 203 and ECO 204</i>
ECO 420	International Economics <i>Prerequisite: ECO 203 and ECO 204</i>
ECO 447	Money and Banking <i>Prerequisite: ECO 203 and ECO 204</i>

Plus any **two (2)** of the following courses:

ECO 303	Data Analysis <i>Prerequisite: ECO 203 and ECO 204</i>
ECO 410	Seminar on Capitalism <i>Prerequisite: ECO 203 and ECO 204</i>
ECO 415	Labor Economics <i>Prerequisite: ECO 203 and ECO 204</i>
IBU 540	International Experience

GRADUATE DEGREES**■ GLOBAL MASTER OF BUSINESS ADMINISTRATION (OFFERED IN SPANISH)***Faculty Advisor: Ramon Corona; (858) 642-8427; rcorona@nu.edu*

La Maestría en Administración de Negocios es un programa que proporciona a los estudiantes adultos las teorías y habilidades necesarias para la toma de decisiones y negociaciones a nivel ejecutivo. La orientación de este programa es multidisciplinaria, incluyendo un análisis económico, político y cultural en la planeación estratégica, y el desarrollo de negocios nacionales e internacionales. Asimismo, se enfatiza la aplicación de principios éticos en las organizaciones.

El programa consiste en una serie de cursos que componen los diversos aspectos de un negocio en el ámbito global, tanto a nivel operativo, como conceptual y de liderazgo, y está diseñado para el ejecutivo (gerente o director) de una empresa pequeña, mediana o global, que busca aprender conceptos de administración, mercadotecnia, finanzas, liderazgo, etc., con un enfoque de aplicación inmediata en su organización. Asimismo, este programa es ideal para ejecutivos experimentados que buscan actualizar sus conocimientos y habilidades en áreas como mercadotecnia global o vía Internet (e-marketing), finanzas internacionales, etc., a fin de garantizar su competencia en el mercado.

Prerrequisitos para ingresar al programa

Haber completado un programa de pregrado (licenciatura), y obtenido el título, en una universidad debidamente acreditada. El departamento escolar de National University (Office of the Registrar) analizará la documentación proporcionada y determinará la validez de los estudios del solicitante, y autorizará o no, su ingreso al programa.

Asimismo, el estudiante deberá comprobar su nivel de dominio del idioma español, ya sea que haya estudiado su pregrado (Licenciatura) en un país donde el idioma oficial sea el español y que los cursos los, haya estudiado en español, o mediante la autorización del asesor académico del programa después de una entrevista con el estudiante.

English Description

Offered online and conducted entirely in Spanish language, the Global MBA in Spanish program provides adult learners with the theories and the skills needed for executive decision-making and negotiation. The focus of this program is on multidisciplinary approaches, including economic, political, and cultural analyses in the strategic planning and development of national and international business. Moreover, the ethical application for executives in organizations is emphasized.

The program consists of a series of courses covering the various business components in a global environment, both at an operational level, as well as conceptual and leadership, and it is geared towards the business executive (Manager or Director) of a small, medium or large global company who needs to learn key concepts and applications in the fields of Management, Marketing, Finance, Leadership, etc. focusing in an immediate application in his/her work or business. Furthermore, this program is ideal for experienced executives who need to update their knowledge and skills in fields such as Global Marketing, E-Marketing, Global Finance, and the like, so they remain competitive in the marketplace.

Program Admission Requirements

To have completed a Bachelor's degree (including certificate or título) from an accredited institution. The Office of the Registrar will analyze the documentation provided and determine eligibility to the degree as well as the validation of the student's academic background.

The applicant must also demonstrate proficiency in the Spanish language such as required for a graduate program, either by having taken the courses of the Bachelor's program in Spanish language or by approval of the faculty advisor after a telephone or CLP interview with the student.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Integrar conceptos y teorías de Mercadotecnia, Liderazgo, Economía, Finanzas y Administración a la solución de problemas y aprovechar oportunidades de negocios. (Integrate Marketing, Leadership, Economics, Finance and Management concepts and theories to solving business problems and taking advantage of Business opportunities).
- Evaluar y analizar las situaciones de negocios en un contexto global para desarrollar estrategias y planes adecuados. (Evaluate and analyze business situations in a global setting to develop appropriate strategies and plans).
- Comparar el uso de las habilidades de Liderazgo y Negociaciones en un entorno global. (Judge leadership and negotiation skills in a changing Global environment).
- Diseñar y administrar alianzas y socios internacionales. (Design and manage international partnerships and alliances).
- Analizar estados financieros y tomar decisiones financieras y contables bien informadas y adecuadas. (Analyze financial statements and make informed financial and accounting decisions).
- Formular decisiones de negocios éticas y apoyar un ambiente de negocios justo e incluyente. (Formulate ethical business decisions and support a fair and engaging business environment).

Degree Requirements

A fin de recibir el grado de Global MBA en Español, el estudiante debe completar por lo menos 49.5 unidades de trabajo de posgrado. Un total de 9 unidades de posgrado pueden ser revalidadas por un trabajo de posgrado equivalente en otra institución acreditada, y se aplicaría a este programa siempre y cuando no se hayan utilizado en la obtención de otro grado académico. Los estudiantes se deberán referir a la sección de requisitos de admisión para la solicitud y evaluación.

In order to obtain the Global MBA in Spanish degree, students must complete at least 49.5 quarter units of graduate work. A maximum of nine (9) graduate units can be transferred from an accredited institution and used for credits in this program provided that the units have not been used to satisfy the requirements of an awarded degree. Students should refer to the admission requirements section for the application and evaluation details.

Cursos Obligatorios

(11 cursos; 49.5 unidades cuatrimestrales)

GMB 689S	Liderazgo y Negociaciones
GMB 620S	Negocios Electrónicos
GMB 601S	Estadísticas para Negocios
GMB 631S	Mercadotecnia Global
GMB 673S	Alianzas Estratégicas Globales
GMB 682S	Contabilidad Gerencial
GMB 672S	Administración del Riesgo Glob
GMB 683S	Administración Financiera Glob
GMB 674S	Estrategias Competitivas Globa
GMB 602S	Administración Estratégica <i>Prerequisite: Curso que culmina la parte académica para los estudiantes del MBA. A fin de inscribirse en GMB 602S, los estudiantes deben haber completado al menos 30 unidades cuatrimestrales de los cursos requeridos del MBA, exceptuando el GMB 696S.</i>
GMB 696S	Proyecto MBA <i>Prerequisite: haber completado todos los cursos fundamentales</i>

■ MASTER OF ACCOUNTANCY

Faculty Advisor: Russell Parkman; (858) 642-8462; rparkman@nu.edu

The Master of Accountancy (MAcc) academically prepares students for a wide range of accounting-related careers. Some examples include public accounting, corporate accounting, internal auditing, accounting in not-for-profit organizations, and accounting for state and local government agencies such as the Internal Revenue Service, Franchise Tax Board, Defense Contract Audit Agency, FBI, CIA and

other agencies. The program is designed for students with little or no previous accounting background who have an undergraduate degree in any discipline, but it is not appropriate for students with an undergraduate degree in accounting. Course content is based largely on the published content specifications of the Uniform CPA Exam. Students who do well in this academic program may choose to invest several hundred hours of study in a recognized CPA Exam review course.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Integrate current information technologies to report and analyze financial information.
- Evaluate accounting information based upon mastery of a common body of accounting knowledge.
- Analyze ethical issues within the accounting profession.
- Effectively conduct and present accounting research.
- Critique international financial accounting standards as compared to Generally Accepted Accounting Principles (GAAP).
- Collaborate effectively as a team to enhance critical thinking.

Degree Requirements

To receive a Master of Accountancy, students must complete at least 63 quarter units of graduate work. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree and provided the units were not used in earning another advanced degree. Students should refer to the section on graduate admission requirements for specific information regarding application and evaluation.

Core Requirements

(14 courses; 63 quarter units)

ACC 601M	Foundations of Financial Acc
ACC 657	Accounting Information Systems <i>Prerequisite: ACC 601M</i>
ACC 610M	Financial Accounting I <i>Prerequisite: ACC 601M</i>
ACC 611M	Financial Accounting II <i>Prerequisite: ACC 610M</i>
ACC 612M	Financial Accounting III <i>Prerequisite: ACC 611M</i>
ACC 615M	Advanced Financial Accounting <i>Prerequisite: ACC 612M</i>
ACC 620M	Taxation of Individuals <i>Prerequisite: ACC 615M</i>
ACC 621M	Taxation of Bus & Oth Entities <i>Prerequisite: ACC 620M</i>
ACC 630M	Cost Accounting <i>Prerequisite: ACC 601M</i>
ACC 631M	Advanced Managerial Accounting <i>Prerequisite: ACC 630M</i>
ACC 640M	Acc for Gov't & NFP Entities <i>Prerequisite: ACC 601M</i>
ACC 650M	Auditing Principles <i>Prerequisite: ACC 621M</i>
ACC 651M	Auditing Procedures <i>Prerequisite: ACC 650M</i>
ACC 695M	Cases in Accounting & Auditing <i>Prerequisite: Completion of prior core requirements</i>

▲ Specialization in Accounting Professional Skills

This specialization is designed for students to obtain additional coursework and skills necessary for many professional opportunities in the field of accounting. For instance, to be a licensed CPA in the state of CA, students need 180 quarter units (150 semester units). Units may be obtained at the undergraduate or graduate level. The only units that are specified is 4.5 quarter units (3 semester units) of Accounting Ethics. The specialization introduces accounting ethics into our

curriculum in addition to other courses that will assist students in preparing for professional exams. Interviewing for internships or jobs, networking, and obtaining data analytic skills.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Identify key issues and recognize alternative viewpoints when presented with ethical problems and dilemmas.
- Evaluate ethical decision processes between professional accountants and major stakeholders.
- Enhance skills to effectively recruit and network within a professional accounting environment.
- Demonstrate and apply accounting knowledge to real world situations or professional examination boards.
- Communicate and analyze information using advance technology skills.

Requirements for Specialization

(4 courses; 18 quarter units)

ACC 515 Accounting Ethics

and

Choose **three (3)** of the following courses:

ACC 520 Professional Exam Review 1
Recommended: Prior completion of: Should have completed approximately 72 quarter units of accounting and/or business.

ACC 525 Professional Exam Review 2
Prerequisite: ACC 520

ACC 550 Business Professional Develop.

ACC 555 Data Analytics

ACC 591 Accounting Internship

■ MASTER OF ARTS IN CAUSE LEADERSHIP

*****THIS PROGRAM IS NOT ACCEPTING APPLICATIONS AT THIS TIME*****

The Master of Arts in Cause Leadership is designed for the mid- to upper-level nonprofit professional, to create increased capacity for leadership skills, balanced with knowledge, theory, and application. The program is designed to provide leaders with the understanding and skills to create a shared vision among stakeholders, attract and retain resources, and gain the ability to develop others throughout one's organization and the community. Candidates will enhance their ability to lead in environments of unpredictability and uncertainty while maintaining a focus on the organizational purpose.

The Master of Arts in Cause Leadership offers individuals the opportunity to learn how to concurrently develop themselves as individuals and leaders in the nonprofit arena, increase the capacity for leadership in others, and foster the ongoing sustainability and success of their organizations. Rooted in the development of the person, this graduate program provides both practical and practicable tools aimed at cultivating the nonprofit development professional. Acquisition of skills focused on the personal and interpersonal is grounded in a comprehensive understanding of the broader aspects of leading a nonprofit organization.

This program is ideal for those with a passion for leadership, seeking new ideas, enhanced development and networking with fellow professionals. Executives from various roles in nonprofit organizations are welcomed including established leaders seeking further development or enhancement, emerging leaders looking to acquire new and hone existing skills, and aspiring leaders striving to develop themselves as individuals as they expand their professional toolbox.

Program Learning Outcomes for the Master of Arts in Cause Leadership define the capabilities of the students upon completion of the degree program and are based on the graduate's ability to enhance capacity to ensure organizational purpose and identify resources to benefit the interest of the public good.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Examine the unique fiduciary responsibilities of and opportunities for nonprofit organizations and their supporters.
- Illustrate a proficiency in the many and varied methods for garnering financial support for nonprofit organizations, including marketing and fundraising.
- Attract and retain resources through the development and management of relationships in the community and with key stakeholders.
- Identify and utilize the skills, tools, and practices that ensure ongoing sustainability and success of nonprofit organizations.
- Navigate the multiple roles and boundaries of the varied stakeholders in the nonprofit arena.
- Articulate one's own leadership philosophy and describe how this philosophy translates into ethical practice through relationships with volunteers, donors, and staff.
- Create and evaluate leadership capacity in self and others.
- Develop an understanding of and grounding in one's personal purpose and connect this to the organization's purpose.

Degree Requirements

(11 courses; 49.5 quarter units)

To receive a Master of Arts in Cause Leadership, student must complete at least 49.5 quarter units of graduate work. A total of 9 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree and provided the units were not used in earning another advanced degree. Refer to the section of graduate admission procedures for specific information regarding application and evaluation.

Core Requirements

(11 courses; 49.5 quarter units)

NPL 600 Nonprofit Fundamentals

NPL 610 Volunteer Leadership
Prerequisite: NPL 600

NPL 620 Financial Management
Prerequisite: NPL 600

NPL 630 Applied Cause Leadership
Prerequisite: NPL 600

NPL 640 Making the Ask: Dev. Methods
Prerequisite: NPL 600

NPL 500 Cause Sales (Level 1)

NPL 650 Making the Case: Marketing NPs
Prerequisite: NPL 600 and NPL 640

NPL 510 Cause Sales Practice (Level 2)
Prerequisite: NPL 500

LED 620 World View & Adult Development

NPL 680 Leading at a Higher Level
Prerequisite: NPL 600, NPL 620, NPL 640, NPL 630, NPL 650, NPL 610, NPL 500, NPL 510 and LED 620

NPL 690 Capstone Course
Prerequisite: NPL 600, NPL 620, NPL 610, NPL 630, NPL 640, NPL 650, NPL 510, LED 620, NPL 680 and NPL 500

■ MASTER OF ARTS IN HUMAN RESOURCE MANAGEMENT

Faculty Advisor: Bernadette Baum; (858) 642-8404; bbaum@nu.edu

The Master of Arts in Human Resource Management Program is recognized by the Society for Human Resource Management (SHRM) as being fully aligned with its curriculum guidelines.

The Master of Arts in Human Resource Management Program provides students with both the critical skills and knowledge required to be effective in this continuously growing domain through case study, experiential learning opportunities, and best practices. The program serves to increase knowledge, skills and abilities of a professional to perform in a senior management position or as a consultant

to organization leadership on matters of human resource management and organizational change.

The MAHRM program integrates the many facets of human resource management in the 21st century through concept, theory, critical analysis and application of recruitment, staffing, training and talent development, compensation and benefits, organizational behavior, performance improvement, technology, legal aspects, labor relations, organizational change and adaptation, ethical issues, and safety concerns in the workplace. The curriculum, incorporating relevant HRM and ODV technology and best practices for both internal practitioners and consultants, offers an in-depth, fully comprehensive curriculum for business professionals to extend their knowledge beyond operations management. This cutting-edge program is designed to offer an innovative multidisciplinary approach to the growing field of human resource management and the continuum of organizational change in the 21st century.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Complete a job analysis of a specific job to be used for recruiting, selection, performance appraisal, training, and compensation.
- Develop a recruiting plan and design a selection process for recruiting, interviewing, and selecting candidates for employment for jobs within an organization.
- Conduct a needs assessment and design a training program for current employees on a specific topic related to organizational goals.
- Assess benefits relevant to the employee population and organizational structure, and formulate a compensation system based upon merit, knowledge, and skill acquisition.
- Assess and develop methods designed to prevent employer liability and labor relation issues (anti-discrimination statutes, employee and labor relations, union, and non-union environment issues).
- Develop a consulting proposal and course of action for an organization regarding a particular organizational challenge and/or change process.
- Recognize, analyze, and effectively address ethical, legal, and safety challenges faced in the workplace.

Degree Requirements

To earn a Master of Arts in Human Resource Management degree, students must complete at least 54 quarter units of graduate work. A total of 13.5 quarter units of graduate credits may be granted for equivalent graduate work completed at another institution, as it applies to this degree and provided the units were not used in earning another advanced degree. It is recommended that students take the capstone project class as their last class in the sequence of the program.

Core Requirements

(11 courses; 49.5 quarter units)

HRM 660	Theory & Practice of HRM
HRM 630	Legal, Ethical & Safety Issues
HRM 637	Workforce Plan, Dev & Outsourc
ODV 606	Seminar in Training & Developm
HRM 667	Compensation & Benefits
HRM 633A	Seminar in Employee Relations,
ODV 610	Adv Studies in Org Behavior in
ODV 600	Theory & Practice of OD
ODV 601	Integrating Performance Mgmt <i>Prerequisite: ODV 600</i>
HRM 669	Research Seminar
HRM 670	Project/Thesis <i>Prerequisite: HRM 669 and at least 7 core courses</i>

Program Electives

(1 course; 4.5 quarter units)

To complete their program, students must select electives from any graduate level course offered by the School of Business and Management. Highly recommended

in the choice of electives are FIN 600, Finance for Non-Financial Managers, and MGT 635, The Organizational Consulting Process. In the alternative, students may complete their program by completing the following specialization.

▲ Specialization in Organizational Leadership

The purpose of the area of specialization in organizational leadership is to provide students with the skills and theoretical concepts that will assist them when seeking promotions or positions in management and supervision. This area of specialization is designed to prepare diverse adult learners to become effective, change oriented leaders in an international society by adding distinctive and challenging curricula.

This area of specialization is ideal for individuals who desire to understand the technical and reflective processes that often accompany opportunities to exercise leadership in profit and not for profit organizations.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Distinguish between multiple approaches for exercising leadership to promote innovation and confront complex issues within organizations.
- Interpret organizational dynamics, group dynamics and engage in systems thinking in order to promote the development of a learning organization capable of innovation, adaptation, and orchestrating conflict.
- Evaluate ethical issues and aid organizational members in creating ethical culture appropriate to the organizational and global environment that supports operating in environments of diversity, uncertainty and unpredictability.
- Distinguish between the functions of authority, power, the practice of leadership, and utilize frameworks that serve organizational purposes.

Program Requirements

(4 courses; 18 quarter units)

LED 602	Developing Groups and Teams
LED 603	Leadership in the 21st Century
LED 604	Leading Change and Adaptation
LED 605	Conflict and Power Dynamics

■ MASTER OF BUSINESS ADMINISTRATION

Faculty Advisor: Kamlesh Mehta; (858) 642-8489; kmehta@nu.edu

Current and Prospective International Students

Contact an advisor at isa@nu.edu or 1-800-NAT-UNIV

Current and Prospective Domestic Students

Contact an advisor at advisor@nu.edu or 1-800-NAT-UNIV

The mission of the Master of Business Administration (MBA) program is to prepare students for leadership positions in business and to provide them with the knowledge and skills needed to successfully manage organizations in an ever-changing business environment. The MBA program imparts the conceptual understanding and application of problem-solving tools contained in basic business disciplines, including accounting, economics, data analysis, finance, management, leadership, and marketing. In addition, students are equipped with the skills needed for effective team-building, quantitative and qualitative decision-making, and creative problem-solving. To ensure that MBA program meets the needs of today's leaders and managers, the program is dedicated to the following 5 themes:

1. Relevance

The MBA program has been designed based on the demands in both domestic and global market place.

2. Accessibility and Support

The MBA program is available to students in both online and onsite. Upon admission to the MBA program, students will be assigned to a faculty advisor to assist them throughout the program in making appropriate decisions about educational and career-related issues.

3. Specialization

Students may design their degree as a general business program or may choose to specialize in a particular discipline.

4. Application

The MBA program imparts the conceptual understanding and application of problem-solving tools contained in basic business disciplines. It also addresses the interests of the stakeholders of an enterprise and of the communities in which the enterprise is operating.

5. Technology

In order to fulfill the learning outcomes, classes will integrate current technology in traditional onsite classes as well as in web-enhanced online classes.

Contact the Faculty Advisor

All students are encouraged to contact an Admissions Advisor (see contact information listed above) for any information related to the MBA degree program and for the purpose of reviewing the student's career objectives and providing guidance regarding the courses and/or specialization to be selected. For specific information not addressed by the advisor, please contact the Lead Faculty for the MBA Program.

MBA Transition Program

National University students who completed a transition program as part of their undergraduate degree and who satisfy MBA transition program requirements described in the catalog description of various undergraduate programs must complete a minimum of 49.5 quarter units for their MBA degree. The number of units required for the MBA program is dependent on the coursework completed in the Bachelors transition program and the grades earned. A complete description of Transition Program requirements can be found in the Policies and Procedures section of this Catalog.

Basic English and Math Skills

It is strongly recommended that students who are unsure about having adequate English writing or math skills take one or both one-hour Accuplacer tests to determine their level of competency. If below the minimum level needed to be comfortable and ensure success in the MBA program, students should seriously consider enrolling in appropriate writing skill courses. If a student has already taken the GRE or GMAT, a score of at least 152 (verbal) and 147 (quantitative) on the GRE or a score of at least 550 on the GMAT indicates adequate proficiency.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- **Value Creation:** Evaluate the systems and processes used throughout an organization including the planning, decision-making, group dynamics, innovation, production, supply chain, operations, technologies, marketing and distribution, and management.
- **Leadership and Governance:** Demonstrate leadership ability and management skills within an environment of change to meet the objectives of the stakeholders of the organization.
- **Global Awareness and Citizenship:** Evaluate the forces in the global business environment, including social responsibility, sustainability, ethics, and the risk and opportunities associated with operating within a multi-cultural, business environment.
- **Quantitative Analysis:** Apply economic models, accounting principles, statistical techniques, and financial theories, analysis, and reporting in business decision-making.
- **Communication and Presentation:** Demonstrate effective business communication skills through written reports, presentations, and working in a collaborative, team setting.
- **Critical Thinking, Analysis and Problem Solving:** Design alternatives to solve business problems utilizing quantitative analysis, critical thinking, and sound ethical decision-making.
- **Strategic Planning:** Formulate strategies and policies utilizing environmental and resources assessment, and integrating various functions to achieve the mission and objectives of the organization.

Degree Requirements

(16-19 courses; 63-76.5 quarter units)

To receive an MBA degree, students must complete at least 63 quarter units of graduate credit. A total of 13.5 quarter units of equivalent graduate work may be granted if completed with a grade of "B" or better (3.0 GPA) at another regionally accredited institution as it applies to this degree and provided the units were not used in earning another advanced degree. Please refer to the section on graduate

admission procedures for specific information regarding application, evaluation, and the course waiver process.

Self-Paced Foundation Course (Optional)

The following non-credit, self-paced, and self-study course is offered online, free of charge to registered MBA students.

BUS 500A Intermediate Algebra (0 quarter units)

Two-Week Foundation Courses (Required)

(2 courses; 4.5 quarter units—no graduate level credit granted)

The following two foundation courses are required for all MBA students, but may be waived if a score of 80 percent or above is achieved on a challenge exam. Rather than being self-study and self-paced, these courses are scheduled in normal fashion with qualified instructors. Each course is two weeks long: ACC 501 is offered in the first two weeks of an academic month and FIN 501 is offered in the second two weeks. The two courses are offered online and at certain onsite campus locations. Grading is "S" for Satisfactory, or "U" for Unsatisfactory. Although these courses are prerequisites for certain core courses and, do not provide academic credit, they have substantial content that is not covered in the related core courses and therefore must be successfully completed or waived by achieving a score of 80% on a challenge exam.

ACC 501* Accounting Fundamentals (1.5 quarter units)

FIN 501 Finance Fundamentals (3 quarter units)

Prerequisite: ACC 501 or ACC 201

* Students who have an undergraduate or graduate degree in accountancy are waived of ACC 501.

Students who have recently taken a basic course in accounting such as ACC 201 or ACC 601M should consider taking the challenge exam.

Module I – Tools for Problem Solving*

Core Requirements

(8 courses; 36 quarter units)

MKT 602 Marketing Management

MGT 605 Organization Mgmt & Leadership

IBU 606 Global Business

MNS 601 Statistics for Business

ACC 604** Managerial Accounting
Prerequisite: ACC 501

ECO 607 Eco. for Managerial Decisions
Recommended: Prior completion of: BUS 500A

MGT 608 Managerial Support Systems

FIN 609A Seminar in Financial Management
Prerequisite: FIN 310 or FIN 501

* Up to three of the eight Module I courses may be waived by a student who has taken an undergraduate course in a similar subject and can demonstrate sufficient knowledge retention by achieving a score of 84 percent or above on a graduate level challenge exam.

Students may then make up the quarter units needed to meet the 63 quarter units required for the degree by taking an additional graduate level course offered by the School of Business and Management. The fifth course of a five-course specialization would also provide the required quarter units.

** Students who successfully complete both ACC630M and ACC631M are waived of ACC604 but must replace the quarter units by taking a graduate level course offered by the School of Business and Management.

Module II – Application and Integration

(2 courses; 9 quarter units)

Note: All Module I courses must be completed before taking either of the following Module II courses.

MGT 685C Business Strategy and Policy
Prerequisite: MGT 605, MGT 608, MKT 602, MNS 601, ECO 607, IBU 606, ACC 604 and FIN 609A

MGT 695C Capstone
Prerequisite: MGT 605, MGT 608, MKT 602, ECO 607, MNS 601, ACC 604, FIN 609A, IBU 606

General Electives

(4 courses; 18 quarter units)

Students may select any graduate courses offered by the School of Business and Management, including BUS 691 Internship Project. As an alternative, students may enroll in an Area of Specialization (see below). Some of the specializations require five rather than four courses. The fifth course is the capstone for the area of specialization that can be used to replace MGT695C in the Module II. Also, if a student can successfully challenge one of the Module I courses (with approval of the Lead Faculty), the fifth specialization course can be used to replace the quarter units of the waived course.

LED 601 Ethics and Classic Theories
IBU 540 International Experience
MGT 625 Managerial Communication
MGT 652 Business Simulation
BIM 610 Strategic Decision Systems

MBA Specialization

Requirements for Specialization

(4-7 courses; 18-31.5 quarter units)

In lieu of general electives, students can choose an Area of Specialization. In order to graduate with a specialization, students must complete all courses specified in the desired area in addition to all Module I and Module II requirements except the area of specializations that have capstone course. In that case students are required to take only MGT685C in the Module II.

▲ Specialization in Accounting Professional Skills

Faculty Advisor: Sharon Lightner; (858) 642-8663; slightner@nu.edu
Faculty Advisor: Russell Parkman; (858) 642-8462; rparkman@nu.edu

This specialization is designed for students to obtain additional coursework and skills necessary for many professional opportunities in the field of accounting. For instance, to be a licensed CPA in the state of CA, students need 180 quarter units (150 semester units). Units may be obtained at the undergraduate or graduate level. The only units that are specified is 4.5 quarter units (3 semester units) of Accounting Ethics. The specialization introduces accounting ethics into our curriculum in addition to other courses that will assist students in preparing for professional exams. Interviewing for internships or jobs, networking, and obtaining data analytic skills.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Identify key issues and recognize alternative viewpoints when presented with ethical problems and dilemmas.
- Evaluate ethical decision processes between professional accountants and major stakeholders.
- Enhance skills to effectively recruit and network within a professional accounting environment.
- Demonstrate and apply accounting knowledge to real world situations or professional examination boards.
- Communicate and analyze information using advance technology skills.

Requirements for Specialization

(4 courses; 18 quarter units)

ACC 515 Accounting Ethics

and

Choose **three (3)** of the following five courses:

ACC 520 Professional Exam Review 1
Recommended: Prior completion of: Should have completed approximately 72 quarter units of accounting and/or business.

ACC 525 Professional Exam Review 2
Prerequisite: ACC 520

ACC 550 Business Professional Develop.

ACC 555 Data Analytics

ACC 591 Accounting Internship

▲ Specialization in Financial Management

Faculty Advisor: Farhang Mossavar-Rahmani; (858) 642-8409; fmossova@nu.edu

The field of finance has undergone great changes in the last decade and now represents one of the most dynamic activities within companies of all sizes, as well as within nonprofit and governmental organizations. Executives with a background in finance head about one out of every three corporations today.

The financial management program is designed to provide both a sound theoretical and a conceptual framework for financial managers. Special emphasis is placed on growth and diversification policies, evaluation and management of securities portfolios, investment banking and merger strategies, analysis of foreign exchange rate movements, formulation of plans to reduce foreign exchange risk exposure and case and/or research projects dealing with contemporary financial issues.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Evaluate the financial condition of the company and recommend the proper course of actions.
- Appraise securities portfolios and investment proposal and evaluate the relationship among the returns for foreign and domestic investment instruments.

Requirements for Specialization

(5 courses; 22.5 quarter units)

FIN 610 Topics in Financial Management
Prerequisite: FIN 609A

FIN 631 Security Analysis & Portfolio
Prerequisite: FIN 609A

FIN 635 International Finance
Prerequisite: FIN 609A

FIN 674 Managing Financial Institution
Prerequisite: FIN 609A

FIN 655 Finance Research Project
Prerequisite: FIN 609A and minimum of 36 quarter units of core courses

▲ Specialization in Human Resource Management

Faculty Advisor: Bernadette Baum; (858) 642-8404; bbaum@nu.edu

This area of specialization focuses on managing people, the human resource of the organization. Moving beyond common sense and good interpersonal skills, these courses provide students with the knowledge to recruit, select, train, evaluate and compensate employees. Students learn how changes in the workplace, such as governmental regulations, global competition, developing technologies and organizational transformations, influence the performance and productivity of workers. Technical knowledge and practical skills for dealing with a multicultural workforce offer students new ideas on leadership and effective tools for managing human resource.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Complete a job analysis of a specific job to be used for recruiting, selection, performance appraisal, training and compensation.
- Develop a recruiting plan and design a selection process for recruiting, interviewing, and selecting candidates for employment for jobs within an organization.
- Conduct a needs assessment and design a training program for current employees on a specific topic related to organizational goals.

- Assess benefits relevant to the employee population and organizational structure, and formulate a compensation system based upon merit, knowledge, and skill acquisition.
- Recognize, analyze, and effectively address ethical, legal and safety challenges faced in the workplace, and develop methods designed to prevent employer liability.

Requirements for Specialization

(5 courses; 22.5 quarter units)

HRM 660	Theory & Practice of HRM
HRM 630	Legal, Ethical & Safety Issues
HRM 637	Workforce Plan, Dev & Outsource
ODV 606	Seminar in Training & Development
HRM 667	Compensation & Benefits

▲ Specialization in Integrated Marketing Communication

Faculty Advisor: Susan Silverstone; (858) 642-8430; ssilvers@nu.edu

This specialization prepares students to take leadership roles in the management and control of marketing messages within and beyond their organizations. Building on the foundation developed in the core classes, courses in this sequence provide learners with essential skills in the marketing communication process. Students gain mastery in conceiving, planning and distributing integrated marketing content for traditional and new media channels, including blogs, social networks and mobile media. They also learn essential quantitative research skills that enable them to evaluate the effectiveness of communication campaigns. Through coursework and a capstone project, graduates are prepared to fulfill management responsibilities for commercial and nonprofit marketing efforts, including advertising, public relations, fundraising, and other campaigns.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Critique integrated marketing communication campaigns.
- Conceive integrated marketing communication plans.
- Produce marketing communication messages.
- Create media mix plans that specify content dissemination channels.
- Evaluate effectiveness and return on investment of communication campaigns.

Requirements for Specialization

(4 courses; 18 quarter units)

COM 610	Integrated Marketing Comm
COM 615	Research Methods
COM 630	Campaign & Program Evaluation <i>Prerequisite: COM 610 and COM 615</i>
COM 660	Capstone Project

▲ Specialization in International Business

Faculty Advisor: Kamlesh Mehta; (858) 642-8489; kmehta@nu.edu

Business activities have an increasingly global reach. Successful business professionals must have a thorough knowledge of international business environments and be able to operate within individual foreign markets.

In this specialization, students have the option to travel to foreign locations where, under the guidance of National University professors, they attend lectures, visit universities, factories and cultural sites, thus achieving full immersion in a foreign environment such as China, Mexico, etc.

Specific issues covered in this specialization include cultural, economic and legal issues, as well as exporting, franchising, licensing, foreign direct investment and outsourcing. Students develop skills in areas such as international risk analysis, international human capital development, international communication, site selection, matching markets, and products/services, etc.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Appraise the key economic, cultural, and legal factors that shape the international business environment.
- Assess the differences between the domestic and international business environments.

Requirements for Specialization

(4 courses; 18 quarter units)

Student should choose **four (4)** courses from the following:

IBU 637	Comparative Int'l Management
IBU 641	Topics in Int'l Business
IBU 643	Global Strategy
IBU 645	Intl Entrepreneurship Project
IBU 540	International Experience

▲ Specialization in Management Accounting

Designed for students who wish to prepare for entry into the corporate, not-for-profit, or government sector of the accounting profession, and may be considering candidacy for the Certified Management Accountant (CMA) designation.

Students wishing to prepare for the Certified Public Accountant (CPA) certification should consider the B.S. in Accountancy or Master of Accountancy program which provide the broader and more in-depth preparation, including income taxes and auditing, needed for the CPA Exam. (CPA Exam candidates in California must have completed 24 semester units (36 quarter units) in accounting or tax courses and 24 semester units (36 quarter units) in business courses which include business law, mathematics, statistics, computer science, and information systems.)

Before taking any of the courses in the Specialization in Management Accounting, students are strongly advised to contact the Faculty Advisor or other member of the accounting faculty for a brief phone interview to review the student's career objectives.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Record and properly categorize common business transactions, make appropriate adjusting journal entries as needed, and prepare financial statements in accordance with U.S. accounting standards.
- Analyze cost and managerial accounting data and other qualitative information to prepare reports for external and internal users.
- Measure, analyze, and report accounting information of governmental and not-for-profit entities.
- Measure, analyze, and report accounting information for business entities.
- Integrate and utilize current information technologies, methodologies, and systems to plan, implement, execute, and analyze performance of the organization and its resources.

Requirements for Specialization

(7 courses; 31.5 quarter units)

To receive an MBA with Specialization in Management Accounting, students must complete the following seven courses. Note that ACC604 is waived for students who complete both ACC630M and ACC631M. Additional graduate accounting courses can be used to replace ACC601M and/or any of the Module I courses that have been waived by challenge exam.

ACC 601M*	Foundations of Financial Acc
ACC 630M	Cost Accounting <i>Prerequisite: ACC 601M</i>
ACC 631M	Advanced Managerial Accounting <i>Prerequisite: ACC 630M</i>
ACC 657	Accounting Information Systems <i>Prerequisite: ACC 601M</i>

ACC 640M Acc for Gov't & NFP Entities
Prerequisite: ACC 601M

ACC 610M Financial Accounting I
Prerequisite: ACC 601M

ACC 611M Financial Accounting II
Prerequisite: ACC 610M

* This course can only be waived by students who have taken a similar college level course and can demonstrate sufficient knowledge retention by achieving a score of 84 percent or above on a challenge exam

▲ Specialization in Marketing

Faculty Advisor: Mary Beth McCabe; (619) 563-7316; mmccabe@nu.edu

The Marketing specialization allows students to gain an understanding of how marketing relates to all the other functions of a business and how to integrate marketing into everything the business does. The Marketing pathway aims to promote a comprehensive understanding of the role of marketing management in consumer, industrial markets and service industries in addition to developing problem-solving and decision-making capabilities in these fields. Marketing concepts provide valuable insights into the various exchange processes involved in consumer, business-to-business, and non-profit settings, around the globe. The purpose of this is to develop a critical and analytical approach to marketing managers' tasks within the context of the organization as a whole.

Students interested in the marketing specialization should be curious about why customers buy what they do and how product development, branding, pricing, and other elements of the marketing mix affect consumer choices. Beyond the first-core marketing management class as part of general MBA program, specialization students are required to take market research, consumer behavior, global marketing, strategic operational marketing and marketing practicum (capstone). Marketing practicum is an integrative course and the capstone for the specialization. The principal outcome of the capstone course will be the completion of a project to integrate various functional areas of marketing. After completing the Marketing AOS--students are expected to develop knowledge, understanding, and cognitive, intellectual, practical and transferable marketing skills.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Evaluate marketing opportunities and successful strategies.
- Apply principles and theories of marketing strategies for management decision making.
- Synthesize varying marketing, operations, personnel and financial initiatives.

Requirements for Specialization

(4 courses; 18 quarter units)

MKT 620 Consumer Behavior
Prerequisite: MKT 602

MKT 631 Global Marketing
Prerequisite: MKT 602

MKT 634 Market Research
Prerequisite: MKT 602

MKT 660 Strategic Marketing Simulation
Prerequisite: MKT 602, MKT 620, MKT 631 and MKT 634

▲ Specialization in Mobile Marketing and Social Media

Faculty Advisor: Mary Beth McCabe; (619) 563-7316; mmccabe@nu.edu

The Specialization in Mobile Marketing and Social Media academically prepares MBA students for a range of marketing-related careers, including: mobile marketing managers, project managers, digital brand managers, social media managers, community managers, entrepreneurs, and job opportunities with agencies and related service businesses as well as the public sector such as local, city, regional and national government and non-profit organizations. The specialization in the MBA is designed for students with some, little or no marketing experience with an undergraduate degree in any discipline. Upon completion of the specialization, students will be able to direct content, mobile and social media strategy across an enterprise, large or small. This includes building brand awareness through

online channels, interfacing with customers and customer relationship management (CRM) systems, internal partners and vendors, the integration of community elements on and off the organization's website, mobile and social monetization and collaborating with related departments within the organization to execute on key initiatives. Students who complete this specialization will be equipped to lead others in their organizations, providing expert support in mobile marketing and social media related activities to company and vendor partners. Course content is based upon the most current successful marketing business practices and ethical behaviors. A global approach to understanding the turbulent changes in the marketplace and how that affects businesses' products and services is included in the curriculum.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Identify and assess mobile marketing and social media strategies for a business.
- Apply ethical behavior and legal knowledge of mobile marketing and social media.
- Integrate the 3 C's: Communication, Content, and Commerce using current cases in mobile marketing and social media.
- Develop marketing strategies to plan the three M's: Monitoring, Measurement, and Metrics.
- Utilize mobile marketing and social media marketing principles and procedures applicable to business, governmental, and not-for-profit entities.
- Create strategic plans using mobile marketing and social media and develop, implement and evaluate their effectiveness for products or services in a global marketplace.
- Create and present a mobile marketing and social media plan for an existing company in both written and oral forms to faculty, industry experts and classmates.

Requirements for Specialization

(5 courses; 22.5 quarter units)

MKT 651 Mobile Marketing
Prerequisite: MKT 602

MKT 652 Adv Mobile Mkt Strategies
Prerequisite: MKT 651

MKT 653 Social Media
Prerequisite: MKT 602

MKT 654 Adv Social Media for MKT
Prerequisite: MKT 653

MKT 655 Mobile MKT Social Media Project
Prerequisite: MKT 654 and MKT 652

▲ Specialization in Organizational Leadership

Faculty Advisor: Julia Buchanan; (858) 642-8453; jbuchanan@nu.edu

The purpose of the area of specialization in organizational leadership is to provide students with the skills and theoretical concepts that will assist them when seeking promotions or positions in management and supervision. This area of specialization is designed to prepare diverse adult learners to become effective, change oriented leaders in an international society by adding distinctive and challenging curricula.

This area of specialization is ideal for individuals who desire to understand the technical and reflective processes that often accompany opportunities to exercise leadership in profit and not for profit organizations.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Distinguish between multiple approaches for exercising leadership to promote innovation and confront complex issues within organizations.
- Interpret organizational dynamics, group dynamics and engage in systems thinking in order to promote the development of a learning organization capable of innovation, adaptation, and orchestrating conflict.

- Evaluate ethical issues and aid organizational members in creating ethical culture appropriate to the organizational and global environment that supports operating in environments of diversity, uncertainty and unpredictability.
- Distinguish between the functions of authority, power, the practice of leadership, and utilize frameworks that serve organizational purposes.

Requirements for Specialization

(4 courses; 18 quarter units)

LED 602	Developing Groups and Teams
LED 603	Leadership in the 21st Century
LED 604	Leading Change and Adaptation
LED 605	Conflict and Power Dynamics

▲ Specialization in Supply Chain Management

Faculty Advisor: Timothy Pettit; (858) 641-8687; tpettit@nu.edu

The Specialization in Supply Chain Management prepares students to advance in this exciting and evolving field of management where firms collaborate to align strategies and operations toward common goals. The program is designed to provide students with the skills to apply logistics functional expertise from planning of inventory deployment to designing transportation networks -- the physical interconnections between firms. In addition, the framing concepts of cross-functional engagement of Supply Chain Management processes will assist graduates to reinvent their organization from within, and then engage strategic partners to better align processes and mitigate operational risks. Supply Chain Management is a critical skill in global corporations, non-profit organizations, healthcare providers and government agencies at all levels. Similarly, military acquisition programs and sustainment organizations require future leaders to infuse best-practices such as Supply Chain Management into operational and strategic planning. For all graduates, early integration of life cycle logistics covered in this program will benefit program performance, timeliness and long-term cost reductions, as you implement Supply Chain Management into your profession.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Integrate supply chain business processes into a coherent supply chain strategy.
- Develop effective supply management and planning policies.
- Design efficient distribution networks.

Requirements for Specialization

(5 courses; 22 quarter units)

SCM 610	Supply Chain Collaboration <i>Prerequisite: MGT 608</i>
SCM 620	Strategic Supply Management <i>Prerequisite: SCM 610 and MGT 608</i>
SCM 630	Supply Chain Planning <i>Prerequisite: SCM 610 and MGT 608</i>
SCM 640	Distribution Management <i>Prerequisite: SCM 610 and MGT 608</i>
SCM 695C	Supply Chain Risk Capstone <i>Prerequisite: SCM 610, SCM 620, SCM 630, SCM 640 and MGT 608</i>

■ MASTER OF GLOBAL MANAGEMENT

Faculty Advisor: Richard Weaver; (858) 642-8490; rweaver@nu.edu

The Master of Global Management is appropriate for students currently or intending to be working in organizations which operate internationally or impacted by international organizations. Through a series of relevant business courses, students are prepared to apply program content to improve decision-making skills to become more effective managers.

This program is especially helpful to those who have been or expected to be promoted from more technical fields into management positions. The program

integrates many aspects of management to prepare graduates to identify work to be completed and how to engage others in the completion of this work.

The Bachelor of Arts in Management/Master of Global Management (BAM/MGM) Transition Program

The Bachelor of Arts in Management/Master of Global Management (BAM/MGM) Transition Program allows currently enrolled BAM students with a cumulative grade point average of at least a 3.0, who are within completing their last six courses, to register for two MGM courses as electives for their BAM degree. Students can take the following two courses: MGT 601M and IBU 606. The number of courses to complete to earn the MGM is reduced from 13 to as few as 11 courses. To be eligible for the Transition Program, students must apply for the MGM and begin their program of study within six months after completing their final BAM course. Students must complete the 13-course MGM program (including the two courses in the Transition Program) within four years with no break exceeding 12 months. Students must complete graduate-level course work taken as part of the BAM degree with a grade of B or better. The course work will not transfer as graduate-level credit to National University or any other institution as it is part of an undergraduate degree program. A complete description of Transition Program requirements can be found in the Policies and Procedures section of this Catalog.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Define problems, use program concepts to frame analysis, generate conclusions from analysis, and make recommendations for positive action.
- Select the most effective managerial alternative after considering the influences of principles of organizational behavior, communication, and motivation.
- Anticipate the impact of cultural similarities and differences on interpersonal and intergroup dynamics.
- Predict forces impacting an organization that arise from global origins.
- Choose the most appropriate action to solve managerial challenges through the application of the steps of planning, organizing, and controlling.
- Recognize ethical dilemmas and make appropriate managerial choices in a context of organizational social responsibility.

Degree Requirements

To receive a Master of Global Management, students must complete at least 58.5 quarter units of graduate work. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree and provided the units were not used in earning another advanced degree. Refer to the section on graduate admission requirements for specific information regarding application and evaluation.

Core Requirements

(13 courses; 58.5 quarter units)

MGT 601M	Principles of Management
IBU 606	Global Business
MGT 625	Managerial Communication
ODV 600	Theory & Practice of OD
FIN 600	Finance for Non-Financial Mgrs
SOC 604	Culture and Socialization
MKT 602	Marketing Management
MGT 603	Business Operations Management
MGT 604	Project and Program Management
MGT 606	Service Management
MGT 607	Performance Management
IBU 637	Comparative Int'l Management
MGT 612	Global Strategic Project

Graduate Elective Option

(1 course; 4.5 quarter units)

Students may choose to use the below course in place of one of these core courses: SOC604 or IBU637. Students desiring this option must notify their advisor when scheduling the IBU540 class so appropriate notation can be made in the record for graduation.

IBU 540 International Experience

■ MASTER OF SCIENCE IN BUSINESS ANALYTICS

Faculty Advisor: Farnaz Sharifrazi; (858) 642-8468; fsharifrazi@nu.edu

The Master of Science in Business Analytics is designed to prepare students to apply scientific knowledge to Big Data to find practical patterns for decision making. Organizations measure their operations, forecasting, and future strategic plans scientifically through analyzing data in marketing, sales, finances, and supply chain areas.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Analyze components of data and analytics environment.
- Evaluate methods and technologies to organize and normalize data for use in statistical analysis.
- Construct data files and statistical models to find patterns for competitive decision making.
- Design an analytical model to forecast prices based on the previous data patterns.
- Apply security, privacy and ethical measures using data and analytical models to improve organizations' due diligence.
- Utilize previous financial data to predict future effects.
- Apply the appropriate data model to analyze the performance of supply chain processes.
- Construct analytical models to business data to achieve targeted results.

Degree Requirements

To receive a Master of Science in Business Analytics, students must complete 58.5 quarter units of graduate coursework. A total of 13.5 quarter units of graduate work completed at another regionally accredited institution may be transferred to meet stated requirements in the program provided those units were not used in earning another advanced degree. Please refer to the General Catalog section on graduate admission requirements for specific information regarding application and evaluation.

Core Requirements

(13 courses; 58.5 quarter units)

BAN 600	Fundamentals of Analytics
ANA 605	Analytic Models & Data Systems <i>Prerequisite: BAN 600</i>
ANA 610	Data Management for Analytics
ANA 615	Data Mining Techniques
ANA 620	Continuous Data Methods, Appl <i>Prerequisite: ANA 615</i>
ANA 625	Categorical Data Methods, Appl <i>Prerequisite: ANA 620</i>
ANA 630	Advanced Analytic Applications <i>Prerequisite: ANA 625</i>
BAN 640	Performance MGT & SCM Process <i>Prerequisite: ANA 625 and BAN 600</i>
BAN 645	Prediction in Marketing <i>Prerequisite: BAN 640</i>
BAN 650	Probabilistic Finance Models <i>Prerequisite: BAN 645</i>
BAN 655	Analytical Security & Ethics <i>Prerequisite: BAN 650</i>

BAN 660A Business Analytics Capstone I
Prerequisite: BAN 655

BAN 660B Business Analytics Capstone II
Prerequisite: BAN 660A

■ MASTER OF SCIENCE IN ORGANIZATIONAL LEADERSHIP

Faculty Advisor: Julia Buchanan; (858) 642-8453; jbuchanan@nu.edu

The mission of the Master of Science in Organizational Leadership (MSOL) program is to prepare diverse learners to become effective, change-oriented leaders in an international society. The program uses distinctive and challenging curriculum that integrates theory with practice, personal success with service to others, and information technology with creativity, empathy, and democracy.

The Master of Science in Organizational Leadership program prepares individuals from a wide variety of backgrounds and interests into change-oriented leaders. As every industry and profession needs effective and ethical leadership, employers are increasingly targeting candidates that possess the capacity to take initiative, build and cultivate strong teams, orchestrate conflict, and promote innovation to serve organizational purposes. Using a collaborative, integral and holistic approach, this degree builds the skill set to think critically and analytically, learn communication skills that serve a diverse population, and develop the ability to lead change in increasingly global/complex environments. Drawing from work/life experiences, students will learn to frame problems, use systems thinking and plan strategic interventions. Students will acquire knowledge, skills and abilities through experiential learning and critical analysis.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Distinguish between multiple approaches to exercising leadership in order to harness collective talent, promote innovation and confront complex issues within organizations.
- Interpret organizational dynamics, group dynamics and engage in systems thinking in order to promote the development of a learning organization capable of orchestrating conflict, creating innovation, and adaptation.
- Evaluate ethical issues and aid organizational members in creating ethical culture appropriate to the organizational and/or global arena that supports operating in environments of diversity, uncertainty and unpredictability.
- Distinguish between the functions of authority or power and the understanding of leadership and be able to apply diverse leadership skills, utilize frameworks in order to serve organizational purposes.
- Utilize emerging technology, presentation skills and communication both in face to face and virtual environments.
- Utilize dialogue and other forms of inquiry with groups and teams in order to create collective problem solving and strategic plans.
- Create frameworks to determine how decisions made might impact ethical culture, support sustainability practices and serve the organizational purpose.
- Identify quality scholarship and research and demonstrate the potential application of emerging leadership theory and knowledge to real world scenarios and simulations.
- Integrate knowledge and skills from multiple disciplines in order to utilize critical thinking, synthesize information, manage conflict, and create collective problem solving capacity.

Degree Requirements

(12 courses; 54 quarter units)

To receive a Master of Science in Organizational Leadership, students must complete at least 54 quarter units of graduate work. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree and provided the units were not used in earning another advanced degree. Refer to the section on graduate admission procedures for specific information regarding application and evaluation.

Core Requirements

(10 courses; 45 quarter units)

LED 601	Ethics and Classic Theories
LED 602	Developing Groups and Teams

LED 603	Leadership in the 21st Century
LED 604	Leading Change and Adaptation
LED 605	Conflict and Power Dynamics
LED 610	Analysis and Decision Making
LED 615	Consulting and Assessments
LED 620	World View & Adult Development
LED 680	Leadership Research <i>Prerequisite: LED 601 and LED 602</i>
LED 690	Capstone Project <i>Prerequisite: 5 LED courses</i>

Program Electives

(2 courses; 9 quarter units)

Each student must complete two graduate courses from the School of Business and Management to meet the elective requirement. In lieu of general electives, students can choose to take the Area of Specialization in Community Development. Students must complete all four courses specified in the Specialization.

▲ Specialization in Community Development

The Area of Specialization in Community Development is designed for aspiring change agents and leaders, working in social transformation and community development. In order to prepare leaders to analyze community development projects and practices from within systemic, holistic, and sustainable perspectives, students will be prepared to frame issues and integrate cultural differences within diverse populations. This program is tied to real-world needs, and promotes a constant emphasis on the interplay between theory, reflection, and practice. An Area of Specialization in Community Development is ideal for individuals who desire to develop the understanding of the dynamics of power, politics, and resources in a social transformation and community development context.

The objective of this program is to equip leaders with the ability to become:

1. Scholars with sensitivity and expertise at observing and interpreting culture and community dynamics.
2. Innovators who can develop and implement culturally responsive programs that address social issues.
3. Critical thinkers able to evaluate approaches to meeting the needs of communities.
4. Leaders who inspire with life-changing compassion and transformative vision.

This program will be useful in many areas including the following:

Non-profit organizations, Advocacy groups, Community organizing, Corporate and private foundations, Public education and public health, Environmental organizations, Economic development, Grassroots and Arts organizations, Religious communities, Tribal organizations.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Critically analyze social transformation and community development cases and practices from within systemic, holistic, and sustainable perspectives.
- Examine the origins and contemporary implications of cultural differences effecting community environments, and develop intervention methods into diverse cultural contexts.
- Recognize and analyze their own behavior within the dynamics of power, politics, and resources in community development contexts.

This AOS requires that students fulfill the degree requirements for the Master of Science in Organizational Leadership (10 courses, 2 electives) and these required 4 courses. Students can use 2 required electives for this specialization, and then are required to take 2 additional courses.

Requirements for Specialization

(4 courses; 18 quarter units)

SCD 600	Global Development
SCD 610	Human Environments
SCD 630	Culture and Change
SCD 680	Planning and Evaluation

CERTIFICATES

UNDERGRADUATE CERTIFICATES

■ UNDERGRADUATE CERTIFICATE IN ACCOUNTANCY

Faculty Advisor: Consolacion Fajardo; (916) 855-4137; cfajardo@nu.edu

Designed for students who wish to prepare for entry into the accounting profession and may be considering one of the recognized professional accounting designations other than the Certified Public Accountant (CPA). CPA Exam candidates should consider the B.S. in Accountancy or Master in Accountancy which provide much greater in -depth preparation for the CPA Exam. CPA Exam candidates in California must have completed 24 semester units (36 quarter units) in accounting or tax and 24 semester units (36 quarter units) in business which includes business law, mathematics, statistics, computer science, and information systems.

Students who wish to pursue a baccalaureate degree, a second baccalaureate degree, or a master's degree can apply some or all of the academic credits awarded in the certificate program toward that degree, depending upon its requirements and providing the coursework taken is at the same level as the degree program.

Before taking any of the courses in the Certificate in Accountancy program, students are strongly advised to contact a full-time accounting faculty member for a brief interview to review the student's career objectives and provide guidance as to the courses to be selected.

Certificate Prerequisite

(1 course; 4.5 quarter units)

Before taking any other accounting courses in this program, students must complete ACC 201 or its equivalent within two years with a grade of "C" or better, unless they receive an equivalent grade on an accounting aptitude exam.

ACC 201 Financial Accounting Funds

Certificate Requirements

(6 courses; 27 quarter units)

To receive a Certificate in Accountancy, students must complete any six undergraduate courses with the prefix ACC for which the required prerequisite has been successfully completed. It is strongly recommended that students consult with full-time accounting faculty before enrolling in the Certificate in Accountancy.

■ UNDERGRADUATE CERTIFICATE IN BASIC HUMAN RESOURCE MANAGEMENT

Faculty Advisor: Bernadette Baum; (858) 642-8404; bbaum@nu.edu

The Certificate in Basic Human Resource Management is designed to provide fundamental knowledge and skills for students seeking entry-level and supervisory positions in the field of human resource management. The program provides a basic knowledge of the foundations of managing human resources, including recruitment, selection, retention, compensation, development, and legal compliance in the workplace. The certificate program prepares students for expanded opportunities in diverse industries. Students will obtain valuable knowledge and skills in human resource management that will enable them to contribute to the ongoing process of attracting and retaining individuals who will assist in furthering an organization's interest in achieving its mission.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Comprehend the various functions of human resource management.
- Identify and describe the stages of the human resource planning process.
- Describe key issues in the motivation and compensation of employees.
- Explain human resource assessment as it relates to the mission of an organization.

- Recognize common concerns surrounding employer liability in the workplace.
- Interpret employment laws and explain their impact on an organization.
- Apply research techniques to the preparation of written assignments.

Certificate Requirements

(4 courses; 18 quarter units)

HRM 200	Intro to Basic Human Resources
HRM 210	Staffing and Development <i>Prerequisite: HRM 200</i>
HRM 220	Compensating Employees <i>Prerequisite: HRM 200</i>
HRM 230	Legal Aspects of Basic HRM <i>Prerequisite: HRM 200</i>

■ UNDERGRADUATE CERTIFICATE IN BASIC SALES AND MARKETING

Faculty Advisor: Mary Beth McCabe; (619) 563-7316; mmccabe@nu.edu

This program encompasses the foundations of the most important areas in sales and marketing including the fundamentals, advertising, consumer behavior and personal selling. Students will obtain valuable knowledge and skills in marketing and customer service to pursue entry and mid-level positions in a wide range of fields and industries.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Comprehend the various elements of the sales and marketing fields and apply them to real-life situations.
- Describe how the Internet is changing marketing for all businesses.
- Identify market segments and target markets.
- Comprehend the basic marketing concepts and the four P's: Price, Promotion, Place and Product.
- Recognize the importance of understanding customer needs and expectations as well as customer service.
- Distinguish the key components of advertising and their impact to the business.
- Demonstrate the ability to use on-line resources to research and prepare written and oral assignments.

Certificate Requirements

(4 courses; 18 quarter units)

MKT 200	Basic Marketing
MKT 210	Intro to Consumer Behavior <i>Prerequisite: MKT 200</i>
MKT 220	Intro to Personal Selling <i>Prerequisite: MKT 200</i>
MKT 230	Basic Advertising Concepts <i>Prerequisite: MKT 200</i>

■ UNDERGRADUATE CERTIFICATE IN FINANCE

Faculty Advisor: Farhang Mossavar-Rahmani; (858) 642-8409; fmossava@nu.edu

This coursework and the accompanying credits may be transferred to appropriate degree programs if all other requirements for admission are met.

A certificate in Finance is designed for students who are interested in strengthening their business acumen, acquiring analytical skills, or supplementing their financial background. Career opportunities include three interrelated areas: financial institutions, investments, and financial management.

Expertise in finance is a sought after and unique skill. This certificate prepares students for managerial responsibilities in organizations such as banks, insurance companies, securities firms, commercial, and not-for-profit organizations.

The four courses that comprise this certificate provide a broad yet comprehensive knowledge of financial management.

Upon successful completion, students will have acquired critical skills in the analysis of accounting, market, and economic data. This will prepare them for expanded opportunities in diverse industries.

Certificate Prerequisites

(5 courses; 22.5 quarter units)

ACC 201	Financial Accounting Funds.
ACC 202	Managerial Accounting Funds. <i>Prerequisite: ACC 201</i>
FIN 310	Business Finance <i>Prerequisite: ACC 201</i>
FIN 442	Investments <i>Prerequisite: FIN 310 and FIN 440</i>
FIN 443	Working Capital Management <i>Prerequisite: FIN 310</i>

Certificate Requirements

(4 courses; 18 quarter units)

FIN 440	Financial Institutions <i>Prerequisite: FIN 310</i>
FIN 444	Risk Management & Insurance <i>Prerequisite: FIN 310</i>
FIN 446	International Financial Mgmt <i>Prerequisite: FIN 310</i>
FIN 448	Seminar in Finance <i>Prerequisite: FIN 310, FIN 440, FIN 442, FIN 443 and FIN 446</i>

■ UNDERGRADUATE CERTIFICATE IN HUMAN RESOURCE MANAGEMENT

Faculty Advisor: Bernadette Baum; (858) 642-8404; bbaum@nu.edu

This certificate is designed for those who wish to gain the knowledge and skills in HRM which are appropriate for professional and supervisory careers in the field of human resource management.

Certificate Requirements

(4 courses; 18 quarter units)

HRM 409B	Survey in HRM & OD
HRM 432	Recruit, Selection, Promo, Ret
HRM 433	Pay & Benefit Admin, & HR Tech
HRM 439	Legal, Reg, & Labor Relation C

■ UNDERGRADUATE CERTIFICATE IN MARKETING

Faculty Advisor: Mary Beth McCabe; (619) 563-7316; mmccabe@nu.edu

This coursework and the accompanying credits may be transferred to appropriate degree programs if all other requirements for admission are met. To receive certification, students are required to successfully complete four courses and achieve a passing grade on a comprehensive test covering these four areas.

Certificate Requirements

(4 courses; 18 quarter units)

MKT 302A	Marketing Fundamentals
MKT 420	Principles of Consumer Behavior <i>Prerequisite: MKT 302A</i>
MKT 434	Intro to Market Research <i>Prerequisite: MKT 302A</i>
MKT 443	Introduction to Advertising <i>Prerequisite: MKT 302A</i>

GRADUATE CERTIFICATE

■ GRADUATE CERTIFICATE IN ACCOUNTANCY

Faculty Advisor: Russell Parkman; (858) 642-8462; rparkman@nu.edu

The Certificate of Accountancy program is designed for students who wish to prepare for entry into the accounting profession and for employment opportunities in private, government, or not-for-profit entities. Those desiring to prepare for taking the CPA or CMA exams should consider the B.S. in Accountancy or Master of Accountancy programs. Students taking ACC 630M and ACC 631M need not take the ACC 604 in the MBA program.

Certificate Requirements

(6 courses; 27 quarter units)

Available to both undergraduate and graduate students.

To receive a Certificate in Accountancy, students must complete the following six courses from the Master of Accountancy program courses for which the required prerequisite has been successfully completed.

ACC 657 Accounting Information Systems

Prerequisite: ACC 601M

ACC 640M Acc for Gov't & NFP Entities

Prerequisite: ACC 601M

ACC 630M Cost Accounting

Prerequisite: ACC 601M

ACC 631M Advanced Managerial Accounting

Prerequisite: ACC 630M

ACC 610M Financial Accounting I

Prerequisite: ACC 601M

ACC 611M Financial Accounting II

Prerequisite: ACC 610M



SANFORD COLLEGE OF EDUCATION

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Dean, Judy Mantle
Ph.D., Education, University of Kansas

Associate Dean, Donna Elder
Ed.D., Educational Leadership, University of La Verne

- 168 Degrees Offered**
- 169 Degrees Offered by Department**
- 170 Faculty**
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- 173 Undergraduate Degrees**
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- 212 Certificates**



DEGREE PROGRAMS OFFERED

UNDERGRADUATE DEGREES

Bachelor of Arts

with Majors in:

- Early Childhood Development with a Preliminary Multiple Subjects Teaching Credential (California)
- Early Childhood Education with Concentrations in:
 - » Early Childhood Administration
 - » Infant and Toddler
 - » Teacher Education
- English with a Preliminary Single Subject Credential (California)
- Health Sciences with a Preliminary Single Subject Credential (California)
- Interdisciplinary Studies with a Preliminary Multiple Subjects Teaching Credential (California)
with a Concentration in:
 - » STEM (Science, Technology, Engineering, Mathematics)
- Mathematics with a Preliminary Single Subject Teaching Credential (California)
- Social Science with a Preliminary Single Subject Credential (California)
- Spanish with a Preliminary Single Subject Teaching Credential (California)

GRADUATE DEGREES

Master of Arts

with Fields of Study in:

- Education with Specializations in:
 - » Best Practices
 - » Educational Technology
 - » e-Teaching and Learning
 - » Teacher Leadership
 - » Teaching Mathematics
 - » US Education in a Global Context
- Special Education with Specializations in:
 - » Autism
 - » Early Childhood Special Education
 - » Language and Academic Development
 - » Mild/Moderate
 - » Moderate/Severe

Master of Education with a Preliminary Multiple or Single Subject Teaching Credential and Internship Option (California)

with Specializations in:

- Best Practices
- e-Teaching and Learning
- Educational Technology

- Teacher Leadership
- Teaching Mathematics
- US Education in a Global Context

Master of Science

with Fields of Study in:

- Advanced Teaching Practices
with Specializations in:
 - » Advanced Assessment Literacy
 - » Advanced Digital Literacy
 - » Advanced Instructional Literacy
 - » Specialization in National Board Certified Teaching Leadership
 - » Reading and Literacy Added Authorization
- Applied Behavioral Analysis
- Applied School Leadership with Preliminary Administrative Services Credential Option (in Partnership with COE)
- Educational Administration with Preliminary Administrative Services Credential Option (California)
- Educational Counseling
- Educational and Instructional Technology
- Higher Education Administration
- School Psychology with PPSP Credential
- Special Education
with Specializations in:
 - » Language & Academic Development
 - » Mild/Moderate Disabilities
 - » Moderate/Severe Disabilities

CALIFORNIA CREDENTIAL PROGRAMS

(Approved by the Commission on Teacher Credentialing)

- Clear Administrative Services Credential Induction Program
- Clear Education Specialist Teaching Credential
- Early Childhood Special Education Add-On Authorization
- Preliminary Administrative Services Credential
- Preliminary Education Specialist Authorization Teaching Credential
- Preliminary Multiple Subject Teaching Credential with Internship Option
- Preliminary Single Subject Credential with Internship Option
- Pupil Personnel Services Credential School Counseling (PPSC)
- University Internship Pupil Personnel Services Credential School Counseling (PPSC)
- Pupil Personnel Services Credential School Psychology (PPSP)

Nevada Programs

(Please see Nevada section of this catalog)

- Bachelor of Arts in Elementary Education with Nevada Elementary Licensure
- Bachelor of Arts in Mathematics Education with Nevada Secondary Licensure
- Bachelor of Arts in English Education with Nevada Secondary Licensure
- Bachelor of Arts in Special Education with Nevada Licensure
- Master of Education with Nevada Elementary Licensure
- Master of Education with Nevada Secondary Licensure
- Master of Science in Educational Administration with Nevada Endorsement as Administrator of a School Option
- Master of Science in Special Education with Nevada Licensure and Endorsement for Generalist Resource Room

The following programs are also listed in the College of Letters and Sciences Section:

Bachelor of Arts

with Majors in:

- English with a California Preliminary Single Subject Credential (California)
- Interdisciplinary Studies with a California Preliminary Multiple Subject Teaching Credential
- Mathematics with a California Preliminary Single Subject Credential (California)
- Social Science with a Preliminary Single Subject Teaching Credential (California)
- Spanish with a Preliminary Single Subject Teaching Credential (California)

The following program is also listed in the School of Health and Human Services Section:

Bachelor of Arts

with a Major in:

- Health Sciences with a Preliminary Single Subject Teaching Credential (California)

GRADUATE CERTIFICATES

- Applied Behavior Analysis
- Autism
- Best Practices
- Early Childhood Special Education Add-on Authorization
- E-Teaching & Learning
- Educational Technology
- National Board Certified Teacher Leadership Certificate
- Reading and Literacy Certificate (Added Authorization) CA only
- Teaching Mathematics
- US Education in a Global Context

ADMINISTRATION AND SCHOOL COUNSELING/ PSYCHOLOGY

Graduate Programs

Master of Science

with Fields of Study in:

- Applied Behavioral Analysis
- Applied School Leadership with Preliminary Administrative Services Credential Option (in Partnership with COE)
- Educational Administration with a Preliminary Administrative Services Credential
- Educational Counseling
- Higher Education Administration
- School Psychology with PPSP

California Credential Programs

(Approved by the Commission on Teacher Credentialing)

- Clear Administrative Services Credential Induction Program
- Preliminary Administrative Services Certificate/Credential
- Pupil Personnel Services Credential School Counseling (PPSC)
- University Internship Pupil Personnel Services Credential School Counseling (PPSC)
- Pupil Personnel Services Credential School Psychology (PPSP)

Graduate Certificate

- Applied Behavioral Analysis

DEPARTMENT OF SPECIAL EDUCATION

Master of Arts

with a Field of Study in:

- Special Education
 - with Areas of Specialization in:
 - » Autism
 - » Early Childhood Special Education
 - » Language and Academic Development
 - » Mild/Moderate
 - » Moderate/Severe

Master of Science

with a Field of Study in:

- Special Education
 - with Areas of Specialization in:
 - » Language and Academic Development
 - » Mild/Moderate Disabilities
 - » Moderate/Severe Disabilities

California Credential Programs

(Approved by the Commission on Teacher Credentialing)

- Clear Education Specialist Induction Program
- Preliminary Education Specialist Authorization Teaching Credential

Graduate Certificates

- Autism
- Early Childhood Special Education Add-on Authorization

DEPARTMENT OF TEACHER EDUCATION

Bachelor of Arts

with Majors in:

- Early Childhood Development with a Preliminary Multiple Subject Teaching Credential (California)
- Early Childhood Education
 - with Concentrations in:
 - » Early Childhood Administration
 - » Infant and Toddler
 - » Teacher Education
- English with a Preliminary Single Subject Credential (California)
- Health Sciences with a Preliminary Single Subject Teaching Credential (California)
- Interdisciplinary Studies with a Preliminary Multiple Subject Teaching Credential (California)
- Mathematics with a Preliminary Single Subject Credential (California)
- Social Science with a Preliminary Single Subject Teaching Credential (California)
- Spanish with a Preliminary Single Subject Teaching Credential (California)

Master of Arts

With a Field of Study in:

- Education
 - with Specializations in:
 - » Best Practices
 - » Educational Technology
 - » e-Teaching and Learning
 - » Teacher Leadership
 - » Teaching Mathematics
 - » US Education in a Global Context

Master of Education with a Preliminary Multiple or Single Subject Teaching Credential and Internship Option (California)

with Specializations in:

- Best Practices
- e-Teaching and Learning
- Educational Technology
- Teacher Leadership
- Teaching Mathematics
- US Education in a Global Context

Master of Science

with Fields of Study in:

- Advanced Teaching Practices
 - with Specializations in:
 - » Advanced Assessment Literacy
 - » Advanced Digital Literacy
 - » Advanced Instructional Literacy
 - » Specialization in National Board Certified Teaching Leadership
 - » Reading and Literacy Added Authorization
- Educational and Instructional Technology

California Credential Programs

(Approved by the Commission on Teacher Credentialing)

- Preliminary Multiple Subject Teaching Credential with Internship Option
- Preliminary Single Subject Credential with Internship Option

Graduate Certificates

- Best Practices
- Early Childhood Education
- E-Teaching & Learning
- Educational Technology
- National Board Certified Teacher Leadership Certificate
- Reading and Literacy Certificate (Added Authorization) CA only
- Teaching Mathematics
- US Education in a Global Context

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CANDIDATE ASSISTANCE PROCESS

National University Policies

National University has Policies and Procedures for Student Discipline, Academic Dishonesty, Civility, Reasons for Probation, Suspension and Dismissal that are described in the Catalog under the Policy and Procedures section. National University also has a process for providing accommodation to students with documented special needs (see Students with Disabilities under the Student Services section of the catalog). Additionally, a Writing Center and Math Tutoring are available to assist students seeking to improve their writing and mathematics skills.

Sanford College of Education Procedures

The Sanford College of Education has developed procedures to assist candidates (students in professional preparation programs) in meeting School and program requirements. Candidates must be able to demonstrate the requisite knowledge, skills and dispositions of the School's Conceptual Framework and the values of National University. These knowledge, skills and dispositions provide a foundation for educators in today's schools.

Within the Sanford College of Education, each program has identified knowledge, skills and dispositions necessary for specific professional responsibilities. The knowledge, skills and dispositions are based upon the Sanford College of Education Conceptual Framework, California Commission on Teacher Credentialing (CTC) preparation standards, National Council on the Accreditation of Teacher Education (NCATE) standards and professional organization standards.

Candidate Progress Alert

When an instructor becomes aware that a candidate needs assistance to effectively demonstrate the appropriate knowledge, skills and/or dispositions within their program, a Candidate Progress Alert will be initiated by their instructor. This is the first step in the Candidate Assistance Process that is intended to be supportive, based upon each program's standards and individualized to the candidate. The Candidate Progress Alert is intended to alert the candidate to areas of performance that are deficient or may need remediation.

When a Progress Alert is initiated, the candidate and instructor will meet to develop activities to improve areas requiring attention and identify methods of assessment.

Candidate Assistance Plan

In cases where a candidate has been unable to adequately remediate deficiencies identified in a Progress Alert, the appropriate faculty member will develop a formal Candidate Assistance Plan. The Plan will identify areas of deficiency and prescribe specific activities and/or intervention strategies the candidate will need to complete to successfully meet knowledge, skills and/or dispositions. The faculty member will review the Plan with the candidate to ensure that the information, intervention strategies and assessment measures are clear. A candidate's signature on the Candidate Assistance Plan will acknowledge receipt and review of the Plan and will be maintained by the Sanford College of Education.

Unsatisfactory Completion of Candidate Assistance Plan

When a candidate has not satisfactorily completed a Candidate Assistance Plan, the Plan, and a detailed description of activities or areas not adequately met will be forwarded by the appropriate faculty member with a recommendation to the Sanford College of Education and Office of Student Services designees. The candidate will be notified by the Dean of the Sanford College of Education regarding the candidate's continuing status within the program and/or the College.

Requesting Accommodations to a Candidate Assistance

Plan Students with disabilities who wish to apply for accommodations to a Candidate Assistance Plan (Plan) may do so through submitting an application for accommodations to the National University Office of Special Services (Special Services). Applications for accommodations for a disability may be requested from the Student Accessibility Services, National University, 16875 West Bernardo Drive Suite 110, San Diego, CA 92127-1675, Phone: 858.521.3967. Students seeking special accommodations due to a disability must submit an application with supporting documentation to Special Services. The application will be reviewed within fourteen (14) days of receipt by the Committee for Students with Disabilities (CSD). The CSD will engage in an interactive process with the student regarding the accommodations request and determine the appropriate accommodations to be administered during the Plan. Once the CSD determines the appropriate accommodations, written notification is sent within seven (7) days to the student and faculty responsible for the implementation of the Plan. Following

receipt of the CSD notification, the faculty responsible for implementing the Plan will schedule a formal meeting with the student to review the Plan and the approved accommodations. The timeline for completion of a Plan is halted during the accommodations application and review process, and begins following the formal meeting. If the accommodations request is not approved, the timeline for completion of the Plan begins upon receipt of the CSD's notification letter. If a student is denied accommodation(s) or believes that the accommodation afforded is insufficient, the student may appeal to the Vice President for Student Services, who will render a decision within seven (7) days of receipt of the appeal or prior to the start date of the next course, depending on which occurs first. The decision of the vice president is final. The timeline for completion of a Plan is also halted during the appeals process.

If a student believes that accommodations approved by Special Services have not been implemented in the Plan, they should immediately contact Special Services. The timeline for completion of the Plan is halted during this process. Special Services will contact the instructor to resolve the student's concern and ensure the approved accommodations are properly implemented. Special Services will provide the student with notification of progress, findings, or resolution within fourteen (14) days. If either the student or Special Services feel that a satisfactory resolution is not reached, the student may appeal to the Vice President for Student Services, who will render a decision within seven (7) days of receipts of the appeal. The decision of the vice president is final. If the complaint is not satisfactorily resolved at the University level, the student may choose to file a complaint with the U.S. Department of Education Office for Civil Rights, 50 Beale Street Suite 7200, SF, CA 94105, Phone: (415) 486-5555, E-mail: ocr.sanfrancisco@ed.gov. The timeline for completion of a Plan is also halted during the appeals process.

SANFORD COLLEGE OF EDUCATION

UNDERGRADUATE DEGREES

■ BACHELOR OF ARTS

◆ MAJOR IN EARLY CHILDHOOD DEVELOPMENT WITH A PRELIMINARY MULTIPLE SUBJECT TEACHING CREDENTIAL (CALIFORNIA) ♿

Faculty Advisor: Patricia Dickenson; (408) 236-1136; pdickenson@nu.edu
Faculty Advisor: Susan Gilbert; (310) 662-2163; sgilbert@nu.edu

The Bachelor of Arts in Early Childhood Development with a California Preliminary Multiple Subject Teaching Credential provides a broad, rigorous education that prepares candidates for a career as a teacher at early elementary grades. Candidates are introduced to essential knowledge, strategies, techniques and connections across the disciplines as applied to young children. Focus is on an enriched and thought-provoking curriculum that incorporates content across subject areas, specific educational methodology courses and preparation for professional work as multiple subject teachers in elementary grades. All candidates must demonstrate subject-matter competency through a state-approved examination.

For additional information on credential requirements, please see the Sanford College of Education Credential Information section of the catalog.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Identify essential concepts, inquiry tools, structure of content areas and resources for early childhood education.
- Develop oral, written, and technological skills for communicating with families and very young children.
- Create environments that are healthy, respectful, supportive, and challenging for all children.
- Use systematic observations, documentation, and other assessment strategies in partnership with families and professionals to positively influence children's development and learning.
- Implement a curriculum that promotes development and learning outcomes for diverse young children.
- Demonstrate ethical, legal, and professional standards in early childhood practice.

- Design, implement and evaluate standards-based lesson plans for learning and achievement in content areas.
- Utilize different teaching strategies to accomplish the teaching and learning goals.

Degree Requirements

To receive a Bachelor of Arts in Early Childhood Development with a California Preliminary Multiple Subject Teaching Credential, candidates must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level, and a minimum 70.5 units of the University General Education requirements. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements. Candidates should refer to the section on undergraduate admission procedures for specific information on admission and evaluation. All students receiving an undergraduate degree in Nevada are required by State Law to complete a course in Nevada Constitution.

Preparation for Major

(4 courses; 18 quarter units)

ECE 201	The Growing Child: Zero to 8
ECE 210	Child, Family, School and Comm
ECE 211	Diversity: Development & Ed.
HED 220	Health, Nutrition and Safety

Early Childhood Education Core Requirements

(9 courses; 40.5 quarter units)

ECE 464	Ethical and Legal Issues
ECE 330	Early Cognition <i>Prerequisite: ECE 201, ECE 210, HED 220 and ECE 211</i>
ECE 410	Early Language and Literacy <i>Prerequisite: ECE 330</i>
ECE 415	Designing Emergent Curriculum <i>Prerequisite: ECE 330</i>
ECE 420	Nature, Numbers and Technology <i>Prerequisite: ECE 330</i>
ECE 430	Play as Pedagogy <i>Prerequisite: ECE 330</i>
ECE 440	Observing, Assessing & Plannin <i>Prerequisite: ECE 330</i>
ECE 443	Children with Special Needs <i>Prerequisite: ECE 330</i>
ECE 445	Strategies: Guiding Behaviors <i>Prerequisite: ECE 330</i>

All Early Childhood Education coursework has field experience component.

Teacher Education Core Requirements

(8 courses; 36 quarter units)

Students may take this sequence of courses in any order.

TED 305	Teaching as a Profession
TED 330A	Reading and Lang. Arts Methods <i>Prerequisite: TED 305 or TED 320 or TED 306</i>
TED 350	Math and Science Methods <i>Prerequisite: TED 305 or TED 320 or TED 306</i>
TED 355	Hist/Social Science Methods <i>Prerequisite: TED 305 or TED 320 or TED 306</i>
EDX 6001X	Computer Tech in Classroom
HEDX 2301X	Intro Health Ed: K-12
TED 430	Special Needs Students <i>Prerequisite: TED 305 or TED 320 or TED 306</i>
HIS 410	California History <i>Prerequisite: ENG 100 and ENG 101</i>

All Teacher Education coursework has field experience component. The CBEST and CSET are prerequisite exams that must be passed prior to beginning the Teacher Education Coursework.

Student Teaching Requirements

(4 courses; 18 quarter units)

TED 530A	Student Teaching I <i>Corequisite: TED 531A</i>
TED 530B	Student Teaching II <i>Prerequisite: TED 530A, Corequisite: TED 531B</i>
TED 531A	Student Teaching Seminar I (2.25 quarter units) <i>Corequisite: TED 530A</i>
TED 531B	Student Teaching Seminar II (2.25 quarter units) <i>Prerequisite: TED 530A with a minimum grade of S, and TED 531A with a minimum grade of S and Corequisite: TED 530B</i>

TED 530A, TED 530B, TED 531A and 531B are field experience courses receiving a Satisfactory, Unsatisfactory, or Incomplete grade and are not factored into cumulative GPA.

◆ MAJOR IN EARLY CHILDHOOD EDUCATION

Faculty Advisor: Susan Gilbert; (310) 662-2163; sgilbert@nu.edu

The Bachelor of Arts degree in Early Childhood Education (BAECE) has been designed to include the competencies and guidelines as established by the National Association for the Education of Young Children (NAEYC) and the Child Development Associates National Competency Standards (CDA). The completion of the BAECE degree program meets the educational requirements needed for the Child Development Associates National Licensing program and meets the requirements of the State of California Child Development Permits.

Non-residents of California; military personnel or their dependents; and international students should contact the Department of Education of the state in which they reside or intend to reside, or the Ministry of Education of the country in which they live, to determine specific requirements for employment. State or country specific coursework, in addition to the BAECE degree program, may be required to obtain a permit, license or credential necessary for employment. Candidates assume the responsibility for determining and meeting these requirements.

The program is based on a conceptual framework of current theory, contemporary perspectives and sound research findings. Focus is on knowledge, attitudes, skills, practice, reflection and field experiences needed to become efficient, competent, and effective professionals in the field of early childhood education. Emphasis is on designing appropriate learning environments, individual and adaptive curricula, and instructional strategies and techniques to maximize learning outcomes. Topics demonstrated, both in writing and discussion, provide a broad-based foundation of child development in the areas of familial and socio-cultural influences on learning and brain development, parent empowerment, peer cooperation and collaboration, early cognition, emerging literacy (listening, speaking, reading and writing), ongoing participant observation and appropriate developmental screening assessments, child advocacy, law and ethics, and, most important, play as pedagogy.

Background Check

Agencies/schools collaborating with the Sanford College of Education to provide field experience, often require a background check and TB clearance prior to acceptance of a student into their facility. Candidates who do not have a Certificate of Clearance will not be able to attend the field experience component of the course and, therefore, will be unable to complete their program of study. Any fee or cost associated with background checks and TB testing is the responsibility of the student.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Identify essential concepts, inquiry tools, and structure of content areas and resources for early childhood education.
- Develop oral, written and technological skills for communicating with families and very young children.
- Create environments that are healthy, respectful, supportive, and challenging for young children.

- Use systematic observations, documentation, and other assessment strategies in partnership with families and professionals to positively influence children's development and learning.
- Implement a curriculum that promotes development and learning outcomes for diverse young children.
- Demonstrate ethical, legal, and professional standards in early childhood education.
- Create positive relationships and supportive interactions with young children.

Degree Requirements

To receive a Bachelor of Arts in Early Childhood Education degree, students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level, and the University General Education requirements. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements. Refer to the section on undergraduate admission procedures for specific information regarding admission and evaluation. All students receiving an undergraduate degree in Nevada are required by State Law to complete a course in Nevada Constitution.

Preparation for Major

(4 courses; 18 quarter units)

ECE 201	The Growing Child: Zero to 8
ECE 210	Child, Family, School and Comm
ECE 211	Diversity: Development & Ed.
HED 220	Health, Nutrition and Safety

Requirements for Major

(10 courses; 45 quarter units)

ECE 464	Ethical and Legal Issues <i>Prerequisite: HED 220</i>
ECE 330	Early Cognition <i>Prerequisite: ECE 211, HED 220, ECE 210 and ECE 201</i>
ECE 410	Early Language and Literacy <i>Prerequisite: ECE 330</i>
ECE 415	Designing Emergent Curriculum <i>Prerequisite: ECE 330</i>
ECE 420	Nature, Numbers and Technology <i>Prerequisite: ECE 330</i>
ECE 430	Play as Pedagogy <i>Prerequisite: ECE 330</i>
ECE 440	Observing, Assessing & Plannin <i>Prerequisite: ECE 415 and ECE 330</i>
ECE 443	Children with Special Needs <i>Prerequisite: ECE 330</i>
ECE 445	Strategies: Guiding Behaviors <i>Prerequisite: ECE 415, ECE 330 and ECE 430</i>
ECE 450	Academic Seminar/Field Experie <i>Prerequisite: Satisfactory completion of all core courses with an average grade of "C" (2.0) or better in the core.</i>

Upper-Division Electives or Concentration Requirements

(6 courses; 27 quarter units)

Candidates may choose **one** concentration or a combination of approved elective courses within the concentrations.

ECE 465	Crisis Trauma and Abuse
ECE 490	Guided Study (variable quarter units)

▲ Concentration in Early Childhood Administration

Faculty Advisor: Susan Gilbert; (310) 662-2163; sgilbert@nu.edu

Students must successfully complete the following courses for a concentration in Early Childhood Administration. It is recommended that students take these classes toward the end of their program after completing the upper-division major requirements.

Degree Requirements for Concentration

(6 courses; 27 quarter units)

ECE 461	Leadership and Supervision
ECE 460	Program Administration
ECE 462	Financial Mgmt & Resources
HRM 432	Recruit, Selection, Promo, Ret
ECE 466	Planning Physical Environments
HUB 401	Conflict Resolution <i>Prerequisite: ENG 100, ENG 101 and PSY 100</i>

▲ Concentration in Infant and Toddler

Faculty Advisor: Jessica Alvarado; (858) 642-8360; jalvarado@nu.edu

This concentration is designed to equip candidates with the skills necessary to provide developmentally appropriate practice and environments for infants and toddlers.

Candidates must successfully complete the following courses for a Concentration in Infant and Toddler in Early Childhood Education. It is recommended that students take these courses after completing the upper-division major requirements and when they are within six months of completing their degree program.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Create environments that are healthy, respectful, supportive, and challenging for infants and toddlers.
- Create positive relationships and supportive interactions with infants, toddlers and their families.

Requirements for Concentration

(6 courses; 27 quarter units)

ECE 312	Infant and Toddler Care
ECE 451	Observation and Assessment <i>Prerequisite: ECE 312</i>
ECE 452	Partnering With Families <i>Prerequisite: ECE 312</i>
ECE 453	Developing Appropriate Curricu <i>Prerequisite: ECE 312</i>
ECE 454	Creative Aesthetics <i>Prerequisite: ECE 312</i>
ECE 466	Planning Physical Environments

▲ Concentration in Teacher Education

Faculty Advisor: Susan Gilbert; (310) 662-2163; sgilbert@nu.edu

Candidates must successfully complete the following courses for a Concentration in Teacher Education in Early Childhood Education. It is recommended that students take these classes after completing the upper-division major requirements and when they are within six (6) months of completing their degree program.

This concentration allows currently enrolled students who are completing their last six courses to register for three prerequisites – HEDX 2301X, EDX 6001X and SPD 608– for the California teaching credential program as electives.

Students must complete graduate level coursework taken as part of the BAECE degree with a grade of “B” or better. This coursework will not transfer as graduate level credit to National University or any other University as it is part of an undergraduate degree program. Grades earned in graduate level courses will be calculated as part of the student's undergraduate grade point average.

Requirements for Concentration

(6 courses; 27 quarter units)

ECE 446	Literature and Young Children
EDX 6001X	Computer Tech in Classroom
SPD 608	Exceptionalities
ECE 435	Music, Movement, Drama, Dance
ECE 465	Crisis Trauma and Abuse
HEDX 2301X	Intro Health Ed: K-12

◆ MAJOR IN ENGLISH WITH A PRELIMINARY SINGLE SUBJECT TEACHING CREDENTIAL (CALIFORNIA)

Faculty Advisor: Patricia Dickenson; (408) 336-1136; pdickenson@nu.edu

Faculty Advisor: John Miller; (949) 733-0632; jmiller@nu.edu

The Bachelor of Arts in English with a Preliminary Single Subject Credential provides a rigorous education that prepares candidates for a career as a teacher of English at the middle and secondary school levels. The program stresses literary analysis, diversity, and critical thinking and written and oral communication skills through a rigorous curriculum of literature, composition, language and linguistics, and communication studies. This program prepares candidates for professional work as single subject teachers in a changing cultural and economic environment.

For additional information on credential requirements, please see the Sanford College of Education Credential Information section of the catalog.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Knowledgeably discuss major writers, works, movements, and periods of the British and American literary traditions.
- Evaluate the relationship of marginalized or oppositional voices to the evolution of literary traditions and histories.
- Analyze literary works within their historical and cultural contexts.
- Analyze works of literature in the context of the conventions and histories of their genres.
- Analyze the use and effects of literary and rhetorical features of literary texts.
- Identify major critical approaches to the interpretation of literature.
- Compose sophisticated written works of literary analysis, incorporating appropriate close reading, research, and writing skills.
- Apply educational technology to meet the needs of all learners.
- Explain how to support growth in cognitive, social, physical and emotional domains.
- Create positive learning environments that ensure healthy human growth.
- Utilize systematic observations, documentation, and other assessment strategies to facilitate and account for learning and to support positive growth.
- Design, implement, and evaluate standards-based lesson plans for learning and achievement in content areas.
- Demonstrate professional standards and ethics.
- Utilize different teaching strategies to accomplish teaching and learning goals.

Degree Requirements

To receive a Bachelor of Arts in English with a Single Subject Teaching Credential, candidates must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level, and a minimum of 70.5 units of the University General Education. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements. All students receiving an undergraduate degree in Nevada are required by State Law to complete a course in Nevada Constitution.

Preparation for Major

(1 course; 4.5 quarter units)

LIT 100*	Introduction to Literature <i>Prerequisite: ENG 100 and ENG 101</i>
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* May be used to meet a General Education requirement.

Requirements for Major

(25 courses; 108 quarter units)

English Requirements

(11 courses; 49.5 quarter units)

Any **four (4)** of the following five survey courses:

LIT 311	British Literature I <i>Prerequisite: ENG 240 and LIT 100</i>
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LIT 312	British Literature II <i>Prerequisite: ENG 240 and LIT 100</i>
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LIT 321	American Literature I <i>Prerequisite: ENG 240 and LIT 100</i>
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LIT 322	American Literature II <i>Prerequisite: ENG 240 and LIT 100</i>
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LIT 360	Literary Theory <i>Prerequisite: ENG 240 and LIT 100</i>
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and

Any **one (1)** of the following three courses:

LIT 410	African American Literature <i>Prerequisite: LIT 100 and ENG 240</i>
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LIT 420	U.S. Latino Literature <i>Prerequisite: LIT 100 and ENG 240</i>
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LIT 460	Gender and Literature <i>Prerequisite: ENG 240 and LIT 100</i>
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and

ENG 350	Fundamentals of Linguistics <i>Prerequisite: ENG 100 and ENG 101</i>
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LIT 338	Shakespeare <i>Prerequisite: ENG 240 and LIT 100</i>
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LIT 365	Contemporary Literary Theory <i>Prerequisite: ENG 240 and LIT 100</i>
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LIT 463	20th Century World Literature <i>Prerequisite: ENG 240 and LIT 100</i>
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LIT 498	English Capstone Course <i>Prerequisite: Satisfactory completion of 8 upper-division LIT courses</i>
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and

Any **one (1)** additional upper-division Literature (LIT) course from available offerings.

Education Orientation, Theory and Methodology Requirements

(8 courses; 36 quarter units)

Students must complete TED 305 prior to TPA 1. All Teacher Education (TED) courses include a field experience component. It is strongly recommended students take the following courses in the order they are listed.

TED 305	Teaching as a Profession
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TED 300	Fundamentals of Education <i>Prerequisite: TED 320 or TED 305 or TED 306</i>
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TED 430	Special Needs Students <i>Prerequisite: TED 305 or TED 320 or TED 306</i>
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TED 410	Survey of Multicultural Lit. <i>Prerequisite: TED 305 or TED 320 or TED 306</i>
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TED 310	Development and Learning <i>Prerequisite: TED 305 or TED 320 or TED 306</i>
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TED 420	Diversity in Schooling <i>Prerequisite: TED 305 or TED 320</i>
TED 330B	Reading and Language Arts <i>Prerequisite: TED 305 or TED 320</i>
TED 450	Methods of Teaching English <i>Prerequisite: TED 305 or TED 320</i>

Student Teaching Requirements

(4 courses; 13.5 quarter units)

TED 530A, 530B, 531A and 531B are field experience courses receiving a Satisfactory or Unsatisfactory grade and are not factored into cumulative GPA.

TED 530A	Student Teaching I <i>Corequisite: TED 531A</i>
TED 530B	Student Teaching II <i>Prerequisite: TED 530A, Corequisite: TED 531B</i>
TED 531A	Student Teaching Seminar I (2.25 quarter units) <i>Corequisite: TED 530A</i>
TED 531B	Student Teaching Seminar II (2.25 quarter units) <i>Prerequisite: TED 530A with a minimum grade of S, and TED 531A with a minimum grade of S and Corequisite: TED 530B</i>

Additional Courses for Satisfying SB2042 and CTC for California Teaching Credential

(2 courses; 9 quarter units)

Students must have senior standing to enroll in these two classes. The classes are considered graduate level. The grades earned must be a "B" or better. These courses will not transfer to any graduate level program (at National University or elsewhere).

EDX 6001X	Computer Tech in Classroom
HEDX 2301X	Intro Health Ed: K-12

◆ MAJOR IN HEALTH SCIENCES WITH A PRELIMINARY SINGLE SUBJECT CREDENTIAL (CALIFORNIA) 📍

Faculty Advisor: Alba Diaz; (858) 309-3497; adiaz@nu.edu

Faculty Advisor: Patricia Dickenson; (408) 336-1136; pdickenson@nu.edu

The Bachelor of Arts with a Major in Health Sciences with a Preliminary Single Subject Credential provides a broad-based foundation in the liberal arts and sciences and a fundamental knowledge of health education and prepares a candidate for a career as a teacher in the middle and secondary school levels. The students are required to think critically, write clearly, and speak articulately. This program prepares candidates for professional work as single subject teachers in a changing cultural and economic environment.

For additional information on credential requirements, please see the Sanford College of Education Credential Information section of the catalog.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate knowledge of developmentally appropriate grade level health education content domains.
- Describe the relationship of personal, family, school, community, cultural and environmental factors as related to health behavior and physical, emotional, and mental well-being.
- Identify cognitive, social, and physical characteristics, growth, and development of healthy adolescents, at-risk adolescents and those who have health problems.
- Examine components of research-based health education and health promotion programs/practices including coordinated school health programs.
- Discuss the evolving role of a health science teacher as a culturally responsive health educator, counselor, advocate, and resource for individuals, families, and communities.
- Analyze the role of mass media, technology and the Internet in promoting physical, mental and emotional health literacy and behaviors.

- Utilize health promotion materials, lessons, and programs to reduce health risk behavior and increase positive health behaviors.
- Discuss the personal, social, and legal requirements and appropriate prevention and intervention strategies in providing a safe, inclusive school environment.
- Integrate educational technology to meet the needs of all learners.
- Describe how to support growth in cognitive, social, physical, and emotional domains.
- Demonstrate a thorough understanding of the learning needs of students through the creation of positive learning environments.
- Utilize systematic observations, documentation, and other effective assessment strategies in a responsible manner to facilitate and account for learning and to support positive growth.
- Design, implement, and evaluate standards-based lesson plans for learning and achievement in content areas.
- Demonstrate professional standards and ethics.
- Utilize different teaching strategies to accomplish teaching and learning goals.

Degree Requirements

To receive a Bachelor of Arts with a Major in Health Science with a Single Subject Teaching Credential, candidates must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University and 76.5 of which must be completed at the upper-division level. All undergraduate students must complete a minimum 70.5 units of the University General Education requirements. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements. All students receiving an undergraduate degree in Nevada are required by State Law to complete a course in Nevada Constitution.

Preparation for Major

(11 courses; 46.5 quarter units)

CHE 101*	Introductory Chemistry <i>Recommended Preparation: MTH 204 or MTH 215 or MTH 216A and MTH 216B</i>
PSY 100*	Introduction to Psychology
SOC 100*	Principles of Sociology <i>Prerequisite: ENG 100 and ENG 101</i>
COH 100*	Personal Health
MTH 204*	Mathematics for Science <i>Prerequisite: MTH 12A and MTH 12B or Accuplacer test placement</i>
MTH 209A*	Fundamentals of Mathematics I <i>Prerequisite: Accuplacer test placement evaluation or MTH 12A and MTH 12B</i>
COM 220*	Media Literacy
BIO 100*	Survey of Bioscience
BIO 100A*	Survey of Bioscience Lab (1.5 quarter units) <i>Prerequisite: BIO 100 for non-science majors (GE) or BIO 163 for science majors</i>
BIO 380	Human Biology for Teachers <i>Recommended Preparation: BIO 161 and BIO 162 and Prerequisite: BIO 163 and BIO 100A</i>
SOC 344	Marriage, Sex and the Family <i>Prerequisite: ENG 100 and ENG 101</i>

* May be used to meet a General Education requirement.

Requirements for Major

(23 courses; 99 quarter units)

Health Science Requirements

(11 courses; 49.5 quarter units)

COH 320	Chronic & Communicable Disease <i>Prerequisite: ILR 260</i>
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COH 321	Health Behavior <i>Prerequisite: ILR 260</i>
COH 416	PH & Physical Activity <i>Prerequisite: COH 401</i>
COH 317	Public Health Nutrition <i>Prerequisite: ILR 260</i>
COH 318	Drug Use and Abuse <i>Prerequisite: ILR 260</i>
COH 319	Human Sexuality <i>Prerequisite: ILR 260</i>
COH 420	Health of Vulnerable Groups
HED 311	Health Literacy
HED 414	Violence & Bullying Prevention
HED 308	Mental and Emotional Health <i>Recommended: Prior completion of COH 318</i>
HED 351	Coordinated School Health <i>Prerequisite: COH 100,</i> <i>Recommended: Prior completion of COH 318</i>

Education Theory/Methodology Requirements

(7 courses; 31.5 quarter units)

TED 305	Teaching as a Profession
TED 300	Fundamentals of Education <i>Prerequisite: TED 320 or TED 305 or TED 306</i>
TED 310	Development and Learning <i>Prerequisite: TED 305 or TED 320 or TED 306</i>
TED 330B	Reading and Language Arts <i>Prerequisite: TED 305 or TED 320</i>
TED 420	Diversity in Schooling <i>Prerequisite: TED 305 or TED 320</i>
TED 430	Special Needs Students <i>Prerequisite: TED 305 or TED 320 or TED 306</i>
TED 464	Mths Teach Sec Health Sci <i>Prerequisite: TED 305, TED 300, TED 310, TED 430 and HED 351,</i> <i>Recommended: Prior completion of: TED 330B, TED 420,</i> <i>COH 320, COH 416, COH 317, COH 318, COH 319, HED 308,</i> <i>COH 100, HED 311, HED 414 and COH 321</i>

Student Teaching Requirements

(4 courses; 13.5 quarter units)

TED 530A, 530B, 531A and 531B	are field experience courses receiving a Satisfactory or Unsatisfactory grade and are not factored into cumulative GPA.
TED 530A	Student Teaching I <i>Corequisite: TED 531A</i>
TED 530B	Student Teaching II <i>Prerequisite: TED 530A, Corequisite: TED 531B</i>
TED 531A	Student Teaching Seminar I (2.25 quarter units) <i>Corequisite: TED 530A</i>
TED 531B	Student Teaching Seminar II (2.25 quarter units) <i>Prerequisite: TED 530A with a minimum grade of S, and TED 531A with a minimum grade of S and Corequisite: TED 530B</i>

Credentialing Requirement

(1 course; 4.5 quarter units)

Students must have a senior standing to enroll in this course. The grade earned must be a B or better. EDX 6001X will not transfer to any graduate level program at National University or elsewhere.

EDX 6001X Computer Tech in Classroom

◆ MAJOR IN INTERDISCIPLINARY STUDIES WITH A PRELIMINARY MULTIPLE SUBJECTS TEACHING CREDENTIAL (CALIFORNIA)

Faculty Advisor: Joshua Olsberg; (559) 256-4908; jolsberg@nu.edu

Faculty Advisor: Patricia Dickenson; (408) 336-1136; pdickenson@nu.edu

The Bachelor of Arts in Interdisciplinary Studies and a Preliminary Multiple Subjects Teaching Credential (California) provides a broad, rigorous education that prepares candidates for a career as a teacher at the elementary level. The program introduces candidates to essential knowledge, connections across the disciplines, and applies knowledge of life beyond the University. This degree program gives candidates an enriched and thought-provoking curriculum that incorporates content across subject areas and with specific educational methodology courses. This program prepares candidates for professional work as multiple subject teachers in a changing cultural and economic environment.

For additional information on credential requirements, please see the Sanford College of Education Credential Information section of the catalog.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate an understanding of interdisciplinary theory and the practice of critical thinking for the collection, validation, analysis, and synthesis of historical data and new information.
- Explain the integration of knowledge in a global context and engage in collaborative research across disciplines.
- Identify and appreciate the cultural perspectives of world view.
- Use information communications technology for knowledge sharing and the interdisciplinary approach.
- Demonstrate a deep and flexible understanding of subject matter.
- Apply educational technology to meet the needs of all learners.
- Explain how to support growth in cognitive, social, physical, and emotional domains.
- Utilize different teaching strategies to accomplish the teaching and learning goals.
- Create positive learning environment that ensures healthy human growth.
- Utilize systematic observations, documentation and other assessment strategies to facilitate and account for learning, and to support positive growth.
- Design, implement and evaluate standards-based lesson plans for learning and achievement in content areas.
- Demonstrate professional standards and ethics.

Degree Requirements

To receive a Bachelor of Arts in Interdisciplinary Studies with a Multiple Subjects Teaching Credential, candidates must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University and 76.5 of which must be completed at the upper-division level, including a minimum 70.5 units of the University General Education. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements. Candidates must demonstrate subject-matter competency through a state-approved examination. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation. All students receiving an undergraduate degree in Nevada are required by State Law to complete a course in Nevada Constitution.

Preparation for Major

(3 courses; 13.5 quarter units required)

LIT 100*	Introduction to Literature <i>Prerequisite: ENG 100 and ENG 101</i>
HIS 410	California History <i>Prerequisite: ENG 100 and ENG 101</i>
MTH 209A*	Fundamentals of Mathematics I <i>Prerequisite: Accuplacer test placement evaluation or MTH 12A and MTH 12B</i>

* May be used to meet a General Education requirement.

Requirements for Major

(22 courses; 99 quarter units)

Core Requirements

(14 courses; 63 quarter units)

BIS 301	Intro to Interdisc. Studies
ENG 350	Fundamentals of Linguistics <i>Prerequisite: ENG 100 and ENG 101</i>
MTH 301	Fundamentals of Mathematics II <i>Prerequisite: MTH 209A or Accuplacer test placement evaluation</i>
ART 329	World Art <i>Prerequisite: ENG 100 and ENG 101</i>
TED 300	Fundamentals of Education <i>Prerequisite: TED 320 or TED 305 or TED 306</i>
TED 410	Survey of Multicultural Lit. <i>Prerequisite: TED 305 or TED 320 or TED 306</i>
TED 430	Special Needs Students <i>Prerequisite: TED 305 or TED 320 or TED 306</i>
TED 310	Development and Learning <i>Prerequisite: TED 305 or TED 320 or TED 306</i>
TED 355	Hist/Social Science Methods <i>Prerequisite: TED 305 or TED 320 or TED 306</i>
TED 380	Arts/PE/Health Methods <i>Prerequisite: TED 305 or TED 320 or TED 306</i>
BIS 401	Interdisciplinary Practice: In <i>Prerequisite: BIS 301 and four additional courses from the major</i>
TED 330A	Reading and Lang. Arts Methods <i>Prerequisite: TED 305 or TED 320 or TED 306</i>
TED 440	Leadership and Assessment <i>Prerequisite: TED 305 or TED 320 or TED 306</i>
BIS 499	Interdisciplinary Studies Proj

* May be used to meet a General Education requirement.

Student Teaching Requirements

(4 courses; 13.5 quarter units)

TED 530A, 530B, 531A and 531B are field experience courses receiving a Satisfactory or Unsatisfactory grade and are not factored into cumulative GPA.

TED 530A	Student Teaching I <i>Corequisite: TED 531A</i>
TED 530B	Student Teaching II <i>Prerequisite: TED 530A, Corequisite: TED 531B</i>
TED 531A	Student Teaching Seminar I (2.25 quarter units) <i>Corequisite: TED 530A</i>
TED 531B	Student Teaching Seminar II (2.25 quarter units) <i>Prerequisite: TED 530A with a minimum grade of S, and TED 531A with a minimum grade of S and Corequisite: TED 530B</i>

Upper-Division Requirements

(5 courses; 22.5 quarter units)

COM 380	Democracy in the Info. Age <i>Prerequisite: ENG 100 and ENG 101</i>
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or

HIS 320	Culture of Global Capitalism <i>Prerequisite: ENG 100 and ENG 101</i>
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TED 305	Teaching as a Profession
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or

TED 306	21st Century Teaching Methods
TED 350	Math and Science Methods <i>Prerequisite: TED 305 or TED 320 or TED 306</i>

or

TED 351	Teaching STEM Methods <i>Prerequisite: TED 305 or TED 306 or TED 320</i>
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and

Two (2) additional courses from the following:

SCI 300	Geography
BIS 405	Genetic Anthropology <i>Prerequisite: BIS 301, Recommended: Prior completion of MTH 215</i>
MTH 410	Technology in Math Education <i>Prerequisite: MTH 215 or MTH 216A and MTH 216B or MTH 301</i>
TED 306	21st Century Teaching Methods
TED 351	Teaching STEM Methods <i>Prerequisite: TED 305 or TED 306 or TED 320</i>

▲ Concentration in STEM (Science, Technology, Engineering, Mathematics)

A concentration in STEM provides students with the depth and breadth of knowledge in science, technology, engineering and mathematics that prepares them to be successful in a digital classroom. Students will define, create and model team building and problem based learning in an interdisciplinary environment that demonstrates an understanding of the integration of knowledge within and across the disciplines.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate how to integrate Science, Technology, Engineering, and Mathematics (STEM) to meet the needs of all learners.
- Create and model interdisciplinary learning environments that reflect team building and problem based learning using technology.

Requirements for Concentration

(5 courses; 22.5 quarter units)

SCI 400	History of Science <i>Prerequisite: One 4.5 quarter unit science course from the natural sciences.</i>
TED 306	21st Century Teaching Methods
MTH 410	Technology in Math Education <i>Prerequisite: MTH 215 or MTH 216A and MTH 216B or MTH 301</i>
BIS 405	Genetic Anthropology <i>Prerequisite: BIS 301, Recommended: Prior completion of MTH 215</i>
TED 351	Teaching STEM Methods <i>Prerequisite: TED 305 or TED 306 or TED 320</i>

Note: Students will need a Taskstream account for portfolio work. Please refer to your Faculty Advisor for more information (including fees).

◆ MAJOR IN MATHEMATICS WITH A PRELIMINARY SINGLE SUBJECT TEACHING CREDENTIAL (CALIFORNIA)

Faculty Advisor: Igor Subbotin; (310) 662-2150; isubboti@nu.edu
Faculty Advisor: Zhonghe Wu; (714) 429-5144; zww@nu.edu

The Bachelor of Arts in Mathematics with a Preliminary Single Subject Credential provides a rigorous education that prepares candidates for a career as a teacher of Mathematics at the middle and secondary school levels. The program stresses foundation in mathematics and its application. This program prepares candidates for professional work as single subject teachers in a changing cultural and economic environment.

For additional information on credential requirements, please see the Sanford College of Education Credential Information section of the catalog.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Employ a variety of reasoning skills and effective strategies for solving problems both within the discipline of mathematics and in applied settings that include non-routine situations.

- Use language and mathematical symbols to communicate mathematical ideas in the connections and interplay among various mathematical topics and their applications that cover range of phenomena across appropriate disciplines.
- Use current technology tools, such as computers, calculators, graphing utilities, video, and interactive programs that are appropriate for the research and study in mathematics.
- Employ algebra and number theory ideas and tools as a base of a fundamental language of mathematics research and communication.
- Develop fundamental knowledge in geometry.
- Model real world problems with a variety of algebraic and transcendental functions.
- Use advanced statistics and probability concepts and methods.
- Use educational technology to meet the needs of all learners including those with special needs linguistically and culturally diverse students.
- Explain how to support growth in cognitive, social, physical and emotional domains.
- Create a positive learning environment that ensures healthy human growth.
- Utilize systematic observations, documentation, and other assessment strategies in a responsible manner to facilitate and account for learning and to support positive growth.
- Design, implement, and evaluate standards-based lesson plans for learning and achievement in content areas.
- Demonstrate professional standards and ethics.
- Utilize different teaching strategies to accomplish the teaching and learning goals.

Degree Requirements

To receive a Bachelor of Arts in Mathematics with a Single Subject Teaching Credential, candidates must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level and a minimum 70.5 units of the University General Education requirements. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation. All students receiving an undergraduate degree in Nevada are required by State Law to complete a course in Nevada Constitution.

Preparation for Major

(6 courses; 27 quarter units)

MTH 210* Probability and Statistics
Prerequisite: Accuplacer test placement evaluation or MTH 12A and MTH 12B

MTH 215* College Algebra & Trigonometry
Prerequisite: Accuplacer test placement evaluation or MTH 12A and MTH 12B

or

MTH 216A* College Algebra I (3 quarter units)
Prerequisite: Accuplacer test placement evaluation MTH 12A and MTH 12B

and

MTH 216B* College Algebra II (3 quarter units)
Prerequisite: MTH 216A

MTH 220* Calculus I
Prerequisite: Accuplacer test placement or MTH 216B or MTH 215

or

CSC 208* Calculus for Comp. Science I
Prerequisite: MTH 215

MTH 221 Calculus II
Prerequisite: MTH 220

MTH 222 Calculus III
Prerequisite: MTH 221

MTH 223 Calculus IV
Prerequisite: MTH 222

* May be used to meet a General Education requirement.

Requirements for Major

(21 courses; 90 quarter units)

Mathematics Requirements

(9 courses; 40.5 quarter units)

MTH 311 Topics from Geometry
Prerequisite: Accuplacer test placement or MTH 216B or MTH 215

MTH 325 Discrete Mathematics
Prerequisite: MTH 215 or MTH 216A and MTH 216B

or

CSC 331 Discrete Structures and Logic
Prerequisite: CSC 252 and CSC 310

MTH 411 Number Theory
Prerequisite: MTH 216B or MTH 215 or MTH 301

MTH 435 Linear Algebra
Prerequisite: MTH 220 and MTH 325

MTH 416 Algebraic Structures
Prerequisite: MTH 435 and MTH 325

MTH 417 Foundations of Geometry
Prerequisite: MTH 216A and MTH 216B or MTH 215 and MTH 311

MTH 418 Statistical Analysis
Prerequisite: MTH 210 and MTH 220

MTH 412 History of Mathematics
Prerequisite: MTH 215 or MTH 301 or MTH 216A and MTH 216B

MTH 410 Technology in Math Education
Prerequisite: MTH 215 or MTH 216A and MTH 216B or MTH 301

Education Theory and Methodology Requirements

(7 courses; 31.5 quarter units)

Students must complete TED 305 prior to TPA 1. All Teacher Education (TED) courses include a field experience component. It is strongly recommended students take the following courses in the order they are listed.

TED 305 Teaching as a Profession

TED 300 Fundamentals of Education
Prerequisite: TED 320 or TED 305 or TED 306

TED 430 Special Needs Students
Prerequisite: TED 305 or TED 320 or TED 306

TED 310 Development and Learning
Prerequisite: TED 305 or TED 320 or TED 306

TED 420 Diversity in Schooling
Prerequisite: TED 305 or TED 320

TED 330B Reading and Language Arts
Prerequisite: TED 305 or TED 320

TED 461 Mathematics Teaching Methods
Prerequisite: TED 305 or TED 320

Student Teaching Requirements

(4 courses; 13.5 quarter units)

TED 530A, 530B, 531A and 531B are field experience courses receiving a Satisfactory or Unsatisfactory grade and are not factored into cumulative GPA.

TED 530A Student Teaching I
Corequisite: TED 531A

TED 530B Student Teaching II
Prerequisite: TED 530A, Corequisite: TED 531B

TED 531A Student Teaching Seminar I (2.25 quarter units)
Corequisite: TED 530A

TED 531B Student Teaching Seminar II (2.25 quarter units)
Prerequisite: TED 530A with a minimum grade of S, and TED 531A with a minimum grade of S and Corequisite: TED 530B

Credentialing Requirement

(1 course; 4.5 quarter units)

Students must have senior standing to enroll in this class.

HEDX 2301X Intro Health Ed: K-12

◆ MAJOR IN SOCIAL SCIENCE WITH A PRELIMINARY SINGLE SUBJECT CREDENTIAL (CALIFORNIA) 📄

Faculty Advisor: Daniel Thorburn; (209) 475-1443; dthorbur@nu.edu

Faculty Advisor: Patricia Dickenson; (408) 336-1136; pdickenson@nu.edu

The Bachelor of Arts with a Major in Social Science with a Preliminary Single Subject Credential combines rigorous coursework in history and the social sciences with training in educational methodology to prepare candidates for careers as teachers of social studies and history at the middle and secondary school levels. The program introduces students to a variety of fields in the social sciences and concentrates on World History, U.S. History, and California History. Students examine worlds, times, places and cultures--including their own--in ways they have never considered and they develop strong skills in critical thinking, reading, writing, and researching. The educational methodology and student teaching portions of the program prepare candidates for professional work as single subject social studies or history teachers in a changing cultural and economic environment.

For additional information on credential requirements, please see the Sanford College of Education Credential Information section of the catalog.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Assess the significance of major trends in World History.
- Assess the significance of major trends in U.S. History.
- Analyze a variety of primary sources.
- Analyze secondary sources for their arguments and use of supporting evidence.
- Discuss current concerns, new theories, new evidence, and issues that shape interpretation in history and the social sciences.
- Conduct research in history and the social sciences supported by appropriate primary and secondary source materials.
- Delineate the central demographic, economic, and political developments in the history of California from the eve of Spanish settlement to the present.
- Integrate educational technology to meet the needs of all learners.
- Describe how to support growth in cognitive, social, physical, and emotional domains.
- Demonstrate a thorough understanding of the learning needs of students through the creation of positive learning environments.
- Utilize systematic observations, documentation, and other effective assessment strategies in a responsible manner to facilitate and account for learning and to support positive growth.
- Design, implement, and evaluate standards-based lesson plans for learning and achievement in content areas.
- Demonstrate professional standards and ethics.
- Utilize different teaching strategies to accomplish teaching and learning goals.

Degree Requirements

To receive a Bachelor of Arts with a Major in Social Science with a Single Subject Teaching Credential, candidates must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level and a minimum 70.5 units of University General Education requirements. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the

degree. The following courses are specific degree requirements. All students receiving an undergraduate degree in Nevada are required by State Law to complete a course in Nevada Constitution.

Preparation for Major

(9 courses; 40.5 quarter units)

HIS 220A* United States History I
Prerequisite: ENG 100 and ENG 101

HIS 220B* United States History II
Prerequisite: ENG 100 and ENG 101

HIS 233* World Civilizations I
Prerequisite: ENG 100 and ENG 101

HIS 234* World Civilizations II
Prerequisite: ENG 100 and ENG 101

POL 100* Introduction to Politics
Prerequisite: ENG 100 and ENG 101

POL 201* American Politics
Prerequisite: ENG 100 and ENG 101

SCI 300* Geography

ECO 203* Principles of Microeconomics

ECO 204* Principles of Macroeconomics

* May be used to meet a General Education requirement.

Requirements for Major

(24 courses; 103.5 quarter units)

Social Science Requirements

(11 courses; 49.5 quarter units)

HIS 431 The Ancient World
Prerequisite: ENG 100, ENG 101 and HIS 233

HIS 432 The Classical World
Prerequisite: ENG 100, ENG 101 and HIS 233

HIS 433 The Post-Classical World
Prerequisite: ENG 100, ENG 101 and HIS 233

HIS 434 Modern World, 1500 to Present
Prerequisite: ENG 100, ENG 101 and HIS 234

HIS 400 Historical Theories & Methods
Prerequisite: ENG 240

HIS 360 American Colonial Experience
Prerequisite: ENG 100, ENG 101 and HIS 220A

HIS 361 Making and Sundering of Union
Prerequisite: ENG 100, ENG 101 and HIS 220A

HIS 362 U.S. Between Wars, 1865-1917
Prerequisite: ENG 100, ENG 101 and HIS 220B

HIS 363 U.S. Since World War I
Prerequisite: ENG 100, ENG 101 and HIS 220B

HIS 410 California History
Prerequisite: ENG 100 and ENG 101

HIS 499 Capstone Research Project
Prerequisite: ENG 240 or equivalent, HIS 400 and completion of 31.5 quarter units of core courses in the major

Education Theory and Methodology Requirements

(7 courses; 31.5 quarter units)

TED 305 Teaching as a Profession

TED 300 Fundamentals of Education
Prerequisite: TED 320 or TED 305 or TED 306

TED 310 Development and Learning
Prerequisite: TED 305 or TED 320 or TED 306

TED 330B Reading and Language Arts
Prerequisite: TED 305 or TED 320

TED 420	Diversity in Schooling <i>Prerequisite: TED 305 or TED 320</i>
TED 430	Special Needs Students <i>Prerequisite: TED 305 or TED 320 or TED 306</i>
TED 434	Methods of Teaching Social Sci <i>Prerequisite: TED 305</i>

Student Teaching Requirements

(4 courses; 13.5 quarter units)

TED 530A, 530B, 531A and 531B are field experience courses receiving a Satisfactory or Unsatisfactory grade and are not factored into cumulative GPA.

TED 530A	Student Teaching I <i>Corequisite: TED 531A</i>
TED 530B	Student Teaching II <i>Prerequisite: TED 530A, Corequisite: TED 531B</i>
TED 531A	Student Teaching Seminar I (2.25 quarter units) <i>Corequisite: TED 530A</i>
TED 531B	Student Teaching Seminar II (2.25 quarter units) <i>Prerequisite: TED 530A with a minimum grade of S, and TED 531A with a minimum grade of S and Corequisite: TED 530B</i>

Credentialing Requirements

(2 courses; 9 quarter units)

Students must have a senior standing to enroll in EDX 6001X. EDX 6001X is graduate level and the grade earned must be a "B" or better. EDX 6001X will not transfer to National University or any other university as a graduate level class.

HEDX 2301X Intro Health Ed: K-12

EDX 6001X Computer Tech in Classroom

◆ MAJOR IN SPANISH WITH PRELIMINARY SINGLE SUBJECT TEACHING CREDENTIAL (CALIFORNIA)

Faculty Advisor: Luis Acebal; (530) 226-4003; lacebal@nu.edu

Faculty Advisor: Patricia Dickenson; (408) 336-1136; pdickenson@nu.edu

The Bachelor of Arts with a Major in Spanish consists of intensive proficiency-oriented coursework in Spanish language acquisition, as well as instruction in essential knowledge and understanding of history, culture, geography, and politics of the region. The program prepares students for a variety of career paths in government, military, business, and education. Each student has the option of choosing to complete seven courses of upper-division electives or pursuing a Preliminary Single Subject Teaching Credential (California).

Please see additional Credential admissions requirements under Teacher Education in the Sanford College of Education's Credential Programs section of the catalog.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Develop oral, written and reading proficiency in Spanish.
- Read and interpret representative texts and cultural productions in Spanish.
- Develop analytical and critical skills that build from textual, cultural and linguistic analysis to the exploration of society.
- Translate and interpret to and from Spanish.
- Differentiate the major aspects of Latin American and Hispanic culture and civilization from pre-Columbian times to the present.
- Demonstrate familiarity with the history and culture of the Spanish speaking world.
- A comprehensive familiarity with the history and culture of the region.

Degree Requirements

To receive the Bachelor of Arts Degree with a Major in Spanish, students must complete at least 180 quarter units as listed below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level and a minimum 70.5 units of University General Education requirements. The following courses are degree requirements. In the

absence of transfer credit, general electives may be necessary to satisfy the total units required for the degree. Students should refer to the section on undergraduate admission requirements for specific information regarding admission and evaluation. All students receiving an undergraduate degree in Nevada are required by State Law to complete a course in Nevada Constitution.

Preparation for Major

(5 courses; 22.5 quarter units)

SPN 100*	Beginning Spanish I
SPN 101*	Beginning Spanish II <i>Prerequisite: SPN 100</i>
SPN 200*	Intermediate Spanish I <i>Prerequisite: SPN 101</i>
SPN 201	Intermediate Spanish II <i>Prerequisite: SPN 200</i>
LIT 100*	Introduction to Literature <i>Prerequisite: ENG 100 and ENG 101</i>

* May be used to meet a General Education requirement.

Requirements for Major

(10 courses; 45 quarter units)

SPN 300	Advanced Spanish I <i>Prerequisite: SPN 201</i>
SPN 301	Advanced Spanish II <i>Prerequisite: SPN 300</i>
SPN 310	Literary Readings in Spanish <i>Prerequisite: LIT 100 and SPN 301</i>
SPN 320	Advanced Spanish Conversation <i>Prerequisite: SPN 201 or 3 semesters of college level Spanish language</i>
SPN 330	Intro Lat Am Cultures <i>Prerequisite: SPN 301</i>
SPN 350	Film and Culture <i>Prerequisite: SPN 301</i>
SPN 420	Literature and Culture I <i>Prerequisite: SPN 310 and SPN 330</i>
SPN 430	Literature and Culture II <i>Prerequisite: SPN 420</i>
SPN 450	Identity and Multiculturalism <i>Prerequisite: SPN 310 and SPN 330</i>
SPN 499	Spanish Capstone <i>Prerequisite: SPN 430</i>

Upper-Division Electives

(7 courses; 31.5 quarter units)

The following are strongly recommended:

HIS 345	Latin American Studies <i>Prerequisite: ENG 100 and ENG 101</i>
GLS 430	The Global Economy <i>Prerequisite: ENG 240</i>
GLS 440	Study Abroad <i>Prerequisite: HIS 320</i>
HUM 501	Global Civic Culture <i>Prerequisite: ENG 100 and ENG 101</i>
HIS 434	Modern World, 1500 to Present <i>Prerequisite: ENG 100, ENG 101 and HIS 234</i>
LIT 360	Literary Theory <i>Prerequisite: LIT 100</i>
LIT 460	Gender and Literature <i>Prerequisite: ENG 240 and LIT 100</i>
LIT 463	20th Century World Literature <i>Prerequisite: ENG 240 and LIT 100</i>

LIT 480	Literature of the Americas <i>Prerequisite: ENG 240 and LIT 100</i>
PHL 320	World Religions <i>Prerequisite: ENG 100 and ENG 101</i>
POL 340	Comparative Politics <i>Prerequisite: ENG 100 and ENG 101</i>
SOC 328	Intercultural Thinking <i>Prerequisite: ENG 100 and ENG 101</i>
SPN 490	Guided Study in Spanish

Education Orientation, Theory and Methodology Requirements

(7 courses; 31.5 quarter units)

TED 305	Teaching as a Profession
TED 300	Fundamentals of Education <i>Prerequisite: TED 320 or TED 305 or TED 306</i>
TED 430	Special Needs Students <i>Prerequisite: TED 305 or TED 320 or TED 306</i>
TED 310	Development and Learning <i>Prerequisite: TED 305 or TED 320 or TED 306</i>
TED 420	Diversity in Schooling <i>Prerequisite: TED 305 or TED 320</i>
LTL 504B	Teach Methods: Sec Schs
LTL 524S	Lang Teach & Assess: Spanish

Student Teaching Requirements

(4 courses; 13.5 units)

TED 530A, 530B, 531A and 531B are field experience courses receiving a Satisfactory or Unsatisfactory grade and are not factored into cumulative GPA. Please see student teaching and internship eligibility requirements under Clinical Practice in the Teacher Education area of the Sanford College of Education's Credentialing programs section of the catalog.

TED 530A	Student Teaching I <i>Corequisite: TED 531A</i>
TED 530B	Student Teaching II <i>Prerequisite: TED 530A, Corequisite: TED 531B</i>
TED 531A	Student Teaching Seminar I (2.25 quarter units) <i>Corequisite: TED 530A</i>
TED 531B	Student Teaching Seminar II (2.25 quarter units) <i>Prerequisite: TED 530A with a minimum grade of S, and TED 531A with a minimum grade of S and Corequisite: TED 530B</i>

Credentialing Requirements

(2 courses; 9 quarter units)

Students must have senior standing to enroll in these two classes. The EDX 6001X class is considered graduate level. These courses will not transfer to any graduate level program (at National University or elsewhere).

EDX 6001X	Computer Tech in Classroom
HEDX 2301X	Intro Health Ed: K-12

GRADUATE DEGREES

■ MASTER OF ARTS IN EDUCATION

Faculty Advisor: Thomas Reynolds; (858) 642-8358; treynold@nu.edu

The Master of Arts in Education (MAE) program is designed for individuals interested in seeking professional growth and advancement in educational fields. Additionally, the program meets the needs of international students seeking a master's degree education. Students will complete a six-course Core focused on exploring the historical, philosophical, psychological, and social foundations education; analyzing issues of educational equity and diversity; understanding learners with learning exceptionalities; examining the foundations of curriculum, assessment, and instruction; and using educational research to deepen critical

thinking skills. Students in this program will have opportunities to select a four-course specialization from a variety of areas.

Note: This program is not designed for students seeking a teaching credential.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Analyze diversity issues in education to support equity in educational contexts and learning practices.
- Integrate foundational theory and skills to make subject matter comprehensible to all learners.
- Analyze the application of educational research, evidence-based practices, and academic writing.
- Apply theoretical foundations of education to examine personal, societal, and organizational practices.

Degree Requirements

To receive a Master of Arts in Education, students must complete 45 quarter hours of graduate work. A total of 4.5 quarter units of transferred, graduate credit may be granted for equivalent graduate work completed, as it applies to this degree and if the units were not used in earning another advanced degree.

Core Requirements

(6 courses; 27 quarter units)

TED 602	Educational Foundations
SPD 604	Psychological Fdns of Educ.
TED 606	Equity and Diversity
SPD 608	Exceptionalities
TED 612	Curric, Assess, & Instruction
TED 670	Educational Research <i>Prerequisite: TED 602 with a minimum grade of B-, SPD 604 with a minimum grade of B-, TED 606 with a minimum grade of B-, SPD 608 with a minimum grade of B- and TED 612 with a minimum grade of B-</i>

or

MAT 655*	Leadership Impact Seminar
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* Only for students in the Teacher Leadership Specialization.

Candidates must also choose **one (1)** of the following specializations:

▲ Specialization in Best Practices

Faculty Advisor: Lynne Anderson; (858) 642-8330; landerso@nu.edu

The Best Practices specialization instructs students in research-based Best Practices that accelerate student achievement. The program is based on 11 years of school-based research that turned around low achieving schools and accelerated achievement at all schools where the Best Practices were used. Students will learn how to implement effective teaching strategies that accelerate student achievement and engage students in 21st century learning. An interdisciplinary approach to learning will enable teachers to develop a systematic approach for teaching interdisciplinary vocabulary across the curriculum.

Teachers will learn how to use both textual and digital comprehension strategies, critical/creative 21st century questioning and 21st century problem solving. An emphasis will be placed on differentiated and targeted instruction, student engagement/motivation strategies, cooperative and other effective grouping patterns, and technological multimedia applications. All the Best Practice strategies will be tied to standards-based direct and indirect instruction.

Effective strategies for English language learners and other diverse learners are integrated throughout the four courses in Best Practices in Teaching. Along with learning the strategies listed above, candidates will be taught how to create multidisciplinary standards-based lesson plans using the structure of Teach, Practice and Apply.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Integrate Best Practices for standards-based instruction across content areas.
- Use Best Practices teaching strategies across the curriculum.
- Apply to their teaching the framework of Teach, Practice and Apply using Best Practice teaching strategies.
- Implement Best Practice teaching strategies for the development of vocabulary, math, reading comprehension, and interdisciplinary learning.
- Apply student engagement/motivational strategies.
- Integrate Best Practices in multimedia-interactive classroom instruction.
- Demonstrate a repertoire of differentiated instructional strategies.

Requirements for Specialization

(4 courses; 18 quarter units)

MAT 670	Theory Best Practice Teaching
MAT 671	Appl Best Practice Strat in Cl
MAT 674	Differentiated Instruction
MAT 675	21st Century Multimedia & Tech

▲ Specialization in e-Teaching and Learning

Faculty Advisor: Thomas Reynolds; (858) 642-8358; treynold@nu.edu

The e-Teaching and Learning Specialization in the Master of Arts in Teaching Program is designed to meet the growing need for quality online instructors in PK - 16, community colleges, and corporations. The specialization focuses on: learning and applying effective student-centered online pedagogical skills, developing online curriculum that adheres to the National Standards for Quality Online Teaching, and assessing online learning using multiple assessment strategies. Upon completion of this specialization, candidates will be prepared to effectively teach in the online learning environment.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Analyze professional standards, trends and issues in the online environment.
- Demonstrate the use of active teaching and assessment strategies for the online environment.
- Apply evidence-based best practices research in the online teaching environment.

Requirements for Specialization

(4 courses; 18 quarter units)

ETL 680	Introduction to e-Teaching
ETL 682	Active Teaching and Learning
ETL 684	Differentiated Online Instruct
ETL 686	Designing Instr Materials

Prerequisite: ETL 680, ETL 682 and ETL 684

▲ Specialization in Educational Technology

Faculty Advisor: Cynthia Sitek-Chandler; (858) 642-8322; cchandler@nu.edu

This specialization is designed for individuals wishing to develop their knowledge and skills for using technology in the educational setting.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Integrate interdisciplinary connection between evidence based technologies for multimedia instruction.
- Use teaching strategies to accommodate learners in an online or blended environment.
- Participate in online community building and web-based interactive activities.

- Assess the effectiveness and efficiency of multimedia courseware and internet resource for use in instruction and delivery system.
- Examine the critical issues involved in designing effective distance educational programs.
- Design web-based courses using web page design authoring tools.

Requirements for Specialization

(4 courses; 18 quarter units)

EDT 605	Education Theory & Technology
EDT 610	Teaching Online
EDT 660	Multimedia & Interactive Tech.
EDT 671	Curriculum for Online Learning

Prerequisite: EDT 605, EDT 610 and EDT 660

▲ Specialization in Teacher Leadership

Faculty Advisor: Sidney Castle; (858) 642-8363; scastle@nu.edu

This five-course specialization comes from the Advanced Learning Press' Center for Performance Assessment, which offers a unique master's degree program that provides teachers with the skills and theories to be leaders in their classrooms and schools. It is a collaborative effort with Advanced Learning Press, which already offers a ten course master's degree in educational leadership. All the courses will be offered online. Similar to the National Board Specialization, the capstone is an alternative course to TED 670 or TED 690. The capstone course is MAT 655 Leadership Impact: Synthesis of Theory and Practice.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate an understanding of the principles of effective educational accountability.
- Demonstrate the ability to analyze and understand research on educational leadership.
- Demonstrate an understanding of how to lead learning communities and cross-cultural educational initiatives within school and classroom.
- Demonstrate the ability to build professional relationships and networks for instructional leadership.

Requirements for Specialization

(5 courses; 22.5 quarter units)

MAT 651	Assessing Educational Leaders
MAT 652	Leadership Accountability
MAT 653	Motivational Leadership
MAT 654	Seminar in Social Issues
MAT 655	Leadership Impact Seminar

▲ Specialization in Teaching Mathematics

Faculty Advisor: Zhonghe Wu; (714) 429-5144; zwu@nu.edu

Designed to improve the quality of teaching mathematics in grades K-9, courses focus on the pedagogy of mathematics and the development of balanced instructional programs that meet the needs of today's diverse students. In order to be successful in this program, potential candidates should have basic mathematics knowledge and skills (equivalent to CSET multiple subject and Praxis II elementary education) or above.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Analyze current principles, state and national standards, trends and issues in teaching Mathematics in grades K-9.
- Demonstrate the ability to develop a balanced program of mathematics instruction that includes conceptual understanding, procedural fluency and problem solving in Algebra, Geometry, Statistics, Probability and Number Theory.
- Apply evidence-based best practices research in the delivery and evaluation of a balanced mathematics education program.

Requirements for Specialization

(4 courses; 18 quarter units)

MAT 635	Contemporary Issues/Challenges
MAT 636	Teaching Algebra/Number Theory <i>Prerequisite: MAT 635</i>
MAT 637	Teaching Geometry/Measurement <i>Prerequisite: MAT 635 and MAT 636</i>
MAT 638	Teaching Probability/Stats <i>Prerequisite: MAT 635, MAT 636 and MAT 637</i>

▲ Specialization in US Education in a Global Context

Faculty Advisor: Peter Serdyukov; (760) 599-8789; pserdyuk@nu.edu

Courses are designed for K-12 teachers. With a focus on global education, content offered in this program will provide educators with advanced views on US school practices based on comparative analysis of international educational systems. Students will gain knowledge of issues affecting education and innovative approaches in teaching and learning that will be applied in contemporary school environments.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Analyze the interdependence among socio-economic, political, geographic and technological factors at both national and global levels and their impact on education and educational systems.
- Analyze the ways in which cultural, religious and linguistic factors affect countries' choices of educational systems and educational priorities.
- Evaluate various international educational theories and practices using research and personal experiences in order to make improvements to current school environments.
- Implement new knowledge of innovative international educational systems, educational theories and practices into practical recommendations for improving teaching and learning in US schools.
- Design effective organizational, technological or instructional applications to address challenges in the US professional educational environment.

Requirements for Specialization

(4 courses; 18 quarter units)

MAT 620	Multidimensional Education
MAT 621	Impact of Culture & Language <i>Prerequisite: MAT 620</i>
MAT 622	Comparative Ed Systems <i>Prerequisite: MAT 621</i>
MAT 623	Transformative Ed Practices <i>Prerequisite: MAT 622</i>

■ MASTER OF ARTS IN SPECIAL EDUCATION

Faculty Advisor: Lucinda Kramer; (714) 429-5132; lkramer@nu.edu

The Master of Arts in Special Education (MASE) degree is designed for teachers already licensed with a preliminary or clear credential in special or general education and/or for professionals who want to broaden their intellectual and professional understanding of the role of special education within the PK to 22 setting. More and more, there is a demand for educators and professionals with a current understanding of the characteristics and needs of individuals with disabilities. In this rigorous program, candidates will expand their knowledge by developing, analyzing, and evaluating innovative and ethical practices in special education; and sustaining their commitment as educational practitioners and leaders in the field of education. The program will be offered in three modalities (online, onsite, and hybrid) and will be accessible for candidates at a national and global level.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Analyze the process for creating a shared vision and philosophy of establishing effective teaching and learning of students with disabilities at a school-wide level.

- Evaluate the role of special education practitioners and leaders in different contexts of education, in terms of implementing the vital elements of special education.
- Evaluate the appropriateness of various research methodologies in relation to a given topic related to Special Education.
- Analyze the ongoing process of establishing a collaborative and inclusive setting, for students with disabilities, to access a Free and Appropriate Public Education (FAPE).
- Evaluate the implications of Special Education law and procedures before applying them in different contexts of educational practices.
- Analyze the requirements of the roles of Special Education practitioners for providing access to curriculum, accommodations and modifications, by utilizing technology, including augmentative and assistive technology, and principles of Universal Design for Learning.

Degree Requirements

(10 courses; 45 quarter units)

To receive a Master of Arts in Special Education, candidates must complete a minimum 45 quarter units of graduate work. A total of 4.5 quarter units of graduate credit may be granted for equivalent graduate work, as it applies to this degree, and if the units were not used in earning another degree.

Core Requirements

(4 courses; 18 quarter units)

SPD 651	Ed Hist Perspt, Iss Trends SPD
SPD 652	21 Century SPD Prac. & Systems <i>Prerequisite: SPD 651</i>
SPD 653	Assist Tech & Practices in SPD <i>Prerequisite: SPD 652 and SPD 651</i>
SPD 654	SPD Law & Leadership Practice <i>Prerequisite: SPD 651, SPD 652 and SPD 653</i>

Research Requirements

(2 courses; 9 quarter units)

Prerequisites: Students must complete all core and Specialization courses **prior** to beginning research.

SPD 697	Research in SPD: Design <i>Prerequisite: SPD 651, SPD 652, SPD 653 and SPD 654</i>
SPD 699	Research in SPD Capstone <i>Prerequisite: SPD 651, SPD 652, SPD 653 and SPD 654</i>

Candidates must choose **one (1)** of the following specializations:

▲ Specialization in Autism

Faculty Advisor: David Rago; (702) 531-7812; drago@nu.edu

This specialization is designed for those interested in working with students that fall within the Autism Spectrum Disorder. For candidates interested in adding the Autism Authorization to a valid Education Specialist credential, please review the Autism Certificate program under the Special Education Department section.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate competence and understanding in using behavioral analysis to manage and change behaviors in children with autism.
- Demonstrate competence in recognizing behaviors and utilizing assessments that identify children as having autism.
- Demonstrate knowledge of the background and orientation of the terms included in Autism Spectrum Disorder (ASD) category.
- Demonstrate skills needed for working collaboratively with diverse populations in ASD.
- Demonstrate understanding of differing evidence-based strategies for teaching students with autism.

- Demonstrate an understanding of federal and state laws.
- Demonstrate competency to collaborate in a group process (paraprofessionals, DIS providers, etc.) to organize a structured ASD classroom, to collect relevant data on behavioral outcomes, and to implement identified evidence-based strategies.

Specialization Requirements

(4 courses; 18 quarter units)

EXC 621	Intro Students w/Autism Spect
EXC 622	Assess & Behavioral App in Aut
EXC 623	Intervention/Instr. w/Aut.
EXC 624	Autism Collab w/Parents & Fam.

▲ Specialization in Early Childhood Education

Faculty Advisor: Lucinda Kramer; (714) 429-5132; lkramer@nu.edu

The Early Childhood Special Education (ECSE) program includes the mild/moderate and moderate/severe disabilities and traumatic brain injury, and authorizes service to children ages birth to pre-kindergarten only. For candidates interested in adding the ECSE Authorization to a valid Education Specialist credential, please review the Autism Certificate program under the Special Education Department section.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate knowledge of developmental and learning characteristics, and evidence-based practices associated with young children (birth to Pre-K) with developmental delays, and all categories of disabilities.
- Demonstrate knowledge of family systems, the impact of child with disabilities on the family, engages in family-centered practices and partnerships in all components of early intervention and education for infants and young children with disabilities.
- Demonstrate skill in formal and informal assessment approaches that inform the development and implementation of evidence-based, developmentally appropriate, family supported interventions and reflect the impact of culture (including ELL), specific disabilities on learning, and the role of the interdisciplinary team.
- Document observations from birth to prekindergarten and in-depth field experiences in early childhood settings with families and children of diverse backgrounds and young children who have a range of abilities including in-home service delivery, and inclusive DAP center based pre-school/pre-kindergarten programs.

Specialization Requirements

(4 courses; 18 quarter units)

SPD 672	Intro to ECSE <i>Prerequisite: SPD 672 Individuals who hold a preliminary, Level I, professional clear, clear, Level II, or life special education teaching credential may take this course.</i>
SPD 674	Collaborative Partners <i>Prerequisite: ECSE Added-Authorization Candidates: Individuals who hold a valid preliminary, Level I, professional clear, clear, Level II, or life special education teaching credential may take this course.</i>
SPD 676	ECSE Assessment & Intervention <i>Prerequisite: Individuals who hold a preliminary, Level I, professional clear, clear, Level II, or life special education teaching credential may take this course.</i>
SPD 678	ECSE Field Experience <i>Prerequisite: SPD 672, SPD 674 and SPD 676</i>

▲ Specialization in Language and Academic Development

Faculty Advisor: Bonnie Plummer; (916) 855-4107; bplummer@nu.edu

The Language and Academic Development specialization prepares educators to address the language development needs of a large number of P-12 students with disabilities who have difficulty in the following areas: language development,

social communication, school readiness skills, literacy development, and with academic competencies across the curriculum in listening, speaking, reading, writing as well as communication and language literacy skills.

Program Learning Outcomes

- Analyze the implications of the characteristics of students with language and academic development needs including academic competencies across the curriculum in listening, speaking, reading, writing and who demonstrate lack of communication and language literacy skills to access and benefit from academic instruction.
- Analyze student's language development across disabilities and the life span including typical and atypical language development, communication skills, social pragmatics as it relates to the acquisition of academic knowledge and skills.
- Differentiate between language disorders, disabilities, and language difference in order to identify and utilize current research based strategies, methods, and materials for the development of fluent reading in students across ages and across an array of environments, including speakers of English and English Language learners.
- Assess the impact of sensory deficits on the development and application of language, verbal and non-verbal communication abilities and needs in order to identify and implement effective intervention techniques for social communication and activities to engage students with communication disabilities in classroom and social activities.
- Utilize and interpret a variety of assessments for students with communication disabilities in order to collaborate with educators and parents to make educational decisions based on the data and apply instructional models and strategies that align with ongoing assessment results.
- Select and implement evidence-based curricula and instructional methods that are effective with students with language and communication disabilities including specially designed curricula and methods for language and literacy development, quantitative reasoning, and reading/language arts instruction to enable individuals to access the core curriculum.

Specialization Requirements

(4 courses; 18 quarter units)

LAD 632	Speech & Language Development
LAD 633	Academic Language Assessment
LAD 634	Curriculum and Instruction
LAD 635	Intensive Lang. Intervention

▲ Specialization in Mild/Moderate Area of Specialization

Faculty Advisor: Nilsa Thorsos; (310) 662-2140; nthorsos@nu.edu

The Specialization in Mild/Moderate is designed for educators and other professionals who want to become knowledgeable about teaching strategies to enhance individuals with mild/moderate disabilities

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Analyze the implications of characteristics of students with M/M disabilities and autism for service delivery such as placement decisions, IEP development, and instruction.
- Evaluate a variety of appropriate assessments procedures and communicate results in order to use evidence based strategies and the core curriculum in the development of IEP goals and instructional plans for students with M/M disabilities and autism.
- Maintain appropriate educational environments and positive behavioral support to include the school-wide behavior support process for students with M/M disabilities and autism.
- Implement effective methods for teaching reading, speaking, listening, written language, and mathematics to ensure access to the general education curriculum across instructional settings for students with M/M disabilities and autism.
- Exhibit collaborative case management to coordinate the IEP process and address the legal and instructional requirements based on the individual needs of the student with M/M disabilities and autism.

Specialization Requirements

(4 courses; 18 quarter units)

SPD 632	Charac/Instr Stds w/ M/M Disab
SPD 634	Assess of Std w/ M/M Disab
SPD 636	Teaching Math/Writing for M/M
SPD 638	Content Differentiation

▲ Specialization in Moderate/Severe Area of Specialization

Faculty Advisor: Mary Lynn Ferguson; (858)642-8346; mferguson@nu.edu

The Specialization in Moderate/Severe program meets the professional program specific standards required by CTC for credentials. Candidates will meet California Standards for the Teaching Profession and Teacher Performance Expectations.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Analyze the implications of the characteristics of students with Moderate/Severe/Profound disabilities for service delivery impacting assessments, IEP development, instruction, and program options.
- Analyze student's verbal and non-verbal communication abilities to develop needed augmentative, alternative or signed systems including assistive technology, to enhance communication, social interaction, academic performance and skill development.
- Evaluate a variety of assessments and procedures to maximize students participation in standards and evidence-based, academic/life skills/wellness curriculum within IEP goals and objectives across school/community settings.
- Establish and maintain educational environments based upon positive behavior support processes at the individual and school-wide levels.
- Analyze the movement, mobility, sensory, and specialized health care needs to access school and community to the fullest extent using appropriate techniques, procedures, materials, assistive technology, and adaptive equipment.
- Exhibit collaborative case management to coordinate the IEP process and the various transitions experienced by students with Moderate/Severe/Profound disabilities, while addressing the legal and instructional requirements of their IEPs.

Specialization Requirements

(4 courses; 18 quarter units)

SPD 642	Academic Instruction M/S
SPD 644	Life Skills & Transitions M/S
SPD 646	PBS, Comm & Social Skills M/S
SPD 648	Medical & Asst Tech Issues M/S

■ MASTER OF EDUCATION WITH A PRELIMINARY MULTIPLE OR SINGLE SUBJECTS TEACHING CREDENTIAL AND INTERNSHIP OPTION (CALIFORNIA)

Faculty Advisor: Clara Amador-Lankster; (714) 965-0280; camadorl@nu.edu

The Master of Education with a Multiple or Single Subjects Teaching Credential is designed for candidates dedicated to instructional leadership in the P-12 settings. Courses meet the California Commission on Teacher Credentialing (CTC) requirements for a Preliminary Multiple or Single Subjects teaching credential and meet requirements for a master's degree. Candidates desiring a Master's degree and not seeking to achieve a Preliminary Multiple or Single Subjects teaching credential or those who already hold a Multiple or Single Subject teaching credential should enroll in the Master of Arts in Teaching.

As this is a joint program students must complete all coursework in order to be eligible for the degree, including student teaching or internship, and one of the five specializations.

***Please Note:** Students need to satisfy/pass the Basic Skills Requirement (e.g., CBEST) and Subject Matter Competency Requirement (e.g., CSET) early (prior to Credential Area Methods coursework) into their programs to avoid interruptions to program progress and/or financial aid arrangements.

For additional information on credential requirements, please see the Sanford College of Education Credential Information section of the catalog.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Integrate knowledge and abilities in making subject matter comprehensible for all P-12 learners, including those with diverse learning needs.
- Integrate knowledge and abilities in assessing all P-12 learners, including those with diverse learning needs.
- Integrate knowledge and abilities in engaging/supporting all P-12 learners, including those with diverse learning needs.
- Integrate knowledge and abilities in designing/planning learning experiences for all P-12 learners, including those with diverse learning needs.
- Integrate knowledge and abilities in creating/maintaining effective learning environments for all P-12 learners, including those with diverse learning needs.
- Integrate knowledge and abilities in being a legal, ethical, and professional educator for all P-12 learners, including those with diverse learning needs.
- Analyze the application of educational research, evidence-based practices, and academic writing.

Degree Requirements

(18-19 courses; 76.5-85.5 quarter units)

To receive a Master of Education with California Preliminary Multiple or Single Subjects Teaching Credential, candidates must complete at least 58.5 quarter units of graduate credit of which 48 quarter units must be taken in residence at National University. Further information on graduate admission and evaluation can be found in the Academic Information for Graduate Degrees section of the catalog.

Candidates choosing the Internship option to obtain the Preliminary Multiple or Single Subject Teaching Credential will need to meet the Internship Eligibility requirements as outlined in the Sanford College of Education Credential information section of the catalog.

The Commission on Teacher Credentialing (CTC) mandates all approved internship programs require a minimum of 120 hours of pre-service coursework (TED 621A or TED 623, TED 621B or TED 634, TED 626) prior to becoming eligible for the Internship Option.

The CA Education Code stipulates a minimum of 144 hours of support and supervision must be provided to the candidate each year of intern employment and documented. Interns without a valid English Learner (EL) Authorization from CTC will be required to receive an additional 45 hours of EL preparation support each year of intern employment (Total 189 hours).

This Internship Option requires the successful completion of the internship clinical practice experience (minimum 1 year). In the event, all program requirements have not been met during the first year and intern employment continues during the second year, National University must provide additional ongoing support and supervision. All candidates holding a valid University Internship Credential will be required to be continuously enrolled in clinical practice support and supervision (TED 628A, TED 628B or TED 628C).

Interns in the Early Completion Option (ECO) route are still required to receive the general support and supervision provided to all interns while they are serving on an Intern credential.

Corequisites

(2 courses; 9 quarter units)

HEDX 2301X Intro Health Ed: K-12

EDX 6001X Computer Tech in Classroom

Core Requirements

(6 courses; 27 quarter units)

TED 602 Educational Foundations

SPD 604 Psychological Fdns of Educ.

TED 606 Equity and Diversity

SPD 608	Exceptionalities
TED 626*	Classroom Management <i>Prerequisite: TED 621A or TED 623</i>
TED 690	Capstone <i>Prerequisite: TED 530B with a minimum grade of S or TED 628B with a minimum grade of S or TED 628I with a minimum grade of S or TED 640B with a minimum grade of S</i>

* Internship Pre-Service course.

Select **one (1)** of the following Teacher Credential Areas:

Teacher Credential Areas: Multiple Subject or Single Subject Methods
(4 courses; 18 quarter units)

Multiple Subject

TED 621A*	Lang. Dev. Methods: Elem. Sch. <i>Prerequisite: SPD 604, SPD 608, TED 602, TED 606 and Pass CBEST and CSET</i>
TED 621B*	Reading/Lang. Arts Methods <i>Prerequisite: TED 621A</i>
TED 635	Methods: History/SS-Heal-PE-Art <i>Prerequisite: TED 621A with a minimum grade of C</i>
TED 636	Methods: Mathematics-Science <i>Prerequisite: TED 621A with a minimum grade of C</i>

or

Single Subject

TED 623*	Lang. Dev. Methods: Secondary <i>Prerequisite: TED 602, SPD 604, TED 606, SPD 608 and Pass CBEST and CSET</i>
TED 632	Content Area Curriculum <i>Prerequisite: TED 623</i>
TED 633	Content Area Instruct-Assess <i>Prerequisite: TED 623 with a minimum grade of C</i>
TED 634*	Content Area Literacy <i>Prerequisite: TED 623</i>

* Internship Pre-Service course.

Clinical Practice Path: Student Teaching or Internship

(Student Teaching—4 courses; 13.5 quarter units or
Internship—5 courses; 18 quarter units)

The clinical practice (K-12 classroom) experience courses (TED 530A, TED 530B, TED 628A, and TED 628B) do NOT grant graduate credit.

Student Teaching will be arranged by the university for candidates who have completed all program coursework and met all program/state requirements. Student Teaching is unpaid and a minimum 80 instructional days in the PK-12 classrooms.

Student Teaching

TED 530A	Student Teaching I <i>Corequisite: TED 531A</i>
TED 530B	Student Teaching II <i>Prerequisite: TED 530A, Corequisite: TED 531B</i>
TED 531A	Student Teaching Seminar I (2.25 quarter units) <i>Corequisite: TED 530A</i>
TED 531B	Student Teaching Seminar II (2.25 quarter units) <i>Prerequisite: TED 530A with a minimum grade of S and TED 531A with a minimum grade of S and Corequisite: TED 530B</i>

or

INTERNSHIPS will result through an offer of employment from a CA public school in partnership with National University. Intern placements will be required to align to the credential sought in compliance with the Commission on Teacher Credentialing. Interns need to be in good standing with both the employer and National University for the duration of the active Internship Teaching Credential.

Internship Clinical Practice is paid and it is a minimum of one year long while the candidate holds employment as a teacher of record in a public school.

Internship

TED 610	Best Internship Practices <i>Prerequisite: Admission to the intern program, SPD 608</i>
TED 628A	Internship Clinical Practice I <i>Corequisite: TED 610 and TED 631A</i>
TED 628B	Internship Clinical Pract. II <i>Prerequisite: TED 628A, Corequisite: TED 631B</i>
TED 631A	Internship Seminar I (2.25 quarter units) <i>Prerequisite: TED 610</i>
TED 631B	Internship Seminar II (2.25 quarter units) <i>Prerequisite: TED 631A and TED 628A, Corequisite: TED 628B</i>

Additional Requirement

This course may be required to fulfill internship hour requirements. It may be taken a maximum of eight times to complete internship hours. Does not grant graduate units towards graduate degree, however tuition is applied for each attempt.

TED 628C	Clinical Practice III (2.25 quarter units) <i>Prerequisite: TED 628A, TED 628B, TED 631A and TED 631B</i>
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Candidates must choose **one (1)** of the following areas of specialization:

▲ Specialization in Best Practices

Faculty Advisor: Lynne Anderson; (858) 642-8330; landerso@nu.edu

The Best Practices specialization instructs students in research-based Best Practices that accelerate student achievement. The program is based on 11 years of school-based research that turned around low achieving schools and accelerated achievement at all schools where the Best Practices were used. Students will learn how to implement effective teaching strategies that accelerate student achievement and engage students in 21st century learning. An interdisciplinary approach to learning will enable teachers to develop a systematic approach for teaching interdisciplinary vocabulary across the curriculum.

Teachers will learn how to use both textual and digital comprehension strategies, critical/creative 21st century questioning and 21st century problem solving. An emphasis will be placed on differentiated and targeted instruction, student engagement/motivation strategies, cooperative and other effective grouping patterns, and technological multimedia applications. All the Best Practice strategies will be tied to standards-based direct and indirect instruction.

Effective strategies for English language learners and other diverse learners are integrated throughout the four courses in Best Practices in Teaching. Along with learning the strategies listed above, candidates will be taught how to create multidisciplinary standards-based lesson plans using the structure of Teach, Practice and Apply.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Integrate Best Practices for standards-based instruction across content areas.
- Use Best Practices teaching strategies across the curriculum.
- Apply to their teaching the framework of Teach, Practice and Apply using Best Practice teaching strategies.
- Implement Best Practice teaching strategies for the development of vocabulary, math, reading comprehension, and interdisciplinary learning.
- Apply student engagement/motivational strategies.
- Integrate Best Practices in multimedia-interactive classroom instruction.
- Demonstrate a repertoire of differentiated instructional strategies.

Requirements for Specialization

(4 courses; 18 quarter units)

MAT 670	Theory Best Practice Teaching
MAT 671	Appl Best Practice Strat in CI

- MAT 674 Differentiated Instruction
 MAT 675 21st Century Multimedia & Tech

▲ Specialization in e-Teaching and Learning

Faculty Advisor: Thomas Reynolds; (858) 642-8358; treynold@nu.edu

The e-Teaching and Learning is designed to meet the growing need for quality online instructors in PK - 16, community colleges, and corporations. The specialization focuses on: learning and applying effective student-centered online pedagogical skills, developing online curriculum that adheres to the National Standards for Quality Online Teaching, and assessing online learning using multiple assessment strategies. Upon completion of this specialization, candidates will be prepared to effectively teach in the online learning environment.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Analyze professional standards, trends and issues in the online environment.
- Demonstrate the use of active teaching and assessment strategies for the online environment.
- Apply evidence-based best practices research in the online teaching environment.

Requirements for Specialization

(4 courses; 18 quarter units)

- ETL 680 Introduction to e-Teaching
 ETL 682 Active Teaching and Learning
 ETL 684 Differentiated Online Instruct
 ETL 686 Designing Instr Materials
Prerequisite: ETL 680, ETL 682 and ETL 684

▲ Specialization in Educational Technology

Faculty Advisor: Cynthia Sistik-Chandler; (858) 642-8322; cchandler@nu.edu

This specialization is designed for individuals wishing to develop their knowledge and skills for using technology in the educational setting.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Integrate interdisciplinary connection between evidence based technologies for multimedia instruction.
- Use teaching strategies to accommodate learners in an online or blended environment.
- Participate in online community building and web-based interactive activities.
- Assess the effectiveness and efficiency of multimedia courseware and internet resource for use in instruction and delivery system.
- Examine the critical issues involved in designing effective distance educational programs.
- Design web-based courses using web page design authoring tools.

Requirements for Specialization

(4 courses; 18 quarter units)

- EDT 605 Education Theory & Technology
 EDT 610 Teaching Online
 EDT 660 Multimedia & Interactive Tech.
 EDT 671 Curriculum for Online Learning
Prerequisite: EDT 605, EDT 610 and EDT 660

▲ Specialization in Teacher Leadership

Faculty Advisor: Sidney Castle; (858) 642-8363; scastle@nu.edu

This five-course specialization comes from the Advanced Learning Press' Center for Performance Assessment, which offers a unique master's degree program that provides teachers with the skills and theories to be leaders in their classrooms and schools. It is a collaborative effort with Advanced Learning Press, which already

offers a ten course master's degree in educational leadership. All the courses will be offered online. Similar to the National Board Specialization, the capstone is an alternative course to TED 670 or TED 690. The capstone course is MAT 655 Leadership Impact: Synthesis of Theory and Practice.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate an understanding of the principles of effective educational accountability.
- Demonstrate the ability to analyze and understand research on educational leadership.
- Demonstrate an understanding of how to lead learning communities and cross-cultural educational initiatives within school and classroom.
- Demonstrate the ability to build professional relationships and networks for instructional leadership.

Requirements for Specialization

(5 courses; 22.5 quarter units)

- MAT 651 Assessing Educational Leaders
 MAT 652 Leadership Accountability
 MAT 653 Motivational Leadership
 MAT 654 Seminar in Social Issues
 MAT 655 Leadership Impact Seminar

▲ Specialization in Teaching Mathematics

Faculty Advisor: Zhonghe Wu; (714) 429-5144; zwu@nu.edu

Designed to improve the quality of teaching mathematics in grades K-9, courses focus on the pedagogy of mathematics and the development of balanced instructional programs that meet the needs of today's diverse students. In order to be successful in this program, potential candidates should have basic mathematics knowledge and skills (equivalent to CSET multiple subject and Praxis II elementary education) or above.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Analyze current principles, state and national standards, trends and issues in teaching Mathematics in grades K-9.
- Demonstrate the ability to develop a balanced program of mathematics instruction that includes conceptual understanding, procedural fluency and problem solving in Algebra, Geometry, Statistics, Probability and Number Theory.
- Apply evidence-based best practices research in the delivery and evaluation of a balanced mathematics education program.

Requirements for Specialization

(4 courses; 18 quarter units)

- MAT 635 Contemporary Issues/Challenges
 MAT 636 Teaching Algebra/Number Theory
Prerequisite: MAT 635
 MAT 637 Teaching Geometry/Measurement
Prerequisite: MAT 635 and MAT 636
 MAT 638 Teaching Probability/Stats
Prerequisite: MAT 635, MAT 636 and MAT 637

▲ Specialization in US Education in a Global Context

Faculty Advisor: Peter Serdyukov; (760) 599-8789; pserdyuk@nu.edu

Courses are designed for K-12 teachers. With a focus on global education, content offered in this program will provide educators with advanced views on US school practices based on comparative analysis of international educational systems. Students will gain knowledge of issues affecting education and innovative approaches in teaching and learning that will be applied in contemporary school environments.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Analyze the interdependence among socio-economic, political, geographic and technological factors at both national and global levels and their impact on education and educational systems.
- Analyze the ways in which cultural, religious and linguistic factors affect countries' choices of educational systems and educational priorities.
- Evaluate various international educational theories and practices using research and personal experiences in order to make improvements to current school environments.
- Implement new knowledge of innovative international educational systems, educational theories and practices into practical recommendations for improving teaching and learning in US schools.
- Design effective organizational, technological or instructional applications to address challenges in the US professional educational environment.

Requirements for Specialization

(4 courses; 18 quarter units)

MAT 620	Multidimensional Education
MAT 621	Impact of Culture & Language <i>Prerequisite: MAT 620</i>
MAT 622	Comparative Ed Systems <i>Prerequisite: MAT 621</i>
MAT 623	Transformative Ed Practices <i>Prerequisite: MAT 622</i>

■ MASTER OF SCIENCE IN ADVANCED TEACHING PRACTICES

Faculty Advisor: Dee Fabry; (858) 642-8381; dfabry@nu.edu

The MS in Advanced Teaching Practices provides pathways to inspired teaching and learning. The program engages candidates in opportunities, based on Universal Design for Learning design theory, to gain skills, knowledge, and expertise to become more effective teachers and transformative change agents in education. From five specialization choices identified by practicing educators, candidates must select one of the Core Requirements Sequence and a Specialization; specialization courses may not duplicate the Core Sequence coursework. The two combined specializations with ATP 600, The Inspired Educator, and ATP 699, the Digital Portfolio Capstone, create an in-depth study for increasing competency as an INSPIRED educator. The evidence of professional educator growth is presented in a portfolio capstone.

The five specialization areas for focus include: Instructional Literacy, Assessment Literacy, Digital Literacy, National Board Certified Teacher Leadership, and Reading. Candidates develop a personal teaching growth plan that is grounded in both historical and current practices as well as professional ethics to create a pathway for continuous growth. The inquiry based approach to learning integrated throughout the program allows candidates to apply action research to design and implement exceptional experiences for diverse learners.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Create a personal INSPIRED educational philosophy that is grounded in historical/current practices and professional ethics to include a pathway for continuous growth.
- Integrate increasingly sophisticated instruction, assessment and digital learning skills for research, curriculum design and professional growth.
- Design exceptional learning experiences that promote social justice, and that include the principles of Universal Design for Learning.
- Apply research based knowledge and skills to create/transform effective, diverse learning environments.

Degree Requirements

To receive a Master of Science in Advanced Teaching Practices students must complete 45 quarter units of graduate work. ATP 600 and ATP 699 must be taken at National University. A total of 4.5 quarter units of graduate credit may be granted for equivalent graduate work completed, as it applies to this degree and if the units were not used in earning another advanced degree.

Requirements for Major

(10 courses; 45 quarter units)

ATP 600 Inspired Educator

Students must select **one (1)** core sequence and complete 18 quarter units as described.

Core Requirements

Sequence I—Advanced Instructional Literacy

(4 courses; 18 quarter units)

AIL 620	Learner Literacy <i>Prerequisite: ATP 600 with a minimum grade of B</i>
AIL 622	Organizing Learning <i>Prerequisite: AIL 620 with a minimum grade of B and ATP 600 with a minimum grade of B</i>
AIL 624	Expert Instruct Lit Approach <i>Prerequisite: ATP 600 with a minimum grade of B, AIL 620 with a minimum grade of B and AIL 622 with a minimum grade of B</i>
AIL 626	Instructional Literacy Port. <i>Prerequisite: AIL 624 with a minimum grade of B, AIL 622 with a minimum grade of B, AIL 620 with a minimum grade of B and ATP 600 with a minimum grade of B</i>

or

Core Requirements

Sequence II—Advanced Digital Literacy

(4 courses; 18 quarter units)

ADL 630	Instrctnl Dsgn for Dig Envrmt <i>Prerequisite: ATP 600</i>
ADL 632	Instrctnl Devmnt and Eval <i>Prerequisite: ATP 600 and ADL 630 with a minimum grade of B</i>
ADL 634	Online and Mobile Learning <i>Prerequisite: ATP 600, ADL 630 with a minimum grade of B and ADL 632 with a minimum grade of B</i>
ADL 636	Assmnt & Eval in Dig Classroom <i>Prerequisite: ADL 630 with a minimum grade of B, ATP 600, ADL 632 with a minimum grade of B and ADL 634 with a minimum grade of B</i>

or

Core Requirements

Sequence III—Advanced Assessment Literacy

(4 courses; 18 quarter units)

AAL 650	Purposeful Assessment <i>Prerequisite: ATP 600 with a minimum grade of B</i>
AAL 652	Creating Clear Lrng Trgt <i>Prerequisite: ATP 600 with a minimum grade of B and AAL 650 with a minimum grade of B</i>
AAL 654	Quality Assess for Stu Lrng <i>Prerequisite: ATP 600 with a minimum grade of B, AAL 650 with a minimum grade of B and AAL 652 with a minimum grade of B</i>
AAL 656	Assessment for Learning <i>Prerequisite: ATP 600 with a minimum grade of B, AAL 650 with a minimum grade of B, AAL 652 with a minimum grade of B and AAL 654 with a minimum grade of B</i>

Capstone Requirement

(1 course; 4.5 quarter units)

All students must complete the following capstone course.

ATP 699	Capstone/Portfolio <i>Prerequisite: Students must complete all major core and specialization courses prior to enrolling in the capstone course.</i>
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or

NBC 639*	Leadership Portfolio
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or

ARL 640C** Action Res for the Read Spec

* Only for students in the National Board Certified Teacher Leadership Specialization.

** Only for students in the Reading Specialization.

Candidates must choose **one (1)** of the following specializations, which was not completed as Core Requirement Sequence:

▲ Specialization in Advanced Assessment Literacy

Faculty Advisor: Dee Fabry; (858) 642-8381; dfabry@nu.edu

The MS in Advanced Teaching Practices Assessment Literacy Specialization is designed for educators to gain knowledge, skills, and experience in assessment literacy to:

- Use assessment to improve student learning and achievement
- To develop and serve as assessment leaders: coaches, student advocates, and change agents.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Create a personal assessment literacy philosophy that is grounded in research and professional ethics.
- Create clear learning targets in order to align quality assessments for learning.
- Evaluate assessments to determine appropriate implementation for student learning.
- Create a balanced assessment plan that reflects knowledge of assessment literacy and can be used by others to improve student learning and achievement based on the assessment standards, knowledge, and skills gained in this specialization to impact teaching and learning.

Requirements for Specialization

(4 courses; 18 quarter units)

AAL 650	Purposeful Assessment <i>Prerequisite: ATP 600 with a minimum grade of B</i>
AAL 652	Creating Clear Lrng Trgt <i>Prerequisite: ATP 600 with a minimum grade of B and AAL 650 with a minimum grade of B</i>
AAL 654	Quality Assess for Stu Lrng <i>Prerequisite: ATP 600 with a minimum grade of B, AAL 650 with a minimum grade of B and AAL 652 with a minimum grade of B</i>
AAL 656	Assessment for Learning <i>Prerequisite: ATP 600 with a minimum grade of B, AAL 650 with a minimum grade of B, AAL 652 with a minimum grade of B and AAL 654 with a minimum grade of B</i>

▲ Specialization in Advanced Digital Literacy

Faculty Advisor: Denise Tolbert; (714) 429-5126; dtolbert@nu.edu

The MS in Advanced Teaching Practices Digital Literacy Specialization is designed for educators to gain knowledge, skills, and experience in digital literacy to:

- Use technology to improve student learning and achievement
- To develop and serve as digital literacy leaders: coaches, student advocates, and change agents

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Analyze current classroom digital classroom practice in light of research and evidence-based instructional design for the digital classroom.
- Critique a variety of resources and appropriate uses for digital based educational software and tools to include games, websites, social media, virtual reality and Maker Spaces.

- Evaluate the impact of digital based educational software on student learning.
- Evaluate the strengths, weaknesses and challenges of designing and teaching for online environments and accommodating different mobile devices.
- Create a digital literacy evaluation plan, as appropriate to students, classroom, school, district and/or community.

Specialization Requirements

Students in this program will have a Bachelor's Degree and experience in teaching/training. Some students will have teaching credentials for Pre-K-12 schools, however a credential is not a requirement.

Requirements for Specialization

(4 courses; 18 quarter units)

ADL 630	Instrctnl Dsgn for Dig Envrmt <i>Prerequisite: ATP 600</i>
ADL 632	Instrctnl Devmnt and Eval <i>Prerequisite: ATP 600 and ADL 630 with a minimum grade of B</i>
ADL 634	Online and Mobile Learning <i>Prerequisite: ATP 600, ADL 630 with a minimum grade of B and ADL 632 with a minimum grade of B</i>
ADL 636	Assmnt & Eval in Dig Classroom <i>Prerequisite: ADL 630 with a minimum grade of B, ATP 600, ADL 632 with a minimum grade of B and ADL 634 with a minimum grade of B</i>

▲ Specialization in Advanced Instructional Literacy

Faculty Advisor: James Mbuva; (951) 515-7324; jmbuva@nu.edu

The MS in Advanced Teaching Practices Instructional Literacy Specialization is designed for educators to reflect on current practice to deepen awareness and understanding of the strengths and needs of diverse learners:

- To design instruction that supports learners in the development of deep understanding
- To develop and serve as instructional leaders: coaches, student advocates, and change agents

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Create an evidence-based personalized teaching growth plan that guides the candidate's path to being an inspired educator.
- Plan optimal learning environments that support individual and collaborative learning which foster self-reliance, positive social interaction, active engagement in learning, and the development of a community of learners.
- Evaluate a variety of research-based instructional approaches and tools of learning and assessment to determine appropriate alignments.
- Produce an instructional practice action research proposal that informs the candidate's personalized teaching growth plan.

Requirements for Specialization

(4 courses; 18 quarter units)

AIL 620	Learner Literacy <i>Prerequisite: ATP 600 with a minimum grade of B</i>
AIL 622	Organizing Learning <i>Prerequisite: AIL 620 with a minimum grade of B and ATP 600 with a minimum grade of B</i>
AIL 624	Expert Instruct Lit Approach <i>Prerequisite: ATP 600 with a minimum grade of B, AIL 620 with a minimum grade of B and AIL 622 with a minimum grade of B</i>
AIL 626	Instructional Literacy Port. <i>Prerequisite: AIL 624 with a minimum grade of B, AIL 622 with a minimum grade of B, AIL 620 with a minimum grade of B and ATP 600 with a minimum grade of B</i>

▲ Specialization in National Board Certified Teaching Leadership

Faculty Advisor: Donna Elder; (858) 642-8416; delder@nu.edu

The five-course NBCT sequence is designed to meet the needs of several groups of teachers:

- Those who want to improve their teaching and prepare themselves to achieve National Board Certification now or sometime during their career.
- Those who are active NBCT candidates and want to earn graduate level credit as they develop the required portfolio in response to NBPTS submission guidelines.
- Those who have achieved NBCT and want to earn graduate credit as they develop an NBCT Leadership Portfolio.
- New teachers who want to experience the NBCT portfolio process in advance of submitting for full candidacy to the NBPTS.

The NBCT Specialization engages teachers in the preparation and submission of the NBPTS portfolio in any one of 24 certificate areas (as defined by the NBPTS organization (nbpts.org)).

The Sanford College of Education and the National University NBPTS Professional Teaching Development Center (PTDC) provide the following online and on-site services, opportunities and program options for new, practicing, and accomplished educators:

- Support and Assistance for NBCT Candidates and School Districts.
- Access to Candidate Support Providers (CSPs) and NBCT Faculty.
- Holding National Board Certification meets requirements for clearing preliminary credentials.
- Master of Science in Advanced Teaching Practices, Master of Science in Instructional Leadership, Master's in Accomplished Collaborative Leadership.
- Teachers Leader and Professional Development Opportunities.
- Networking and Celebration of Accomplishments.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate the ability to focus on student learning through a systematic study and reflection of one's own teaching practices.
- Demonstrate continuous growth in effective instructional practices and leadership through evidence of contributions to purposefully formed collaborative learning communities.
- Integrate fairness, equity, and access in designing strategies to meet diverse student learning.
- Apply learning theories, methodologies, and assessments to manage, monitor, and engage student learning.
- Integrate information literacy skills to inform professional teaching practices and future instruction.

Requirements for Specialization

(4 courses; 18 quarter units)

NBC 680 Quality Teaching and Learning

or

NBCX 6001X NBCT

NBC 681 Membership in Learning Communi

NBC 682 Videotape Analysis

NBC 683 Student Work and Assessments

▲ Specialization in Reading and Literacy Added Authorization

Faculty Advisor: Marilyn Moore; (858) 642-8301; mmoore@nu.edu

This four-course sequence is designed to meet the needs of teachers who already have a valid teaching credential, have two-years full-time teaching experience and want to attain a specialty in assessing student reading capabilities and provide

appropriate reading instruction in response to those assessments (ARL 640C is the capstone course.)

Candidates in the Reading Specialization are required to upload assignments in the Reading Specialization Electronic Presentation Portfolio.

Completion of the reading specialization may qualify candidates for a state of California Added Authorization in Reading. Upon successful completion, the candidate should contact their credential program specialist for information about applying for the California Reading Certificate Added Authorization. All courses must be taken at National University. No coursework is accepted from another university for this program and no substitutions are allowed.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Examine the theories and research related to effective reading and language arts instruction.
- Analyze current research on elements of an effective culture of literacy at the classroom, school, district, and community levels.
- Analyze current, confirmed, reliable and replicable quantitative and qualitative research pertaining to language and literacy instruction.
- Design appropriate assessment, instruction, and differentiation in the field.
- Evaluate the culture of literacy at a classroom, grade or school level, and identify how it supports or impedes students literacy development.

Requirements for Specialization

(4 courses; 18 quarter units)

ARL 645 Dev. Fluency in Reading

ARL 646 Comprehension Strategies

ARL 647A Lang Arts Assess and Instruct I
Prerequisite: ARL 645 and ARL 646

ARL 647B Fld St: Lag Art Assess & In II
Prerequisite: ARL 645, ARL 646 and ARL 647A

■ MASTER OF SCIENCE APPLIED BEHAVIORAL ANALYSIS

Faculty Advisor: Donna Elder; (858) 642-8416; delder@nu.edu

Faculty Advisor: Dina Pacis; (858) 642-8351; dpacis@nu.edu

The program includes a six-course sequence in applied behavior analysis (ABA) that bridges applied behavior analysis in the school settings and community. ABA 607 is the sixth course in the ABA sequence; this course is optional, not a part of the master's degree requirements. The six-course ABA sequence is designed to prepare candidates for the certification examination sponsored by the Behavior Analyst Certification Board (BACB).

Upon successful completion of this six course sequence, the candidate will have met the BACB academic requirements for taking the Board Certified Behavior Analyst (BCBA) exam. Also, a candidate may receive a certificate of completion from National University. This is not professional certification by the BACB and does not entitle candidates to claim they are BCBA's upon completion. Also offered on a limited basis and under very specific conditions, is an Intensive Practicum, not part of the academic requirements for taking the BCBA exam. The Intensive Practicum is designed to meet BACB experiential requirements for taking the BCBA exam.

Information about becoming certified through the BACB can be found at www.bacb.com.

Required CBA Learning Module Subscription

Students are required to purchase a one year subscription to the CBA Learning Module Series from Behavior Development Solutions (BDS) at www.behavior-developmentalsolutions.com. Using someone else's account is not permissible. This program is an addition to the required textbook materials, and will be used throughout the program. The current cost of this program for a twelve month subscription is \$265. The CBA Learning Module Series will greatly improve your chances of passing the BCBA® and BCaBA® exams. Students will work on these modules during each class period, and between classes. There is a money-back guarantee from BDS if one uses the modules per BDS recommendations and does not pass the BCBA exam.

The six-course sequence in this program is designed to prepare candidates for acceptable behavior management techniques and strategies in a P-12 setting. Students will develop skills to assist them navigate through the halls of P-12 academic environments with a knowledge and understanding of special education law, rules and functions of school personnel, and behavioral consultation. Students will be required to develop, implement, analyze, and evaluate, behaviorally accepted methods for positive behavior change in a P-12 academic setting.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Integrate knowledge and skill in the identification of the function of the behavior and the development of an intervention addressing the function of the behavior.
- Integrate data-based decisions using behavioral analytic approaches to increase and decrease target behaviors.
- Examine special education law and its relevance with behavioral assessments and interventions.
- Engage in behavioral consultation in the school setting.
- Collaborate with school personnel to develop a Functional Behavioral Assessment and Behavior Intervention Plan.
- Investigate the concept of school culture and its impact on all stakeholders, internal and external.

Degree Requirements

To receive a Master of Science in Applied Behavior Analysis, students must complete at least 45 quarter units of graduate work. A total of 4.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree and if the units were not used in earning another advanced degree and provided the coursework was completed within the past 7 years. Course equivalence cannot be granted for life experience. Please refer to the graduate information section of the University catalog for admission and evaluation.

Core Requirements

(10 courses; 45 quarter units)

ABA 600	Basics of Behavior Analysis
ABA 601	Assessment in ABA <i>Prerequisite: ABA 600 with a minimum grade of B</i>
ABA 602	Processes of ABA <i>Prerequisite: ABA 601</i>
ABA 603	Applications of ABA <i>Prerequisite: ABA 602</i>
ABA 604	Advanced Applications <i>Prerequisite: ABA 603</i>
ABA 606	Ethics for Behavior Analysts
ABA 610	Role and Function of Schools
SPD 616	Law, Collaboration & Transition
ABA 612	Behavioral Consultation
ABA 611	Positive Behav Inter/Support

■ MASTER OF SCIENCE APPLIED SCHOOL LEADERSHIP WITH PRELIMINARY ADMINISTRATIVE SERVICES CREDENTIAL OPTION (IN PARTNERSHIP WITH PARTICIPATING COUNTY OFFICES OF EDUCATION)

Faculty Advisor: Glenn Sewell; (209) 475-1442; gsewell@nu.edu

This program is designed for students who are committed to improving education and who are interested in advancing their careers by becoming school site or district administrators. This program is offered in collaboration with County Offices of Education—"Leaders in Educational Administration Program" (L.E.A.P), which is comprised of six courses leading to the Preliminary Administrative Services Credential. Students accepted into the program receive full National University graduate credit for the six County Education Office Tier I courses. In addition, students are required to enroll in two additional National University Tier I core

courses, not including EDA 600 (Fieldwork in Educational Administration). The EDA 600 National University requirement is met through the completion of 75 hours of on-site administrative fieldwork embedded in the six County Office of Education courses. Students must also take an additional four required National University Master of Science in Educational Administration courses for the completion of the Masters of Science in Applied Leadership Degree.

For additional information on credential requirements, please see the Sanford College of Education Credential Information section of the catalog.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Develop a personal vision of education that includes reflection with colleagues and school stakeholders.
- Implement a shared vision that places student and adult learning at the center of instructional leadership.
- Establish high expectations and standards for the academic and social development of all students and adult stakeholders.
- Devise effective communication systems that support the implementation of the vision of the school community and the infusion of the vision in the instructional program.
- Create consensus among the diverse constituencies in the school and community.
- Critically analyze a topic related to educational leadership through the lens of a researcher.

Degree Requirements

To receive a Master of Science in Applied School Leadership in partnership with County Offices of Education, students must complete at least 45 quarter units of graduate work. A total of 4.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree and if the units were not used in earning another advanced degree.

Core Requirements

(8 courses; 36 quarter units)

EDA 631 (**), *	Shared Vision of Learning
EDA 632 (**), *	Teaching and Learning Culture
EDA 633 (**), *	Mgmt for Teaching/Learn
EDA 634 (**), *	Diverse Families/Communities
EDA 635 (**), *	Personal Ethics for Leadership
EDA 636 (**), *	Political and Social Influence
ILD 625	Educational Research
EDA 637	Action Research <i>Prerequisite: ILD 625</i>

(**) SCCOE Courses.

* Required for Preliminary Administrative Services Certificate/Credential.

Plus choose **two (2)** additional core courses from the following:

EDA 652	Visionary Leadership
EDA 653	Curriculum Leadership
EDA 654	Instructional Leadership
EDA 655	School Improvement Leadership
EDA 656	Professional Growth Leadership
EDA 657	Org/Systems Leadership
EDA 658	Community Leadership

Fieldwork is required and the requirement is met through the completion of 75 hours of supervised on-site administrative fieldwork embedded in the six SCCOE courses.

■ MASTER'S OF SCIENCE IN EDUCATIONAL ADMINISTRATION WITH PRELIMINARY ADMINISTRATIVE SERVICES CREDENTIAL OPTION (CA OPTION)

Faculty Advisor: David Kurth; (909) 806-3313; dkurth@nu.edu

Faculty Advisor: Rollin Nordgren; (858) 642-8144; rnordgren@nu.edu

This program is designed for students who are committed to improving education and who are interested in advancing their careers by becoming school site administrators. It can be completed with or without a preliminary credential option for those pursuing a career in the nonpublic education sector. For additional information on credential requirements, please see the Sanford College of Education Credential Information section of the catalog.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Analyze the process for creating, stewarding, and communicating a shared vision that includes school-wide goals for improving teaching and learning.
- Examine the role of the instructional leader in the context of the stewardship of effective instructional practices.
- Examine the role of the instructional leader in the context of curriculum development, implementation, and assessment.
- Analyze the collaborative, ongoing processes of data-based school growth plans.
- Critiques systems for the provision of professional growth opportunities for school teachers, staff, and administrators.
- Examine the complex Interaction of all of a school's systems to promote teaching and learning.
- Analyze ways in which a school can engage their communities to promote the shared vision.
- Examine a topic related to educational leadership through the lens of a researcher.

Degree Requirements

To receive a Master of Science in Educational Administration, students must complete at least 45 quarter units of graduate work. A total of 4.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree and if the units were not used in earning another advanced degree. Course equivalence cannot be granted for life experience.

To be successful in this program, it is highly recommended to take program coursework in order.

Core Requirements

(10 courses; 45 quarter units)

EDA 652	Visionary Leadership
EDA 600	Applications in Leadership
EDA 653	Curriculum Leadership
EDA 654	Instructional Leadership
EDA 655	School Improvement Leadership
EDA 656	Professional Growth Leadership
EDA 657	Org/Systems Leadership
EDA 658	Community Leadership
ILD 625	Educational Research
EDA 637	Action Research

Prerequisite: ILD 625

■ MASTER OF SCIENCE IN EDUCATIONAL COUNSELING WITH PPSC CREDENTIAL OPTION

Faculty Advisor: Sonia Rodriguez; (858) 642-8385; srodriguez@nu.edu

The Department of School Counseling and School Psychology offers a graduate degree leading to the Master of Science in Educational Counseling and a recommendation for a Pupil Personnel School Counseling Credential (PPSC). This program is aligned with national standards and prepares candidates for the position of

school counselor. Graduates of this program generally seek employment as school counselors in P-12 schools and employment in an institution of higher education.

Candidates enrolled in the degree and/or credential program are not awarded the master's degree until they have successfully completed all coursework, the action research project and the PRAXIS exam. All coursework must be completed prior to the PPSC credential recommendation. Course equivalence will not be granted for life experiences.

For additional information on credential requirements, please see the Sanford College of Education Credential Information section of the catalog.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Distinguish among major developmental theories (personality, social, physical, emotional, and cognitive development) and chronological stages of life-long human development and the impact of these stages on school behavior and learning.
- Differentiate relevant social and diversity concerns and crises of individuals and groups of students.
- Implement comprehensive guidance programs based on relevant data that has been developed and implemented by the student.
- Implement individual counseling skills and techniques to help students cope with personal and interpersonal problems appreciating the diversity of each student.
- Implement group counseling skills and techniques to help students cope with personal and interpersonal problems appreciating the diversity of each student.
- Integrate positive consultative and collaborative skills and techniques in communication with school staff, parents, and community agencies in order to support candidate academic, career, and personal/social success.
- Evaluate legal mandates affecting education and school counseling and apply appropriate legal and ethical standards and practices to specific counseling situations.
- Advocate academic success for all preK-16 students by employing appropriate standardized and non-standardized group and individual educational and psychological assessment data and data driven educational decisions/interventions.
- Integrate computer technology relevant to the tasks and role of a school counselor.
- Construct curriculum for diverse classrooms and classroom interventions strategies based on learning theory.
- Perform as professional school counselors and professional leaders reflecting the history and trends of the profession to enhance the field of school counseling.
- Propose career based programs and interventions based on career development theories, and the impact of career development on school behavior and learning.
- Interpret findings of social science research, developed and implemented by the student, to professional practice.

Degree Requirements

(19 courses; 81 quarter units)

To receive a Master of Science in Educational Counseling, students must complete at least 81 quarter units of graduate work. Credentialed teachers may waive the CED605 course. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree and if the units were not used in earning another advanced degree and provided the coursework was completed within the past 7 years. Course equivalence cannot be granted for life experience.

Program Prerequisites

(2 courses; 9 quarter units)

ECE 201 The Growing Child: Zero to 8

MTH 210 Probability and Statistics
Prerequisite: Accuplacer test placement evaluation or MTH 12A and MTH 12B

Note: Only CED 607 and prerequisites can be taken prior to admission.

Core Requirements

(15 courses; 64.5 quarter units)

CED 607 School Counseling Orientation
CED 600 Applied Child/Adol Development
Prerequisite: CED 607 or PED 504
CED 602 Societal Issues in the Schools
Prerequisite: CED 607
CED 605 Instructional Design
CED 606 Development and Evaluation
Prerequisite: CED 607
CED 610 Adv Coun Theories & Methods
Prerequisite: CED 600 or PED 667
CED 603 Multicultural Counseling
Prerequisite: CED 610
CED 611 Group Counseling
Prerequisite: CED 610
CED 631 School Counseling Practicum (1.5 quarter units)
CED 601 Consultation in the Schools
Prerequisite: CED 610
CED 612 Career & Academic Counseling
CED 613 Assessment for Ed Counselors
Prerequisite: CED 607 and Advancement to Candidacy
CED 614 Legal and Ethical Practices
Prerequisite: CED 607
ILD 625 Educational Research
CED 637 School Counseling Research
Prerequisite: ILD 625

Candidates are required to complete 100 hours of practicum prior to starting internship. These hours will be completed throughout CED coursework.

Internship Requirements for Master's Degree with PPSC Credential Students

(4 courses; 16.5 quarter units)

A minimum of 600 clock hours is required. The candidate will draft a plan with the Site Supervisor and University Supervisor, meet weekly with Site Supervisor for supervision, keep weekly logs of each 200 hours of internship, and submit logs to University Supervisor. No more than two sites at one time with no more than two Site Supervisors at one time. Includes two levels.

CED 620 Internship Seminar (3 quarter units)
Prerequisite: Students must have completed ten (10) courses, and must be enrolled in their internship and have permission of the faculty advisor.

Choose **three (3)** from the following:

CED 616 School Counseling Intern. I
Prerequisite: A record of a passing score on the Basic Skills Requirement (CBEST), completion of all program prerequisites, completion of ten (10) courses, 100 hours of practicum, have permission of faculty advisor and approval of internship site by Placement Specialist.
CED 617 School Counseling Intern. II
Prerequisite: A record of a passing score on the Basic Skills Requirement (CBEST), completion of all program prerequisites, completion of ten (10) courses, 100 hours of practicum, have permission of faculty advisor and approval of internship site by Placement Specialist.

CED 618 School Counseling Intern. III
Prerequisite: A record of a passing score on the Basic Skills Requirement (CBEST), completion of all program prerequisites, completion of ten (10) courses, 100 hours of practicum, have permission of faculty advisor and approval of internship site by Placement Specialist.

CED 619 Couns Practicum Comm College
Prerequisite: Completion of all program prerequisites, completion of ten (10) courses, 100 hours of practicum, have permission of faculty advisor and approval of internship site by Placement Specialist.

Candidates are expected to complete their internship either on a full time basis of 3 to 4 months (40 hours per week) or part time basis of a minimum of 8 hours per week.

Internship Requirements for Master's Degree Only Students

(4 courses; 16.5 quarter units)

For candidates that are only pursuing the MS degree in Educational Counseling (without the PPSC credential).

CED 619 Couns Practicum Comm College
Prerequisite: Completion of all program prerequisites, completion and approval of internship site by Placement Specialist.

or

CED 616 School Counseling Intern. I
Prerequisite: A record of a passing score on the Basic Skills Requirement (CBEST), completion of all program prerequisites, completion of ten (10) courses, 100 hours of practicum, have permission of faculty advisor and approval of internship site by Placement Specialist.

CED 620 Internship Seminar (3 quarter units)
Prerequisite: Students must have completed ten (10) courses, and must be enrolled in their internship and have permission of the faculty advisor.

Plus select **two (2)** courses from the following (other electives may be chosen in consultation with the Faculty Advisor by special permission):

TED 605 The Diverse Classroom
EDT 660 Multimedia & Interactive Tech.
EDA 656 Professional Growth Leadership
EDA 652 Visionary Leadership
EDA 640 Introduction to H.E. Admin.
EDA 648 Student Svcs & Enrollment Mgt
EDA 647 Curriculum & Instruction in HE
Prerequisite: EDA 640

Candidates are expected to complete their internship either on a full time basis or part time basis of a minimum of 8 hours per week.

■ MASTER OF SCIENCE IN EDUCATIONAL AND INSTRUCTIONAL TECHNOLOGY

Faculty Advisor: Everett Beckwith; (909) 806-3349; gbeckwith@nu.edu

The Master of Science in Educational and Instructional Technology is designed for students who want to participate in the paradigm changes that technology is precipitating in both education and training, as human learning moves from print and classroom-based instruction to digital media. The history and effectiveness of change processes and the role of technology in human learning are key components to the program.

Graduates will be prepared to enter education careers such as K-12 technology coordination, site administration, home school and virtual school instruction, and online instruction in higher education. Graduates will be prepared for the rapidly growing employment opportunities available to people skilled in applying emerging information and telecommunication technologies to solving instructional problems. These graduates will be capable of applying their knowledge and skills to any situation in which digital technologies hold the potential for improving

instruction—especially business, industry, and governmental agencies. This program emphasizes practical applications by offering extensive technical training in a variety of software. The program culminates with a final technology project that applies the theory and practice of educational and instructional technology.

Program Technical Requirements

Students are expected to possess a computer or to have access to a campus with a computer lab. Given the nature of educational and instructional technology, the off campus computer should have a high speed internet connection (T1 or DSL) and have at least 1.6 GHz of processing speed with 512 MB RAM. In addition students should have access to MS Office (Word, PowerPoint, Excel, and Internet Explorer), as well as Adobe Dreamweaver 8. Additional software may be required depending on courses selected. Finally, students must also have access to a computer headset with microphone for Adobe Connect for synchronous video enabled, web-based conferences.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Develop research skills and conduct an educational needs assessment using analysis of subject matter, job/task, audience and context.
- Apply learning theory, instructional theory, and interactive communication theory using various technology methods across disciplines to prepare students for lifelong learning.
- Apply interdisciplinary elements from technology, psychology, and computer assisted interactive communications.
- Construct an instructional module requiring students to use and display appropriate theories and methodologies to include literary and communicative skills.
- Present effective teaching methods for adult learners using available technologies.
- Develop the social, political, economic, and global implications of web-based instruction to include tools for group processes and collaboration.
- Demonstrate multimedia elements such as simulations, virtual worlds, and learning objects.
- Demonstrate professional ethics as well as cultural and global awareness to be responsible citizens in a diverse society to include how technology education may contribute to each.

Degree Requirements

To obtain a Master of Science in Educational and Instructional Technology students must complete 45 quarter units of graduate work. Where appropriate, students can transfer a maximum of 4.5 quarter units of graduate work completed at another regionally accredited institution to meet stated requirements in the program if the units were not used toward a conferred degree. Students should refer to the section on graduate admission requirements for specific information regarding application and evaluation.

Core Requirements

(10 courses; 45 quarter units)

EDT 600A	Technology Foundations
EDT 601	Instructional Design <i>Prerequisite: EDT 600A</i>
EDT 605	Education Theory & Technology
EDT 607	Media Based Learning Objects <i>Prerequisite: EDT 600A, EDT 601 and EDT 605</i>
EDT 609	Developing Online Courseware <i>Prerequisite: EDT 600A, EDT 601, EDT 605 and EDT 607</i>
EDT 613	Simulations & Virtual Reality <i>Recommended: Prior completion of: EDT 600A, EDT 601, EDT 605, EDT 607 and EDT 609</i>
EDT 631	Media and Instruction <i>Prerequisite: EDT 600A</i>
EDT 632	Technology and Leadership <i>Prerequisite: EDT 600A, EDT 601, EDT 605, EDT 607, EDT 609, EDT 631 and completion of all core requirements</i>

EDT 693 Instructional Eval. & Devl.
Prerequisite: EDT 600A, EDT 601, EDT 605, EDT 607, EDT 609, EDT 631, EDT 613 and EDT 632

EDT 695 Capstone Project
Prerequisite: EDT 693

■ MASTER OF SCIENCE IN HIGHER EDUCATION ADMINISTRATION

Faculty Advisor: Joseph Marron; (858) 642-8356; jmarron@nu.edu

The program is designed to provide candidates with the knowledge and skills necessary for leadership positions in institutions of higher education. Candidates will learn to apply sound educational theory, leadership and strategic management techniques in the planning, evaluation and implementation of instructional programs and student services. Candidates will learn strategies for managing and implementing change in the dynamic higher education environment. Developing and maintaining positive community relationships and addressing diverse community needs and interests will be addressed, along with financial management and case law pertinent to higher education.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Analyze sound educational philosophy, theory and practice to managing change, policy and governance, strategic planning and analysis, student services, and enrollment management in higher education.
- Appraise change strategies, including understanding complex human phenomena such as resistance and anxiety.
- Evaluate current higher education policy in the context of its possible impact on the future of colleges and universities.
- Examine the impact community relations have on institutions of higher learning.
- Interpret major legal issues that impact higher education today and will impact higher education in the future.
- Examine resource management in higher education settings.
- Analyze strategic planning and evaluation strategies and data in the context of student, programmatic assessment, and operational needs.
- Examine the impact Student Services and Enrollment Management have on institutions of higher learning.
- Critically analyze a topic related to higher education administration through the lens of a researcher.

Degree Requirements

To receive a Master of Science in Higher Education Administration, students must complete at least 45 quarter units of graduate work. A total of 4.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree and if the units were not used in earning another advanced degree and provided the coursework was completed within the past 7 years. Course equivalence cannot be granted for life experience. Please refer to the graduate information section of the University catalog for admission and evaluation.

Core Requirements

(10 courses; 45 quarter units)

EDA 640	Introduction to H.E. Admin.
EDA 641	Leading and Managing Change
EDA 642	Policy & Accountability
EDA 643	Community Development in HE
EDA 644	Higher Education Law/Politics
EDA 645	Managing Finances & Operations
EDA 646	Strategic Planning & Analysis
EDA 648	Student Svcs & Enrollment Mgt
EDA 649	Higher Education Research
EDA 694	Thesis <i>Prerequisite: EDA 649. Students must have written permission of lead faculty to enroll in the course.</i>

■ MASTER OF SCIENCE IN SCHOOL PSYCHOLOGY WITH PPSP CREDENTIAL

Faculty Advisor: Tricia Crosby-Cooper; (714) 429-5129; tcrosbycooper@nu.edu

The Department of Pupil Personnel Services-School Psychology offers a graduate degree leading to the Master of Science in School Psychology and a recommendation for a Pupil Personnel School Psychology credential (PPSP). Candidates cannot get a master's degree without a credential. This program is aligned with California Commission for Teacher Credentialing (CCTC) standards and prepares candidates in California for the position of school psychologist. Graduates of this program generally seek employment as a school psychologist in P-12 school districts and must hold a PPSP credential for public school employment.

Students taking courses online are advised that there is a program requirement for students to meet on 16 Saturdays onsite to engage in experiential, hands-on training for the 4 assessment courses: PED 671-674. No make-up sessions will be available for these Saturday sessions; students missing a session may be significantly delayed from completing the program.

Candidates enrolled in the degree and credential program are not awarded the master's degree until they have completed all coursework including practicum and internship and successful completion of the PRAXIS exam. Course equivalence cannot be granted for life experiences.

Applied Behavior Analysis Information

The program includes the five-course sequence in applied behavior analysis which is designed to prepare candidates for the certification examination sponsored by the Behavior Analyst Certification Board (BACB).

Upon successful completion of this five course sequence, the candidate will have the option to take and successfully complete the elective ABA 606 course and will have then met the BACB academic requirements for taking the Board Certified Behavior Analyst (BCBA) exam. Also, a candidate may receive a "certificate of completion" from National University. This is not professional certification by the BACB and does not entitle candidates to claim they are BCBA's upon completion.

ABA 607 is not required for the degree or credential, but can be taken to greatly reduce the number of internship hours required by the BACB (Behavior Analysts Certification Board) which is a national licensure for Advanced Behavioral Analysis.

Information about becoming certified through the BACB can be found at www.bacb.com.

Required CBA Learning Module Subscription

Students are required to purchase a one year subscription to the CBA Learning Module Series from Behavior Development Solutions (BDS) at www.behavior-development-solutions.com. Using someone else's account is not permissible. This program is an addition to the required textbook materials, and will be used throughout the program. The current cost of this program for a twelve month subscription is \$265. The CBA Learning Module Series will greatly improve your chances of passing the BCBA® and BCaBA® exams. Students will work on these modules during each class period, and between classes. There is a money-back guarantee from BDS if one uses the modules per BDS recommendations and does not pass the BCBA exam.

For additional information on credential requirements, please see the Sanford College of Education Credential Information section of the catalog.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Analyze consultative/collaborative relationships with school staff, parents, and community agencies in support of student success.
- Evaluate various methods of assessment in order to make data-based decisions.
- Analyze how systemic school approaches can affect student outcomes.
- Examine societal influences on academic and social behavior.
- Appraise principles related to prevention in the context of their ability to improve services provided to students.
- Examine strategies related to family systems that support student success.

- Evaluate strategies that mitigate individual differences, abilities, disabilities, and other diverse characteristics in order to enhance services for students.
- Compare and contrast current research methodologies used in school psychology and related fields.
- Conduct research using relevant design, statistics, measurements, data analysis, and program evaluation methods to improve student outcomes.
- Interpret the ethical, legal, and professional standards necessary to engage in sound decision making.
- Design a crisis intervention plan that includes responses that address both individual and school-wide emergency concerns.

Degree Requirements

To receive a Master of Science in School Psychology, students must complete at least 94.5 quarter units of graduate work. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree and if the units were not used in earning another advanced degree. Students are not awarded the master's degree until they have completed all graduate and credential coursework, including internship and research (PED637). Course equivalence cannot be granted for life experience. Students must complete all coursework with a GPA of 3.0 or better within seven years. Any courses taken more than seven years ago must be repeated.

Core Requirements

(21 courses, 94.5 quarter units)

Candidates are required to complete ALL 450 hours of practicum prior to starting their internship. Candidates must complete the practicum experience under the supervision of a credentialed and experienced (three years) school psychologist.

PED 603	School Psychology Orientation
PED 680	Roles, Issues and Ethics <i>Prerequisite: PED 603</i>
PED 665	Test and Measurements
PED 667	Developmental Psychopathology
CED 601	Consultation in the Schools <i>Prerequisite: CED 610</i>
CED 610	Adv Coun Theories & Methods <i>Prerequisite: CED 600 or PED 667</i>
ABA 600	Basics of Behavior Analysis
ABA 601	Assessment in ABA <i>Prerequisite: ABA 600 with a minimum grade of B</i>
ABA 602	Processes of ABA <i>Prerequisite: ABA 601</i>
ABA 603	Applications of ABA <i>Prerequisite: ABA 602</i>
ABA 604	Advanced Applications <i>Prerequisite: ABA 603</i>
PED 671	Cognitive Assessment <i>Prerequisite: PED 665 and PED 680</i>
PED 672	Psycho-Academic Assessment <i>Prerequisite: PED 671 with a minimum grade of B</i>
PED 673	Social/Emotional Assessment <i>Prerequisite: PED 672 with a minimum grade of B</i>
PED 678	Practicum in School Psychology <i>Prerequisite: PED 673, PED 671 and PED 672</i>
PED 674	Special Populations Assessment <i>Prerequisite: PED 673 with a minimum grade of B</i>
PED 625	Research Methods in Education <i>Prerequisite: PED 665 with a minimum grade of B</i>
PED 637	School Psychology Research <i>Prerequisite: PED 625</i>

- PED 685 Internship Seminar
Prerequisite: Students must have completed all program core requirements (except PED 625 and PED 637), 450 hours of practicum, eligible to be enrolled in the internship and have permission of the faculty advisor.
- PED 689 School Psych Internship I
Prerequisite: Students must have completed all program coursework, must be enrolled in their internship and have permission of the faculty advisor
- PED 690 School Psychology Intern II
Prerequisite: Students must have completed all program coursework, must be enrolled in their internship and have permission of the faculty advisor

Optional Electives

(2 courses, 9 quarter units)

ABA 606 Ethics for Behavior Analysts

or

ABA 607 ABA Intensive Practicum
Prerequisite: Permission of Program Lead Faculty

■ MASTER OF SCIENCE IN SPECIAL EDUCATION

Faculty Advisor: Myrtice Irish; (909) 919-7634; mirish@nu.edu

The Master of Science in Special Education is designed for educators and other professionals who want to gain knowledge and skills in working with students who have disabilities and other special needs. Students will learn about educational learning problems and teaching strategies to enhance the performance of students. The Program is aligned with the Education Specialist Authorizations and standards of the California Commission on Teacher Credentialing.

Students may obtain a California Teaching Credential in Special Education while completing their master's degree. Please see completion requirements under Education Specialist in the Sanford College of Education's Credential Programs section.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate competence in the application of research methods including critiquing and synthesizing current educational literature.
- Demonstrate appropriate standards of conduct; practice within legal and ethical parameters.
- Develop skills to become a change agent and advocate for exceptional individuals, including diverse learners.
- Demonstrate an understanding of federal and state laws, legislation and judicial decisions regarding exceptional individuals.
- Demonstrate competence in instructional design including adaptations required to assist diverse special education learners achieve the state standards for curriculum.
- Demonstrate competence in positive behavioral support.
- Demonstrate expertise in use of adaptive and augmentative technology.
- Demonstrate the knowledge, skills and dispositions to actively and creatively engage and support all students in learning.
- Strive to become a continuous learner, a scholar, a collaborative community service member and a responsible citizen.

Degree Requirements

(16-17 courses; 72-76.5 quarter units)

To receive a Master of Science in Special Education students must complete at least 72 quarter units of graduate work. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree and if the units were not used in earning another advanced degree. Course equivalence cannot be granted for life experience. Students must complete all coursework with a GPA of 3.0 or better within seven years. Any courses taken more than seven years ago must be repeated.

Core Requirements

(12 courses; 54 quarter units)

- TED 602 Educational Foundations
- SPD 604 Psychological Fdns of Educ.
- TED 606 Equity and Diversity
- SPD 608 Exceptionalities
- TED 621A Lang. Dev. Methods: Elem. Sch.
Prerequisite: SPD 604, SPD 608, TED 602, TED 606 and Pass CBEST and CSET
- or
- TED 623 Lang. Dev. Methods: Secondary
Prerequisite: TED 602, SPD 604, TED 606, SPD 608 and Pass CBEST and CSET
- TED 621B Reading/Lang. Arts Methods
Prerequisite: TED 621A
- SPD 614 Classroom and Behavior Mgmt
- SPD 616 Law, Collaboration & Transition
- SPD 622 Assessment
Prerequisite: TED 621B or equivalent, and Pass CBEST and CSET
- SPD 628 Teaching Reading/Lang Arts
Prerequisite: TED 621B or equivalent, and Pass CBEST and CSET
- SPD 695 Understanding Edu. Research
- SPD 696 Capstone Project
Prerequisite: SPD 695

Requirements for Specialization

(4-5 courses; 18-22.5 quarter units)

All students must choose **one (1)** specialization defined below:

▲ Specialization in Language and Academic Development

Faculty Advisor: Bonnie Plummer; (916) 855-4107; bplummer@nu.edu

The Language and Academic Development specialization prepares educators to address the language development needs of a large number of P-12 students with disabilities who have difficulty in the following areas: language development, social communication, school readiness skills, literacy development, and with academic competencies across the curriculum in listening, speaking, reading, writing as well as communication and language literacy skills.

Candidates completing this credential specialization are prepared to teach students with disabilities in classrooms and inclusive settings as teachers, co teachers and consultants. Candidates have the option of completing traditional student teaching or participating in an internship to fulfill the final clinical practice requirement.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Analyze the implications of the characteristics of students with language and academic development needs including academic competencies across the curriculum in listening, speaking, reading, writing and who demonstrate lack of communication and language literacy skills to access and benefit from academic instruction.
- Analyze students' language development across disabilities and the life span including typical and atypical language development, communication skills, social pragmatics as it relates to the acquisition of academic knowledge and skills.
- Differentiate between language disorders, disabilities, and language difference in order to identify and utilize current research based strategies, methods, and materials for the development of fluent reading in students across ages and across an array of environments, including speakers of English and English Language learners.
- Assess the impact of sensory deficits on the development and application of language, verbal and non-verbal communication abilities and needs in order to identify and implement effective intervention techniques for social communication and activities to engage students with communication disabilities in classroom and social activities.

- Utilize and interpret a variety of assessments for students with communication disabilities in order to collaborate with educators and parents to make educational decisions based on the data and apply instructional models and strategies that align with ongoing assessment results.
- Select and implement evidence-based curricula and instructional methods that are effective with students with language and communication disabilities including specially designed curricula and methods for language and literacy development, quantitative reasoning, and reading/language arts instruction to enable individuals to access the core curriculum.

Requirements for Specialization

(4 courses; 18 quarter units)

LAD 632	Speech & Language Development
LAD 633	Academic Language Assessment
LAD 634	Curriculum and Instruction
LAD 635	Intensive Lang. Intervention

▲ Specialization in Mild/Moderate

Faculty Advisor: Nilsa Thorsos; (310) 662-2140; nthorsos@nu.edu

The specialization in Mild/Moderate is designed for educators and other professionals who want to become knowledgeable about teaching strategies to enhance individuals with mild/moderate disabilities.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Analyze the implications of characteristics of students with M/M disabilities and autism for service delivery such as placement decisions, IEP development, and instruction.
- Evaluate a variety of appropriate assessments procedures and communicate results in order to use evidence based strategies and the core curriculum in the development of IEP goals and instructional plans for students with M/M disabilities and autism.
- Maintain appropriate educational environments and positive behavioral support to include the school-wide behavior support process for students with M/M disabilities and autism.
- Implement effective methods for teaching reading, speaking, listening, written language, and mathematics to ensure access to the general education curriculum across instructional settings for students with M/M disabilities and autism.
- Exhibit collaborative case management to coordinate the IEP process and address the legal and instructional requirements based on the individual needs of the student with M/M disabilities and autism.

Requirements for Specialization

(4 courses; 18 quarter units)

SPD 632	Charac/Instr Stds w/ M/M Disab
SPD 634	Assess of Std w/ M/M Disab
SPD 636	Teaching Math/Writing for M/M
SPD 638	Content Differentiation

▲ Specialization in Moderate/Severe

Faculty Advisor: Mary-Lynn Ferguson; (858) 642-8345; mferguson@nu.edu

The specialization in Moderate/Severe program meets the professional program specific standards required by CTC for credentials. Candidates will meet California Standards for the Teaching Profession and Teacher Performance Expectations.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Analyze the implications of the characteristics of students with Moderate/Severe/Profound disabilities for service delivery impacting assessments, IEP development, instruction, and program options.
- Analyze students' verbal and non-verbal communication abilities to develop needed augmentative, alternative or signed systems including assistive

technology, to enhance communication, social interaction, academic performance and skill development.

- Evaluate a variety of assessments and procedures to maximize students' participation in standards and evidence-based, academic/life skills/wellness curriculum within IEP goals and objectives across school/community settings.
- Establish and maintain educational environments based upon positive behavior support processes at the individual and school-wide levels.
- Analyze the movement, mobility, sensory, and specialized health care needs to access school and community to the fullest extent using appropriate techniques, procedures, materials, assistive technology, and adaptive equipment.
- Exhibit collaborative case management to coordinate the IEP process and the various transitions experienced by students with Moderate/Severe/Profound disabilities, while addressing the legal and instructional requirements of their IEPs.

Requirements for Specialization

(4 courses; 18 quarter units)

SPD 642	Academic Instruction M/S
SPD 644	Life Skills & Transitions M/S
SPD 646	PBS, Comm & Social Skills M/S
SPD 648	Medical & Asst Tech Issues M/S

CREDENTIAL PROGRAMS

■ CLEAR ADMINISTRATIVE SERVICES CREDENTIAL INDUCTION PROGRAM

Faculty Advisor: Wayne Padover; (818) 635-4634; wpadover@nu.edu

This program is to be developed from the Professional Administrative Services Credentials Standards adopted by California Commission for Teacher Credentialing (CTC) on February 13, 2014, which is an Administrator Induction Program (AIP) to support beginning school administrators in their administrative roles, to advance their knowledge and skills related to the California Professional Standards for Education Leaders (CPSEL), and to become effective school leaders and administrators that results in the success of all students. The program consists of four 4.5 qu courses spread over a two-year period as per Commission policy.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Facilitate the development and implementation of a shared vision of learning and growth of all students.
- Develop a collaborative culture of teaching and learning informed by professional standards and focused on student and professional growth.
- Manage the organization to cultivate a safe and productive learning and working environment.
- Collaborate with families and other stakeholders to address diverse student and community interests and mobilize community resources.
- Model professionalism, ethics, integrity, justice, and equity for faculty and staff.
- Influence political, social, economic, legal and cultural contexts affecting education to improve education policies and practices.

Credential Requirements

(4 courses; 18 quarter units)

EDA 610	Induction Seminar
EDA 611	Pro Development Seminar I <i>Prerequisite: EDA 610 with a minimum grade of S</i>
EDA 612	Pro Development Seminar II <i>Prerequisite: EDA 611 with a minimum grade of S</i>
EDA 613	Assessment Seminar <i>Prerequisite: EDA 612 with a minimum grade of S</i>

■ CLEAR EDUCATION SPECIALIST TEACHING CREDENTIAL

Faculty Advisor: Nanette Fritschmann; (714) 429-5178; nfritschmann@nu.edu

The Clear Education Specialist Teaching Credential Program is designed for educators who hold a Preliminary Education Specialist credential in M/M (Mild/Moderate) or M/S (Moderate Severe). The program is a continuation of professional development for Education Specialist teachers who wish to clear their Preliminary credential.

The program consists of four courses, one of which is an elective selected by the participating teacher. Participating teachers will develop an Individual Induction Plan (IIP) focused on the California Standards for the Teaching Profession (CSTP) and receive support from a district support provider. Teachers interested in completing the Clear Education Specialist program must be employed as a special education teacher while participating in the program.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate use of a variety of advanced evidence-based instructional strategies to engage and support all students. (CSTP 1; Clear Standard 5, 6, 6a, 6b)
- Develop and maintain effective equitable and inclusive learning environments appropriate for the supports for all students. (CSTP 2; Clear Standard 5, 6, 6a, 6b)
- Demonstrate knowledge and organization of subject matter, academic content standards and curriculum frameworks to ensure all students understanding. (CSTP 3; Clear Standard 5)
- Plan and develop instructional goals, adapt instructional plans and materials to meet the assessed learning needs of all students. (CSTP 4; Clear Standard 4, 5, 6, a, 6b)
- Use assessment data to develop and monitor goals, plan, differentiate and modify instruction for all students. (CSTP 5; Clear Standard 4, 5)
- Reflect on your teaching practice with DSP, using current evidence based research, legal issues, collaboration with families and other professionals in the context of current teaching assignment. (CSTP 6; Clear Standard 1, 2,3, 4,5,6, 7)

Candidates must possess a valid preliminary credential in M/M or M/S and be currently employed in special education classroom. The program consists of 3 program courses and one elective course selected from an approved list of specialization courses.

Credential Requirements

(4 courses; 18 units)

The program includes **three (3)** program specific courses and **one (1)** elective.

SPD 660 Clear Orientation Seminar
Prerequisite: California Preliminary Education Specialist Credential (M/M, or M/S) and a full-time teaching position in special education in a P-12 school or a pre-approved long term contracted substitute position.

SPD 661 Special Topics MM MS
Prerequisite: SPD 660

SPD 664 Clear Capstone
Prerequisite: SPD 660 and SPD 661 and the elective course must be completed prior to registering for SPD 664 Clear Capstone. A 3.0 grade point average is required to complete the program.

Program participant's select one course from the following electives depending on their teaching assignment or as specified in their IIP and approved by the site support provider and university supervisor.

SPD 642 Academic Instruction M/S

or

SPD 632 Charac/Instr Stds w/ M/M Disab

or

SPD 672 Intro to ECSE
Prerequisite: SPD 672 Individuals who hold a preliminary, Level I, professional clear, clear, Level II, or life special education teaching credential may take this course

or

EXC 658 Adv. Spc. Mild/Moderate

or

EXC 659 Adv. Spc. Moderate/Severe

For participating teachers interested in information on special populations and educational research choose from the following elective courses:

EXC 621 Intro Students w/Autism Spect

or

SPD 630 Tech for Teaching & Learning

or

SPD 695 Understanding Edu. Research

■ EARLY CHILDHOOD SPECIAL EDUCATION ADD-ON AUTHORIZATION

Faculty Advisor: Lucinda Kramer; (714) 429-5132; lkramer@nu.edu

The Early Childhood Special Education (ECSE) program includes the mild/moderate and moderate/severe disabilities and traumatic brain injury, and authorizes service to children ages birth to pre-kindergarten only.

This Added On Authorization in Early Childhood Special Education is available to individuals who hold a valid preliminary, Level I, professional clear, clear, Level II, or life special education teaching credential, and who complete a program through a Commission-approved program sponsor. The ECSE Added Authorization authorizes the holder to provide special education services in the area of mild/moderate or moderate/severe disabilities for student's ages birth to pre-K as determined by the local level special education assessment.

Completion of the Add-On Authorization extends special education teaching authorization from birth to Pre-K. It may also be added to Clear Credentials in Deaf and Hard-of-Hearing, Physical Impairments, and Visual Impairments. In addition, persons with Learning Handicapped or Severely Handicapped credentials may add this Add-On authorization. It is expected that the candidate has experience and access to early childhood special education programs serving young children with disabilities, birth to five, during the program.

Professionals in other fields, such as social work, nursing, behavioral intervention, and child development may also complete the course work for professional development units.

Note: SPD 678 ECSE Field Experience must be taken as the last course in the program. After successfully completing coursework and the ECSE Exit Exam candidates must meet with a Credential Program Specialist to complete and submit to the Commission on Teacher Credentialing application for the Add-On Authorization.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrates knowledge of developmental and learning characteristics, and evidence-based practices associated with young children (birth to Pre-K) with developmental delays, and all categories of disabilities.
- Demonstrates knowledge of family systems, the impact of child with disabilities on the family, engages in family-centered practices and partnerships in all components of early intervention and education for infants and young children with disabilities.
- Demonstrates skill in formal and informal assessment approaches that inform the development and implementation of evidence-based, developmentally appropriate, family supported interventions and reflect the impact of culture (including ELL), specific disabilities on learning, and the role of the interdisciplinary team.
- Document observations from birth to prekindergarten and in-depth field experiences in early childhood settings with families and children of

diverse backgrounds and young children who have a range of abilities including in-home service delivery, and inclusive DAP center based pre-school/pre-kindergarten programs

To receive the Early Childhood Special Education Add-On Authorization candidates are required to successfully complete all course work including field experiences and pass the ECSE Program Exit Exam.

Authorization Requirements

(4 courses; 18 quarter units)

- SPD 672 Intro to ECSE
Prerequisite: SPD 672 Individuals who hold a preliminary, Level I, professional clear, clear, Level II, or life special education teaching credential may take this course.
- SPD 674 Collaborative Partners
Prerequisite: ECSE Added-Authorization Candidates: Individuals who hold a valid preliminary, Level I, professional clear, clear, Level II, or life special education teaching credential may take this course.
- SPD 676 ECSE Assessment & Intervention
Prerequisite: Individuals who hold a preliminary, Level I, professional clear, clear, Level II, or life special education teaching credential may take this course.
- SPD 678 ECSE Field Experience
Prerequisite: SPD 672, SPD 674, SPD 676

■ PRELIMINARY ADMINISTRATIVE SERVICES CREDENTIAL (CA OPTION)

Faculty Advisor: Rollin Nordgen; (858) 642-8144; rnordgren@nu.edu

This program is designed for students who are committed to improving education and who want to advance their careers by becoming public school administrators. For additional information on credential requirements, please see the Sanford College of Education Credential Information section of the catalog.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Analyze the process for creating, stewarding, and communicating a shared vision that includes school-wide goals for improving teaching and learning.
- Examine the role of the instructional leader in the context of the stewardship of effective instructional practices.
- Examine the role of the instructional leader in the context of curriculum development, implementation, and assessment.
- Analyze the collaborative, ongoing processes of data-based school growth plans.
- Critique systems for the provision of professional growth opportunities for school teachers, staff, and administrators.
- Examine the complex Interaction of all of a school's systems to promote teaching and learning.
- Analyze ways in which a school can engage their communities to promote the shared vision.

Credential Requirements

(8 courses; 36 quarter units)

- EDA 600 Applications in Leadership
- EDA 652 Visionary Leadership
- EDA 653 Curriculum Leadership
- EDA 654 Instructional Leadership
- EDA 655 School Improvement Leadership
- EDA 656 Professional Growth Leadership
- EDA 657 Org/Systems Leadership
- EDA 658 Community Leadership

■ PRELIMINARY EDUCATION SPECIALIST AUTHORIZATION TEACHING CREDENTIAL

Faculty Advisor: Suzanne Evans; (858) 642-8438; sevans@nu.edu

The Preliminary Education Specialist Authorization Teaching Credential is designed to address both the Education Specialist Standards and the program specific standards, including the Teacher Performance Expectations and California Standards for the Teaching Profession.

For additional information on credential requirements, please see the Sanford College of Education Credential Information section of the catalog.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Integrate professional, legal, and ethical practices when instructing students with disabilities.
- Teach students who are diverse learners including those who are English language learners.
- Communicate effective case management and collaborative practices with parents, professionals, and other stake holders, in order to facilitate access to the core curriculum for students with disabilities.
- Assess students using a variety of standardized and non-standardized assessments in order to make appropriate educational decisions for students with disabilities.
- Develop evidence-based curriculum and instruction including the use of educational and assistive technology to provide access to the core standards for students with disabilities.
- Transition students between educational environments and programs into successful post school experiences.

To receive a California Preliminary Education Specialist: Mild/Moderate, Moderate/Severe, or Language and Academic Development teaching credential candidates are required to successfully complete core courses, specific program (advanced) courses, and a clinical practice path to supervised teaching (student teaching or internship).

Candidates choosing the Internship option to obtain the Preliminary Education Specialist: Mild/Moderate, Moderate/Severe, or Language and Academic Development teaching credential will need to meet the Internship Eligibility requirements.

The CTC mandates approved internship programs require a minimum of 120 hours of pre-service coursework prior to becoming the teacher of record. Forty clock hours are equal to 4.5 quarter units. These pre-service courses must be successfully completed prior to eligibility for completing the internship option.

Requirements for Credential

(19-21 courses; 81-90 quarter units)

Corequisites

(2 courses; 9 quarter units)

HEDX 2301X Intro Health Ed: K-12

EDX 6001X Computer Tech in Classroom

Core Requirements

(10 courses; 45 quarter units)

TED 602 Educational Foundations

SPD 604 Psychological Fdns of Educ.

TED 606 Equity and Diversity

SPD 608* Exceptionalities

TED 621A Lang. Dev. Methods: Elem. Sch.

Prerequisite: SPD 604, SPD 608, TED 602, TED 606 and Pass CBEST and CSET

or

TED 623 Lang. Dev. Methods: Secondary

Prerequisite: TED 602, SPD 604, TED 606, SPD 608 and Pass CBEST and CSET

TED 621B*	Reading/Lang. Arts Methods <i>Prerequisite: TED 621A</i>
SPD 614*	Classroom and Behavior Mgmt
SPD 616	Law, Collaboration & Transition
SPD 622	Assessment <i>Prerequisite: TED 621B or equivalent, and Pass CBEST and CSET</i>
SPD 628	Teaching Reading/Lang Arts <i>Prerequisite: TED 621B or equivalent, and Pass CBEST and CSET.</i>

* Internship Pre-Service course.

Students must also complete **one (1)** of the following specializations:

▲ Specialization in Language and Academic Development

Faculty Advisor: Bonnie Plummer; (916) 855-4107; bplummer@nu.edu

The Language and Academic Development specialization prepares educators to address the language development needs of a large number of P-12 students with disabilities who have difficulty in the following areas: language development, social communication, school readiness skills, literacy development, and with academic competencies across the curriculum in listening, speaking, reading, writing as well as communication and language literacy skills.

Candidates completing this credential specialization are prepared to teach students with disabilities in classrooms and inclusive settings as teachers, co teachers and consultants. Candidates have the option of completing a traditional student teaching or participating in an internship to fulfill the final clinical practice requirement.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Analyze the implications of the characteristics of students with language and academic development needs including academic competencies across the curriculum in listening, speaking, reading, writing and who demonstrate lack of communication and language literacy skills to access and benefit from academic instruction.
- Analyze student's language development across disabilities and the life span including typical and atypical language development, communication skills, social pragmatics as it relates to the acquisition of academic knowledge and skills.
- Differentiate between language disorders, disabilities, and language difference in order to identify and utilize current research based strategies, methods, and materials for the development of fluent reading in students across ages and across an array of environments, including speakers of English and English Language learners.
- Assess the impact of sensory deficits on the development and application of language, verbal and non-verbal communication abilities and needs in order to identify and implement effective intervention techniques for social communication and activities to engage students with communication disabilities in classroom and social activities.
- Utilize and interpret a variety of assessments for students with communication disabilities in order to collaborate with educators and parents to make educational decisions based on the data and apply instructional models and strategies that align with ongoing assessment results.
- Select and implement evidence-based curricula and instructional methods that are effective with students with language and communication disabilities including specially designed curricula and methods for language and literacy development, quantitative reasoning, and reading/language arts instruction to enable individuals to access the core curriculum.

Core Requirements

(4 courses; 18 quarter units)

LAD 632	Speech & Language Development
LAD 633	Academic Language Assessment
LAD 634	Curriculum and Instruction
LAD 635	Intensive Lang. Intervention

Clinical Practice Requirement

Students will need to choose from **one (1)** of the following options: Internship or Student Teaching.

Internship Option

(4 courses; 9 quarter units)

LAD 692A	Internship LAD <i>Prerequisite: SPD 608, SPD 614 and TED 621B with a minimum grade of B and Candidates must be admitted to university internship program.</i>
LAD 692B	Internship LAD <i>Prerequisite: SPD 608, SPD 614 and TED 621B and Candidates must be admitted to university internship program.</i>
SPD 698A	Internship Seminar (2.25 quarter units) <i>Prerequisite: SPD 608, SPD 614, TED 621B and Candidates must also complete all pre-requisite requirements for the internship credential as outlined by CTC.</i>
SPD 698B	Internship Seminar (2.25 quarter units) <i>Prerequisite: SPD 608, SPD 614, TED 621B and Candidates must also complete all pre-requisite requirements for the internship credential as outlined by CTC.</i>

Additional Requirement

This course may be required to fulfill internship hour requirements. It may be taken a maximum of eight times to complete internship hours. Does not grant graduate units towards graduate degree, however tuition is applied for each attempt.

LAD 692C	Internship Support LAD (2.25 quarter units) <i>Prerequisite: LAD 692B with a minimum grade of S</i>
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OR

Student Teaching Option

(4 courses; 13.5 quarter units)

LAD 682A	Student Teaching I
LAD 682B	Student Teaching II
SPD 688A	Clinical Practice Seminar (2.25 quarter units) <i>Corequisite: SPD 682A or SPD 684A or LAD 682A</i>
SPD 688B	Clinical Practice Seminar (2.25 quarter units) <i>Corequisite: SPD 682B or SPD 684B or LAD 682B</i>

Optional

(5-6 courses; 22.5-25.5 quarter units)

For the Multiple or Single Subject Credential Requirements, choose **one (1)** of the following options:

Multiple Subject Credential

(3 courses; 13.5 quarter units)

TED 635	Methods: History/SS-Heal-PE-Art <i>Prerequisite: TED 621A with a minimum grade of C</i>
TED 636	Methods: Mathematics-Science <i>Prerequisite: TED 621A with a minimum grade of C</i>
TED 626	Classroom Management <i>Prerequisite: TED 621A or TED 623</i>

OR

Single Subject Credential

(3 courses; 13.5 quarter units)

TED 632	Content Area Curriculum <i>Prerequisite: TED 623</i>
TED 633	Content Area Instruct-Assess <i>Prerequisite: TED 623 with a minimum grade of C</i>
TED 626	Classroom Management <i>Prerequisite: TED 621A or TED 623</i>

Choose from **one (1)** of the following options:

Student Teaching Option

(3 courses; 9 quarter units)

- TED 530A Student Teaching I
Corequisite: TED 531A
- TED 531A Student Teaching Seminar I (2.25 quarter units)
Corequisite: TED 530A
- TED 531B Student Teaching Seminar II (2.25 quarter units)
Prerequisite: TED 530A with a minimum grade of S and TED 531A with a minimum grade of S and Corequisite: TED 530B

OR

Internship Option

(5 courses; 18 quarter units)

- TED 610 Best Internship Practices
Prerequisite: Admission to the intern program, SPD 608
- TED 628A Internship Clinical Practice I
Corequisite: TED 610 and TED 631A
- TED 628B Internship Clinical Pract. II
Prerequisite: TED 628A, Corequisite: TED 631B
- TED 631A Internship Seminar I (2.25 quarter units)
Prerequisite: TED 610
- TED 631B Internship Seminar II (2.25 quarter units)
Prerequisite: TED 628A and TED 631A, Corequisite: TED 628B

Additional Requirement

This course may be required to fulfill internship hour requirements. It may be taken a maximum of eight times to complete internship hours. Does not grant graduate units towards graduate degree, however tuition is applied for each attempt.

- TED 628C Clinical Practice III (2.25 quarter units)
Prerequisite: TED 628A, TED 628B, TED 631A and TED 631B

▲ Specialization in Mild/Moderate

Faculty Advisor: Nilsa Thorsos; (310) 662-2140; nthorsos@nu.edu

The specialization in Mild/Moderate is designed for educators and other professionals who want to become knowledgeable about teaching strategies to enhance individuals with mild/moderate disabilities.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Analyze the implications of characteristics of students with M/M disabilities and autism for service delivery such as placement decisions, IEP development, and instruction.
- Evaluate a variety of appropriate assessments procedures and communicate results in order to use evidence based strategies and the core curriculum in the development of IEP goals and instructional plans for students with M/M disabilities and autism.
- Maintain appropriate educational environments and positive behavioral support to include the school-wide behavior support process for students with M/M disabilities and autism.
- Implement effective methods for teaching reading, speaking, listening, written language, and mathematics to ensure access to the general education curriculum across instructional settings for students with M/M disabilities and autism.
- Exhibit collaborative case management to coordinate the IEP process and address the legal and instructional requirements based on the individual needs of the student with M/M disabilities and autism.

Core Requirements

(4 courses; 18 quarter units)

- SPD 632 Charac/Instr Stds w/ M/M Disab
- SPD 634 Assess of Std w/ M/M Disab

- SPD 636 Teaching Math/Writing for M/M
- SPD 638 Content Differentiation

Clinical Practice Requirements

Students will need to choose from **one (1)** of the following options: Internship or Student Teaching.

Internship Option

(4 courses; 13.5 quarter units)

- SPD 692A Internship M/M
Prerequisite: SPD 608, SPD 614, TED 621B and Candidates must be admitted to the University internship program.
- SPD 692B Internship M/M
Prerequisite: SPD 692A
- SPD 698A Internship Seminar (2.25 quarter units)
Prerequisite: SPD 608, SPD 614, TED 621B and Candidates must also complete all pre-requisite requirements for the internship credential as outlined by CTC.
- SPD 698B Internship Seminar (2.25 quarter units)
Prerequisite: SPD 608, SPD 614, TED 621B and Candidates must also complete all pre-requisite requirements for the internship credential as outlined by CTC.

Additional Requirement

This course may be required to fulfill internship hour requirements. It may be taken a maximum of eight times to complete internship hours. Does not grant graduate units towards graduate degree, however tuition is applied for each attempt.

- SPD 692C Internship Support (2.25 quarter units)
Prerequisite: SPD 692B with a minimum grade of S

OR

Student Teaching Option

(4 courses; 13.5 quarter units)

- SPD 682A Student Teaching M/M
Corequisite: SPD 688A
- SPD 682B Student Teaching M/M
Corequisite: SPD 688B
- SPD 688A Clinical Practice Seminar (2.25 quarter units)
Corequisite: SPD 682A or SPD 684A or LAD 682A
- SPD 688B Clinical Practice Seminar (2.25 quarter units)
Corequisite: SPD 682B or SPD 684B or LAD 682B

Optional

(6-8 courses; 22.5-31.5 quarter units)

For the Multiple or Single Subject Credential Requirements, choose **one (1)** of the following options:

Multiple Subject Credential

(3 courses; 13.5 quarter units)

- TED 635 Methods: History/SS-Heal-PE-Art
Prerequisite: TED 621A with a minimum grade of C
- TED 636 Methods: Mathematics-Science
Prerequisite: TED 621A with a minimum grade of C
- TED 626 Classroom Management
Prerequisite: TED 621A or TED 623

OR

Single Subject Credential

(3 courses; 13.5 quarter units)

- TED 632 Content Area Curriculum
Prerequisite: TED 623
- TED 633 Content Area Instruct-Assess
Prerequisite: TED 623 with a minimum grade of C

TED 626 Classroom Management
Prerequisite: TED 621A or TED 623

AND

Choose from **one (1)** of the following options:

Student Teaching Option

(3 courses; 9 quarter units)

- TED 530A Student Teaching I
Corequisite: TED 531A
- TED 531A Student Teaching Seminar I (2.25 quarter units)
Corequisite: TED 530A
- TED 531B Student Teaching Seminar II (2.25 quarter units)
Prerequisite: TED 530A with a minimum grade of S and TED 531A with a minimum grade of S and Corequisite: TED 530B

OR

Internship Option

(5 courses; 18 quarter units)

- TED 610 Best Internship Practices
Prerequisite: Admission to the intern program, SPD 608
- TED 628A Internship Clinical Practice I
Corequisite: TED 610 and TED 631A
- TED 628B Internship Clinical Pract. II
Prerequisite: TED 628A, Corequisite: TED 631B
- TED 631A Internship Seminar I (2.25 quarter units)
Prerequisite: TED 610
- TED 631B Internship Seminar II (2.25 quarter units)
Prerequisite: TED 628A and TED631A, Corequisite: TED 628B

Additional Requirement

This course may be required to fulfill internship hour requirements. It may be taken a maximum of eight times to complete internship hours. Does not grant graduate units towards graduate degree, however tuition is applied for each attempt.

- TED 628C Clinical Practice III (2.25 quarter units)
Prerequisite: TED 628A, TED 628B, TED 631A and TED 631B

▲ Specialization in Moderate/Severe

Faculty Advisor: Mary-Lynn Ferguson; (858) 642-8345; mferguson@nu.edu

The specialization in Moderate/Severe program meets the professional program specific standards required by CTC for credentials. Candidates will meet California Standards for the Teaching Profession and Teacher Performance Expectations.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Analyze the implications of the characteristics of students with Moderate/Severe/Profound disabilities for service delivery impacting assessments, IEP development, instruction, and program options.
- Analyze student's verbal and non-verbal communication abilities to develop needed augmentative, alternative or signed systems including assistive technology, to enhance communication, social interaction, academic performance and skill development.
- Evaluate a variety of assessments and procedures to maximize student's participation in standards and evidence-based, academic/life skills/wellness curriculum within IEP goals and objectives across school/community settings.
- Establish and maintain educational environments based upon positive behavior support processes at the individual and school-wide levels.
- Analyze the movement, mobility, sensory, and specialized health care needs to access school and community to the fullest extent using appropriate techniques, procedures, materials, assistive technology, and adaptive equipment.

- Exhibit collaborative case management to coordinate the IEP process and the various transitions experienced by students with Moderate/Severe/Profound disabilities, while addressing the legal and instructional requirements of their IEPs.

Core Requirements

(4 courses; 18 quarter units)

- SPD 642 Academic Instruction M/S
- SPD 644 Life Skills & Transitions M/S
- SPD 646 PBS, Comm & Social Skills M/S
- SPD 648 Medical & Asst Tech Issues M/S

Clinical Practice Requirements

Students will need to choose from **one (1)** of the following options: Internship or Student Teaching.

Internship Option

(4 courses; 13.5 quarter units)

- SPD 694A Internship M/S
Prerequisite: SPD 608, SPD 614, TED 621B and Candidates must be admitted to the University internship program.
- SPD 694B Internship M/S
Prerequisite: SPD 694A
- SPD 698A Internship Seminar (2.25 quarter units)
Prerequisite: SPD 608, SPD 614, TED 621B and Candidates must also complete all pre-requisite requirements for the internship credential as outlined by CTC.
- SPD 698B Internship Seminar (2.25 quarter units)
Prerequisite: SPD 608, SPD 614, TED 621B and Candidates must also complete all pre-requisite requirements for the internship credential as outlined by CTC.

Additional Requirement

This course may be required to fulfill internship hour requirements. It may be taken a maximum of eight times to complete internship hours. Does not grant graduate units towards graduate degree, however tuition is applied for each attempt.

- SPD 694C Internship Support M/S (2.25 quarter units)
Prerequisite: SPD 694B with a minimum grade of S

OR

Student Teaching Option

(4 courses; 13.5 quarter units)

- SPD 684A Student Teaching M/S
Corequisite: SPD 688A
- SPD 684B Student Teaching M/S
Corequisite: SPD 688B
- SPD 688A Clinical Practice Seminar (2.25 quarter units)
Corequisite: SPD 682A or SPD 684A or LAD 682A
- SPD 688B Clinical Practice Seminar (2.25 quarter units)
Corequisite: SPD 682B or SPD 684B or LAD 682B

Optional

(6-8 courses; 22.5-31.5 quarter units)

For the Multiple or Single Subject Credential Requirements, choose **one (1)** of the following options:

Multiple Subject Credential

(3 courses; 13.5 quarter units)

- TED 635 Methods: History/SS-Heal-PE-Art
Prerequisite: TED 621A with a minimum grade of C
- TED 636 Methods: Mathematics-Science
Prerequisite: TED 621A with a minimum grade of C
- TED 626 Classroom Management
Prerequisite: TED 621A or TED 623

OR

Single Subject Credential

(3 courses; 13.5 quarter units)

- TED 632 Content Area Curriculum
Prerequisite: TED 623
- TED 633 Content Area Instruct-Assess
Prerequisite: TED 623 with a minimum grade of C
- TED 626 Classroom Management
Prerequisite: TED 623, or TED 621A

AND

Choose from **one (1)** of the following options:

Student Teaching Option

(3 courses; 9 quarter units)

- TED 530A Student Teaching I
Corequisite: TED 531A
- TED 531A Student Teaching Seminar I (2.25 quarter units)
Corequisite: TED 530A
- TED 531B Student Teaching Seminar II (2.25 quarter units)
Prerequisite: TED 530A with a minimum grade of S and TED 531A with a minimum grade of S, Corequisite: TED 530B

OR

Internship Option

(5 courses; 18 quarter units)

- TED 610 Best Internship Practices
Prerequisite: Admission to the intern program, SPD 608
- TED 628A Internship Clinical Practice I
Corequisite: TED 610 and TED 631A
- TED 628B Internship Clinical Pract. II
Prerequisite: TED 628A, Corequisite: TED 631B
- TED 631A Internship Seminar I (2.25 quarter units)
Prerequisite: TED 610
- TED 631B Internship Seminar II (2.25 quarter units)
Prerequisite: TED 628A and TED 631A, Corequisite: TED 628B

Additional Requirement

This course may be required to fulfill internship hour requirements. It may be taken a maximum of eight times to complete internship hours. Does not grant graduate units towards graduate degree, however tuition is applied for each attempt.

- TED 628C Clinical Practice III (2.25 quarter units)
Prerequisite: TED 628A, TED 628B, TED 631A and TED 631B

■ PRELIMINARY MULTIPLE SUBJECTS TEACHING CREDENTIAL PROGRAM WITH INTERNSHIP OPTION (CALIFORNIA)

Faculty Advisor: Clara Amador-Lankster; (714) 965-0280; camadorl@nu.edu

The California Preliminary Multiple Subjects Teaching Credential with Internship Option is designed for candidates dedicated to instructional leadership in the K-6 settings. Courses meet the California Commission on Teacher Credentialing (CTC) requirements for a Preliminary Multiple Subject teaching credential. Candidates are required to successfully complete Core courses, multiple single subject's methods' area, and a clinical practice path (student teaching or internship).

*** Please Note:** Students need to satisfy/pass the Basic Skills Requirement (e.g., CBEST) and Subject Matter Competency Requirement (e.g., CSET) early (prior to Credential Area Methods coursework) into their programs to avoid interruptions to program progress and/or financial aid arrangements.

For additional information on credential requirements, please see the Sanford College of Education Credential Information section of the catalog.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Integrate knowledge and abilities in making subject matter comprehensible for all P-12 learners, including those with diverse learning needs.
- Integrate knowledge and abilities in assessing all P-12 learners, including those with diverse learning needs.
- Integrate knowledge and abilities in engaging/supporting all P-12 learners, including those with diverse learning needs.
- Integrate knowledge and abilities in designing/planning learning experiences for all P-12 learners, including those with diverse learning needs.
- Integrate knowledge and abilities in creating/maintaining effective learning environments for all P-12 learners, including those with diverse learning needs.
- Integrate knowledge and abilities in being a legal, ethical, and professional educator for all P-12 learners, including those with diverse learning needs.

To receive a California Preliminary Multiple Subjects Teaching Credential, candidates must complete at least 45 quarter units of graduate work, with 2 co-requisite courses, such that, 49.5 graduate units must be completed.

Candidates pursuing the Internship option to obtain a Preliminary Multiple Subject teaching credential will need to meet the Internship Eligibility requirements as outlined in the Credential Information section of the catalog.

The Commission on Teacher Credentialing (CTC) mandates all approved internship programs require a minimum of 120 hours of pre-service coursework (TED 621A, TED 621B, TED 626) prior to becoming eligible for the Internship Option. The CA Education Code stipulates that a minimum of 144 hours of support and supervision must be provided to the candidate each year of intern employment and documented. Interns without a valid English Learner (EL) Authorization from CTC will be required to receive an additional 45 hours of EL preparation support each year of intern employment (Total 189 hours).

This Internship Option requires the successful completion of the internship clinical practice experience (minimum 1 year). In the event that all program requirements have not been met during the first year and intern employment continues during the second year, National University must provide additional ongoing support and supervision. All candidates holding a valid University Internship Credential will be required to be continuously enrolled in clinical practice support and supervision (TED 628A, TED 628B or TED 628C).

Interns in the Early Completion Option (ECO) route are still required to receive the general support and supervision be provided to all interns while they are serving on an Intern credential.

Credential Requirements

(13-14 courses; 54-58.5 quarter units)

Corequisites

(2 courses; 9 quarter units)

- HEDX 2301X Intro Health Ed: K-12
EDX 6001X Computer Tech in Classroom

Core Requirements

(5 courses; 22.5 quarter units)

- TED 602 Educational Foundations
SPD 604 Psychological Fdns of Educ.
TED 606 Equity and Diversity
SPD 608 Exceptionalities
TED 626* Classroom Management
Prerequisite: TED 621A or TED 623

* Internship Pre-Service course.

Teaching Credential Area: Multiple Subject Methods

(4 courses; 18 quarter units)

Multiple Subject

- TED 621A* Lang. Dev. Methods: Elem. Sch.
Prerequisite: SPD 604, SPD 608, TED 602, TED 606 and Pass CBEST and CSET
- TED 621B* Reading/Lang. Arts Methods
Prerequisite: TED 621A
- TED 635 Methods: History/SS-Heal-PE-Art
Prerequisite: TED 621A with a minimum grade of C
- TED 636 Methods: Mathematics-Science
Prerequisite: TED 621A with a minimum grade of C

* Internship Pre-Service course.

Clinical Practice Path: Student Teaching or Internship

(Student Teaching—4 courses; 13.5 quarter units or
Internship—5 courses; 18 quarter units)

The clinical practice (K12 classroom) experience courses (TED 530A, TED 530B, TED 628A, and TED 628B) do not grant graduate credit.

STUDENT TEACHING will be arranged by the university for candidates who have completed all program coursework and met all program and state requirements. Student Teaching is unpaid and minimum 80 instructional days in the PK-12 classrooms.

Student Teaching

- TED 530A Student Teaching I
Corequisite: TED 531A
- TED 530B Student Teaching II
Prerequisite: TED 530A, Corequisite: TED 531B
- TED 531A Student Teaching Seminar I (2.25 quarter units)
Corequisite: TED 530A
- TED 531B Student Teaching Seminar II (2.25 quarter units)
Prerequisite: TED 530A with a minimum grade of S and TED 531A with a minimum grade of S and Corequisite: TED 530B

or

INTERNSHIPS will result through an offer of employment from a CA public school in partnership with National University. Intern placements will be required to align to the credential sought in compliance with the Commission on Teacher Credentialing. Interns need to be in good standing with both the employer and National University for the duration of the active Internship Teaching Credential. Internship Clinical Practice is paid and is one year long while the candidate holds employment as a teacher of record in a public school.

Internship

- TED 610 Best Internship Practices
Prerequisite: Admission to the intern program, SPD 608
- TED 628A Internship Clinical Practice I
Corequisite: TED 610 and TED 631A
- TED 628B Internship Clinical Pract. II
Prerequisite: TED 628A, Corequisite: TED 631B
- TED 631A Internship Seminar I (2.25 quarter units)
Prerequisite: TED 610
- TED 631B Internship Seminar II (2.25 quarter units)
Prerequisite: TED 628A and TED 631A, Corequisite: TED 628B

Additional Requirement

This course may be required to fulfill internship hour requirements. It may be taken a maximum of eight times to complete internship hours. Does not grant graduate units towards graduate degree, however tuition is applied for each attempt.

- TED 628C Clinical Practice III (2.25 quarter units)
Prerequisite: TED 628A, TED 628B, TED 631A and TED 631B

PRELIMINARY SINGLE SUBJECTS TEACHING CREDENTIAL WITH INTERNSHIP OPTION (CALIFORNIA)

Faculty Advisor: Clara Amador-Lankster; (714) 965-0280; camadorl@nu.edu

The California Single Subjects Teaching Credential with Internship Option is designed for candidates dedicated to instructional leadership in the P-12 settings. Courses meet the California Commission on Teacher Credentialing (CTC) requirements for a Preliminary Single Subject teaching credential. Candidates are required to successfully complete Core courses, single subject methods' area, and a clinical practice path (student teaching or internship).

***Please Note:** Students need to satisfy/pass the Basic Skills Requirement (e.g., CBEST) and Subject Matter Competency Requirement (e.g., CSET) early (prior to Credential Area Methods coursework) into their programs to avoid interruptions to program progress and/or financial aid arrangements.

For additional information on credential requirements, please see the Sanford College of Education Credential Information section of the catalog.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Integrate knowledge and abilities in making subject matter comprehensible for all P-12 learners, including those with diverse learning needs.
- Integrate knowledge and abilities in assessing all P-12 learners, including those with diverse learning needs.
- Integrate knowledge and abilities in engaging/supporting all P-12 learners, including those with diverse learning needs.
- Integrate knowledge and abilities in designing/planning learning experiences for all P-12 learners, including those with diverse learning needs.
- Integrate knowledge and abilities in creating/maintaining effective learning environments for all P-12 learners, including those with diverse learning needs.
- Integrate knowledge and abilities in being a legal, ethical, and professional educator for all P-12 learners, including those with diverse learning needs.

To receive a California Preliminary Single Subjects Teaching Credential, candidates must complete at least 45 quarter units of graduate work, with 2 co-requisite courses, such that, 49.5 graduate units must be completed.

Candidates pursuing the Internship option to obtain a Preliminary Single Subject teaching credential will need to meet the Internship Eligibility requirements as outlined in the Credential Information section of the catalog. The Commission on Teacher Credentialing (CTC) mandates all approved internship programs require a minimum of 120 hours of pre-service coursework (TED 623, TED 634, TED 626) prior to becoming eligible for the Internship Option.

The CA Education Code stipulates a minimum of 144 hours of support and supervision must be provided to the candidate each year of intern employment and documented. Interns without a valid English Learner (EL) Authorization from CTC will be required to receive an additional 45 hours of EL preparation support each year of intern employment (Total 189 hours).

This Internship Option requires the successful completion of the internship clinical practice experience (minimum 1 year). In the event, that all program requirements have not been met during the first year and intern employment continues during the second year, National University must provide additional ongoing support and supervision. All candidates holding a valid University Internship Credential will be required to be continuously enrolled in clinical practice support and supervision (TED 628A, TED 628B or TED 628C).

Interns in the Early Completion Option (ECO) route are still required to receive the general support and supervision provided to all interns while they are serving on an Intern credential.

Candidates choosing the Internship option to obtain the Preliminary Single Subject teaching credential will need to meet the Internship Eligibility requirements.

The CTC mandates that all approved internship programs require a minimum of 120 hours of pre-service coursework prior to becoming the teacher of record. Forty clock hours are equal to 4.5 quarter units. These pre-service courses must be successfully completed prior to eligibility for completing the internship option.

Credential Requirements

(13-14 courses; 54-58.5 quarter units)

Corequisites

(2 courses; 9 quarter units)

HEDX 2301X Intro Health Ed: K-12

EDX 6001X Computer Tech in Classroom

Core Requirements

(5 courses; 22.5 quarter units)

TED 602 Educational Foundations

SPD 604 Psychological Fdns of Educ.

TED 606 Equity and Diversity

SPD 608 Exceptionalities

TED 626* Classroom Management

Prerequisite: TED 621A or TED 623

* Internship Pre-Service course.

Teaching Credential Area: Single Subject Methods

(4 courses; 18 quarter units)

Single Subject

TED 623* Lang. Dev. Methods: Secondary

Prerequisite: TED 602, SPD 604, TED 606, SPD 608 and Pass CBEST and CSET

TED 632 Content Area Curriculum

Prerequisite: TED 623

TED 633 Content Area Instruct-Assess

Prerequisite: TED 623 with a minimum grade of C

TED 634* Content Area Literacy

Prerequisite: TED 623

* Internship Pre-Service course.

Clinical Practice Path: Student Teaching or Internship

(Student Teaching—4 courses; 13.5 quarter units or

Internship—5 courses; 1 quarter units)

The clinical practice (K12 classroom) experience courses (TED 530A, TED 530B, TED 628A and TED 628B) do not grant graduate credit.

STUDENT TEACHING will be arranged by the university for candidates who have completed all program coursework and met all program and state requirements. Student Teaching is unpaid and minimum 80 instructional days in the PK-12 classrooms.

Student Teaching

TED 530A Student Teaching I

Corequisite: TED 531A

TED 530B Student Teaching II

Prerequisite: TED 530A, Corequisite: TED 531B

TED 531A Student Teaching Seminar I (2.25 quarter units)

Corequisite: TED 530A

TED 531B Student Teaching Seminar II (2.25 quarter units)

Prerequisite: TED 530A with a minimum grade of S and TED 531A with a minimum grade of S and Corequisite: TED 530B

OR

INTERNSHIPS will result through an offer of employment from a CA public school in partnership with National University. Intern placements will be required to align to the credential sought in compliance with the Commission on Teacher Credentialing. Interns need to be in good standing with both the employer and National University for the duration of the active Internship Teaching Credential. Internship Clinical Practice is paid and it is one year long while the candidate holds employment as a teacher of record in a public school.

Internship

TED 610 Best Internship Practices

Prerequisite: Admission to the intern program, SPD 608

TED 628A Internship Clinical Practice I

Corequisite: TED 610 and TED 631A

TED 628B Internship Clinical Pract. II

Prerequisite: TED 628A, Corequisite: TED 631B

TED 631A Internship Seminar I (2.25 quarter units)

Prerequisite: TED 610

TED 631B Internship Seminar II (2.25 quarter units)

Prerequisite: TED 628A and TED 631A, Corequisite: TED 628B

Additional Requirement

This course may be required to fulfill internship hour requirements. It may be taken a maximum of eight times to complete internship hours. Does not grant graduate units towards graduate degree, however tuition is applied for each attempt.

TED 628C Clinical Practice III (2.25 quarter units)

Prerequisite: TED 628A, TED 628B, TED 631A and TED 631B

■ PUPIL PERSONNEL SERVICES CREDENTIAL SCHOOL COUNSELING (PPSC)

Faculty Advisor: Sonia Rodriguez; (858) 642-8385; srodriguez@nu.edu

This credential authorizes the holder to serve as an educational counselor in a school setting at any grade level P-12. This credential is valid for a maximum of five years. Candidate should see Admissions to Credential Programs for specific admission information.

Candidates who have completed an appropriate master's degree in Counseling, Psychology, Social Work, or Education from National University or another regionally-accredited institution can work toward a Pupil Personnel Services Credential with a School Counseling Specialization (PPSC) (i.e. without receiving another master's degree). To meet state-required competencies for the credential, candidates must complete either the entire Master of Science in Educational Counseling or the prerequisites and requirements for the MS in Educational Counseling not already met in previous graduate coursework. Course equivalence cannot be granted for life experiences.

This program is aligned with national standards and prepares candidates for the position of school counselor. Graduates of this program generally seek employment as school counselors in P-12 school districts and must hold a PPSC credential for public school employment or employment in a community college.

Candidates enrolled in the credential program are not awarded the master's degree until they have completed all coursework and have successfully completed the PRAXIS exam. All coursework must be completed prior to the PPSC credential recommendation. Course equivalence cannot be granted for life experiences.

It is strongly recommended, but not required, that applicants have one year of related professional experience working with school age children, preferably in a public school setting.

For additional information on credential requirements, please see the Sanford College of Education Credential Information section of the catalog.

Program Advisement

All PPSC candidates will be assigned a faculty advisor. Candidates will meet with a faculty advisor for evaluation of prior coursework to meet program prerequisites. Only CED 607 and prerequisites can be taken prior to admission.

All candidates are expected to meet with their assigned faculty advisor at the following times:

1. Upon admission into the program
2. After five classes
3. Before starting their clinical practice
4. At the completion of internship hours

Candidates are expected to complete their internship either on a full- or part-time basis.

Exit Requirements

In order to receive a PPSC credential, candidates must complete all courses and internship within seven years and fulfill the following requirements:

- Successful completion of all coursework, portfolio, practicum and internship.
- Successful completion of the ETS National Praxis: The Professional School Counselor (#0421 or #5421) examination in Professional School Counseling (passage score is 156 out of 200).
- Submit written evaluations of performance in internship experiences by Site Supervisor to University Supervisor.
- Successful completion of the Exit interview with faculty advisor or University Supervisor.
- Complete Program Evaluation Form-School Counseling.
- Schedule an exit appointment with credential program specialist for final clearance and credential documents.
- Have a zero account balance.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Distinguish among major developmental theories (personality, social, physical, emotional, and cognitive development) and chronological stages of life-long human development and the impact of these stages on school behavior and learning.
- Appraise and address relevant social and diversity concerns and crises of individuals and groups of students.
- Develop and evaluate comprehensive guidance programs based on relevant data.
- Implement individual counseling skills and techniques to help students cope with personal and interpersonal problems appreciating the diversity of each student.
- Implement group counseling skills and techniques to help students cope with personal and interpersonal problems appreciating the diversity of each student.
- Integrate positive consultative and collaborative skills and techniques in communication with school staff, parents, and community agencies in order to support candidate academic, career, and personal/social success.
- Evaluate legal mandates affecting education and school counseling and apply appropriate legal and ethical standards and practices to specific counseling situations.
- Support academic success for all PreK-16 students by employing appropriate standardized and non-standardized group and individual educational and psychological assessment data and data driven educational decisions/interventions.
- Integrate computer technology relevant to the tasks and role of a school counselor.
- Construct curriculum for diverse classrooms and classroom interventions strategies based on learning theory.
- Perform as professional school counselors and professional leaders reflecting the history and trends of the profession to enhance the field of school counseling.
- Propose career based programs and interventions based on career development theories, and the impact of career development on school behavior and learning.
- Interpret findings of social science research, developed and implement by the student, to professional practice.

Program Requirements

(17 courses; 72 quarter units)

Credentialed teachers may waive the CED 605 course with a curriculum and instruction course taken during their credential program.

Advancement to Candidacy

Advancement to Candidacy is a process and is one of several evaluative steps to help ensure that program objectives are met and that candidate-learning outcomes are attained.

After admission as a credential seeking candidate, a candidate must also Advance to Candidacy. To qualify for candidacy, a candidate must:

- Complete prerequisite coursework or equivalent (MTH 210 and ECE 201).
- Complete CED 607 and the next four graduate CED courses with a grade no lower than a B minus.
- If a candidate earns less than 3.0 GPA upon completion of the above courses, the candidate will not Advance to Candidacy. The candidate will be required to meet with lead faculty. A plan for remediation or possible dismissal from the program will be considered.

Program Prerequisites

(2 courses; 9 quarter units)

ECE 201 The Growing Child: Zero to 8

MTH 210 Probability and Statistics

Prerequisite: Accuplacer test placement evaluation, or MTH 12A and MTH 12B

Note: Only CED 607 and prerequisites can be taken prior to admission.

Core Requirements

(13 courses; 55.5 quarter units)

CED 607 School Counseling Orientation

CED 600 Applied Child/Adol Development
Prerequisite: CED 607 or PED 504

CED 602 Societal Issues in the Schools
Prerequisite: CED 607

CED 605 Instructional Design

CED 606 Development and Evaluation
Prerequisite: CED 607

CED 610 Adv Coun Theories & Methods
Prerequisite: CED 600 or PED 667

CED 603 Multicultural Counseling
Prerequisite: CED 610

CED 611 Group Counseling
Prerequisite: CED 610

CED 631 School Counseling Practicum (1.5 quarter units)

CED 601 Consultation in the Schools
Prerequisite: CED 610

CED 612 Career & Academic Counseling

CED 613 Assessment for Ed Counselors
Prerequisite: CED 607 and Advancement to Candidacy

CED 614 Legal and Ethical Practices
Prerequisite: CED 607

Candidates are required to complete 100 hours of practicum prior to starting internship. These hours will be completed throughout CED coursework.

Internship Requirements for Master's Degree with PPSC Credential Students

(4 courses; 16.5 quarter units)

A minimum of 600 clock hours is required. The candidate will draft a plan with the Site Supervisor and University Supervisor, meet weekly with Site Supervisor for supervision, keep weekly logs of each 200 hours of internship, and submit logs to University Supervisor. No more than two sites at one time with no more than two Site Supervisors at one time. Includes two levels (Elementary and Secondary). The internship consists of the following:

CED 620 Internship Seminar (3 quarter units)

Prerequisite: Students must have completed ten (10) courses, and must be enrolled in their internship and have permission of the faculty advisor.

Choose **three (3)** from the following:

CED 616 School Counseling Intern. I
Prerequisite: A record of a passing score on the Basic Skills Requirement (CBEST), completion of all program prerequisites, completion of ten (10) courses, 100 hours of practicum, have permission of faculty advisor and approval of internship site by Placement Specialist.

CED 617 School Counseling Intern. II
Prerequisite: A record of a passing score on the Basic Skills Requirement (CBEST), completion of all program prerequisites, completion of ten (10) courses, 100 hours of practicum, have permission of faculty advisor and approval of internship site by Placement Specialist.

CED 618 School Counseling Intern. III
Prerequisite: A record of a passing score on the Basic Skills Requirement (CBEST), completion of all program prerequisites, completion of ten (10) courses, 100 hours of practicum, have permission of faculty advisor and approval of internship site by Placement Specialist.

or

CED 619 Couns Practicum Comm College
Prerequisite: Completion of all program prerequisites, completion of ten (10) courses, 100 hours of practicum, have permission of faculty advisor and approval of internship site by Placement Specialist.

Candidates are expected to complete their internship either on a full time basis of 3 to 4 months (40 hours per week) or part time basis of a minimum of 8 hours per week.

● PUPIL PERSONNEL SERVICES CREDENTIAL SCHOOL PSYCHOLOGY (PPSP)

Faculty Advisor: Tricia Crosby-Cooper; (714) 429-5129; tcrosbycooper@nu.edu

Candidates who have completed an appropriate master's degree in counseling, social work or psychology from this or another regionally-accredited institution can work toward a Pupil Personnel Services Credential with a School Psychology Specialization (i.e. without receiving another master's degree). Course equivalence cannot be granted for life experiences.

No more than three comparable graduate level courses (13.5 quarter units) can be waived. Courses not eligible for waiver include all assessment courses, practicum, and internship.

To adhere to the recently updated NASP Standards, waiver of PED625 (Research in Education) and PED 637 (School Psychology Research) is not automatic. The candidate's previous research related coursework in their Master's Degree Program will be reviewed on a case by case basis to ensure that the overall quality and equivalence of a MS in School Psychology is being met.

Students taking courses online are advised there is a program requirement for students to meet on 16 Saturdays onsite to engage in experiential, hands-on training for the 4 assessment courses: PED 671-674. No make-up sessions will be available for these Saturday sessions; students missing a session may be significantly delayed from completing their program.

Candidates may participate in a paid internship if they are able to secure a position with an employing agency that meets the standards of the university internship program. The program for a PPSP university internship is identical to the program for the non-university interns. Please note that the majority of internship positions are unpaid. For more information, contact a Credential Advisor.

Admission Requirements

Successfully complete a Write Placer exam during the first course in the program.

Please see additional Credential requirements in the Sanford College of Education Credential section of the catalog.

Program Advisement

All PPSP candidates will be assigned a faculty advisor. Candidates will meet with a faculty advisor for evaluation of prior coursework to meet program prerequisites.

All candidates are expected to communicate with their assigned faculty advisor at the following times:

1. Upon admission into the program
2. After 5 classes
3. Before starting their practicum and internship
4. At the exit of the program

Candidates who receive a grade lower than a "B" in two or more courses may be evaluated by the faculty and may be required to repeat the course(s) at their own expense before being allowed to continue in the program.

Advancement to Candidacy

Advancement to Candidacy is a process and is one of several evaluative steps to help ensure that program objectives are met and that candidate outcomes are attained.

To qualify for candidacy, a candidate must:

- Complete first four graduate PED courses with a grade no lower than a B.
- If a candidate earns less than 3.0 GPA upon completion of the above courses, the candidate will not advance to Candidacy. The candidate will be required to meet with a faculty advisor. A plan for remediation or possible dismissal from the program will be considered.

The six-course sequence in applied behavior analysis is designed to prepare candidates for the national certification examinations sponsored by the Behavior Analyst Certification Board (BACB). Upon successful completion of National University's six course sequence, the candidate will receive a certificate of completion from National University, but this is not professional certification by the Behavior Analyst Certification Board (BACB) and does not entitle candidates to claim they are Board Certified Behavior Analysts (BCBA's). Information about becoming certified through the BACB can be found at www.bacb.com.

Required CBA Learning Module Subscription

Students are required to purchase a one year subscription to the CBA Learning Module Series from Behavior Development Solutions (BDS) at www.behaviordevelopmentsolutions.com using someone else's account is not permissible. This program is an addition to the required textbook materials, and will be used throughout the program. The current cost of this program for a twelve month subscription is \$265. The CBA Learning Module Series will greatly improve your chances of passing the BCBA® and BCaBA® exams. Students will work on these modules during each class period, and between classes. There is a money-back guarantee from BDS if one uses the modules per BDS recommendations and does not pass the BCBA exam.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Evaluate various methods of assessment in order to make data-based decisions.
- Analyze consultative/collaborative relationships with school staff, parents, and community agencies in support of student success.
- Examine societal influences on academic and social behavior.
- Analyze how systemic school approaches can affect student outcomes.
- Appraise principles related to prevention in the context of their ability to improve services provided to students.
- Examine strategies related to family systems that support student success.
- Evaluate strategies that mitigate individual differences, abilities, disabilities, and other diverse characteristics in order to enhance services for students.
- Compare and contrast current research methodologies used in school psychology and related fields.
- Conduct research using relevant design, statistics, measurements, data analysis, and program evaluation methods to improve student outcomes.
- Interpret the ethical, legal, and professional standards necessary to engage in sound decision making.
- Design a crisis intervention plan that includes responses that address both individual and school-wide emergency concerns.

Credential Requirements

(20 courses; 90 quarter units)

As the School Psychology program is now at the CTC minimum of requiring 90 quarter units, **two (2)** courses (9 quarter units) of approved electives will need to be taken in place of PED 625 and PED 637.

Core Requirements

(16 courses; 72 quarter units)

PED 603	School Psychology Orientation
PED 680	Roles, Issues and Ethics <i>Prerequisite: PED 603</i>
PED 665	Test and Measurements
ABA 600	Basics of Behavior Analysis
PED 671	Cognitive Assessment <i>Prerequisite: PED 665 and PED 680</i>
ABA 601	Assessment in ABA <i>Prerequisite: ABA 600 with a minimum grade of B</i>
PED 672	Psycho-Academic Assessment <i>Prerequisite: PED 671 with a minimum grade of B</i>
ABA 602	Processes of ABA <i>Prerequisite: ABA 601</i>
PED 667	Developmental Psychopathology
PED 673	Social/Emotional Assessment <i>Prerequisite: PED 672 with a minimum grade of B</i>
ABA 603	Applications of ABA <i>Prerequisite: ABA 602</i>
CED 601	Consultation in the Schools <i>Prerequisite: CED 610</i>
PED 674	Special Populations Assessment <i>Prerequisite: PED 673 with a minimum grade of B</i>
ABA 604	Advanced Applications <i>Prerequisite: ABA 603</i>
CED 610	Adv Coun Theories & Methods <i>Prerequisite: CED 600 or PED 667</i>
PED 678	Practicum in School Psychology <i>Prerequisite: PED 673, PED 671 and PED 672</i>

Practicum Prerequisites

In PED 678 candidates are required to complete their practicum hours and experiences only in a public school based settings (according to CCTC requirements). A credential school site psychologist will supervise and evaluate the candidate's performance. Candidates must complete PED 671, PED 672, PED 673 and pass the CBEST.

Internship Prerequisites

Candidates are required to complete ALL 450 hours of practicum prior to starting their internship. Candidates must complete the practicum experience under the supervision of a credentialed and experienced (three years) school psychologist. In PED 678 (Practicum in School Psychology) candidates will do their practicum hours and experiences only in public school based settings (according to CCTC requirements). A credentialed school site psychologist will evaluate candidate performance.

Internship Requirements

(3 courses; 13.5 quarter units)
(1,200 hours / 2 levels)

A minimum of 1,200 clock hours is required. The candidate will draft a plan with the Site Supervisor and University Supervisor, meet weekly for two hours with Site Supervisor for supervision, keep weekly logs of each 300 hours of internship, and submit logs to University Supervisor. No more than two sites at one time with no more than two Site Supervisors at one time. Includes two levels (Elementary and Secondary).

The internship consists of the following:

PED 685*	Internship Seminar <i>Prerequisite: Students must have completed all program core requirements (except PED 625 and PED 637), 450 hours of practicum, eligible to be enrolled in the internship and have permission of the faculty advisor.</i>
PED 689	School Psych Internship I <i>Prerequisite: Students must have completed all program coursework, must be enrolled in their internship and have permission of the faculty advisor</i>
PED 690	School Psychology Intern II <i>Prerequisite: Students must have completed all program coursework, must be enrolled in their internship and have permission of the faculty advisor</i>

Candidates are expected to complete their internship either on a full time basis of 8 months (40 hours per week) or on part time basis of 17 months (20 hours per week). Less than 20 hours per week at the internship site will not be approved.

* PED 685 course meets for two months during the entire internship.

Electives

(1 course; 4.5 quarter units)

Students must select graduate elective courses from the following course prefixes: ABA, CED, EDA, EXC, HUB, SPD or TED.

● UNIVERSITY INTERNSHIP CREDENTIAL PROGRAM FOR PUPIL PERSONNEL SERVICES SCHOOL COUNSELING

Faculty Advisor: Sonia Rodriguez; (858) 642-8385; srodriguez@nu.edu

The University Internship Pupil Personnel Services in School Counseling credential program allows students who meet the requirements to begin service as a "paid" school counselor in their sponsoring district while completing their formal coursework preparation. Students who qualify as a university intern may begin the program upon starting a school counseling position, either at the beginning of their program or while currently enrolled in the regular pupil personnel services credential program. Intern students participate in the standard coursework and internship coursework. National University students who are interested in becoming a university intern must complete and show verification of all prerequisite requirements.

For additional information on credential requirements, please see the Sanford College of Education Credential Information section of the catalog.

This program is aligned with national standards and prepares candidates for the position of school counselor. Graduates of this program generally seek employment as school counselors in P-12 school districts and must hold a PPSC credential for public school employment.

Candidates enrolled in the degree and credential program are not awarded the master's degree until they have completed all coursework and have successfully completed the ETS PRAXIS-School Counseling exam. All coursework must be completed prior to the Preliminary PPSC credential recommendation. Course equivalence cannot be granted for life experiences.

Program Advisement

All PPSC candidates will be assigned a faculty advisor. Candidates will meet with a faculty advisor for evaluation of prior coursework to meet program prerequisites. Only CED 607 and prerequisites can be taken prior to admission.

All candidates are expected to meet with their assigned faculty advisor at the following times:

1. Upon admission into the program
2. After five (5) classes
3. Before starting their internship hours
4. At the completion of internship hours

Program Prerequisites

All candidates for the intern program must:

- Have a minimum GPA of 3.0.
- Possess an appropriate Master's Degree or be enrolled in the Master of Science in Educational Counseling program and meet the standard internship requirements.
- Verification of two years relevant paid experience in a P-12 public school or related system or as a licensed counselor or therapist.
- Letter of recommendation from the Principal or Administrator of the hiring school.
- Completion of an American School Counseling Association (ASCA) National Model essay.
- Recommendation by Faculty Advisor.

Exit Requirements

In order to receive a Preliminary PPSC credential, candidates must complete all courses and internship within seven years and fulfill the following requirements:

- Successful completion of all coursework, portfolio, practicum and internship.
- Successful completion of the ETS Praxis (#0421 or #5421) examination in Professional School Counseling (passage score is 156 out of 200).
- Submission of written evaluations of performance in internship experiences by Site Supervisor to University Supervisor.
- Successful completion of the Exit interview with Faculty advisor or University Supervisor.
- Complete Program Evaluation Form-School Counseling.
- Schedule an exit appointment with Credential Program Specialist for final clearance and credential documents.
- Have a zero account balance.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Appraise and address relevant social and diversity concerns and crises of individuals and groups of students.
- Distinguish among major developmental theories (personality, social, physical, emotional and cognitive development) and chronological stages of life-long human development and their impact on school behavior and learning.
- Develop and evaluate comprehensive guidance programs based on relevant data.
- Implement individual counseling skills and techniques to help students cope with personal and interpersonal problems appreciating the diversity of each student.
- Implement group counseling skills and techniques to help students cope with personal and interpersonal problems appreciating the diversity of each student.
- Integrate positive consultative and collaborative skills and techniques in communication with school staff, parents, and community agencies in order to support candidate academic, career, and personal/social success.
- Evaluate legal mandates affecting education and school counseling and apply appropriate legal and ethical standards and practices to specific counseling situations.
- Advocate academic success for all preK-16 students by employing appropriate standardized and non-standardized group and individual educational and psychological assessment data and data driven educational decisions/interventions.
- Integrate computer technology relevant to the tasks and roles of a school counselor.
- Construct curriculum for diverse classrooms and classroom interventions strategies based on learning theory.

- Perform as professional school counselors and professional leaders reflecting the history and trends of the profession to enhance the field of school counseling.
- Propose career based programs and interventions based on career development theories, and the impact of career development on school behavior and learning.
- Interpret findings of social science research, developed and implemented by the student, to professional practice.

Credential Requirements

Credentialed teachers may waive the CED 605 course with a curriculum and instruction course taken during their credential program.

Advancement to Candidacy

After admission as a credential seeking candidate, a candidate must also Advance to Candidacy. To qualify for candidacy, a candidate must:

- Complete CED 607 and next four graduate CED courses with a grade no lower than a B minus.
- Complete prerequisite coursework or equivalent (MTH 210 and ECE 201).
- If a candidate earns less than 3.0 GPA upon completion of the above courses, the candidate will not Advance to Candidacy. The candidate will be required to meet with Faculty advisor. A plan for remediation or possible dismissal from the program will be considered.

Program Requirements

(19 courses; 81 quarter units)

Program Prerequisites

(2 courses; 9 quarter units)

ECE 201	The Growing Child: Zero to 8
MTH 210	Probability and Statistics <i>Prerequisite: Accuplacer test placement evaluation or MTH 12A and MTH 12B</i>

Note: Only CED 607 and prerequisites can be taken prior to admission.

Internship Pre-Service Coursework

(5 courses; 22.5 quarter units)

CED 607	School Counseling Orientation
CED 600	Applied Child/Adol Development <i>Prerequisite: CED 607 or PED 504</i>
CED 605	Instructional Design
CED 602	Societal Issues in the Schools <i>Prerequisite: CED 607</i>
CED 606	Development and Evaluation <i>Prerequisite: CED 607</i>

Program Requirements

(8 courses; 33 quarter units)

CED 610	Adv Coun Theories & Methods <i>Prerequisite: CED 600 or PED 667</i>
CED 603	Multicultural Counseling <i>Prerequisite: CED 610</i>
CED 611	Group Counseling <i>Prerequisite: CED 610</i>
CED 631	School Counseling Practicum (1.5 quarter units)
CED 601	Consultation in the Schools <i>Prerequisite: CED 610</i>
CED 612	Career & Academic Counseling
CED 613	Assessment for Ed Counselors <i>Prerequisite: CED 607 and Advancement to Candidacy</i>
CED 614	Legal and Ethical Practices <i>Prerequisite: CED 607</i>

Candidates are required to complete 100 hours of practicum throughout CED coursework.

Internship

(4 courses; 16.5 quarter units)

A minimum of 600 clock hours is required. The candidate will draft a plan with the Site Supervisor and University Supervisor, meet weekly with Site Supervisor for supervision, keep weekly logs of each 200 hours of internship, and submit logs to University Supervisor. No more than two sites at one time with no more than two Site Supervisors at one time. Includes two levels (Elementary and Secondary).

- CED 620* Internship Seminar (3 quarter units)
Prerequisite: Students must have completed ten (10) courses, and must be enrolled in their internship and have permission of the faculty advisor.
- CED 616 School Counseling Intern. I
Prerequisite: A record of a passing score on the Basic Skills Requirement (CBEST), completion of all program prerequisites, completion of ten (10) courses, 100 hours of practicum, have permission of faculty advisor and approval of internship site by Placement Specialist.
- CED 617 School Counseling Intern. II
Prerequisite: A record of a passing score on the Basic Skills Requirement (CBEST), completion of all program prerequisites, completion of ten (10) courses, 100 hours of practicum, have permission of faculty advisor and approval of internship site by Placement Specialist.
- CED 618 School Counseling Intern. III
Prerequisite: A record of a passing score on the Basic Skills Requirement (CBEST), completion of all program prerequisites, completion of ten (10) courses, 100 hours of practicum, have permission of faculty advisor and approval of internship site by Placement Specialist.

* Taken concurrently with Internship.

CERTIFICATES

■ GRADUATE CERTIFICATE IN APPLIED BEHAVIOR ANALYSIS

Faculty Advisor: William Matthew; (661) 864-2367; wmatthew@nu.edu

The six-course sequence in applied behavior analysis is designed to prepare candidates for the national certification examinations sponsored by the Behavior Analyst Certification Board (BACB). Upon successful completion of National University's six course sequence, the candidate will receive a certificate of completion from National University, but this is not professional certification by the Behavior Analyst Certification Board (BACB) and does not entitle candidates to claim they are Board Certified Behavior Analysts (BCBA's). Information about becoming certified through the BACB can be found at www.bacb.com.

Required CBA Learning Module Subscription

Students are required to purchase a one year subscription to the CBA Learning Module Series from Behavior Development Solutions (BDS) at www.behavior-development-solutions.com. Using someone else's account is not permissible. This program is an addition to the required textbook materials, and will be used throughout the program. The current cost of this program for a twelve month subscription is \$265. The CBA Learning Module Series will greatly improve your chances of passing the BCBA® and BCaBA® exams. Students will work on these modules during each class period, and between classes. There is a money-back guarantee from BDS if one uses the modules per BDS recommendations and does not pass the BCBA exam.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Evaluate data and information from applied behavior analysis procedures, and synthesize in graphic, textual, and oral formats.
- Integrate overall practice guidelines code of ethics, and laws in applied behavior management.
- Critique relevant research literature and use idiographic research methods to solve behavior problems.

- Use multiple data sources and points of view in the design, implementation, and evaluation of analytic goals.
- Apply methods of applied behavior analysis to practice.

Degree Requirements

Qualifying to take the national Board Certified Behavior Analyst exam requires that candidates must do 1,500 hours of Supervised Fieldwork, supervised by a Board Certified Behavior Analyst (BCBA). National University does not provide this supervision. Candidates for admission to the ABA Certificate Program must have a bachelor's degree.

Requirements for Certificate

(6 courses; 27 quarter units)

- ABA 600 Basics of Behavior Analysis
- ABA 601 Assessment in ABA
Prerequisite: ABA 600 with a minimum grade of B
- ABA 602 Processes of ABA
Prerequisite: ABA 601
- ABA 603 Applications of ABA
Prerequisite: ABA 602
- ABA 604 Advanced Applications
Prerequisite: ABA 603
- ABA 606 Ethics for Behavior Analysts

Optional Elective

(1 course; 4.5 quarter units)

- ABA 607 ABA Intensive Practicum
Prerequisite: Permission of Program Lead Faculty

■ GRADUATE CERTIFICATE IN AUTISM

Faculty Advisor: David Rago; (702) 531-7812; drago@nu.edu

This certificate is designed for those interested in finding out more about working with and teaching those that fall within the Autism Spectrum Disorder. The four course sequence is designed to provide the student with an orientation to the terms and the characteristics involved, assessment and behavior management interaction strategies, a variety of teaching strategies, and train necessary skills in collaborating with parents and families of those in the spectrum. It is recommended that students complete EXC 621 first in the sequence.

Credentialed teachers interested in this certificate to enhance their knowledge of teaching those in the field, should contact a Credential Program Specialist.

Professionals in other fields such as social work, nursing, and child development can also complete the coursework for professional growth units or a National University certificate.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate knowledge of the background and orientation of the terms included in the Autism Spectrum Disorder (ASD) category.
- Demonstrate an understanding of federal and state laws, legislation and judicial decisions regarding children with autism.
- Demonstrate competence in recognizing behaviors and utilizing assessments that identify children as having autism.
- Demonstrate competence and understanding in using behavioral analysis to manage and change behaviors of children with autism.
- Demonstrate understanding of differing evidence-based program strategies for teaching students with autism.
- Demonstrate the competence to organize a structured classroom, to collect relevant data on behavioral outcomes, and to implement identified evidence-based strategies for a class that includes students that fall within the spectrum.
- Demonstrate skills needed for working collaboratively within and across systems that serve children and families and with professionals from diverse disciplines.

Requirements for Certificate

1. Hold a bachelor's or master's degree from a regionally accredited college or university with an overall grade point average of 2.5 or better, or where a grade point average of 2.75 or higher as achieved in the last 90 quarter units.
2. Possess a valid Education Specialist Mild/Moderate, Deaf and Hard-of-Hearing, Physical and Health Impairment, or Visual Impairment credential.
3. Meet with a Credential Program Specialist within 30 days of enrollment to obtain certification application procedures.

Prerequisite

Completion of a Bachelor's degree.

Program Requirements

(4 courses; 18 quarter units)

EXC 621	Intro Students w/Autism Spect
EXC 622	Assess & Behavioral App in Aut
EXC 623	Intervention/Instr. w/Aut.
EXC 624	Autism Collab w/Parents & Fam.

■ GRADUATE CERTIFICATE IN BEST PRACTICES

Faculty Advisor: Lynne Anderson; (858) 642-8330; landerso@nu.edu

The Best Practices program implements research-based practices that accelerate student achievement. It involves the following effective teaching practices: vocabulary development, comprehensive strategies, accelerated English Language Learning, higher level questioning, differentiated and targeted instruction, student engagement strategies, cooperative learning grouping strategies and standard-based instruction. Along with learning the strategies listed above, candidates will be taught how to create multidisciplinary standards-based lesson plans. They will learn how to target research-based strategies to close the achievement gap.

Candidates will do a video-streaming analysis of specific strategies. Candidates will develop a repertoire of strategies to become a trainer of trainers.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Integrate Best Practices for Standards-based instruction across content areas.
- Use Best Practice teaching Strategies across the curriculum.
- Apply to their teaching the framework of Teach, Practice and Apply using Best Practice Teaching strategies.
- Implement Best Practice teaching strategies for the development of vocabulary, math, reading comprehension and interdisciplinary learning.
- Integrate Best Practices in multimedia-interactive classroom instruction.
- Demonstrate a repertoire of differentiated instructional strategies for assessment and grouping.

Core Requirements

(4 courses; 18 quarter units)

MAT 670	Theory Best Practice Teaching
MAT 671	Appl Best Practice Strat in CI
MAT 674	Differentiated Instruction
MAT 675	21st Century Multimedia & Tech

■ GRADUATE CERTIFICATE IN EARLY CHILDHOOD EDUCATION

Faculty Advisor: Susan Gilbert; (310) 662-2163; sgilbert@nu.edu

The Early Childhood Education Certificate program has been designed to include the competencies and guidelines as established by the National Association for the Education of Young Children (NAEYC) Advanced Program standards. The certificate is also structured to meet the State of California Child Development Permit Matrix requirements for employment in pre-school settings however it does not confer a State of California teaching credential or license.

Non-residents of California; military personnel or their dependents; and international students should contact the Department of Education of the state in which they reside or intend to reside, or the Ministry of Education of the country in which they live, to determine specific requirements for employment. State or country specific coursework, in addition to the certificate program, may be required to obtain a permit, license or credential necessary for employment. Candidates assume the responsibility for determining and meeting these requirements. The four course sequence specializing in early childhood education is designed to prepare candidates with teaching experience for meeting the unique needs of teaching children from birth to age 8.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Analyze and evaluate effective early childhood practice using critical thinking skills, active self-reflection and professional standards.
- Analyze and articulate the impact of theory, standards and current research in Early Childhood practice.
- Apply and integrate evidence-based practices in current work situations to increase learning, growth and development.

Certificate Requirements

(4 courses; 18 quarter units)

ECE 650	The Early Childhood Teacher
ECE 651	Current Issues in ECE
ECE 652	Cognition and the Young Child
ECE 653	Best ECE Teaching Practices

■ GRADUATE EARLY CHILDHOOD SPECIAL EDUCATION ADD-ON AUTHORIZATION

Faculty Advisor: Lucinda Kramer; (714) 429-5132; lkramer@nu.edu

The Early Childhood Special Education (ECSE) program includes the mild/moderate and moderate/severe disabilities and traumatic brain injury, and authorizes service to children ages birth to pre-kindergarten only.

This Added On Authorization in Early Childhood Special Education is available to individuals who hold a valid preliminary, Level I, professional clear, clear, Level II, or life special education teaching credential, and who complete a program through a Commission-approved program sponsor. The ECSE Added Authorization authorizes the holder to provide special education services in the area of mild/moderate or moderate/severe disabilities for student's ages birth to pre-K as determined by the local level special education assessment.

Completion of the Add-On Authorization extends special education teaching authorization from birth to Pre-K. It may also be added to Clear Credentials in Deaf and Hard-of-Hearing, Physical Impairments, and Visual Impairments. In addition, persons with Learning Handicapped or Severely Handicapped credentials may add this Add-On authorization. It is expected that the candidate has experience and access to early childhood special education programs serving young children with disabilities, birth to five, during the program.

Professionals in other fields, such as social work, nursing, behavioral intervention, and child development may also complete the course work for professional development units.

Note: SPD 678 ECSE Field Experience must be taken as the last course in the program. After successfully completing coursework and the ECSE Exit Exam candidates must meet with a Credential Program Specialist to complete and submit to the Commission on Teacher Credentialing application for the Add-On Authorization.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate knowledge of developmental and learning characteristics, and evidence-based practices associated with young children (birth to Pre-K) with developmental delays, and all categories of disabilities.
- Demonstrate knowledge of family systems, the impact of child with disabilities on the family, engages in family-centered practices and

partnerships in all components of early intervention and education for infants and young children with disabilities.

- Demonstrate skill in formal and informal assessment approaches that inform the development and implementation of evidence-based, developmentally appropriate, family supported interventions and reflect the impact of culture (including ELL), specific disabilities on learning, and the role of the interdisciplinary team.
- Document observations from birth to prekindergarten and in-depth field experiences in early childhood settings with families and children of diverse backgrounds and young children who have a range of abilities including in-home service delivery, and inclusive DAP center based pre-school/pre-kindergarten programs.

Degree Requirements

To receive the Early Childhood Special Education Add-On Authorization candidates are required to successfully complete all course work including field experiences and pass the ECSE Program Exit Exam.

Authorization Requirements

(4 courses; 18 quarter units)

SPD 672	Intro to ECSE <i>Prerequisite: SPD 672 Individuals who hold a preliminary, Level I, professional clear, clear, Level II, or life special education teaching credential may take this course.</i>
SPD 674	Collaborative Partners <i>Prerequisite: ECSE Added-Authorization Candidates: Individuals who hold a valid preliminary, Level I, professional clear, clear, Level II, or life special education teaching credential may take this course.</i>
SPD 676	ECSE Assessment & Intervention <i>Prerequisite: Individuals who hold a preliminary, Level I, professional clear, clear, Level II, or life special education teaching credential may take this course</i>
SPD 678	ECSE Field Experience <i>Prerequisite: SPD 672, SPD 674 and SPD 676</i>

■ CERTIFICATE IN E-TEACHING & LEARNING

Faculty Advisor: Thomas Reynolds; (858) 642-8358; treynolds@nu.edu

The e-Teaching and Learning Certificate is designed to meet the growing need for quality online instructors in PK-16, community colleges, and corporations. The specialization focuses on learning and applying effective student-centered online pedagogical strategies and research-based Best Practices. Course content includes the history and evolution of distance learning, the use of interactive media tools, the development of online curriculum that adheres to the National Standards for Quality Online Teaching, and the accurate evaluation of student learning outcomes using multiple assessment strategies. Upon completion of this Certificate, candidates will be prepared to teach effectively in the online learning environment.

The four course e-Teaching Certificate sequence is designed to help candidates cultivate the skills, knowledge and dispositions required for successful online course development, delivery and assessment. Given the exponential growth in online education, a Certificate in the area of e-Teaching and Learning will improve candidate teaching performance, increase student learning and enhance employment opportunities

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Analyze professional standards, trends, and issues in the online environment.
- Demonstrate the use of active teaching and assessment strategies for the online environment.
- Apply evidence based best practices research in the online teaching environment.

Certificate Requirements

(4 courses; 18 quarter units)

ETL 680	Introduction to e-Teaching
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ETL 682	Active Teaching and Learning
ETL 684	Differentiated Online Instruct
ETL 686	Designing Instr Materials <i>Prerequisite: ETL 680, ETL 682 and ETL 684</i>

■ GRADUATE CERTIFICATE IN EDUCATIONAL TECHNOLOGY

Faculty Advisor: Cynthia Sitek-Chandler; (858) 642-8322; cchandler@nu.edu

This graduate certificate is designed for individuals wishing to develop their knowledge and skills for integrating technology in a PK-12 educational setting. The four course sequence will provide the students with hands-on activities to develop a portfolio of digital work. Students will develop competency with contemporary web tools and online systems.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Integrate interdisciplinary connection between evidence based technologies for multimedia instruction.
- Use teaching strategies to accommodate learners in an online or blended environment.
- Participate in online community building and web-based interactive activities.
- Assess the effectiveness and efficiency of multimedia courseware and internet resource for use in instruction and delivery system.
- Examine the critical issues involved in designing effective distance educational programs.
- Design web-based courses using web page design authoring tools.

Required Courses

(4 courses; 18 quarter units)

Students need to take EDT 671 as the last class in the sequence.

EDT 605	Education Theory & Technology
EDT 610	Teaching Online
EDT 660	Multimedia & Interactive Tech.
EDT 671	Curriculum for Online Learning <i>Prerequisite: EDT 605, EDT 610 and EDT 660</i>

■ NATIONAL BOARD CERTIFIED TEACHER LEADERSHIP CERTIFICATE

Faculty Advisor: Donna Elder; (858) 642-8416; delder@nu.edu

The Sanford College of Education and the National University NBPTS Professional Teaching Development Center (PTDC) provide the following services, opportunities and program options for new, practicing, and accomplished educators:

- Support and Assistance for NBCT Candidates and School Districts.
- Access to Candidate Support Providers (CSPs) and NBCT Faculty.
- Master of Arts in Teaching, Master of Science in Instructional Leadership, Master's in Accomplished Collaborative Leadership.
- Five course Certificate Program.
- Teachers Leader and Professional Development Opportunities.
- Networking and Celebration of Accomplishments.

The five-course NBCT Leadership sequence is thoughtfully designed to develop a professional teacher leadership portfolio that aligns with requirements and submission dates outlined by the National Board for Professional Teaching Standards. The courses meet the needs of several groups of teachers:

- Those who want to improve their teaching and prepare themselves to achieve National Board Certification now or sometime during their career.
- Those who are active NBCT candidates and want to earn graduate level credit as they develop the required portfolio in response to NBPTS submission guidelines.

- Those who have achieved NBCT and want to earn graduate credit as they develop an NBCT Leadership Portfolio.
- New teachers who want to experience the NBCT portfolio process in advance of submitting for full candidacy to the NBPTS.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate the ability to focus on student learning through a systematic study and reflection of one's own teaching practices and through shared knowledge gained from purposefully formed professional learning communities.
- Demonstrate a commitment to educating all students by examining cross-cultural educational issues and relating those to enhancing student learning.
- Demonstrate knowledge of how to teach students by effectively accessing and using research based learning theories, assessment strategies, teaching models, technology, and classroom management strategies to educate all learners.

Required Courses

(5 courses; 22.5 quarter units)

NBC 680 Quality Teaching and Learning

or

NBCX 6001X NBCT

NBC 681 Membership in Learning Communi

NBC 682 Videotape Analysis

NBC 683 Student Work and Assessments

NBC 639 Leadership Portfolio

■ GRADUATE CERTIFICATE IN READING AND LITERACY ADDED AUTHORIZATION

Faculty Advisor: Marilyn Moore; (858) 642-8301; mmoore@nu.edu

The Reading Certificate (Added Authorization) authorizes the holder to assess student reading and provide reading instruction in response to those assessments. Reading Certificate holders are also authorized to develop, implement, and adapt the reading content curriculum and assist classroom teachers in these areas. Holders of the Certificate may perform the above services.

Requirements for Certificate

1. Hold a bachelor's or master's degree from a regionally accredited college or university where an overall grade point average of 2.5 or better was achieved, or where a grade point average of 2.75 or higher was achieved in the last 90-quarter units.
2. Possess a valid California teaching credential and two years full-time teaching experience.
3. Meet with Admission Advisor to enroll in the Reading Certificate (Added Authorization) program.
4. Meet with Credential Program Specialist within 30 days of enrollment to obtain reading certification application procedures. This packet provides detail on the additional requirements for the certificate listed below.
5. No coursework is accepted from another university for this program and no substitutions are allowed.
6. Candidates must maintain a 3.0 GPA. "D" and "F" grades are not accepted. Candidates are also required to upload assignments in the Reading Specialization electronic Presentation Portfolio in e-College.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Examine the theories and research related to effective reading and language arts instruction.
- Analyze current research on elements of an effective culture of literacy at the classroom, school, district, and community levels.

- Analyze current, confirmed, reliable and replicable quantitative and qualitative research pertaining to language and literacy instruction.
- Design appropriate assessment, instruction, and differentiation in the field.
- Evaluate the culture of literacy at a classroom, grade or school level, and identify how it supports or impedes students' literacy development.

Required Courses

(4 courses; 18 quarter units)

ARL 645 Dev. Fluency in Reading

ARL 646 Comprehension Strategies

ARL 647A Lang Arts Assess and Instruct I
Prerequisite: ARL 645 and ARL 646

ARL 647B Fld St: Lag Art Assess & In II
Prerequisite: ARL 645, ARL 646 and ARL 647A

Note: At the end of each course, candidates must have their instructor sign off on the competency verification e-forms. These verification forms must be completed for each course before applying for the certificate.

Completion Requirements for the CA Added Authorization

1. Provide verification of three years successful, full-time teaching experience in any grade or subject, preschool through adults. A letter or other appropriate documentation by the candidate's employer may provide verification. Acceptable experience does NOT include student teaching, internship teaching, or teaching while holding an emergency permit. This experience may also be gained outside of California.
2. Provide a copy of a teaching credential valid for a minimum of 12 months and have a non-delinquent student account balance.
3. For each course, provide verification e-forms signed off by each course instructor.
4. After successful completion of the required coursework and a completed credential packet, the regional reading certificate coordinator will review the packet for final approval. Once approval is obtained, please see your Credential Advisor to apply to the CTC for the certificate. A valid credit card for the online application fee is required.

■ GRADUATE CERTIFICATE IN TEACHING MATHEMATICS

Faculty Advisor: Zhonghe Wu; (714) 429-5144; zwu@nu.edu

Designed to improve the quality of mathematics teaching in grades K-9, courses focus on the pedagogy of mathematics and the development of balanced instructional programs that meet the needs of today's diverse students. Based on the National Council of Teachers of Mathematics Principles and Standards, course content includes research-based strategies for developing curriculum and instructional materials, delivering instruction, conducting scholarly investigation, integrating technology and evaluating student performance. Specific course materials focus on contemporary issues and challenges in teaching mathematics, algebra and number theory, geometry and measurement, probability and statistics.

Content prepares teacher credential holders and/or candidates for the CSET 1 and 2 Foundational Level Mathematics Exam. In order to be successful in this program, potential candidates should have basic mathematics knowledge and skills (equivalent to CSET multiple subject and Praxis II elementary education) or above.

The four course Certificate sequence is designed to prepare candidates with the necessary skills, knowledge and dispositions for meeting the unique challenges of teaching Mathematics in elementary and middle schools. Given the demand for qualified teachers in this area, a Certificate in Teaching Mathematics will improve candidate teaching performance, increase student learning and enhance employment opportunities.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Analyze current principles, state and national standards, trends and issues in teaching Mathematics in grades K-9.

- Demonstrate the ability to develop a balanced program of mathematics instruction that includes conceptual understanding, procedural fluency and problem solving in Algebra, Geometry, Statistics, Probability and Number Theory.
- Apply evidence-based best practices research in the delivery and evaluation of a balanced mathematics education program.

Certificate Requirements

(4 courses; 18 quarter units)

MAT 635	Contemporary Issues/Challenges
MAT 636	Teaching Algebra/Number Theory <i>Prerequisite: MAT 635</i>
MAT 637	Teaching Geometry/Measurement <i>Prerequisite: MAT 635 and MAT 636</i>
MAT 638	Teaching Probability/Stats <i>Prerequisite: MAT 635, MAT 636 and MAT 637</i>

■ GRADUATE CERTIFICATE IN US EDUCATION IN A GLOBAL CONTEXT

Faculty Advisor: Peter Serdyukov; (858) 642-8333; pserdyuk@nu.edu

These courses are designed for K-12 teachers, especially those who teach in the social sciences, foreign and second languages, language arts, math and science. With a focus on global education, content offered in this program will provide practicing educators with advanced views on US school practices based on analyses of international educational systems. Students will gain knowledge of issues affecting education, including socio-economics, culture, technology, as well as innovative approaches in teaching and learning. In addition, students will increase skills in implementing effective approaches and strategies that address the needs of contemporary school environments and diverse student populations. Educational administrators, policymakers and international students would also benefit from participation in this program.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Analyze the interdependence among socio-economic, political, geographic and technological factors at both national and global levels and appraise their impact on education and educational systems.
- Analyze the ways in which cultural, religious and linguistic factors affect countries' choices of educational systems and educational priorities.
- Evaluate various international educational theories and practices using research and personal experiences in order to make improvements to current school environments.
- Synthesize new knowledge of innovative international educational systems, educational theories and practices, and develop practical recommendations for improving teaching and learning in US schools.
- Design effective organizational, technological or instructional applications to address challenges in the US professional educational environment.

Certificate Requirements

(4 courses; 18 quarter units)

MAT 620	Multidimensional Education
MAT 621	Impact of Culture & Language <i>Prerequisite: MAT 620</i>
MAT 622	Comparative Ed Systems <i>Prerequisite: MAT 621</i>
MAT 623	Transformative Ed Practices <i>Prerequisite: MAT 622</i>

SANFORD COLLEGE OF EDUCATION CREDENTIAL INFORMATION

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Dean, Judy Mantle
Ph.D., Education, University of Kansas

Associate Dean, Donna Elder
Ed.D., Educational Leadership, University of La Verne

217 General Information for all Credential Programs



REQUIREMENTS FOR ALL CREDENTIAL PROGRAM CANDIDATES

All credential program candidates are required to turn in a completed credential packet for his or her program within 30 days of enrollment. Candidates must review and respond accordingly to all messages delivered to the candidate's student message center and all printed information listed in the degree and credential section of this catalog.

Please be advised that credential programs have time sensitive requirements that must be met for admission, clinical practice, and completion. Candidates are encouraged to discuss individual completion goals and desired timelines with a Credential Program Specialist at the beginning of their program.

Note:

- Candidates transferring from a credential program at another university must provide a letter of good standing.
- Candidates with international degrees who do not hold a U.S.- bachelor's degree must receive an evaluation from a CTC-approved international evaluation agency before being admitted to the University and starting their first course.

CREDENTIAL RESIDENCY REQUIREMENTS

All candidates enrolled in a preliminary credential program must complete a minimum of 31.5 qu. in residency at National University. All clinical practice courses must be taken in residence. All credential candidates concurrently pursuing a degree, must also meet the degree residency requirements.

Minimum residency requirements to be recommended for a credential and or degree may vary and are listed under each program. Courses taken online are considered to be in-residence.

Note: All graduate credential coursework must be completed with a GPA of 3.0 (D, F and U grades are not accepted and must be repeated). All undergraduate credential coursework must be completed with a GPA of 2.5 (D, F and U grades are not accepted and must be repeated). Please see the grade requirements listed under your specific credential program.

STUDENT ACKNOWLEDGEMENT OF TERMS AND AGREEMENTS

All applicants for admission to a credential program must review and sign a student acknowledgment of terms and agreements.

The student acknowledgement (provided in each credential packet) gives National University the right to suspend or terminate the candidate's participation in a credential program for any of the following reasons:

- Committed acts or engaged in conduct that could constitute grounds for denial of a credential
- Failed to demonstrate the requisite skills and qualifications to satisfy the requirements for a credential
- Demonstrated other qualities or behaviors enumerated in the student agreement inconsistent with National University's recommendation of the candidate for an education credential

The student acknowledgment of terms and agreements also authorizes National University to release to the Commission all pertinent information pertaining to the candidate's qualification or fitness for a credential.

Program Advisement

Every credential program has an assigned Faculty Advisor who is available to provide program specific advisement related to a specific program field. The Faculty Advisor name and contact information is listed in the catalog under the heading of specific programs. The Faculty Advisor is a resource for specific questions candidates may have about classes, curriculum, and instructors.

Each candidate also has a Credential Program Specialist available to him/her to help navigate the specifics of the state and university credentialing requirements. These requirements may be updated due to changing legislation. It is very important for candidates to work closely with a Credential Program Specialist to understand and educate themselves on the specifics of their particular credentialing requirements.

CLINICAL PRACTICE INFORMATION

Clinical practice may consist of student teaching, internship and/or field experience and must be completed in California. All clinical practice courses are

scheduled by a Credential Program Specialist. Detailed clinical practice eligibility requirements can be found under each credential program section.

RECOMMENDATION FOR A CALIFORNIA CREDENTIAL

To be formally recommended for a California Teaching or Services Credential by National University all candidates must meet the following requirements:

- Official transcripts from all colleges/universities attended on file at National University.
- Proof of a conferred bachelor's degree from a regionally accredited institution of higher education (IHE) or an international degree of U.S. equivalence.
- Completion of the specific program residency requirements.
- Written evaluations of performance in field experiences, internships, educational projects, student teaching, and other practicum.
- All credential program coursework with minimum 3.0 GPA (D, F, and U grades are not accepted).
- Fulfillment of all financial obligations to the University before applying for the credential; zero account balance.
- A completed CTC credential application with valid credit card to pay for CTC online application fee.

Note: For Candidates in the BA/S Blended Programs the undergraduate degree must be conferred, with a minimum of a 2.0 cumulative GPA and 2.5 in credential coursework.

ADMINISTRATIVE SERVICES CREDENTIAL PROGRAMS

PRELIMINARY ADMINISTRATIVE SERVICES CREDENTIAL

The Administrative Services Credential authorizes the following services in grades PreK-12 and in classes organized primarily for adults; develop, coordinate, and assess instructional programs; evaluate certificated and classified personnel; provide candidates' discipline, including but not limited to, suspension and expulsion; provide certificated and classified employees discipline, including but not limited to, suspension, dismissal, and reinstatement; supervise certificated and classified personnel; manage school site, district, or county level fiscal services; recruit, employ, and assign certificated and classified personnel; develop, coordinate, and supervise candidate support services, including but not limited to extracurricular activities, pupil personnel services, health services, library services, and technology support services.

Admission Requirements

In order to be admitted into the Program, Candidates must complete a Credential Packet that includes or provides evidence/proof of the following:

- Signed Acknowledgement of Terms and Agreements
- Request for Field Experience Placement
- Proof of attempt or passage of Basic Skills Assessment is required for admittance to the program (Proof of passage is mandatory prior to clinical practice)
- Negative TB test results or Tuberculosis Risk Assessment with Certificates of Completion (valid within the last four years)
- Possess a Teaching or Services Credential (may be preliminary for admittance, but must be clear for recommendation)

Field Experience Requirements

To be cleared to begin field experience, candidates must have a credential packet on file.

Recommendation Requirements

In addition to meeting the admissions and field experience requirements, candidates must also complete and return the following prior to credential recommendation:

- Possess a Valid CA Clear Teaching or Services Credential (with at least one year remaining on document)
- Five years of experience (must be in the area of the credential held)

- All credential program coursework with minimum 3.0 GPA (D, F, and U grades are not accepted)
- Zero account balance

All test results must remain valid in order to apply for credential, except for negative TB test results.

Candidates are issued a Certificate of Eligibility upon completion of the program unless candidate provides a completed “Verification of Employment as an Administrator” (CL-777) form with the credential application, in which case the candidate will be recommended for the preliminary credential.

PRELIMINARY ADMINISTRATIVE SERVICES CREDENTIAL UNIVERSITY INTERNSHIP PROGRAM

The University internship route provides an opportunity for candidates who have been offered employment to complete his or her field experience, while employed in an appropriate position as a school administrator. This experience is a partnership between the candidate, National University, and the employer meant to support the candidate in an environment similar to that authorized by the preliminary credential obtained at the end of the program.

Candidates on probation or permanent academic probation are not eligible for a National University internship program. Once intern eligible, candidates must apply for an Internship Credential which is valid for two years and issued specifically for the site of hire. All candidates participating in the Administrative Services University Internship program must serve a minimum of one full year in the internship position to be recommended for the Preliminary credential.

Candidates who are interested in becoming a university intern must complete and show verification of all prerequisite requirements and go through the internship eligibility process to determine suitability for the internship program (see below).

University Internship Prerequisite Requirements

- Possession of a valid Clear, Life, General, or Services credential. A day to day or short term teaching permit does not qualify as an accepted credential for admission.
- Proof of passage of a Basic Skills Assessment.
- Five years of experience.
- A letter of application stating the candidate’s qualifications for admission to the internship program, plus three letters of recommendation, one of the three must be from superintendent or district representative*.
- Agreement on file between the employing District, School or Agency and National University.
- Negative TB test results or Tuberculosis Risk Assessment with Certificates of Completion (valid within the last four years).
- Minimum 3.0 GPA (D, F, and U grades are not accepted).
- Current account balance.

* All candidates must furnish three letters of recommendation from the district discussing his/her prospects for success in the program. One of the letters must be from the superintendent or the superintendent’s designee pledging district support of the candidate.

University Internship Eligibility Requirements

In addition to completion of all internship prerequisites, candidates are required to verify completion of the following Intern Eligibility:

1. Verification of internship program prerequisites
2. District or agency offer of employment for the intern as a full time administrator in a setting appropriate for the credential being sought
3. Verification of intern eligibility determined in an interview by lead internship faculty

CLEAR ADMINISTRATIVE SERVICES CREDENTIAL INDUCTION PROGRAM

The Administrative Services Credential authorizes the holder to provide the following school services in grades K-12, preschool, and classes organized primarily for adults: develop, coordinate, and assess instructional programs; evaluate certificated and classified personnel; provide student discipline; provide certificated and classified employees discipline, supervise certificated and classified personnel;

manage school site, district, or county level fiscal services; recruit, employ, and assign certificated and classified personnel; and develop, coordinate, and supervise student support services.

The Clear Administrative Services Credential Induction Program is a two-year program which focuses on professional development (PD) for Candidates’ leadership performance. The job-embedded PD replaces a more traditional approach where learning is more theoretical and occurs in the classroom and is a response to new research-based practices and evolving expectations of schools to prepare students for success beyond grade school. The core of the Induction Program is the coaching experience – a highly qualified, trained Coach is assigned to the Candidate and works collaboratively with them to develop the Candidate’s skills and knowledge while evaluating their attainment of goals and demonstration of leadership.

<http://www.ctc.ca.gov/educator-prep/standards/SVC-Admin-Handbook-2014.pdf> p.27

Admission Requirements

In order to be admitted into the Program, Candidates must complete a Credential Packet that includes or provides evidence/proof of the following:

- Signed Acknowledgement of Terms and Agreements.
- Preliminary Administrative Services Credential.
- Current employment in an appropriate administrative services position.

Recommendation Requirements

In order to be recommended for a Credential, Candidates must:

- Complete all credential program coursework with minimum satisfactory grades (U grades are not accepted).
- Valid Preliminary Administrative Services Credential (with at least one year remaining on document).
- Two years of experience as an Administrator.
- Zero account balance.

EDUCATION SPECIALIST CREDENTIAL PROGRAMS

PRELIMINARY EDUCATION SPECIALIST AUTHORIZATION TEACHING CREDENTIALS

The Education Specialist Instruction Credential authorizes the holder to conduct Educational Assessments related to student’s access to the academic core curriculum and progress towards meeting instructional academic goals, provide instruction, and Special Education Support to individuals in the area of specialization listed on the credential in the following settings: resource rooms or services; special education settings; general education settings; special schools; home/hospital settings; state hospitals; development centers; correctional facilities; non-public, non-sectarian schools and agencies; alternative and non-traditional instructional public school settings other than classroom. Autism Spectrum Disorders (ASD) content is included in the new preliminary Education Specialist Instruction Teaching Credential programs for all specialty areas.

Language and Academic Development (LAD)

Authorizes the holder to provide instructional services to students with academic communication and language needs to children in preschool, kindergarten, in grades 1 - 12 through age 22, and classes organized primarily for adults, but does not take the place of speech and language services as defined in Education Code section 56333. The Autism Spectrum Disorders (ASD) authorization appears as a separate authorization on the Education Specialist Instruction Credential.

Mild/Moderate Disabilities (M/M)

Includes specific learning disabilities; mild to moderate mental retardation; attention deficit and attention deficit hyperactivity disorders; serious emotional disturbance; and authorizes service in grades K–12 and in classes organized primarily for adults through age 22. The Autism Spectrum Disorders (ASD) authorization appears as a separate authorization on the Education Specialist Instruction Credential.

Moderate/Severe Disabilities (M/S)

Includes autism; deaf-blindness; moderate to severe mental retardation; multiple disabilities; serious emotional disturbance; and authorizes service in grades K–12 and in classes organized primarily for adults through age 22.

NATIONAL UNIVERSITY PRELIMINARY EDUCATION SPECIALIST AUTHORIZATION TEACHING CREDENTIAL

Core Requirements (10)

TED 602	TED 621B*	Corequisites (2)
SPD 604	SPD 614*	
TED 606	SPD 616	
SPD 608*	SPD 622	
TED 621A or TED 623	SPD 628	

Specialization Courses (4-5)

Mild/Moderate (4)	Moderate/Severe (4)	Language & Academic Development (4)
SPD 632	SPD 642	LAD 632
SPD 634	SPD 644	LAD 633
SPD 636	SPD 646	LAD 634
SPD 638	SPD 648	LAD 635

Student Teaching Route (4)

SPD 682A	SPD 684A	LAD 682A
SPD 682B	SPD 684B	LAD 682B
SPD 688A	SPD 688A	SPD 688A
SPD 688B	SPD 688B	SPD 688B

Internship Route (4)

SPD 692A	SPD 694A	LAD 692A
SPD 692B	SPD 694B	LAD 692B
SPD 692C**	SPD 694C**	LAD 692C**
SPD 698A	SPD 698A	SPD 698A
SPD 698B	SPD 698B	SPD 698B

DUAL CANDIDATES

Multiple Subject (3)	Single Subject (3)
TED 635	TED 632
TED 636	TED 633
TED 626	TED 626

Student Teaching Route (3)

Internship Route (5)

TED 530A	TED 610
TED 531A	TED 628A
TED 531B	TED 628B
	TED 628C**
	TED 631A
	TED 631B

OPTIONAL MASTER OF SCIENCE IN SPECIAL EDUCATION (2)

SSPD 695 and SPD 696

* Prerequisites for Internship

** This course may be required to fulfill internship hour requirements. It may be taken a maximum of eight times to complete internship hours. Does not grant graduate units toward graduate degree, however tuition is applied for each attempt. Interns are required to repeat TED 628C while employed as an intern until recommended for their preliminary credential.

Admission Requirements

In order to be admitted into the Program, Candidates must complete a Credential Packet that includes or provides evidence/proof of the following:

- Signed Acknowledgement of Terms and Agreements.
- Request for Student Teaching Placement.
- Negative TB test results or Tuberculosis Risk Assessment with Certificates of Completion (valid within the last four years).
- Fingerprint Clearance through the CTC.
- Attend mandatory program information meeting with Faculty.
- Proof of attempt or passage of Basic Skills Assessment* is required for admittance to the program (Proof of passage is mandatory prior to scheduling specialization).
- Proof of Subject Matter Competency in an NCLB Core Academic Subject Area may be shown by one of the scenarios listed below (Proof of passage is mandatory prior to scheduling specialization). The Education Specialist Credential programs admit only those candidates who meet one of the following criteria:
 - » The candidate provides evidence of registration for the next scheduled examination.
 - » The candidate provides evidence of having attempted the appropriate subject matter examination(s).
 - » The candidate provides evidence of having completed a Commission approved appropriate subject matter preparation program (Single Subject Candidates only).
 - » The candidate provides evidence of enrollment in an organized subject matter examination preparation program.

* The Basic Skills Assessment may be waived based upon pre-lingual deafness. Pre-lingually deaf candidates who opt to waive the Basic Skills Assessment will be issued a two year preliminary credential instead of a five year.

Core Coursework Requirements

In addition to meeting the admissions requirements, for a Credential Program Specialist to schedule TED 621A, TED 621B, TED 623, SPD 622 and SPD 628 candidates must show proof of the following:

- Proof of a Basic Skills Assessment.
- Proof of Subject Matter Competency in an NCLB Core Academic Subject Area.

Specialization Requirements

In addition to meeting the admissions and core requirements, to be scheduled in specialization coursework candidates must also complete and return the following:

- All core coursework with minimum 3.0 GPA (D, F, and U grades are not accepted).
- Passage of the Generic Core Exam (Basic Skills and Subject Matter must be met prior to taking the Generic Core Exam).

* Basic Skills Assessment may be waived based upon pre-lingual deafness. Pre-lingually deaf candidates who opt to waive the Basic Skills Assessment will be issued a two year preliminary credential instead of a five year.

Student Teaching Requirements

In addition to meeting the admissions and specialization requirements, to be cleared to begin student teaching candidates must also complete and return the following 90 days prior to start date:

- All specialization coursework with minimum 3.0 GPA (D, F, and U grades are not accepted)
- Student Teaching Placement Request Form
- Faculty Student Teaching Interview
- Current account balance
- FOR DUAL CANDIDATES ONLY: Pass Teaching Performance Assessment (TPA) Tasks 1 & 2 (For additional information, see the Teacher Education Credential Program section)

Recommendation Requirements

In addition to meeting the admissions, specialization and student teaching requirements; candidates must also complete and return the following prior to credential recommendation:

- U.S. Constitution requirement met by exam, transcript verifying completed U.S. Constitution coursework or CSU Bachelor's degree.
- Reading Instruction Competence Assessment (RICA).
- CPR (incl. Infant, Child, and Adult).
- Exit Exam.
- All credential program coursework with minimum 3.0 GPA (D, F, and U grades are not accepted).
- Zero account balance.
- FOR DUAL CANDIDATES ONLY: Pass all four Teaching Performance Assessment (TPA) Tasks.

* National University cannot recommend Dual candidates for a Preliminary Single Subject Credential prior to passage of the RICA.

All test results must remain valid in order to apply for credential, except for negative TB test results.

ALTERNATIVE EDUCATION SPECIALIST CLINICAL PRACTICE ROUTES

Student Teaching Under Contract

National University provides a program whereby actively employed teachers can complete the requirements for his/her teaching credential while employed. All of the student teaching may be conducted in the candidate's classroom, assuming that the contract position is a match for the credential sought.

Credential candidates teaching under contract must be:

- In a regionally (WASC) approved nonpublic school setting must complete a minimum of four weeks in a public school.
- Under the supervision of a University Supervisor and Supervising Teacher who model effective teaching, implement state-adopted academic core curriculum, and mentor the candidate.
- Teaching in an approved assignment that is a match for the credential sought.

University Internship Program

The University internship route provides an opportunity for candidates who have been offered employment to complete clinical practice, while employed in an appropriate position as a teacher of record. This experience is a partnership between the candidate, National University, and the employer meant to support the candidate in an environment similar to that authorized by the preliminary credential obtained at the end of the program.

Candidates on probation or permanent academic probation are not eligible for a National University internship program. National University candidates who are interested in becoming a university intern must complete and show verification of all prerequisite requirements and go through the internship eligibility process to determine suitability for the internship program. Once intern eligible, candidates must apply for an Internship Credential which is valid for two years and issued specifically for the site of hire.

University Internship Prerequisite Requirements

- Conferred bachelor's degree (regionally accredited).
- Fingerprint Clearance through the CTC.
- Negative TB test results or Tuberculosis Risk Assessment with Certificates of Completion (valid within the last four years).
- Proof of passage of a Basic Skills Assessment.
- Proof of Subject Matter Competency in an NCLB Core Academic Subject Area.
- U.S. Constitution requirement met by exam, transcript verifying completed.
- U.S. Constitution coursework or CSU Bachelor's degree.

- 120 hours of pre-service met by coursework (SPD 608, TED 621B and SPD 614).
- Minimum 3.0 GPA (D, F, and U grades are not accepted).
- Agreement on file between the employing District, School or Agency and National University.
- Zero account balance.

University Internship Eligibility Requirements

In addition to completion of all internship prerequisites, candidates are required to verify completion of the following Intern Eligibility:

1. Verification of internship program prerequisites.
2. Completed Internship Participation form.
3. District or agency provisional offer of employment for the intern as a full time teacher of record in a setting appropriate for the credential being sought with a minimum of 20 instructional hours per week.
4. Internship Eligibility Packet complete and on file with Credentials Department.
5. Verification of intern eligibility determined in an interview by lead internship faculty.

CLEAR EDUCATION SPECIALIST INDUCTION PROGRAM

The Clear Education Specialist Teaching Credential Program combines the “strongest and most effective” portions of the Beginning Teacher Support and Assessment (BTSA) Induction Program and the Level II Special Education Preparation Program. The Education Specialist Instruction Credential authorizes the holder to teach in specific disability areas in the following settings: special day classes, special schools, home/hospital settings, correctional facilities, nonpublic schools and agencies, and resource rooms. National University’s program is designed to clear the following authorizations: Mild/Moderate; Moderate/Severe; and Language and Academic Development.

Admission Requirements

In order to be admitted into the Program, Candidates must complete a Credential Packet that includes or provides evidence/proof of the following:

- Signed Acknowledgement of Terms and Agreements
- Approved Verification of Employment Form
- Support Provider Application/Agreement
- Verification of Approved Support Provider Form
- Preliminary Special Education Credential or Level I Education Specialist Instruction Credential *
- Current employment in an appropriate special education position

* For Level I Education Specialist Instruction Credential holders: A Transition Plan will be developed for each Candidate prior to the completion of their preliminary program. The Transition Plan will contain an Individualized Induction Plan (IIP), which may include professional development and/or additional coursework. In order to obtain a clear, all Level I Education Specialist candidates are required to show proof of completed coursework in Educational Technology and Health Education, including valid CPR Certification for Infant, Child and Adult. Candidates will be evaluated for these courses. If these courses have been completed in a Level I program or at another university, the candidate should meet with a Credential Program Specialist to review the transcripts/course descriptions.

Recommendation Requirements

In order to be recommended for a Credential, Candidates must:

- Complete all credential program coursework with minimum 3.0 GPA (D, F, and U grades are not accepted).
- For Level I Credential Holders Only: Meet Educational Technology & Health Education (incl. CPR) requirement.
- Zero account balance.

Note: Holders of both a Preliminary General Education (Multiple or Single Subject) and Preliminary/Level I Special Education Teaching Credential may Clear both Credentials through one induction program. An IIP will be developed to identify the requirements needed.

PUPIL PERSONNEL SERVICES CREDENTIAL: SCHOOL COUNSELING

The Pupil Personnel Services Credential with School Counseling Specialization authorizes the holder to perform the following duties: develop, plan, implement, and evaluate a school counseling and guidance program that include academic, career, personal, and social development; advocate for the high academic achievement and social development of all students; provide school-wide prevention and intervention strategies and counseling services; provide consultation, training, and staff development to teachers and parents regarding students’ needs. Candidates seeking only a School Counseling credential must already hold an appropriate Master’s degree. Candidates who do not already hold an appropriate Master’s degree must be enrolled into the Master of Science in Educational Counseling with Credential program.

Admission Requirements

In order to be admitted into the Program, Candidates must complete a Credential Packet that includes or provides evidence/proof of the following:

- Signed Acknowledgement of Terms and Agreements.
- Proof of Master’s Degree or enrollment in National University’s Master of Science in Educational Counseling.
- Proof of attempt or passage of Basic Skills Assessment is required for admittance to the program (Proof of passage is mandatory prior to clinical practice).
- Negative TB test results or Tuberculosis Risk Assessment with Certificates of Completion (valid within the last four years).
- Proof of Fingerprint Clearance through the CTC.
- Online Assessment Course Residency Requirements form.

Candidates must also successfully complete the orientation course CED 607 and meet with his/her Faculty Advisor for initial advisement to be fully admitted into the program.

Internship Requirements

In addition to meeting the admissions requirements, in order to begin internship hours, candidates must meet all admissions requirements and return the following 30 days prior to start:

- Proof of passage of a Basic Skills Assessment.
- Internship Application Form.
- Complete 10 (ten) CED courses including: CED 610, CED 611, CED 603 and CED 601 (excluding: CED 637, CED 694 and CED 620).
- Minimum 3.0 GPA (D, F, and U grades are not accepted).
- Current account balance.

Recommendation Requirements

In addition to meeting the admission and internship requirements, to be recommended for a Pupil Personnel Services: School Counseling Credential candidates must also complete and return the following:

- Passage of the ETS Praxis (#0421) examination in School Counseling (passing score is 156).
- Possession of an appropriate Master’s degree or completed Master’s degree coursework.
- Exit interview with NU Faculty Advisor or University Supervisor.
- All credential program coursework with minimum 3.0 GPA (D, F, and U grades are not accepted).
- Zero account balance.

All test results must remain valid in order to apply for credential, except for negative TB test results.

PUPIL PERSONNEL SERVICES CREDENTIAL: SCHOOL COUNSELING UNIVERSITY INTERNSHIP PROGRAM

The University internship route provides an opportunity for candidates who have been offered employment to complete clinical practice, while employed in an appropriate position as a school counselor. This experience is a partnership between the candidate, National University, and the employer meant to support the candidate in an environment similar to that authorized by the credential obtained at the end of the program.

Candidates on probation or permanent academic probation are not eligible for a National University internship program. National University candidates who are interested in becoming a university intern must complete and show verification of all prerequisite requirements and go through the internship eligibility process to determine suitability for the internship program. Once intern eligible, candidates must apply for an Internship Credential which is valid for two years and issued specifically for the site of hire.

National University candidates who are interested in becoming a university intern must complete and show verification of all prerequisite requirements and go through the internship eligibility process to determine suitability for the internship program.

University Internship Prerequisite Requirements

- Proof of Fingerprint Clearance through the CTC.
- Proof of passage of a Basic Skills Assessment.
- Negative TB test results or Tuberculosis Risk Assessment with Certificates of Completion (valid within the last four years).
- Letter of recommendation from the Principal or Administrator of the hiring school.
- Complete 12 (twelve) CED courses including CED 610, CED 611, CED 603, and CED 601 (except CED 637, CED 694 and CED 620) if not completed the following will be required:
 - » Completion of program prerequisites courses, CED 607 and four additional core CED courses.
 - » Verification of two years relevant paid experience in a K-12 public school or related system or as a licensed counselor or therapist.
- Faculty approval of an American School Counseling Association (ASCA) National Model essay.
- Minimum 3.0 GPA (D, F, and U grades are not accepted).
- Zero account balance.
- Recommendation by NU Faculty Advisor.

University Internship Eligibility Requirements

In addition to completion of all internship prerequisites, candidates are required to verify completion of the following Intern Eligibility:

- Verification of internship program prerequisites.
- Agreement on file between the employing District, School or Agency and National University.
- District or agency offer of employment for the intern as a full time school counselor with a minimum of 10 hours per week.
- Verification of intern eligibility determined in a Faculty Advisor interview.

PUPIL PERSONNEL SERVICES CREDENTIAL: SCHOOL PSYCHOLOGY

The Pupil Personnel Services Credential with School Psychology Specialization authorizes the holder to perform the following duties: provide services that enhance academic performance; design strategies and programs to address problems of adjustment; consult with other educators and parents on issues of social development and behavioral and academic difficulties; conduct psycho-educational assessment for purposes of identifying special needs; provide psychological counseling for individuals, groups, and families; coordinate intervention strategies for management of individuals and school wide crises.

Admission Requirements

In order to be admitted into the Program, Candidates must complete a Credential Packet that includes or provides evidence/proof of the following:

- Signed Acknowledgement of Terms and Agreements.
- Proof of attempt or passage of Basic Skills Assessment is required for admittance to the program (Proof of passage is mandatory prior to internship).
- Negative TB test results or Tuberculosis Risk Assessment with Certificates of Completion (valid within the last four years).
- Fingerprint Clearance through the CTC.

Internship Requirements

In addition to meeting the admissions requirements, to be cleared to begin internship hour's candidates must also complete and return the following 30 days prior to the start date:

- Proof of passage of a Basic Skills Assessment.
- Internship Application Form.
- Minimum 3.0 GPA (D, F, and U grades are not accepted).
- Current account balance.

Recommendation Requirements

In addition to meeting the admission and internship requirements; candidates must also complete and return the following prior to credential recommendation:

- Passage of the ETS National Praxis (#5402) examination-School Psychology (passing score is 132).
- Complete all program coursework with minimum 3.0 GPA (D, F, and U grades are not accepted).
- Conferred masters 's degree (regionally accredited).
- Exit interview with NU Faculty Advisor or University Supervisor.
- Zero account balance.

All test results must remain valid in order to apply for credential, except for negative TB test results.

PUPIL PERSONNEL SERVICES CREDENTIAL: SCHOOL PSYCHOLOGY UNIVERSITY INTERNSHIP

The University internship route provides an opportunity for candidates who have been offered employment to complete clinical practice, while employed in an appropriate position as a school psychologist. This experience is a partnership between the candidate, National University, and the employer meant to support the candidate in an environment similar to that authorized by the credential obtained at the end of the program.

Candidates on probation or permanent academic probation are not eligible for a National University internship program. National University candidates who are interested in becoming a university intern must complete and show verification of all prerequisite requirements and go through the internship eligibility process to determine suitability for the internship program. Once intern eligible, candidates must apply for an Internship Credential which is valid for two years and issued specifically for the site of hire.

National University candidates who are interested in becoming a university intern must complete and show verification of all prerequisite requirements and go through the internship eligibility process to determine suitability for the internship program.

University Internship Prerequisite Requirements

Candidates must complete and provide evidence/proof of the following:

- Fingerprint Clearance through the CTC.
- Proof of passage of a Basic Skills Assessment.
- Negative TB test results or Tuberculosis Risk Assessment with Certificates of Completion (valid within the last four years).
- Complete all program coursework (excluding internship and seminar).
- Minimum 3.0 GPA (D, F, and U grades are not accepted).
- Current account balance.
- Recommendation by NU Faculty Advisor.

University Internship Eligibility Requirements

In addition to completion of all internship prerequisites, candidates are required to verify completion of the following Intern Eligibility:

- Verification of internship program prerequisites.
- Agreement on file between the employing District, School or Agency and National University.
- District or agency offer of employment for the intern as a full time school psychologist.
- Verification of intern eligibility determined in an interview by NU Faculty Advisor.

TEACHER EDUCATION CREDENTIAL PROGRAMS

MULTIPLE/SINGLE SUBJECT TEACHING CREDENTIAL

The Multiple Subject Teaching Credential authorizes the holder to teach in a self-contained classroom in grades PreK-12 or in classes organized primarily for adults. In addition, the holder of a Multiple Subject Teaching Credential may serve in a core or team teaching setting. The Single Subject Teaching Credential authorizes the holder to teach in departmentalized classes in any subject within his/her authorized fields in grades PreK-12, or in classes organized primarily for adults. The SB2042 credentials carry with them an authorization to teach English Language Learners both in the general education classroom and in designated classes.

Admission Requirements

In order to be admitted into the Program, Candidates must complete a Credential Packet that includes or provides evidence/proof of the following:

- Signed Acknowledgement of Terms and Agreements.
- Request for Student Teaching Placement.
- Negative TB test results or Tuberculosis Risk Assessment with Certificates of Completion (valid within the last four years).
- Proof of Fingerprint Clearance through the CTC.
- Attend mandatory program information meeting with Faculty.
- Proof of attempt or passage of Basic Skills Assessment is required for admittance to the program (Proof of passage is mandatory prior to scheduling methods courses).
- Proof of Subject Matter Competency may be shown by one of the scenarios listed below (Proof of passage is mandatory prior to scheduling methods courses). The Multiple/Single Subject Credential programs admit only those candidates who meet one of the following criteria:
 - » The candidate provides evidence of registration for the next scheduled examination.
 - » The candidate provides evidence of having attempted the appropriate subject matter examination(s).
 - » The candidate provides evidence of having completed a Commission approved appropriate subject matter preparation program (Single Subject Candidates only).
 - » The candidate provides evidence of enrollment in an organized subject matter examination preparation program.

Teaching Performance Assessment (TPA)

All Multiple and Single Subject Credential Candidates are required to pass the Teaching Performance Assessment (TPA) mandated by the California Commission on Teacher Credentialing (CTC). The assessments are scored anonymously by Assessors who are calibrated by the CTC to ensure accurate and fair scoring. The TPA is comprised of four Tasks that are to be completed independently by candidates during their program:

- Task 1: Subject Specific Pedagogy
- Task 2: Designing Instruction
- Task 3: Assessing Learning
- Task 4: Culminating Teaching Experience

National University's TPA program is hosted by Taskstream (www.taskstream.com). Candidates are required to open an account and purchase a subscription. Taskstream subscription costs are monthly, however it is recommended that a \$49 one-year subscription be purchased. For each submission made, including resubmissions, candidates will be charged a National University assessment fee.

TPA Fee Structure:

- Task 1: \$65
- Task 2: \$65
- Task 3: \$65
- Task 4: \$110*

*Task 4 requires a higher fee because of the length of the task.

For additional information on the TPA Program at National University please visit the TPA Webpage: <https://w.taskstream.com/ts/manager17/TPANU>.

Methods Coursework Requirements

In addition to meeting the admissions requirements, for a Credential Program Specialist to schedule TED 621A, 621B, 623, 632, 633, 634, 635 & 636 candidates must show proof of the following:

- Proof of a Basic Skills Assessment.
- Proof of Subject Matter Competency.

Student Teaching Requirements

In addition to meeting the admissions and methods requirements, to be cleared to begin student teaching candidates must also complete and return the following 90 days prior to start date:

- Student Teaching Placement Request Form.
- Passage of Teaching Performance Assessments (TPA) Tasks 1 & 2 (minimum passing score is 3).
- For Graduate students: All credential program coursework with minimum 3.0 GPA (D, F, and U grades are not accepted).
- For Undergraduate students: All credential and undergraduate coursework with minimum 2.5 GPA (F, and U grades are not accepted).
- Current account balance.
- Attend Screening Interview with a Sanford College of Education faculty member.
- Attend Student Teaching orientation.

Eligible candidates with three or more years of accredited private school experience may be exempt from student teaching under SB 57. See a Credential Program Specialist for details.

Eligible candidates with six or more years of accredited private school experience may apply directly to the California Commission on Teacher Credentialing (CTC) under SB 57 by submitting application form 41-4, fingerprint clearance materials, transcripts, other requested materials, and current applicable fees. Website: <http://www.ctc.ca.gov/>.

Student Teaching Placement Information

Candidates will be placed by the University:

- Under the supervision of a National University Support Provider and Site Support Provider(s)
- In a supervised full-time student teaching assignment within the appropriate credential area, in two different teaching settings, in two different grade spans, for a minimum of 80 instructional days

At least one-half of student teaching, will be conducted in approved public, charter, or private schools that implement state adopted core curriculum content standards within the state of California. Summer school, after-school programs, and outdoor education programs will be reviewed to determine if they meet criteria for a student teaching assignment. Court schools or community alternative schools may be acceptable placements for one-half of the student teaching experience.

Recommendation Requirements

In addition to meeting the admissions, methods and student teaching requirements; candidates must also complete and return the following prior to credential recommendation:

- Pass all four Teaching Performance Assessment (TPA) Tasks.
- U.S. Constitution requirement met by exam, transcript verifying completed U.S. Constitution coursework or CSU Bachelor's degree.
- * Proof of passing the Reading Instruction Competence Assessment (RICA)—Multiple Subject candidates only.
- CPR certification for Infant, Child, and Adult.
- For Graduate Students: All credential program coursework including clinical practice with minimum 3.0 GPA (D, F, and U grades are not accepted).
- For Undergraduate Students: All credential and undergraduate coursework including clinical practice with minimum 2.5 GPA (F, and U grades are not accepted).
- Zero account balance.

All test results must remain valid in order to apply for credential, except for negative TB test results.

ALTERNATIVE CLINICAL PRACTICE ROUTES

Student Teaching Under Contract

National University provides a program whereby actively employed teachers can complete the requirements for his/her teaching credential while employed. All of the student teaching may be conducted in the candidate's classroom, assuming that the contract position is a match for the credential sought.

Credential candidates teaching under contract must be:

- In a regionally (WASC) approved nonpublic school setting must complete a minimum of four weeks in a public school.
- Under the supervision of a University Supervisor and Supervising Teacher who model effective teaching, implement state-adopted academic core curriculum, and mentor the candidate.
- Teaching in an approved assignment that is a match for the credential sought.

University Internship Program

The University internship route provides an opportunity for candidates who have been offered employment to complete clinical practice, while employed in an appropriate position as a teacher of record. This experience is a partnership between the candidate, National University, and the employer meant to support the candidate in an environment similar to that authorized by the preliminary credential obtained at the end of the program.

Candidates on probation or permanent academic probation are not eligible for a National University internship program. National University candidates who are interested in becoming a university intern must complete and show verification of all prerequisite requirements and go through the internship eligibility process to determine suitability for the internship program. Once intern eligible, candidates must apply for an Internship Credential which is valid for two years and issued specifically for the site of hire.

Graduate level National University candidates who are interested in becoming a university intern must complete and show verification of all prerequisite requirements and go through the internship eligibility process to determine suitability for the internship program.

University Internship Prerequisite Requirements

- Proof of Fingerprint Clearance through the CTC.
- Bachelor's Degree on file.
- Proof of passage of a Basic Skills Assessment.
- Proof of Subject Matter Competency.
- Completion of U.S. Constitution requirement met by exam, transcript verifying completed U.S. Constitution coursework or CSU Bachelor's degree
- Negative TB test results or Tuberculosis Risk Assessment with Certificates of Completion (valid within the last four years).
- 120 hours of pre-service met by coursework.
- Minimum 3.0 GPA (D, F, and U grades are not accepted).
- Agreement on file between the employing District, School, or Agency and National University.
- Current account balance.
- Taskstream Subscription.

University Internship Eligibility Requirements

In addition to completion of all internship prerequisites, candidates are required to verify completion of the following Intern Eligibility:

- Verification of internship program prerequisites.
- Internship candidate acknowledgement.
- District or agency offer of employment for the intern as a full time teacher of record in a setting appropriate for the credential being sought with a minimum of 20 instructional hours per week.
- Verification of intern eligibility determined in an interview by lead internship faculty.

INTERNSHIP EARLY COMPLETION OPTION (ECO)

The Early Completion Internship Option is intended to provide candidates with requisite skills and knowledge an opportunity to challenge the academic coursework portion of a Multiple or Single Subject Internship Program and demonstrate pedagogical skills through a performance assessment while in a University internship program. The Early Completion Internship Option (ECO) is available to candidates who have passed the appropriate National Evaluation Series (NES) Assessment of Professional Knowledge (APK) exam.

ECO Eligibility Requirements

In order to be eligible for the Early Completion Internship Option, candidates must:

For Multiple Subjects

- Complete all University Internship Prerequisite and Eligibility requirements except the 120 hours of pre-service met by coursework.
- Passage of the National Evaluation Series (NES) Assessment of Professional Knowledge (APK): Elementary (Test code 051) with minimum score of 220.
- Passage of TPA Task 1: Subject Specific Pedagogy- Multiple Subject*.

For Single Subject

- Complete all University Internship Prerequisite and Eligibility requirements except the 120 hours of pre-service met by coursework.
- Passage of the National Evaluation Series (NES) Assessment of Professional Knowledge (APK): Secondary (Test code 052) with minimum score of 220.
- Passage of TPA Task 1: Subject Specific Pedagogy- In the appropriate Single Subject area (must match subject matter competence)*.

ECO Recommendation Requirements

Candidates who have been granted the University internship credential and are eligible for the Early Completion Internship Option will need to complete the following in order to be recommended for a Preliminary credential:

- Meet Education Technology requirement (EDX 6001X, or an equivalent course/exam).
- Passage of the Reading Instruction Competence Assessment (RICA)- Multiple Subject ONLY.
- Passage of the remaining three Teaching Performance Assessment Tasks: Task 2-Designing Instruction, Task 3-Assessing Learning and Task 4-Culminating Teaching Experience within the first academic year of enrolling in the intern ECO route*.

* If the candidate does not pass the TPA on the first attempt, he/she is no longer eligible to participate in the Early Completion Internship Option Program and must complete the full intern preparation program through an individualized professional development plan that emphasizes preparation in areas where additional growth is warranted and waives preparation in areas where the candidate has demonstrated competence.



SCHOOL OF ENGINEERING AND COMPUTING

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Dean, John A. Cicero
Ph. D., Electrical Engineering, Illinois Institute of Technology

- 228 Degrees Offered**
- 229 Degrees Offered by Department**
- 230 Faculty**
- 231 Undergraduate Degrees**
- 239 Minors**
- 240 Graduate Degrees**



DEGREE PROGRAMS OFFERED

UNDERGRADUATE DEGREES

Associate of Science

with a Major in:

- Engineering Technology 

Bachelor of Science

with Majors in:

- Computer Science 
- Construction Engineering Technology 

- Construction Management 

- Cybersecurity 

with Concentrations in:

- » Computer Network Defense 
- » Digital Forensics 

- Electrical and Computer Engineering 

- Information Systems 

with Concentrations in:

- » Business Management
- » Information Management

- Information Technology Management 

- Manufacturing Design Engineering 

MINORS

- Computer Science 
- Information Technology Management 
- Technology 

TRANSITION PROGRAMS

- Bachelor of Science Information Systems to Master of Science in Management Information Systems

GRADUATE DEGREES

Master of Science

with Fields of Study in:

- Computer Science 
with Areas of Specialization in:

- » Advanced Computing 
- » Database Engineering 
- » Software Engineering 

- Cyber Security 

with Areas of Specialization in:

- » Ethical Hacking and Pen Testing 
- » Information Assurance and Security Policy 

- Data Analytics 

- Electrical Engineering

with Areas of Specialization in:

- » Computer Engineering
- » Wireless Communication

- Engineering Management 

with Areas of Specialization in:

- » Enterprise Architecture
- » Project Management 
- » Systems Engineering 
- » Technology Management 

- Information Technology Management

- Management Information Systems 

- Sustainability Management 

 Entire program can be completed online.

 On-site program with possible online courses or prerequisites.

Not all courses or programs are available at every campus.

Consult an admissions advisor for online course availability.

DEPARTMENT OF APPLIED ENGINEERING

Associate of Science

with a Major in:

- Engineering Technology [☞](#)

Bachelor of Science

with Majors in:

- Construction Engineering Technology [☞](#)
- Construction Management [☞](#)
- Electrical and Computer Engineering [☞](#)
- Manufacturing Design Engineering [☞](#)

Master of Science

with Fields of Study in:

- Electrical Engineering
with Areas of Specialization in:
 - » Computer Engineering
 - » Wireless Communication
- Engineering Management [☞](#)
with Areas of Specialization in:
 - » Enterprise Architecture
 - » Project Management [☞](#)
 - » Systems Engineering [☞](#)
 - » Technology Management [☞](#)
- Management Information Systems [☞](#)
- Sustainability Management [☞](#)

DEPARTMENT OF COMPUTER SCIENCE AND INFORMATION SYSTEMS

Bachelor of Science

with Majors in:

- Computer Science [☞](#)
- Cybersecurity [☞](#)
with Concentrations in:
 - » Computer Network Defense [☞](#)
 - » Digital Forensics [☞](#)
- Information Systems [☞](#)
with Concentrations in:
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 - » Information Management
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Master of Science

with Fields of Study in:

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with Areas of Specialization in:
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 - » Database Engineering [☞](#)
 - » Software Engineering [☞](#)
- Cyber Security [☞](#)
with Areas of Specialization in:
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 - » Information Assurance and Security Policy [☞](#)
- Data Analytics [☞](#)
- Information Technology Management
- Management Information Systems [☞](#)

Minors

- Computer Science [☞](#)
- Information Technology Management [☞](#)
- Technology [☞](#)

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SCHOOL OF ENGINEERING AND COMPUTING

UNDERGRADUATE DEGREES

■ ASSOCIATE OF SCIENCE

◆ MAJOR IN ENGINEERING TECHNOLOGY

Faculty Advisor: Laith Al Any; (858) 309-3489; lalany@nu.edu

The growing importance of technology in fields ranging from environmental to medical, and from product development to manufacturing, requires trained engineering technology professionals to design, maintain, troubleshoot, and repair equipment and systems. The Associate of Science in Engineering Technology program prepares students to pursue opportunities in a wide range of industries including manufacturing, hospitals, laboratories, government, and many other industrial sectors. This program provides the student with broad, basic skills in electronics, computer aided design, computer programming and networks, test and measurement, mathematics, and communication. Focus is on the practical and useful application of fundamental engineering tools and techniques, and will prepare students for careers such as: test engineering technician, field engineering technician, production engineering technician, design engineering technician.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Use math, science, engineering, and technology to solve technology problems.
- Apply analog and digital electronics, computer networks, programming and software tools to the building, testing and operation of engineering systems.
- Demonstrate laboratory skills, including the use of appropriate hardware, software, and simulation techniques.
- Communicate through written, verbal, and graphical media.
- Apply ethical standards in professional decision-making.
- Function effectively as a member of a technical team.

Degree Requirements

To receive an Associate of Science in Engineering Technology, students must complete at least 96 quarter units, 31.5 of which must be taken in residence at National University. All Associate degree students must complete a minimum 34.5 units of the University General Education requirements. In the absence of transfer credit students may need to take additional electives to fulfill overall unit requirements. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation. All students receiving an undergraduate degree in Nevada are required by State Law to complete a course in Nevada Constitution.

Prerequisites for Major

(7 courses; 22.5 quarter units)

- ENG 100* Effective College English I (3 quarter units)
Prerequisite: Satisfactory performance on Accuplacer
- ENG 101* Effective College English II (3 quarter units)
Prerequisite: ENG 100
- MTH 215* College Algebra & Trigonometry
Prerequisite: Accuplacer test placement evaluation or MTH 12A and MTH 12B
- PHS 104* Introductory Physics
Prerequisite: 2 years of high school algebra and MTH 204 or MTH 215 or MTH 216A and MTH 216B
- PHS 104A* Introductory Physics Lab (1.5 quarter units)
Prerequisite: PHS 104 or PHS 171 for science majors
- or
- PHS 130A Physics Lab for Engineering (1.5 quarter units)
- CHE 101* Introductory Chemistry
Recommended Preparation: MTH 204 or MTH 215 or MTH 216A and MTH 216B

CHE 101A* Introductory Chemistry Lab (1.5 quarter units)
Prerequisite: CHE 101 or CHE 141 for science majors

or

CHE 120A Intro to Chemistry Lab for Eng (1.5 quarter units)
Prerequisite: CHE 101

* May be used to meet a General Education requirement.

Requirements for Major

(15 courses; 58.5 quarter units)

- EGR 219 Intro to Graphics and Auto CAD
Prerequisite: MTH 215
- EGR 220 Engineering Mathematics
Prerequisite: MTH 215
- EGR 225 Statics & Strength of Material
Prerequisite: EGR 220
- EGR 230 Electrical Circuits & Systems
Prerequisite: MTH 215
- EGR 240 Electronic Circuits
Prerequisite: EGR 230, Corequisite: EGR 240L
- EGR 240L Electronic Circuits Lab (1.5 quarter units)
Prerequisite: EGR 240
- ITM 230 Computer Network Overview
- CSC 242 Intro to Programming Concepts
Prerequisite: MTH 215
- CSC 252 Programming in C++
Prerequisite: CSC 242
- or
- CSC 262 Programming in JAVA
Prerequisite: MTH 215
- CSC 220 Applied Probability & Stats.
Prerequisite: MTH 215
- CSC 340 Digital Logic Design
Prerequisite: CSC 208 or EGR 220, Corequisite: CSC 340L
- CSC 340L Digital Logic Design Lab (1.5 quarter units)
Corequisite: CSC 340
- EGR 320 Scientific Problem Solving
Prerequisite: CSC 208 or EGR 220
- EGR 320L Scientific Problem Solving-LAB
Prerequisite: EGR 320
- DEN 308 Computer Aided Engineering I
Prerequisite: EGR 219

■ BACHELOR OF SCIENCE

◆ MAJOR IN COMPUTER SCIENCE

Faculty Advisor: Alireza Farahani; (858) 309-3438; afarahan@nu.edu

The ABET accredited Bachelor of Science in Computer Science degree program provides a strong technical background for students planning to begin careers upon graduation and for those interested in graduate study in computer science. Degree requirements include courses in object oriented programming, data structures and algorithms, operating systems, computer communication networks, software engineering, and computer architecture, as well as mathematics, statistics, and the natural sciences. The program features a rigorous academic foundation that is complemented by realistic programming assignments. Emphasis is placed on developing both the technical and design skills necessary to begin and enhance an individual's career. Graduates of this program are well prepared for immediate employment in either the computer industry or many other businesses that increasingly rely on computer science.

The Bachelor of Science in Computer Science Program Educational Objectives

Within a few years of graduation, graduates are expected to be:

- Engaged and active as responsible professionals pursuing diverse career paths or successfully continuing their education in graduate school.

- Participating in continuing education opportunities enabling them to understand and apply new ideas and technologies in the field of computing.
- Effective communicators and team members.
- Active contributors to their community and their profession.

Bachelor of Science in Computer Science/Master of Science in Computer Science (BSCS/MSCS) Transition Program

Students must complete graduate-level coursework taken as part of the BSCS degree with a grade of B or better. This coursework, which counts as electives, will not transfer as graduate-level credit to National University or any other institution as it is part of an undergraduate degree program. Grades earned in graduate level courses will be calculated as part of the student's undergraduate grade point average. Students must be within completing their last six courses in their undergraduate program and have a cumulative GPA of at least a 3.00 to be eligible. Lastly, students must apply for and begin the MSCS program within six months after completing their final BSCS course. Students must complete their MSCS program within four years with no break exceeding 12 months. Students in the BSCS transition program may take up to two MSCS classes as electives during the BSCS. Students may choose from the following courses: SEN 601, SEN 602, DAT 604, CSC606, and CSC607. The number of courses required to earn an MSCS degree for transition program students is reduced from 12 to as few as 10 courses. A complete description of Transition Program requirements can be found in the Policies and Procedures section of this Catalog.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Apply mathematical foundations, algorithmic principles, and computer science theory in the modeling, design and optimization of computer-based systems.
- Analyze a problem and design the computing requirements appropriate to its solution.
- Implement and evaluate a computer-based system, process, component, or program to meet objectives.
- Discuss the impact of computing on individuals, organizations, and society, including ethical, legal, security, and global policy issues.
- Use current techniques, skills, and tools necessary for computing practice that supports the recognized need for continual professional development.
- Apply design and development principles in the construction of software systems.
- Function effectively on teams to accomplish a common goal.
- Demonstrate written and oral communication skills expected of a computer science professional.

Degree Requirements

To receive a Bachelor of Science in Computer Science, students must complete at least 180 quarter units to include a minimum of 70.5 units of the University General Education requirements; 76.5 quarter units must be completed at the upper-division level, and 45, including the senior project courses (CSC 480A and CSC 480B), must be taken in residence at National University. In the absence of transfer credit, students may need to take additional general electives to satisfy the total units for the degree. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation. All students receiving an undergraduate degree in Nevada are required by State Law to complete a course in Nevada Constitution.

Prerequisites for Major

(12 courses; 48 quarter units)

Students must select **two (2)** science related courses **with labs** from Area F of the General Education for a total of 12 quarter units.

Students must select **one (1)** additional mathematics or science course without duplicating any of the courses in the program. The mathematics course must be beyond pre-calculus and beyond the level of MTH 215 (i.e. have MTH 215 as a prerequisite). The program lead faculty must approve your course selection.

MTH 215* College Algebra & Trigonometry
Prerequisite: Accuplacer test placement evaluation or MTH 12A and MTH 12B

CSC 208*	Calculus for Comp. Science I Prerequisite: MTH 215
CSC 209	Calculus for Comp. Science II Prerequisite: CSC 208
CSC 220	Applied Probability & Stats. Prerequisite: MTH 215
CSC 242*	Intro to Programming Concepts Prerequisite: MTH 215
CSC 252*	Programming in C++ Prerequisite: CSC 242
CSC 262*	Programming in JAVA Prerequisite: MTH 215

* May be used to meet a General Education requirement.

Requirements for Major

(17 courses; 70.5 quarter units)

CSC 300	Object Oriented Design Prerequisite: CSC 252
CSC 310	Linear Algebra and Matrix Comp Prerequisite: CSC 300
EGR 320	Scientific Problem Solving Prerequisite: CSC 208 or EGR 220
EGR 320L	Scientific Problem Solving-LAB Prerequisite: EGR 320
CSC 331	Discrete Structures and Logic Prerequisite: CSC 252 and CSC 310
CSC 335	Data Structures and Algorithms Prerequisite: CSC 300 and CSC 331
CSC 338	Algorithm Design Prerequisite: CSC 335
CSC 340	Digital Logic Design Prerequisite: CSC 208 or EGR 220, Corequisite: CSC 340L
CSC 340L	Digital Logic Design Lab (1.5 quarter units) Corequisite: CSC 340
CSC 342	Computer Architecture Prerequisite: CSC 340 and CSC 340L
CSC 350	Computer Ethics
CSC 400	OS Theory and Design Prerequisite: CSC 335
CSC 422	Database Design Prerequisite: CSC 300
CSC 430	Programming Languages Prerequisite: CSC 300
CSC 436	Comp. Communication Networks Prerequisite: CSC 335 or CSC 340 and CSC 340L
CSC 480A	Computer Science Project I Prerequisite: Completion of core courses.
CSC 480B	Computer Science Project II Prerequisite: CSC 480A

Approved Electives

(2 courses; 9 quarter units)

Students must complete **two (2)** 400 level technical electives, these electives can be taken from the computer science, computer information systems, or information technology management programs without duplicating any of the core courses.

◆ MAJOR IN CONSTRUCTION ENGINEERING TECHNOLOGY

Faculty Advisor: Dirk Epperson; (858) 309-3474; depperson@nu.edu

The Construction Engineering Technology program provides students with a well-rounded education in construction principles and practices in preparation for a career in the construction industry. Upon completion of this degree, students will

be prepared for careers such as construction superintendent, field engineer, project manager, project coordinator, facilities engineer, cost estimator, CAD drafter, and quality and safety controller. Additionally, graduates of this program with experience, interest, and/or knowledge about specific construction trades will be capable of performing in a large number of positions within those respective subcontracting firms.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Effectively communicate through written, verbal, and graphical media.
- Demonstrate knowledge of engineering science and mathematics and its application in problem solving.
- Analyze structural systems.
- Recognize ethical issues and apply professional standards in decision-making.
- Utilize appropriate computer tools for engineering problems.
- Apply modern methods for surveying and metrics.
- Exhibit a fundamental understanding of building mechanical and electrical systems.
- Demonstrate cost estimating and scheduling techniques.
- Integrate and apply field inspection techniques and safety standards.
- Apply the principles of project management and control.
- Work effectively in a team environment.

Degree Requirements

To receive a Bachelor of Science in Construction Engineering Technology, students must complete at least 180 quarter units to include a minimum of 70.5 units of the University General Education requirements; 76.5 units must be completed at the upper-division level and 45 units must be taken in residence, including the capstone project classes. In the absence of transfer credit, students may need to take additional general electives to satisfy the total units for the degree. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation. All students receiving an undergraduate degree in Nevada are required by State Law to complete a course in Nevada Constitution.

Preparation for Major

(10 courses; 39 quarter units)

MTH 215* College Algebra & Trigonometry
Prerequisite: Accuplacer test placement evaluation or MTH 12A and MTH 12B

PHS 104* Introductory Physics
Prerequisite: 2 years of high school algebra and MTH 204 or MTH 215 or MTH 216A and MTH 216B

PHS 104A* Introductory Physics Lab (1.5 quarter units)
Prerequisite: PHS 104 or PHS 171 for science majors

or

PHS 130A ^ Physics Lab for Engineering (1.5 quarter units)

CHE 101* Introductory Chemistry
Recommended Preparation: MTH 204 or MTH 215 or MTH 216A and MTH 216B

CHE 101A* Introductory Chemistry Lab (1.5 quarter units)
Prerequisite: CHE 101 or CHE 141 for science majors

or

CHE 120A ^ Intro to Chemistry Lab for Eng (1.5 quarter units)
Prerequisite: CHE 101

CSC 208* Calculus for Comp. Science I
Prerequisite: MTH 215

CSC 220 Applied Probability & Stats.
Prerequisite: MTH 215

EGR 220 Engineering Mathematics
Prerequisite: MTH 215

EGR 225 Statics & Strength of Material
Prerequisite: EGR 220

EGR 219 Intro to Graphics and Auto CAD
Prerequisite: MTH 215

^ For online students only.

* May be used to meet a General Education requirement.

Requirements for Major

(15 courses; 64.5 quarter units)

EGR 310 Engineering Economics
Prerequisite: MTH 215

EGR 320 Scientific Problem Solving
Prerequisite: EGR 220 or CSC 208

EGR 320L Scientific Problem Solving-LAB
Prerequisite: EGR 320

EGR 316 Legal Aspects of Engineering

DEN 308 Computer Aided Engineering I
Prerequisite: EGR 219

CEN 320 Surveying, Metrics and GIS
Prerequisite: EGR 219

CEN 323 Structural Analysis
Prerequisite: EGR 220 and EGR 225

CEN 325 Soil Mechanics and Foundation
Prerequisite: CEN 323

CEN 410 Constr Materials and Methods
Prerequisite: MTH 215

CEN 413 Plans and Specifications
Prerequisite: EGR 219

CEN 416 Mech and Electrical Systems
Prerequisite: MTH 215

CEN 419 Est., Scheduling and Control
Prerequisite: CEN 410

EGR 440 Project Management Fundamental

CEN 420 Est., Scheduling & Control II
Prerequisite: CEN 419

CEN 422 Field Inspection and Safety
Prerequisite: CEN 410

Engineering Senior Project

(3 courses; 13.5 quarter units)

EGR 486A Construction Senior Project I
Prerequisite: Completion of 10 core courses in construction program

EGR 486B Construction Senior Project II
Prerequisite: EGR 486A

EGR 486C Construction Senior Project III
Prerequisite: EGR 486B

◆ MAJOR IN CONSTRUCTION MANAGEMENT

Faculty Advisor: Dirk Epperson; (858) 309-3474; depperson@nu.edu

The purpose of the Bachelor of Science in Construction Management program is to provide students with a well-rounded education in written and verbal communication, technical construction fundamentals, mathematics, business, law, humanities, fine arts, and social, behavioral and natural sciences that will prepare them for a career at management, administrative, and ownership positions in the construction industry.

This degree program will prepare the student for careers such as construction executive, project manager, project engineer/coordinator, field engineer, planning/scheduling engineer, cost engineer, cost estimator, quality and safety controller, construction superintendent, and facilities engineer. Additionally, graduates with experience, interest, and/or knowledge about specific construction trades will be capable of performing in a large number of management and administrative positions within respective subcontracting companies.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Effectively communicate through written, verbal, and graphical media.
- Demonstrate knowledge of engineering science and mathematics and its application in problem solving.
- Analyze structural systems.
- Recognize ethical issues and apply professional standards in decision-making.
- Utilize appropriate computer tools for engineering problems.
- Apply modern methods for surveying and metrics.
- Exhibit a fundamental understanding of building mechanical and electrical systems.
- Demonstrate cost estimating and scheduling techniques.
- Integrate and apply field inspection techniques and safety standards.
- Apply the principles of project management and control.
- Apply construction accounting principles and analyze financial reports.
- Demonstrate knowledge of the legal aspects of construction contracting.
- Work effectively in a team environment.

Degree Requirements

To receive a Bachelor of Science in Construction Management, students must complete at least 180 quarter units to include a minimum of 70.5 units of the University General Education requirements; 76.5 units must be completed at the upper-division level and 45 units must be taken in residence, including the capstone project classes. In the absence of transfer credit, students may need to take additional general electives to satisfy the total units for the degree. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation. All students receiving an undergraduate degree in Nevada are required by State Law to complete a course in Nevada Constitution.

Preparation for Major

(13 courses; 55.5 quarter units)

- COM 103* Public Speaking
- ILR 260* Information Literacy
Prerequisite: ENG 100 and ENG 101
- MTH 215* College Algebra & Trigonometry
Prerequisite: Accuplacer test placement evaluation or MTH 12A and MTH 12B
- PHS 104* Introductory Physics
Prerequisite: 2 years of high school algebra and MTH 204 or MTH 215 or MTH 216A and MTH 216B
- PHS 104A* Introductory Physics Lab (1.5 quarter units)
Prerequisite: PHS 104 or PHS 171 for science majors
- or
- PHS 130A[^] Physics Lab for Engineering (1.5 quarter units)
- EGR 220 Engineering Mathematics
Prerequisite: MTH 215
- EGR 225 Statics & Strength of Material
Prerequisite: EGR 220
- EGR 219 Intro to Graphics and Auto CAD
Prerequisite: MTH 215
- CSC 220 Applied Probability & Stats.
Prerequisite: MTH 215
- ACC 201 Financial Accounting Funds.
- ECO 203* Principles of Microeconomics
- ECO 204* Principles of Macroeconomics
- ENG 334A* Technical Writing
Prerequisite: ENG 100 and ENG 101, (Only Business, Engineering and Nursing majors may fulfill the requirement by taking ENG 334A)

[^] For online students only.

* May be used to meet a General Education requirement.

Requirements for Major

(18 courses; 78 quarter units)

- MGT 309C Prin. of Mgmt & Organizations
- EGR 310 Engineering Economics
Prerequisite: MTH 215
- EGR 320 Scientific Problem Solving
Prerequisite: EGR 220 or CSC 208
- EGR 320L Scientific Problem Solving-LAB (1.5 quarter units)
Prerequisite: EGR 320 with a minimum grade of C
- EGR 316 Legal Aspects of Engineering
- DEN 308 Computer Aided Engineering I
Prerequisite: EGR 219
- CEN 320 Surveying, Metrics and GIS
Prerequisite: EGR 219
- CEN 323 Structural Analysis
Prerequisite: EGR 220 and EGR 225
- CEN 325 Soil Mechanics and Foundation
Prerequisite: CEN 323
- CEN 410 Constr Materials and Methods
Prerequisite: MTH 215
- CEN 413 Plans and Specifications
Prerequisite: EGR 219
- CEN 416 Mech and Electrical Systems
Prerequisite: MTH 215
- CEN 419 Est., Scheduling and Control
Prerequisite: CEN 410
- EGR 440 Project Management Fundamental
- CEN 420 Est., Scheduling & Control II
Prerequisite: CEN 419
- CEN 422 Field Inspection and Safety
Prerequisite: CEN 410
- CEN 421 Constr, Acct, Finance and Law
Prerequisite: ACC 201
- CEN 425 Design & Const Process Integra

Engineering Senior Project

(3 courses; 13.5 quarter units)

- EGR 486A Construction Senior Project I
Prerequisite: Completion of 10 core courses in construction program
- EGR 486B Construction Senior Project II
Prerequisite: EGR 486A
- EGR 486C Construction Senior Project III
Prerequisite: EGR 486B

◆ MAJOR IN CYBERSECURITY

Faculty Advisor: Christopher Simpson; (858) 309-3418; csimpson@nu.edu

The Bachelor of Science in Cybersecurity (BSCYB) program is designed to meet the increasing demand for cybersecurity professionals. This program is designed to provide students with an understanding of basic information technology management concepts and fundamental security skills. Students will also learn the legal and ethical issues associated with cybersecurity. Graduates are prepared for positions in the areas of security analysts, computer network defenders, and computer incident responders. Once students have completed the core cybersecurity classes, they will choose a four class concentration in Computer Network Defense or Digital Forensics.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Analyze a problem and design the cybersecurity measures appropriate to its solution.
- Apply concepts of best practices in cybersecurity management to enterprise processes.

- Describe the ethical challenges that confront a cybersecurity professional.
- Apply security control principles in the construction of cybersecurity solutions.
- Demonstrate written and oral communication skills expected of a cybersecurity professional.
- Demonstrate the ability to securely administer a Windows and Linux system using security automation tools and techniques.
- Demonstrate knowledge of the fundamental concepts of operating systems, networks, and cloud computing.

Degree Requirements

To receive a Bachelor of Science in Cybersecurity, students must complete at least 183 quarter units, 45 of which must be completed in residence at National University, 81 of which must be completed at the upper-division level, and a minimum 70.5 units of the University General Education requirements. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation. All students receiving an undergraduate degree in Nevada are required by State Law to complete a course in Nevada Constitution.

Prerequisite for Major

(1 course; 4.5 quarter units)

CYB 200 Introduction to Cybersecurity

Foundation Technologies

(6 courses; 27 quarter units)

CYB 211 Operating System Fundamentals
Prerequisite: CYB 200

CYB 212 Introduction to Networking
Prerequisite: CYB 200

CYB 213 Data Fundamentals for Cybersecurity
Prerequisite: CYB 200

CYB 214 Quant Tools for Cybersec Pro
Prerequisite: CYB 213

CYB 215 Fund of Virt and Cloud Comp
Prerequisite: CYB 211 and CYB 212

CYB 216 Programming for Cybersecurity
Prerequisite: CYB 215

First Core Sequence

(5 courses; 22.5 quarter units)

CYB 320 Tech Writing/Proj Mgmt for CYB

CYB 331 Secure Linux System Admin
Prerequisite: CYB 216

CYB 332 Secure Windows Administration

CYB 333 Security Automation
Prerequisite: CYB 331 and CYB 332

CYB 340 Sys Sec Arch for Cybersec
Prerequisite: CYB 333

Second Core Sequence

(6 courses; 27 quarter units)

CYB 420 Sec Audit and Assessments
Recommended: Prior completion of: CYB 340 At least 13.5 units of the first core sequence must be completed before this course.

CYB 450 Cyber Threat Intelligence
Prerequisite: CYB 340

CYB 451 Incident Handling/Response
Prerequisite: CYB 340

CYB 452 Intro to Ethical Hacking
Prerequisite: CYB 340

CYB 453 Network Defense

CYB 454 Cybersec Planning and Policy
Prerequisite: CYB 340

Project

(3 courses; 13.5 quarter units)

CYB 499A Cybersecurity Project I
Prerequisite: Completion of Computer network defense concentration (CYB 460, CYB 461, CYB 462, CYB 463) or completion of Digital Forensics Concentration (CYB 470, CYB 471, CYB 472, CYB 473)

CYB 499B Cybersecurity Project II
Prerequisite: CYB 499A

CYB 499C Cybersecurity Project III
Prerequisite: CYB 499B

▲ Concentration in Computer Network Defense

The concentration in Computer Network Defense provides for greater focus on the security issues for computer networks.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate the ability to set up, implement and assess cybersecurity status of a computer system.
- Apply security controls affecting virtualized computing environment, a wireless network and an operating system.

Requirements for Concentration

(4 courses; 18 quarter units)

CYB 460 Operating System Security
Prerequisite: CYB 420 and completion of all core CYB classes before starting the concentration, CYB 450, CYB 451, CYB 452, CYB 453, CYB 454

CYB 461 Wireless and Mobile Security
Prerequisite: CYB 460

CYB 462 Cloud and Virtualization Sec
Prerequisite: CYB 460

CYB 463 Advanced Network Defense
Prerequisite: CYB 460

▲ Concentration in Digital Forensics

The concentration in Digital Forensics provides for greater focus on investigation and analysis of computers and networks.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate the ability to conduct a digital forensics investigation on a server or workstation using commonly accepted standards and tools.
- Demonstrate the ability to preserve digital evidence using federal rules of digital evidence.
- Demonstrate the ability to conduct a digital forensics investigation on a mobile device using commonly accepted standards and tools.
- Examine digital evidence for indications of illegal malicious activity or malfeasance.

Requirements for Concentration

(4 courses; 18 quarter units)

CYB 470 Intro to Digital Forensics
Prerequisite: CYB 420 and completion of all core CYB classes before starting the concentration, CYB 450, CYB 451, CYB 452, CYB 453, CYB 454

CYB 471 Operating Systems Forensics
Prerequisite: CYB 470

CYB 472 Network Forensics
Prerequisite: CYB 470

CYB 473 Mobile Device Forensics
Prerequisite: CYB 470

◆ MAJOR IN ELECTRICAL AND COMPUTER ENGINEERING

Faculty Advisor: Mohammad Amin; (858) 309-3422; mamin@nu.edu

The Electrical and Computer Engineering program involves the study of hardware, software, communications, and the interactions between them. Its curriculum focuses on the theories, principles, and practices of traditional electrical engineering and mathematics and applies them to the design of computers and computer-based devices. Electrical and Computer Engineering students study the design of digital hardware systems including communications systems, computers, and devices that contain computers. They study software development, focusing on software for digital devices and their interfaces with users and other devices. The program emphasizes a balanced approach between hardware and software, both built on an engineering and mathematics foundation. Currently, a dominant area within Electrical and Computer engineering is embedded systems, the development of devices that have software and hardware embedded within. For example, devices such as cell phones, digital audio players, digital video recorders, alarm systems, x-ray machines, and laser surgical tools all require integration of hardware and embedded software and all are the result of computer engineering. The undergraduate program is structured to establish analytical thinking and design skills in areas such as computer architecture, digital logic design, circuits analysis, computer communication networks, digital computer control, integrated circuit engineering, project management, VLSI design, digital signal processing and embedded systems.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Apply knowledge of mathematics, science, and engineering to solve problems.
- Analyze and interpret data.
- Design a component, a system, or a process to meet desired needs within realistic constraints.
- Function on a team and be able to communicate orally and in writing to accomplish a common goal.
- Identify, formulate, and solve engineering problems.
- Use professional ethics in making engineering decisions.
- Identify the impact of engineering solutions in a global and economic environment.
- Use the techniques, skills, and modern engineering tools necessary for engineering practice.

Degree Requirements

To receive a Bachelor of Science in Electrical and Computer Engineering, students must complete at least 180 quarter units to include a minimum of 70.5 units of the University General Education requirements; 76.5 quarter units must be completed at the upper-division level, and 45, including the senior project courses (CEE498 and CEE499), must be taken in residence at National University. In the absence of transfer credit, students may need to take additional general electives to satisfy the total units for the degree. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation. All students receiving an undergraduate degree in Nevada are required by State Law to complete a course in Nevada Constitution.

Prerequisites for Major

(8 courses; 33 quarter units)

MTH 215* College Algebra & Trigonometry
Prerequisite: Accuplacer test placement evaluation or MTH 12A and MTH 12B

PHS 104* Introductory Physics
Prerequisite: 2 years of high school algebra and MTH 204 or MTH 215 or MTH 216A and MTH 216B

PHS 130A Physics Lab for Engineering (1.5 quarter units)

CSC 208* Calculus for Comp. Science I
Prerequisite: MTH 215

CSC 209 Calculus for Comp. Science II
Prerequisite: CSC 208

CSC 220 Applied Probability & Stats.
Prerequisite: MTH 215

CSC 242* Intro to Programming Concepts
Prerequisite: MTH 215

CSC 252* Programming in C++
Prerequisite: CSC 242

* May be used to meet a General Education requirement.

Requirements for Major

(21 Courses; 85.5 quarter units)

PHS 231 Calculus-based Physics 1
Prerequisite: PHS 104 and MTH 220 or CSC 208 and MTH 221 or CSC 209

CSC 300 Object Oriented Design
Prerequisite: CSC 252

CSC 310 Linear Algebra and Matrix Comp
Prerequisite: CSC 300

PHS 232 Calculus-based Physics 2
Prerequisite: PHS 104, PHS 231, MTH 220 or CSC 208 and MTH 221 or CSC 209

MTH 433 Differential Equations
Prerequisite: MTH 223 and MTH 435 or CSC 209 and CSC 310

CSC 331 Discrete Structures and Logic
Prerequisite: CSC 252 and CSC 310

EGR 340 Embedded Systems
Prerequisite: CSC 208 and CSC 252 or CSC 262

EGR 340L Embedded Systems Lab (1.5 quarter units)
Corequisite: EGR 340

CSC 340 Digital Logic Design
Prerequisite: CSC 208 or EGR 220, Corequisite: CSC 340L

CSC 340L Digital Logic Design Lab (1.5 quarter units)
Corequisite: CSC 340

CSC 342 Computer Architecture
Prerequisite: CSC 340 and CSC 340L

CSC 350 Computer Ethics

CEE 310 Circuit Analysis
Prerequisite: MTH 433, Corequisite: CEE 310L

CEE 310L Circuit Analysis Lab (1.5 quarter units)
Corequisite: CEE 310

EGR 440 Project Management Fundamental

CSC 436 Comp. Communication Networks
Prerequisite: CSC 335 or CSC 340 and CSC 340L

CEE 420 Microelectronics
Prerequisite: CEE 310

CEE 430 Digital Signal Processing
Prerequisite: CEE 420

CEE 440 VLSI Design
Prerequisite: CEE 430

CEE 498 Capstone Design Project I
Prerequisite: Complete all core courses except CEE499 OR Permission of the program lead.

CEE 499 Capstone Design Project II
Prerequisite: CEE 498 with a minimum grade of S

◆ MAJOR IN INFORMATION SYSTEMS

Faculty Advisor: Lu Zhang; (858) 309-3429; lzhang@nu.edu

The Bachelor of Science in Information Systems (BSIS) program links business and technology, and there is great demand in the corporate world for people who can integrate all elements of the enterprise into a comprehensive network of responsive, proactive information delivery systems. Information systems have

become increasingly important in fields such as healthcare and criminal justice. The BSIS program includes: data communications, systems analysis, system development, database management system, project management, enterprise architecture, IT infrastructure and IS strategy, management and acquisition.

A Transition Program is available for students in the BSIS to Master of Science in Management Information Systems. Students must meet certain requirements as detailed.

BSIS/Master of Science in Management Information Systems (MSMIS) Transition Program

Students can select CIS 601 and any one of the following two courses: DAT604 and CIS 602. The number of courses required to earn an MSMIS degree for Transition Program students is reduced from 12 to as few as 10 courses, depending on courses selected and grades earned. Students must complete graduate-level coursework taken as part of the BSIS degree with a grade of B or better. This coursework, which counts as electives, will not transfer as graduate-level credit to National University or any other institution as it is part of an undergraduate degree program. Grades earned in graduate level courses will be calculated as part of the student's undergraduate grade point average. Students must be within completing their last six courses in their undergraduate program and have a cumulative GPA of at least 3.00 to be eligible. Students must apply for and begin the MSMIS program within six months after completing their final BSIS course. Students must complete their MSMIS program within four years with no break exceeding 12 months. A complete description of Transition Program requirements can be found in the Policies and Procedures section of this Catalog.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Apply analytical and critical thinking skills, and information systems concepts for solving organizational problems.
- Discuss the potential global impact of specific information systems solutions.
- Evaluate and implement organizational planning, design, and integration of information systems solutions in competitive environment.
- Plan and design organizational communications infrastructure and networking topology.
- Improve strategic information management procedures and processes.
- Identify innovative and efficient solutions to solve organizational problems.
- Demonstrate written and oral communication skills in a collaborative environment.

Degree Requirements

To receive a Bachelor of Science in Information Systems, students must complete at least 180 quarter units, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level, and a minimum 70.5 units of the University General Education requirements. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation. All students receiving an undergraduate degree in Nevada are required by State Law to complete a course in Nevada Constitution.

Requirements for Major

(17 courses; 76.5 quarter units)

Core Requirements

(10 courses; 45 quarter units)

CIS 301	Mgmt Information Systems
CIS 310	Technology Project Management
CIS 320	Systems Analysis & Integration
CIS 350	Database Management Systems
CIS 421	Enterprise Architecture <i>Prerequisite: CIS 301</i>
CIS 422	IT Infrastructure <i>Prerequisite: CIS 421</i>

CIS 423	IS Strategy, Mgt & Acquisition <i>Prerequisite: CIS 422</i>
CSC 350	Computer Ethics
CIS 420A	Information Systems Project I <i>Prerequisite: CIS 310 and 80 percent of courses in the major, except CIS 420B</i>
CIS 420B	Information Systems Project II <i>Prerequisite: CIS 420A</i>

Upper-Division Electives

(3 courses; 13.5 quarter units)

Select **three (3)** upper-division courses from the following:

CIS 430	Web/EB Design & Development
CIS 460	Human Factor /Ergonomic Design
ITM 420	Local Area Network Management
ITM 430	Wide Area Network Management <i>Prerequisite: ITM 420</i>
ITM 470	Information Security Management
ITM 475	Information Security Technology <i>Prerequisite: ITM 470</i>

Students must complete core courses (Except CIS 420A and CIS 420B) and upper-division electives before taking **four (4)** courses in one of the two concentrations: Information Management or Business Management.

▲ Concentration in Business Management

Business management concentration is 4 courses from Business (4 courses from SOBM will allow students to obtain the needed skills listed below):

- General Models of Business
- Business Models
- Business Process Design and Management
- Organizational Theory
- Business Strategy
- Evaluation of Business Performance
- Analysis of Organizational Performance
- Analysis of Individual and Team Performance
- Business Analytics
- Business Intelligence

Requirements for Concentration

(4 courses; 18 quarter units)

Students must complete core courses (except CIS 420A and CIS 420B) and upper-division electives before taking **four (4)** courses in this concentration.

MGT 309C	Prin. of Mgmt & Organizations
BIM 400	Info Mgmt in Organizations
MGT 483	E-Business

and

Select **one (1)** upper-division undergraduate course from the School of Business and Management

▲ Concentration in Information Management

Students will choose four upper-division undergraduate courses from the School of Engineering and Computing programs to create their own specialized concentration. This concentration requires prior approval from the program lead.

Requirements for Concentration

(4 courses; 18 quarter units)

Students must complete core courses (except CIS 420A and CIS 420B) and upper-division electives before taking **four (4)** courses in this concentration.

◆ MAJOR IN INFORMATION TECHNOLOGY MANAGEMENT

Faculty Advisor: Debra Bowen; (858) 309-3527; dbowen@nu.edu

The Bachelor of Science in Information Technology Management (BSITM) program is designed to meet the increasing demand for the management of information technology in consulting, marketing and sales support, customer services and support, information security and management, and management of IT projects. This program is designed to provide students with an understanding of basic information technology management concepts and practical technology skills. Graduates are prepared for positions in the areas of:

1. Client and Server Management, Administration, and Technical Support
2. IT Project Management Associate
3. Information Security Analyst
4. Network/Systems Administrator and Support Specialist

CAEL Portfolio

In partnership with the Council on Adult and Experiential Learning (CAEL), National University has developed a portfolio-based system of demonstrating that a student has achieved the course outcomes for University undergraduate courses. Credit may apply towards both the lower division and upper division credit requirements of the University's undergraduate degree programs unless specified otherwise in policy or limited by the state or jurisdiction of a student's residence. In our Portfolio program, students demonstrate that what they already know is equivalent to what they would have learned in an equivalent college course. The program is designed to be as flexible as possible to meet student's needs. Students may have acquired this knowledge through past employment, independent reading and study, training programs or in-service courses, volunteer service, cultural or artistic pursuits, hobbies and recreational pastimes, community or religious activities, organizational memberships, adult education, non-credit courses, study abroad, military training not evaluated for credit by ACE, or other experiences. A portfolio enables students to identify and articulate this knowledge, and potentially earn credit for it. Students learn the process of identifying areas of course-equivalent learning and portfolio development skills through the PRLX2100X course offered through the Division of Extended Learning. The resulting portfolio is submitted for review by Subject Matter Experts for potential award of credit. For further information regarding the Portfolio program, please contact extlearning@nu.edu.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate the ability to set up a networking environment with proper user authentication to preserve user privacy and confidentiality.
- Demonstrate the ability to plan an integrated information technology system that involves applications to satisfy specific business needs and processes.
- Design, implement, manage and administer a secured network environment.
- Design, develop, administer, and support a relational database management system.
- Evaluate best practices in information technology management and security to enhance business processes.
- Describe ethical, professional, and legal challenges that confront an IT professional.
- Develop written documentation and presentations, individually and in collaborative environments that provide solutions to information technology management challenges.

Degree Requirements

To receive a Bachelor of Science in Information Technology Management, students must complete at least 180 quarter units, 76.5 of which must be completed at the upper-division level, 45 of which must be taken in residence, including the capstone project classes (ITM 490 A/B/C) and a minimum 70.5 units of the University General Education requirements. In the absence of transfer credit, students may need to take additional general electives to satisfy the total units for the degree. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation. All students receiving an undergraduate degree in Nevada are required by State Law to complete a course in Nevada Constitution.

Prerequisites for Major

(3 courses; 13.5 quarter units)

Students should be computer literate and have a basic understanding of computer usage.

- ITM 200* Computer Hardware & Software
- ITM 205* Office Productivity Software
- ITM 230* Computer Network Overview

* Prior learning credit eligible course.

Requirements for Major

(16 courses; 72 quarter units)

- ITM 320 Information Technology Management
- ITM 325* IT Project Management
Prerequisite: ITM 320
- ITM 340 IT Clients Using MS Windows
- ITM 345 IT Servers Using Linux
- ITM 420 Local Area Network Management
- ITM 430 Wide Area Network Management
Prerequisite: ITM 420
- ITM 434 Wireless LAN Administration
- ITM 435 Wireless LAN Security
Prerequisite: ITM 434
- ITM 438 Role of Programming in IT
- ITM 440 Database Concepts & Data Model
- ITM 450 DB Processing & Administration
Prerequisite: ITM 440
- ITM 470 Information Security Management
- ITM 475 Information Security Technology
Prerequisite: ITM 470
- ITM 490A Info Technology Project I
Prerequisite: ITM 325 and 10 of the core ITM courses must be successfully completed. Must be taken consecutively with ITM 490B.
- ITM 490B Info Technology Project II
Prerequisite: ITM 490A with a minimum grade of S. Must be taken consecutively with ITM 490A.
- ITM 490C Info Technology Project III
Prerequisite: ITM 490B with a minimum grade of S. Must be taken consecutively with ITM 490B

* Prior learning credit eligible course.

◆ MAJOR IN MANUFACTURING DESIGN ENGINEERING

Faculty Advisor: Alireza Farahani; (858) 309-3438; afarahani@nu.edu

The Bachelor of Science in Manufacturing Design Engineering provides students with the theoretical foundations, hands-on experience, and teaming skills required for effective conceptual, logistical, developmental, and interdisciplinary design of complex engineering devices, product life cycles, and engineering systems through integration of state-of-the-art computer-aided tools, concurrent engineering standards, and simulation modeling techniques. Graduates of this program will have competency in the fundamentals of evolving automated manufacturing technology and provide the industry with a source for qualified graduates to apply engineering principles in the design of automated and computer integrated manufacturing systems.

Upon completion of this degree, students will be prepared to hold positions such as manufacturing system design engineer, design supervisor for engineering projects, and product design engineer. The program blends together professional components from the traditional engineering curricula with the practical aspects of programming applications, engineering project management standards, and simulation modeling techniques. It also combines knowledge and practices needed for professionals working on engineering projects that require innovative and interdisciplinary background, skills, and experience.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Combine knowledge and practices needed to work on engineering projects that require innovative and interdisciplinary skills.
- Utilize product reliability and design optimization concepts in engineering applications.
- Apply state-of-the-art computer-aided engineering tools and engineering graphics techniques and methodologies.
- Integrate engineering project management standards for efficient and competitive design of engineering products and processes.
- Apply the concepts of engineering experiment design and analysis.
- Analyze human factors, ergonomics, and safety issues as part of the requirements for design of engineering systems, products, and services.
- Analyze a production problem and design and/or develop a manufacturing system.
- Develop oral and written communication skills appropriate for engineering professionals.
- Demonstrate global awareness and team skills needed in manufacturing design engineering.

Degree Requirements

To receive a Bachelor of Science in Manufacturing Design Engineering, students must complete at least 180 quarter units, 76.5 of which must be completed at the upper-division level and 45 of which must be taken in residence, including the research project classes, and a minimum of 70.5 units of the University General Education requirements. In the absence of transfer credit, students may need to take additional general electives to satisfy the total units for the degree. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation. All students receiving an undergraduate degree in Nevada are required by State Law to complete a course in Nevada Constitution.

Preparation for Major

(11 courses; 43.5 quarter units)

MTH 215* College Algebra & Trigonometry
Prerequisite: Accuplacer test placement evaluation or MTH 12A and MTH 12B

PHS 104* Introductory Physics
Prerequisite: 2 years of high school algebra and MTH 204 or MTH 215 or MTH 216A and MTH 216B

PHS 104A* Introductory Physics Lab (1.5 quarter units)
Prerequisite: PHS 104 or PHS 171 for science majors

or

PHS 130A Physics Lab for Engineering (1.5 quarter units)

CHE 101* Introductory Chemistry
Recommended Preparation: MTH 204 or MTH 215 or MTH 216A and MTH 216B

CHE 101A* Introductory Chemistry Lab (1.5 quarter units)
Prerequisite: CHE 101 or CHE 141 for science majors

or

CHE 120A Intro to Chemistry Lab for Eng (1.5 quarter units)
Prerequisite: CHE 101

EGR 219 Intro to Graphics and Auto CAD
Prerequisite: MTH 215

EGR 220 Engineering Mathematics
Prerequisite: MTH 215

EGR 225 Statics & Strength of Material
Prerequisite: EGR 220

EGR 230 Electrical Circuits & Systems
Prerequisite: MTH 215

CSC 208* Calculus for Comp. Science I
Prerequisite: MTH 215

CSC 220 Applied Probability & Stats.
Prerequisite: MTH 215

* May be used to satisfy a general education requirement.

Requirements for Major

(15 courses; 64.5 quarter units)

EGR 316 Legal Aspects of Engineering

EGR 320 Scientific Problem Solving
Prerequisite: CSC 208 or EGR 220

EGR 320L Scientific Problem Solving-LAB
Prerequisite: EGR 320

DEN 308 Computer Aided Engineering I
Prerequisite: EGR 219

EGR 310 Engineering Economics
Prerequisite: MTH 215

DEN 411 Computer Aided Engineering II
Prerequisite: EGR 219

DEN 417 Computer Aided Engineering IV
Prerequisite: EGR 219

DEN 420 Computer Aided Engineering V
Prerequisite: EGR 219

DEN 422 Materials and Manufacturing
Prerequisite: EGR 225

DEN 423 Human Factors in Engineering
Prerequisite: MTH 215

DEN 426 Reliability Engineering
Prerequisite: MTH 215

DEN 429 Product Design Optimization
Prerequisite: MTH 215

DEN 432 Concurrent Design Engineering
Prerequisite: MTH 210 or CSC 220

DEN 435 Design & Analysis of Experiment

EGR 440 Project Management Fundamental

Engineering Senior Project

(2 courses; 9 quarter units)

EGR 496A Senior Capstone Project I
Prerequisite: EGR 440 and satisfactory completion of courses as specified by lead faculty

EGR 496B Senior Capstone Project II
Prerequisite: EGR 496A

MINORS

● MINOR IN COMPUTER SCIENCE

Faculty Advisor: Ronald Uhlig; (858) 309-3415; ruhlig@nu.edu

Requirements for Minor

(6 courses; 27 quarter units)

Students can complete a minor in computer science to fulfill requirements for a bachelor's degree with a major other than computer science. Prior to enrolling in the minor, students must complete the prerequisite courses listed below or waive them through challenge exams.

Prerequisites for Minor

(5 courses; 22.5 quarter units)

MTH 215* College Algebra & Trigonometry
Prerequisite: Accuplacer test placement evaluation or MTH 12A and MTH 12B

CSC 200 Orientation to Comp. Science

CSC 208* Calculus for Comp. Science I
Prerequisite: MTH 215

CSC 242* Intro to Programming Concepts
Prerequisite: MTH 215

CSC 252* Programming in C++
Prerequisite: CSC 242

* May be used to meet a General Education requirement.

Requirements for Minor

(6 courses; 27 quarter units)

CSC 300 Object Oriented Design
Prerequisite: CSC 252

CSC 331 Discrete Structures and Logic
Prerequisite: CSC 252 and CSC 310

CSC 335 Data Structures and Algorithms
Prerequisite: CSC 300 and CSC 331

CSC 340 Digital Logic Design
Prerequisite: CSC 208 or EGR 220

and

Choose **two (2)** upper-division level (300-400) Computer Science (CSC) courses provided that all required prerequisites have been met. Students may not take CSC 480A/B.

● MINOR IN INFORMATION TECHNOLOGY MANAGEMENT

Faculty Advisor: Debra Bowen; (858) 309-3527; dbowen@nu.edu

A Minor in Information Technology Management is available to students in any bachelor's degree program other than the BS in Information Technology Management. To fulfill the requirements for the minor, students can take any six courses listed as upper-division requirements for the major and beginning with ITM prefixes. See Bachelor of Science in Information Technology Management section. Prerequisites may be required.

Requirements for Minor

(6 courses; 27 quarter units)

To constitute a technology minor, students must select any **six (6)** upper-division courses from the following technology areas. All prerequisites must be met for courses selected.

- Information Technology Management (ITM)
- Information Systems (CIS)

GRADUATE DEGREES

● MASTER OF SCIENCE IN COMPUTER SCIENCE

Faculty Advisor: Pradip Dey; (858) 385-9218; pdey@nu.edu

The Master of Science in Computer Science (MSCS) program at National University provides students with a solid foundation, in the fundamental knowledge and skills of software engineering, database theory and design and cloud computing, exposing them to best practice methodologies using a variety of tools and techniques required for solving real world problems and to be of immediate benefit to the computing industry.

National University's MSCS program not only prepares students in the theoretical and practical aspects of solving complex computing problems but also it develops other essential communication skills. MSCS graduates are able to clearly discuss issues, trends, and solutions with both technical and non-technical audiences. In addition, every part of the curriculum is devoted towards developing "people skills," ethics, and standards of professionalism.

The rigorous scientific and analytical techniques taught in the MSCS program have four primary goals:

1. Provide a clear understanding of scope and limitations of computational models.
2. Facilitate acquisition of marketable skills throughout the program.
3. Facilitate logical discussion of concepts, trends and issues including cloud computing and security in computing, and underlying problem-solving strategies.
4. Facilitate lifelong learning.

National University's approach to teaching in the MSCS program allows graduates to immediately become highly productive members of a real-world computing team.

Specializations

After acquisition of common fundamental concepts, students select **one (1)** of the following three specializations in order to concentrate on specialized knowledge and skills in one of the advanced areas:

- Advanced Computing
- Software Engineering
- Database Engineering

Integration

The two master's project classes provide an integrating mechanism for acquiring realistic experience through building a computationally complex project. It is a three-month project solving a real problem for a real client against a time deadline using all available tools and resources as students work together in teams. This component addresses the need to integrate a broad range of technologies and skills. Students are given the opportunity to crystallize the ideas learned earlier and to implement comprehensive systems across an organization.

Career Tracks

In the MSCS program, graduates are proficient in analytical and critical thinking skills, have a sense of professionalism, and are instilled with a strong set of values essential for success in computer science. This program reflects current and future industry needs, and graduates are trained and prepared to assume a leadership role in the field.

Admission Requirements

Candidates seeking admission to the program should possess a baccalaureate degree in Computer Science (CS), Software Engineering (SE), Information Systems (IS), Information Technology (IT) or a closely related area. Non-CS students should fulfill the program prerequisites either through additional equivalent coursework or waiver through a course challenge exam.

MSCS Transition Program

National University students who completed a transition program as part of their undergraduate degree and who satisfy MSCS transition program requirements described in the catalog must complete a minimum of 45 quarter units for their MSCS degree. The number of units required for the MSCS program is dependent on the coursework completed in the Bachelors transition program and the grades earned. A complete description of Transition Program requirements can be found in the Policies and Procedures section of this Catalog.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Create software requirements specifications, and design and develop complex software systems.
- Evaluate computer security vulnerabilities and threats, and countermeasures that are effective and ethical.
- Analyze, design and develop database solutions by translating database modeling theory into sound database design and implementation.
- Analyze and design complex front-end applications for cloud and client-server architectures and integrate them with backend databases.
- Compare and contrast alternative systems for process and memory management.
- Demonstrate ability to conduct in-depth research, both individually as well as in teams, in a specific computer science area.
- Demonstrate critical thinking and ability to analyze and synthesize computer science concepts and skills with ethical standards.

Degree Requirements

(15 courses; 67.5 quarter units)

To receive a Master of Science in Computer Science, students must complete 54 quarter units of graduate coursework. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another accredited

ited institution, as it applies to this degree, and provided the units were not used in earning another advanced degree. The degree program consists of ten courses plus the two-part MSCS graduate project (two courses, 4.5 quarter units each) that cannot be taken until all other courses have been completed.

Program Prerequisites

(3 courses; 13.5 quarter units)

Students with non-computer related baccalaureate degrees can qualify for admission to the program by choosing **one (1)** or a combination of the following options:

CSC 242 Intro to Programming Concepts
Prerequisite: MTH 215

CSC 252 Programming in C++
Prerequisite: CSC 242

CSC 262 Programming in JAVA
Prerequisite: MTH 215

or

Gain permission of the MSCS program based on equivalent coursework supported by verifiable documented proof.

Core Requirements

(8 courses; 36 quarter units)

SEN 601 Software Eng Fundamentals

SEN 602 Software Architecture Principle
Prerequisite: SEN 601 or approval of lead faculty.

DAT 604 Database Design and Impl.

DAT 605 Web and Cloud Computing
Prerequisite: DAT 604 or approval of lead faculty.

CSC 606 Modern Operating Systems

CSC 607 Security in Computing

CSC 686 Computer Science Project I
Prerequisite: Completion of all MSCS core courses or permission of the instructor.

CSC 687 Computer Science Project II
Prerequisite: CSC 686

Requirements for Specialization

(4 courses; 18 quarter units)

All students must choose **one (1)** specialization defined below:

▲ Specialization in Advanced Computing

Students in this specialization learn to solve computational problems combining mathematical modeling, domain analysis, information processing techniques, and user interface engineering.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Construct a computational model for a given problem and examine its consequences.
- Evaluate programming models.
- Compare emerging computing concepts.
- Design and implement a user interface for a software system in order to maximize its usability.

Requirements for Specialization

(4 courses; 18 quarter units)

CSC 610 Mathematical Foundations

CSC 615 Advanced Programming

CSC 668 Topics in Computing

CSC 670 User Interface Engineering

▲ Specialization in Database Engineering

Students in this specialization learn to solve complex database problems combining analysis, design, implementation and testing techniques.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Evaluate logical and physical database architecture components.
- Demonstrate proficiency in advanced database programming skills.
- Configure and deploy database systems.
- Demonstrate database administration and management skills.

Requirements for Specialization

(4 courses; 18 quarter units)

DAT 615 Advanced Database Programming

DAT 625 Database Management Systems
Prerequisite: DAT 604 or approval of lead faculty

DAT 635 Database Installation & Config
Prerequisite: DAT 615 or approval of lead faculty

DAT 645 DB Management & Security
Prerequisite: DAT 635 or approval of lead faculty

▲ Specialization in Software Engineering

Students in this specialization learn to solve complex software engineering problems combining analysis, design, implementation and testing techniques and user interface engineering.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Evaluate design methodologies of hardware/software integration, networking and graphical user interface for software projects.
- Develop and evaluate comprehensive software test plans at both the software module and the systems level.
- Analyze and manage software configuration to ensure conformance to Total Quality Assurance standards.
- Design and implement a user interface for a software system in order to maximize its usability.

Requirements for Specialization

(4 courses; 18 quarter units)

SEN 632 Software Architecture Appl.

SEN 635 Software Testing

SEN 662 Engineering Software Quality

CSC 670 User Interface Engineering

■ MASTER OF SCIENCE IN CYBER SECURITY

Faculty Advisor: Ron Gonzales; (858) 309-3435; rgonzales@nu.edu

The Master of Science in Cyber Security is a professional degree for those who endeavor through technical and managerial measures to ensure the security, confidentiality, integrity, authenticity, control, availability and utility of the world's computing and information systems infrastructure. The program has a required core and a required specialization which can be selected from some alternatives. The core is designed to provide a means of supporting the variety of backgrounds (both education and work experience) that those who wish to study this area may bring to the program. The core is also a statement of the knowledge domain that is common to most efforts in this area. The specializations provide for study in particular domains of knowledge within the field - which are also tied to communities of effort within the field.

Program Admission Requirements

All students who seek to enroll in the MS-CSIA program must interview with the Faculty Advisor noted above prior to enrolling in the first course of the program.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Devise a mitigation plan against both external and internal vulnerabilities to enterprise computer infrastructures and sensitive digital assets.
- Analyze and evaluate multiple risk assessment methods and strategies.
- Compare and contrast the legal and ethical aspects of cybersecurity at the Federal, State, and International level.
- Assess and summarize the legal and ethical requirements of a cyber security professional.
- Integrate project management skills to produce a cybersecurity solution.
- Evaluate the results of a security assessment to assess the security status of a network or computer system.
- Conduct in-depth research into a specific CSIA topic, including finding and integrating relevant research results of others.
- Integrate systems-level-infrastructure thinking into CSIA problem identification and resolution, and effectively communicate the solution

Degree Requirements

To obtain the Master of Science in Cyber Security, students must complete 58.5 graduate units. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another regionally accredited institution, as it applies to this degree, and provided the units were not used in earning another advanced degree. All students must complete the 9 core requirements and choose an Area of Specialization. Please refer to the graduate admissions requirements for specific information regarding application and evaluation.

Core Requirements

(9 Courses; 40.5 quarter units)

CYB 600	Cyber Security Technology
CYB 601	Cyber Sec. Toolkit Utilization <i>Prerequisite: CYB 600 with a minimum grade of B</i>
CYB 602	Threat Modeling & Intel <i>Prerequisite: CYB 601</i>
CYB 603	Cyber Security Ethical Issues <i>Prerequisite: CYB 602</i>
CYB 604	Wireless and Mobile Security <i>Prerequisite: CYB 603</i>
CYB 606	Net Defense & Cloud Security <i>Prerequisite: CYB 604</i>
CYB 699A	Cyber Security Project I <i>Prerequisite: CYB 608 and completion of one specialization area.</i>
CYB 699B	Cyber Security Project II <i>Prerequisite: CYB 699A</i>
CYB 699C	Cyber Security Project III <i>Prerequisite: CYB 699B with a minimum grade of S</i>

Requirements for Specialization

(4 courses; 18 quarter units)

All students must choose **one (1)** specialization defined below.

▲ Specialization in Ethical Hacking & Pen Testing

The Ethical Hacking & Pen Testing specialization is designed to provide unique applications involved in the professional domain of Cyber Security and Information Assurance (CSIA). The curriculum focus is directed toward ethical hacking and penetration (Pen) testing. Penetration tests probe network and information system security components by conducting simulated attacks on systems. This specialization prepares the professional to develop rules of engagement, prepare a tool kit, discover and exploit system vulnerabilities, ethically conduct a penetration test and prepare penetration test documentation. Red Teaming practices are utilized and Red vs. Blue team exercises are executed.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Devise a mitigation plan against both external and internal vulnerabilities to enterprise computer infrastructures and sensitive digital assets. (PLO 2)
- Integrate systems-level-infrastructure thinking into CSIA problem identification and resolution, and effectively communicate the solution. (PLO 4)
- Forecast the impact of continually advancing technology and national and international cyber-legislation on CSIA. (PLO 9)
- Conduct in-depth research into a specific CSIA topic, including finding and integrating relevant research results of others. (PLO 10)
- Generate critical thinking in analysis and synthesis of enterprise and global CSIA issues through effective individual and team graduate-level written and oral assignments. (PLO 11)
- Integrate project development skills in producing a security system. (PLO 12)
- SPECIALIZATION: Produce a pen test authorization and rules of engagement document.
- SPECIALIZATION: Prepare and synthesize process specifications of Red Team actions against a Blue Team defense of a computer infrastructure.
- SPECIALIZATION: Prepare and synthesize process specifications of a Blue Team defense used to protect the computer infrastructure against a Red Team attack.

Requirements for Specialization

(4 courses; 18 quarter units)

CYB 608	Ethical Hacking <i>Prerequisite: CYB 606</i>
CYB 632	Info Sys Vulnerab & Attacks <i>Prerequisite: CYB 608</i>
CYB 633	Red Teaming <i>Prerequisite: CYB 632</i>
CYB 634	Red vs. Blue Team Exercise <i>Prerequisite: CYB 633</i>

▲ Specialization in Information Assurance and Security Policy

The specialization in Information Assurance and Security Policy provides study in the professional domain of Cyber Security and Information Assurance that focuses on the organizational and informational portion of the field. This arena particularly involves larger organizations, often in government, that have codified standards, policies and practices for this field.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Differentiate among the models, architectures, challenges and global legal constraints of secure electronic commerce technologies used to ensure transmission, processing and storage of sensitive information. (PLO 5)
- Prescribe how to provide message privacy, integrity, authentication and non-repudiation using network security practices and infrastructure hardening techniques. (PLO 6)
- Assess, from both a national and global perspective, the relative demands of Internet-openness, legislation and law-enforcement, and individual right-to-privacy. (PLO 8)
- Forecast the impact of continually advancing technology and national and international cyber-legislation on CSIA. (PLO 9)
- Generate critical thinking in analysis and synthesis of enterprise and global CSIA issues through effective individual and team graduate-level written and oral assignments. (PLO 11)
- Produce a successful project using project development skills. (PLO 12)
- SPECIALIZATION: Prepare an IT risk mitigation and security plan.
- SPECIALIZATION: Prepare and create an enterprise disaster recovery and business continuity plan.
- SPECIALIZATION: Derive information assurance from an INFOSEC perspective.

Requirements for Specialization

(4 courses; 18 quarter units)

CYB 608	Ethical Hacking <i>Prerequisite: CYB 606</i>
CYB 612	Disaster Rec./Bus. Continuity <i>Prerequisite: CYB 608</i>
CYB 613	Information Assurance <i>Prerequisite: CYB 608</i>
CYB 616	Certification & Accreditation <i>Prerequisite: CYB 613</i>

■ MASTER OF SCIENCE IN DATA ANALYTICS

Faculty Advisor: Jodi Reeves; (858) 309-3426; jreeves@nu.edu

The Master of Science in Data Analytics program is designed to provide students with a comprehensive foundation for applying statistical methods to solve real-world problems. One goal of this program is to prepare students for careers in data analytics with a broad knowledge of the application of statistical tools, techniques, and methods as well as the ability to conduct in-depth analysis, synthesis, and evaluation. Another goal is to prepare students for careers with analytical database knowledge, the ability to apply analytical database tools, techniques, and methods, and the ability to design, develop, implement, program, and maintain data marts and data warehouses.

To address the spectrum of issues in data analytics, this curriculum has been designed to include core courses in statistical topics as well as areas for advanced applications of data analytics in unique fields. Core topics include data modeling, data management, data mining, continuous and categorical data methods and applications, teamwork, and communication. Advanced topics include how to develop, implement, and maintain the hardware and software tools needed to make efficient and effective use of big data including databases, data marts, data warehouses, machine learning, and analytic programming. State-of-the-art analytical software will be used in all courses.

The culmination of this program is a three-month capstone project where real data from sponsoring organizations or publicly available data will be used to solve specialized problems in analytical database design, programming, implementation, or optimization.

Previous academic studies or industrial experience in such areas as math, statistics, computer programming, engineering, or science are helpful prerequisites for this master's program. This degree is appropriate for both experienced professionals as well as recent college graduates.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Integrate components of data analytics to produce knowledge-based solutions for real-world challenges using public and private data sources.
- Evaluate data management methods and technologies used to improve integrated use of data.
- Construct data files using advanced statistical and data programming techniques to solve practical problems in data analytics.
- Design an analytic strategy to frame a potential issue and solution relevant to the community and stakeholders.
- Develop team skills to ethically research, develop, and evaluate analytic solutions to improve organizational performance.
- Design data marts.
- Analyze complex database queries for real-world analytical applications.
- Design medium to large data warehouses.
- Evaluate machine learning methods and strategies for advanced data mining.

Degree Requirements

To obtain the Master of Science in Data Analytics, students must complete at least 54 graduate units. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another regionally accredited institution, as it applies to this degree, and provided the units were not used in earning

another advanced degree. Please refer to the graduate admissions requirements for specific information regarding application and evaluation.

Core Requirements

(13 courses; 58.5 quarter units)

BAN 600	Fundamentals of Analytics
ANA 605	Analytic Models & Data Systems <i>Prerequisite: BAN 600</i>
ANA 610	Data Management for Analytics
ANA 615	Data Mining Techniques
ANA 620	Continuous Data Methods, Appl <i>Prerequisite: ANA 615</i>
ANA 625	Categorical Data Methods, Appl <i>Prerequisite: ANA 620</i>
ANA 630	Advanced Analytic Applications <i>Prerequisite: ANA 625</i>
ANA 650	Database Design for Analytics
ANA 655	Data Warehouse Design & Devel <i>Prerequisite: ANA 650</i>
ANA 660	Advanced SQL Programming <i>Prerequisite: ANA 655</i>
ANA 665	Data Mining & Machine Learning <i>Prerequisite: ANA 660</i>
ANA 699A	Analytic Capstone Project I <i>Prerequisite: All core and specialization courses in an analytics program with a minimum GPA of 3.0 or approval of Lead Faculty.</i>
ANA 699B	Analytic Capstone Project II <i>Prerequisite: ANA 699A</i>

■ MASTER OF SCIENCE IN ELECTRICAL ENGINEERING

Faculty Advisor: Mohammad Amin; (858) 309-3422; mamin@nu.edu

The Master of Science in Electrical Engineering (MSEE) program will provide students with the mathematical and theoretical foundation and hands-on skills required for solving real world problems in electrical engineering and other related fields. The MSEE program provides a balanced approach to studying core topics in electrical engineering along with specializations in wireless communication and computer engineering. Core topics include engineering mathematics, advanced engineering computing, digital signal processing, network systems and security, and engineering economics. In addition to the core topics, students will be able to study a specific specialization such as wireless communication or computer engineering. The wireless communication specialization topics include electromagnetic field theory, communications standards and protocols, and wireless sensor networks. The computer engineering specialization topics include computer architecture, system modeling and simulation, real-time systems, digital image processing, and information storage and retrieval.

Candidates seeking admission to the program should have a baccalaureate degree in electrical engineering, computer engineering, physics, or a related engineering field from a regionally accredited university. Prospective students will work with the program lead to determine prerequisite qualifications.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Integrate theoretical ideas and practical electrical engineering and computing skills to design and develop new applications in the engineering field.
- Design and conduct engineering experiments or simulations for new product development.
- Analyze engineering problems with both mathematical principles and scientific theories.
- Evaluate the impact of evolving engineering systems on the global economy.
- Design specifications and implement, analyze and solve engineering problems.

- Analyze advanced network systems to meet technological demands, ethical values, and legal standards.
- Assemble a team to work productively and successfully on a technical project.

Degree Requirements

To obtain the Master of Science in Electrical Engineering (MSEE), students must complete 54 graduate units. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another regionally accredited institution, as it applies to this degree, and provided the units were not used in earning another advanced degree. All students must complete the seven core courses and five specialization courses in one area of specialization. Please refer to the graduate admissions requirements for specific information regarding application and evaluation.

Program Prerequisites

(2 courses; 9 quarter units)

Students without an appropriate background in electrical engineering and computing can qualify for admission to the program by taking one or both of the following courses, or receive permission from the faculty advisor based on equivalent coursework supported by verifiable documented proof:

EEC 501 Application Software Dev.
Recommended Preparation: Baccalaureate degree in electrical engineering, computer engineering, or related field from a regionally accredited university.

and

EEC 502 Electronic Circuits & Systems
Recommended Preparation: Baccalaureate degree in electrical engineering, computer engineering, or related field from a regionally accredited university.

Core Requirements

(5 courses; 22.5 quarter units)

EEC 605 Adv Engr Problem Solving
Prerequisite: EEC 501 and EEC 502

EEC 610 Advanced Engineering Math
Prerequisite: EEC 605

EEC 615 Digital Signal Processing
Prerequisite: EEC 610

EEC 620 Network Systems & Security
Prerequisite: EEC 615

EEC 625 Engr Economics & Ecosystems

All students must choose **one (1)** specialization and complete the specialization courses before enrolling in the capstone project courses.

Project Capstone Requirements

(2 courses; 9 quarter units)

The following courses can only be taken after the completion of the core courses and the required area of specialization:

EEC 690 Master's Research Project I
Prerequisite: EEC 659 or EEC 669

and

EEC 695 Master's Research Project II
Prerequisite: EEC 690

▲ Specialization in Computer Engineering

This specialization is designed to prepare students for a dynamic computer industry as well as for post-graduate students in the field of computer engineering and other related fields. Students take courses to analyze computer architecture, modeling and simulation of real time systems, image processing, and information storage and retrieval. This specialization emphasizes the use of simulation tools to understand various computer engineering concepts.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Compare various computer architectures and evaluate their benefits.
- Evaluate various simulation models for engineering problems.
- Analyze real-time systems.
- Analyze current technologies and various algorithms used for image processing.
- Synthesize principles and functionality of information storage and retrieval systems.

Students must successfully complete the core requirements before starting the specialization.

Requirements for Specialization

(5 courses; 22.5 quarter units)

EEC 661 Advanced Computer Architecture
Prerequisite: EEC 620

EEC 663 System Modeling & Simulation
Prerequisite: EEC 620

EEC 665 Real-Time Systems
Prerequisite: EEC 661

EEC 667 Digital Image Processing
Prerequisite: EEC 663

EEC 669 Info Storage & Retrieval
Prerequisite: EEC 661

▲ Specialization in Wireless Communication

Students in this specialization will develop skills to analyze different communication systems, apply electromagnetic signal propagation principles, modulation techniques, coding, standards and technologies to build secure and efficient wireless communication systems.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Analyze electromagnetic radiation and propagation principles and apply to wireless communication systems.
- Analyze wireless communication systems for improvement to meet technological, business, and consumer demands.
- Evaluate modulation and demodulation techniques for constructing coding/decoding schemes and detecting and filtering wireless communication signals.
- Evaluate wireless networking, protocols, architectures, and standards to the development and design of wireless communication systems.
- Create a strategic analysis to develop different wireless sensor networks and applications.

Students must successfully complete the core requirements before starting the specialization.

Requirements for Specialization

(5 courses; 22.5 quarter units)

EEC 651 Electromagnetic Theory, Appl
Prerequisite: EEC 620

EEC 653 Wireless Principles & Systems
Prerequisite: EEC 651

EEC 655 Wireless Mod Theories & Coding
Prerequisite: EEC 653

EEC 657 Wireless Standards & Protocol
Prerequisite: EEC 653

EEC 659 Wireless Sensor Networks
Prerequisite: EEC 653

■ MASTER OF SCIENCE IN ENGINEERING MANAGEMENT

Faculty Advisor: Shekar Viswanathan; (858) 309-3416; sviswana@nu.edu

The Master of Science in Engineering Management program (M.S.) is designed to bring the benefits of modern technology and high quality graduate-level instruction to engineers/scientists/technologists interested in furthering their skills in engineering management with specialization in any of the following areas:

- Project/Program Management, so as to become effective future project/program managers.
- Enterprise Architecture education so as to become expert in technology oriented Enterprise Architectures and executing decisions in technological and scientific organizations.
- Systems management expert related to the life cycle of systems including definition, development, deployment and decommissioning.
- Certified Lean Six Sigma programs for improving enterprise excellence.
- Technology Management experts to manage and lead technology in global marketplace.

These M.S. programs offer practical business perspectives necessary for engineering management. Unlike traditional MBA programs, these programs emphasize required management skills that are specifically built on the students' technical backgrounds and experience. The custom-designed mix of management concepts and technical expertise will help prepare professionals to direct major public and private organizations in the increasingly complicated managerial environment of today's competitive global, technical environment. In this program, engineering management principles are broadly based and draw from many different disciplines such as: applied sciences, engineering, natural sciences, mathematics, economics, business and social sciences.

Relevance to the Real World

Engineering Management leadership has become a highly sought skill in today's competitive global technological marketplace. It is now a well-recognized profession in most industries. Within this curriculum are the following areas of specializations: project/program management, systems engineering, technology management, and enterprise architecture. These four specializations provide a broad perspective of engineering management careers that are of current interest and need.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate quantitative analytical and critical thinking skills and techniques to manage projects, and processes (products and services).
- Examine a multidisciplinary approach involving the integration of engineering, management, quality and risk analysis in projects, and processes (products and services).
- Identify, prioritize and select relevant solutions in solving complex engineering problems and processes.
- Assess tools and techniques, resources, organizational systems, and decision making processes for the successful management of projects and processes (products and services).
- Apply global mindset and a detailed knowledge of business environments in engineering management solutions.
- Demonstrate organizational and team skills needed to manage projects and processes.
- Communicate graduate level oral and writing skills.
- Demonstrate professional and ethical responsibility.

Degree Requirements

To receive a Master of Science in Engineering Management, students must complete 63 quarter units, of which 54 quarter units of graduate credit are required. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another accredited institution, as it applies to this degree, and provided the units were not used in earning another advanced degree. Students should refer to the section in the graduate admission requirements for specific information regarding application and matriculation.

Program Prerequisites

(2 courses; 9 quarter units)

Candidates for the program must possess a Bachelor's degree in engineering, engineering technology, or physical sciences or a closely related area from an accredited university. Interested students from other disciplines may be admitted to the program but may be required to complete additional courses. Non-degree students will not be allowed to enter this program. For those who have a general non-science and non-engineering degree, admission would be based on relevant experience and the following program prerequisites:

MGT 309C Prin. of Mgmt & Organizations

CSC 220 Applied Probability & Stats.
Prerequisite: MTH 215

or

MNS 205 Intro to Quantitative Methods
Prerequisite: Placement Evaluation

Core Requirements

(8 courses; 36 quarter units—all except FEAC specialization)
(9 courses; 40.5 quarter units FEAC specialization students)

ENM 600 Engineering Mgmt Concepts

ENM 601 Project Management Principles

ENM 602 Risk, Contracts, and Legal Iss

PME 602 Skills Management

ENM 604 Quality Management

TMG 610 Global Trends in Technology

ENM 607A Capstone Course I
Prerequisite: All core classes in program.

ENM 607B Capstone Course II
Prerequisite: ENM 607A

Students in the FEAC specialization must also take the following course as an additional core course:

ENM 603 Operation Management
Prerequisite: ENM 600

Requirements for Specialization

(4 courses; 18 quarter units)

All students must choose **one (1)** area of specialization defined below:

▲ Specialization in Project Management

From small companies to giant global institutions, project managers are fueling much of the successful development of exciting technical enterprises. Talented and knowledgeable project managers command the best assignments, salaries, other compensation and bonuses. They are the future leaders and entrepreneurs. Good project managers are not born, but are nurtured from a combination of experience, time, talent, and training. Successful projects do not happen spontaneously; they require preparation, planning, and organization. This program is designed to provide systematic training to those would like to pursue an engineering project management career.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Apply a multidisciplinary approach involving the integration of engineering, management, quality, and cultural analysis to the conduct of project management engineering.
- Evaluate the financial impact of projects on corporations and businesses and develop appropriate action plans through project management engineering.
- Integrate state-of-the-art technological advances to the practice of project management engineering.
- Achieve agreed upon scope, budget and schedule requirements using resources, organizational systems, and decision-making processes.

Requirements for Specialization

(4 courses; 18 quarter units)

ENM 603	Operation Management <i>Prerequisite: ENM 600</i>
PME 601	Advanced Project Management <i>Prerequisite: ENM 600, ENM 601, ENM 602 and ENM 603</i>
PME 603	Product Management <i>Prerequisite: ENM 600, ENM 601, ENM 602 and ENM 603</i>
PME 604	Project Financing Management <i>Prerequisite: ENM 600, ENM 601, ENM 602 and ENM 603</i>

▲ Specialization in Systems Engineering

This specialization focuses on complex technology systems that have a far reaching effect on society and its people. These systems are comprised of three types of entities: a) complex products such as aircraft, ships, land vehicles, and military hardware; b) networks of information and infrastructure such as air traffic control, highways, and public works and environmental processes; and, c) the organizations that design, build, and maintain these products, systems and related services, i.e., businesses (public and private, for-profit and non-profit), military command, and government agencies. The systems engineering program provides knowledge in the activities related to the life cycle of systems including definition, development, deployment, and decommission.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Comprehend the fundamentals of systems and general systems theory.
- Design discrete and continuous systems utilizing appropriate systems theory, operational requirements, and component integration.
- Validate system performance with testing and evaluation methods.
- Maintain system operations at optimal conditions through the application of systems management fundamentals.

Requirements for Specialization

(4 courses; 18 quarter units)

SYE 600	Introduction to Systems Design
SYE 601	Systems Analysis & Design Eval <i>Prerequisite: SYE 600</i>
SYE 602	Advanced System Design <i>Prerequisite: SYE 601</i>
SYE 603	System Dynamics <i>Prerequisite: SYE 602</i>

▲ Specialization in Technology Management

This specialization prepares individuals to manage and lead the technology in any organizations. From the Internet Renaissance, a new way of managing information technology resources in organizations has emerged. Information technology has expanded the technological management responsibilities beyond desks, offices, labs, manufacturing sites, cities, and countries. Technology has become the essential force in any industry. Over the past decade the synergy of business, technology, and people have created the abundance of opportunities in all fields of technology management, especially information technology.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Implement and manage technologies aligned with the business of an organization.
- Perform organizational systems analysis, design, planning, and integration of technology.
- Evaluate hardware, software, and systems applications that support technologies.
- Develop strategic technology management policies and procedures required by the organization.

Requirements for Specialization

(4 courses; 18 quarter units)

TMG 620	Principles of Technology Mgmt.
TMG 635	Mgmt. of Tech & Innovation
TMG 640	Managing Technology Change
TMG 625	Systems Analysis and Design

■ MASTER OF SCIENCE IN INFORMATION TECHNOLOGY MANAGEMENT

Faculty Advisor: Mudasser Wyne; (858)309-3433; mwyne@nu.edu

Students in this program will learn to develop the skills needed to design, build, and manage IT infrastructures, along with career skills such as project management, software design, database management, cyber security administration, problem solving, collaboration, and critical thinking. Combining a rigorous study of protocols and standards along with hands-on learning activities on state of the art devices, students develop both theoretical and practical skills to help them fill the growing need for Information Technology Management professionals around the world.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Create software and IT project plans.
- Analyze project plans using software development life cycle (SDLC) and apply them to software and IT projects.
- Integrate local and remote servers, workstation computers and databases with proper user authentication to preserve user privacy and confidentiality.
- Administer wired and wireless networking environments.
- Design IT infrastructures using concepts of best practices in information technology management and security to enterprise processes.
- Evaluate an integrated system that involves computer applications to satisfy specific business processes.
- Manage IT projects using written and oral communication skills in collaborative environments by participating on teams that address solutions for IT management challenges.

Degree Requirements

To obtain the Master of Science in Information Technology Management, students must complete 54 graduate units. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another regionally accredited institution, as it applies to this degree, and provided the units were not used in earning another advanced degree. Please refer to the graduate admissions requirements for specific information regarding application and evaluation.

The degree program consists of ten courses plus a two-part graduate project that cannot be taken until all other core courses have been completed or by approval of the lead faculty.

Requirements for Major

(12 courses; 54 quarter units)

CIS 601	Information Systems Strategies
ITM 605	Advanced IT Project Mgmt
DAT 604	Database Design and Impl.
CIS 602	Network Services & Protocols <i>Prerequisite: CIS 601</i>
ITM 650	Network Infrastructure Mgmt
TMG 620	Principles of Technology Mgmt.
TMG 625	Systems Analysis and Design
TMG 635	Mgmt. of Tech & Innovation
TMG 640	Managing Technology Change
DAT 605	Web and Cloud Computing <i>Prerequisite: DAT 604 or approval of lead faculty.</i>

CIS 620A Master's Research Project I
Prerequisite: All core requirements with a GPA of 3.0 approval of lead faculty.

CIS 620B Master's Research Project II
Prerequisite: CIS 620A

■ MASTER OF SCIENCE IN MANAGEMENT INFORMATION SYSTEMS

Faculty Advisor: Patrick Olson; (408) 236-1152; polson@nu.edu

The Master of Science in Management Information Systems (MSMIS) program is designed to provide students with the requisite management, business, strategic, and technical skills needed to help them apply information systems technology more efficiently and effectively. The MSMIS program's objective is to close this gap by providing the needed education and career development foundations, including oral, written, and presentation skills; technical skills; people and business skills; and ethics and professionalism, which are integrated throughout its individual courses. The curriculum is designed as a set of interrelated building blocks consisting of foundations, core, integration, and career tracks.

Admission Requirements

Candidates seeking admission to the program must possess a baccalaureate degree. This program is designed to offer information systems expertise to those from various education backgrounds. Enrolling students must have an undergraduate degree in information systems, information technology, computer science, or software engineering, business or must have approval of the lead faculty and have some background in business and technology.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Use analytical and critical thinking skills to develop organizational project management strategies and strategic solutions for information system processes.
- Perform systems analysis that addresses requirements among information systems technology, people and organizational goals.
- Evaluate current and emerging systems integration and distributed computing alternatives to maximize efficiencies and meet organizational goals.
- Develop decision support system solutions inclusive of knowledge based systems, expert systems and artificial intelligence.
- Illustrate managerial principles and applications of networking and telecommunications.
- Communicate and advise organizations using written and oral skills required for IS professionals.
- Integrate legal, ethical, and global implications in decision making processes.

Degree Requirements

To receive a Master of Science in Management Information Systems, student must complete 54 quarter units of graduate coursework. A total of 13.5 quarter units of graduate work completed at another regionally accredited institution may be transferred to meet stated requirements in the program provided those units were not used in earning another advanced degree. The degree program consists of ten courses plus the two-part MSMIS graduate project (two courses; 4.5 quarter units each) that cannot be taken until all other core courses have been completed or by approval of the lead faculty.

Core Requirements

(12 courses; 54 quarter units)

CIS 601 Information Systems Strategies

CIS 602 Network Services & Protocols
Prerequisite: CIS 601

DAT 604 Database Design and Impl.

CIS 604 Management and Security
Prerequisite: CIS 601

MGT 604 Project and Program Management

BIM 606 Info Mgmt for Leaders

BIM 600 Human-Computer Interaction

BIM 610 Strategic Decision Systems

TMG 625 Systems Analysis and Design

CIS 607 Systems Integration
Prerequisite: CIS 601

CIS 620A Master's Research Project I
Prerequisite: All core requirements with a GPA of 3.0 approval of lead faculty.

CIS 620B Master's Research Project II
Prerequisite: CIS 620A

■ MASTER OF SCIENCE IN SUSTAINABILITY MANAGEMENT

Faculty Advisor: Ben Radhakrishnan; (858) 309-3423; bradhakrishnan@nu.edu

This blended program prepares students for the industrial revolution of the 21st century. There is no doubt that we need to re-think our way of living, producing and consuming in order to eliminate the current contradictions between the natural world, the community and the profitability of businesses. In fact, many corporations, cities, states and countries are introducing new policies and programs from an emphasis on pollution control to pollution prevention to sustainable practices. Sustainability in the sense that programs do incorporate all social, ecological and economic conditions, as well as, the general principle of meeting the needs of the present generation without compromising the ability of future generations to meet their own needs.

This program is designed to provide methods and theories appropriate to the study of sustainability from business perspectives to practical engineering. After a comprehensive interdisciplinary introduction to sustainability, students are exposed to managerial key ideas and practices with sustainable perspectives: risk assessment, life cycle, lean supply chain, firm excellence and innovation. Students are also exposed to combine engineering and sustainability concepts into the management practices of energy, environment, watershed and buildings. The strength of the program comes from its engineering and management blended nature, as well as its theoretical and practical approach.

Career Tracks

After completing the MS in Sustainability Management degree, students can enter the job market or pursue further higher educational degrees. Possible types of jobs include: Project Manager, Sustainability Manager, Sustainability Analyst, Sustainable Design Professional, Engineer, Environmental Consultant, Sustainability Consultant, Energy Efficiency Analyst, Operations Manager, Development Specialist, Resource Manager, etc. Students interested in continuing, their educational careers can pursue doctoral degrees in sustainability, management, sustainable development, natural resources and sustainability, or other related doctoral degrees.

UCSD Partnership Eligibility

National University and University of California San Diego Extension have formed a partnership that allows UCSD Extension Sustainable Business Practices Certificate graduates to test out of two classes in National University's MS Sustainability Management program. This agreement is only available to UCSD Extension students who meet the following criteria:

1. A bachelor's degree from an accredited university
2. Complete a college-level statistics class with a grade of C or better
3. Maintain an overall B average in UCSD Extension's sustainability certificate.
4. Complete and submit a copy of the official UCSD Extension Sustainable Business Practices Certificate to National University.

If an UCSD Extension student meets the criteria above, National University will:

1. Provide students with a fee-based exam that will, upon passing with a score of 80% or higher, substitute for SUS 601 Introduction to Sustainability.
2. Provide students with a fee-based exam that will, upon passing with a score of 80% or higher, substitute for SEM 605 Energy Management.

For additional information, please contact the Office of Extended Learning at 858.642.8600.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Apply scientific knowledge and methods required to evaluate sustainability concepts and systems.
- Design, manufacture, and manage processes in an environmentally conducive manner.
- Analyze engineering and management problems in their social and environmental context.
- Develop economic, environmental, and social sound sustainable decisions.
- Evaluate the impact of products, processes, and activities through life cycle assessment.
- Develop written communication skills required for this profession.
- Demonstrate professional, legal, and ethical responsibility in decision making practices.

Degree Requirements

To receive a Master of Science in Sustainability Management, students must complete 49.5 quarter units of graduate level credit. A total of 9.0 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree, and provided the units were not used in earning another advanced degree. Students should refer to the section in the graduate admission requirements for specific information regarding application and evaluation.

Program Prerequisites

(1 course; 4.5 quarter units)

Candidates for the program must possess a Bachelor's degree in engineering, engineering technology, sciences, business, management or a closely related area from an accredited university. Interested students from other disciplines may be admitted to the program but may be required to complete additional courses. Non-degree students will not be allowed to enter this program. For those who have a general non-science and non-engineering degree, admission is based on relevant experience and the completion of the following program prerequisite:

MTH 210* Probability and Statistics
Prerequisite: Accuplacer test placement evaluation, or MTH 12A and MTH 12B

or

CSC 220* Applied Probability & Stats.
Prerequisite: MTH 215

* This course may be waived if its equivalent has been completed at the undergraduate level with a grade of "C" or better.

Core Requirements

(11 courses; 49.5 quarter units)

- SUS 601 Introduction to Sustainability
- SUS 602 Enterprise Excellence
Prerequisite: CSC 220 or permission from lead faculty.
- SUS 603 Sustainable Innovation
- SEM 604 Life Cycle and Risk Assessment
- SEM 605 Energy Management
- SEM 606 Environmental Management
- SEM 607 Watershed Management
- SEM 608 Sustainable Buildings
- SUS 604 Sustainable Supply Chain
- SEM 610A Project I
Prerequisite: SUS 601, SUS 602, SUS 603, SEM 604, SUS 604, SEM 605, SEM 606, SEM 607 and SEM 608
- SEM 610B Project II
Prerequisite: SEM 610A

SCHOOL OF HEALTH AND HUMAN SERVICES

P 858.309.3472 • F 858.309.3480 • E shhs@nu.edu

Dean, Gloria McNeal
Ph.D., Higher Education Administration, University of Pennsylvania

- 250 Degrees Offered**
- 251 Degrees Offered by Department**
- 252 Faculty**
- 255 Undergraduate Degrees**
- 262 Nursing Programs**
- 270 Graduate Degrees**
- 279 Undergraduate Certificate**
- 280 Graduate Certificates**



DEGREE PROGRAMS OFFERED

UNDERGRADUATE DEGREES

Bachelor of Arts

with a Major in:

- Health Sciences with a Preliminary Single Subject Teaching Credential (California) 

Bachelor of Science

with Majors in:

- Allied Health 
with a Concentration in:
 - » Health Informatics
- Clinical Lab Science 
- Healthcare Administration 
- Nursing (Generic Entry)
- Nursing (Second-Bachelor Degree)
- Nursing (Licensed Vocational Nurse/
Licensed Practical Nurse to BSN)
- Nursing (RN Completion)
- Public Health 
- Radiation Therapy

GRADUATE DEGREES

Master of Healthcare Administration

Master of Public Health

with Specializations in:

- Health Promotion 
- Healthcare Administration 
- Mental Health 

Master of Science

with Fields of Study in:

- Clinical Affairs 
- Clinical Regulatory Affairs 
- Complementary & Integrative Healthcare 
- Health Informatics 
- Health and Life Science Analytics 
- Nurse Anesthesia
- Nursing
with Specializations in:
 - » Family Nurse Practitioner
 - » Nursing Administration 
 - » Nursing Informatics 
 - » Psychiatric-Mental Health Nurse
Practitioner—Lifespan

UNDERGRADUATE CERTIFICATE

- LVN “30 Unit” Option Certificate

GRADUATE CERTIFICATES

- Clinical Lab Science Didactic Certificate
- Health Coaching
- Health Informatics 
- Integrative Health 

The following program is also listed in the Sanford College of Education section:

Bachelor of Arts

with a Major in:

- Health Sciences with a Preliminary Single Subject Teaching Credential (California) 

 Entire program can be completed online.

Not all courses or programs are available at every campus.

Consult an admissions advisor for online course availability.

DEGREE PROGRAMS BY DEPARTMENT

DEPARTMENT OF COMMUNITY HEALTH

Bachelor of Arts

with a Major in:

- Health Sciences with a Preliminary Single Subject Teaching Credential (California) 

Bachelor of Science

with Majors in:

- Healthcare Administration 
- Public Health 

Master of Healthcare Administration

Master of Public Health

with Specialization in:

- Health Promotion 
- Healthcare Administration 
- Mental Health 

Master of Science

with a Field of Study in:

- Health and Life Science Analytics 

DEPARTMENT OF HEALTH SCIENCES

Bachelor of Science

with Majors in:

- Allied Health 
- with a Concentration in:
 - » Health Informatics
- Clinical Lab Science 
- Radiation Therapy

Master of Science

with Fields of Study in:

- Clinical Affairs 
- Clinical Regulatory Affairs 
- Complementary & Integrative Healthcare 
- Health Informatics 

Graduate Certificates

- Clinical Lab Science Didactic Certificate
- Health Coaching
- Health Informatics
- Integrative Health

DEPARTMENT OF NURSING

Bachelor of Science

with Majors in:

- Nursing (Generic Entry)
- Nursing (Second-Bachelor Degree)
- Nursing (Licensed Vocational Nurse/
Licensed Practical Nurse to BSN)
- Nursing (RN Completion)

Master of Science

with Fields of Study in:

- Nurse Anesthesia
- Nursing 
- with Specializations in:
 - » Family Nurse Practitioner
 - » Nursing Administration 
 - » Nursing Informatics 
 - » Psychiatric-Mental Health Nurse
Practitioner—Lifespan

Undergraduate Certificate

- LVN “30 Unit” Option Certificate

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SCHOOL OF HEALTH AND HUMAN SERVICES

UNDERGRADUATE DEGREES

■ BACHELOR OF SCIENCE

◆ MAJOR IN HEALTH SCIENCES WITH A PRELIMINARY SINGLE SUBJECT CREDENTIAL (CALIFORNIA)

Faculty Advisor: Alba Diaz; (858) 309-3497; adiaz@nu.edu

For Credential: Carol Shepherd; (916) 855-4115; cshepher@nu.edu

The Bachelor of Arts with a Major in Health Sciences with a Preliminary Single Subject Credential provides a broad-based foundation in the liberal arts and sciences and a fundamental knowledge of health education and prepares a candidate for a career as a teacher in the middle and secondary school levels. The students are required to think critically, write clearly, and speak articulately. This program prepares candidates for professional work as single subject teachers in a changing cultural and economic environment.

For additional information on credential requirements, please see the Sanford College of Education Credential Information section of the catalog.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate knowledge of developmentally appropriate grade level health education content domains.
- Describe the relationship of personal, family, school, community, cultural and environmental factors as related to health behavior and physical, emotional, and mental well-being.
- Identify cognitive, social, and physical characteristics, growth, and development of healthy adolescents, at-risk adolescents and those who have health problems.
- Examine components of research-based health education and health promotion programs/practices including coordinated school health programs.
- Discuss the evolving role of a health science teacher as a culturally responsive health educator, counselor, advocate, and resource for individuals, families, and communities.
- Analyze the role of mass media, technology and the Internet in promoting physical, mental and emotional health literacy and behaviors.
- Utilize health promotion materials, lessons, and programs to reduce health risk behavior and increase positive health behaviors.
- Discuss the personal, social, and legal requirements and appropriate prevention and intervention strategies in providing a safe, inclusive school environment.
- Integrate educational technology to meet the needs of all learners.
- Describe how to support growth in cognitive, social, physical, and emotional domains.
- Demonstrate a thorough understanding of the learning needs of students through the creation of positive learning environments.
- Utilize systematic observations, documentation, and other effective assessment strategies in a responsible manner to facilitate and account for learning and to support positive growth.
- Design, implement, and evaluate standards-based lesson plans for learning and achievement in content areas.
- Demonstrate professional standards and ethics.
- Utilize different teaching strategies to accomplish teaching and learning goals.

Degree Requirements

To receive a Bachelor of Arts with a Major in Health Science with a Single Subject Teaching Credential, candidates must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University and 76.5 of which must be completed at the upper-division level. All undergraduate students must complete a minimum 70.5 units of the University General Education requirements. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses

are specific degree requirements. All students receiving an undergraduate degree in Nevada are required by State Law to complete a course in Nevada Constitution.

Preparation for Major

(11 courses; 46.5 quarter units)

CHE 101*	Introductory Chemistry <i>Recommended Preparation: MTH 204 or MTH 215 or MTH 216A and MTH 216B</i>
PSY 100*	Introduction to Psychology
SOC 100*	Principles of Sociology <i>Prerequisite: ENG 100 and ENG 101</i>
COH 100*	Personal Health
MTH 204*	Mathematics for Science <i>Prerequisite: MTH 12A and MTH 12B or Accuplacer test placement</i>
MTH 209A*	Fundamentals of Mathematics I <i>Prerequisite: Accuplacer test placement evaluation or MTH 12A and MTH 12B</i>
COM 220*	Media Literacy
BIO 100*	Survey of Bioscience
BIO 100A*	Survey of Bioscience Lab (1.5 quarter units) <i>Prerequisite: BIO 100 for non-science majors (GE) or BIO 163 for science majors</i>
BIO 380	Human Biology for Teachers <i>Recommended Preparation: BIO 161 and BIO 162, Prerequisite: BIO 163 and BIO 100A</i>
SOC 344*	Marriage, Sex and the Family <i>Prerequisite: ENG 100 and ENG 101</i>

* May be used to meet a General Education requirement.

Requirements for Major

(23 courses; 99 quarter units)

Core Requirements

(11 courses, 49.5 quarter units)

COH 320	Chronic & Communicable Disease <i>Prerequisite: ILR 260</i>
COH 321	Health Behavior <i>Prerequisite: ILR 260</i>
COH 416	PH & Physical Activity <i>Prerequisite: COH 401</i>
COH 317	Public Health Nutrition <i>Prerequisite: ILR 260</i>
COH 318	Drug Use and Abuse <i>Prerequisite: ILR 260</i>
COH 319	Human Sexuality <i>Prerequisite: ILR 260</i>
COH 420	Health of Vulnerable Groups
HED 311	Health Literacy
HED 414	Violence & Bullying Prevention
HED 308	Mental and Emotional Health <i>Recommended: Prior completion of: COH 318</i>
HED 351	Coordinated School Health <i>Prerequisite: COH 100, Recommended: Prior completion of COH 321</i>

Education Theory/Methodology Requirements

(7 courses; 31.5 quarter units)

TED 305	Teaching as a Profession
TED 300	Fundamentals of Education <i>Prerequisite: TED 320 or TED 305 or TED 306</i>
TED 310	Development and Learning <i>Prerequisite: TED 305 or TED 320 or TED 306</i>

TED 330B	Reading and Language Arts <i>Prerequisite: TED 305 or TED 320</i>
TED 420	Diversity in Schooling <i>Prerequisite: TED 305 or TED 320</i>
TED 430	Special Needs Students <i>Prerequisite: TED 305 or TED 320 or TED 306</i>
TED 464	Mths Teach Sec Health Sci <i>Prerequisite: TED 305, TED 300, TED 310, TED 430 and HED 351, Recommended: Prior completion of: TED 330B, TED 420, COH 320, COH 416, COH 317, COH 318, COH 319, HED 308, COH 100, HED 311, HED 414 and COH 321</i>

Student Teaching Requirements

(4 courses; 13.5 quarter units)

TED 530A, 530B, 531A and 531B are field experience courses receiving a Satisfactory or Unsatisfactory grade and are not factored into cumulative GPA.

TED 530A	Student Teaching I <i>Corequisite: TED 531A</i>
TED 530B	Student Teaching II <i>Prerequisite: TED 530A, Corequisite: TED 531B</i>
TED 531A	Student Teaching Seminar I (2.25 quarter units) <i>Corequisite: TED 530A</i>
TED 531B	Student Teaching Seminar II (2.25 quarter units) <i>Prerequisite: TED 530A with a minimum grade of S, TED 531A with a minimum grade of S and Corequisite: TED 530B</i>

Credentialing Requirement

(1 course; 4.5 quarter units)

Students must have a senior standing to enroll in this course. The grade earned must be a B or better. EDX 6001X will not transfer to any graduate level program at National University or elsewhere.

EDX 6001X Computer Tech in Classroom

◆ MAJOR IN ALLIED HEALTH

Faculty Advisor: Ricardo Parker; (714) 429-5149; rparker2@nu.edu

The allied health profession refers to occupations that support, aid, and increase the efficiency of the physician, dentist, or primary healthcare specialist. Allied health professionals are involved with the delivery of health or related services pertaining to the identification, evaluation, and prevention of diseases and disorders; dietary and nutrition services; rehabilitation and health systems management.

The Bachelor of Science Major in Allied Health degree program provides a broad-based foundation in global and national healthcare issues and trends, ethical and legal issues, health promotion and disease prevention, evidence-based practice, allied healthcare research, healthcare systems management, and healthcare based informatics. The program is designed to articulate with Associate of Arts allied health related degree programs at community colleges. It prepares graduates with additional knowledge, skills, and values to advance in the allied health profession; meet societal and healthcare delivery demands; and work in a variety of settings with diverse patients, families, and communities. Graduates are prepared to assume supervisory, management, and/or educational positions. In addition, successful completion of this program allows students to pursue graduate education in the healthcare field.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Assess the relative health effects of environment, socioeconomic conditions, behavior, health services, and biology.
- Explain how a team approach that is coordinated, comprehensive and continuous facilitates successful treatment outcomes.
- Compare and contrast a medical model of healthcare delivery with a health promotion and disease prevention approach.
- Explain the process of active participation in healthcare from a provider, patient, family, and community perspective.
- Assess the impact of effective and ineffective applications of technology in health services.

- Analyze health services from social, workforce, financial, regulatory, technological, and organizational viewpoints.
- Commit to a code of professional ethics when providing services to clients, families and communities under all circumstances.
- Utilize culturally competent strategies and practices that respect the cultural, social, religious, racial, and ethnic diversity of the patient and family regarding disease and their health.

Degree Requirements

To receive a Bachelor of Science degree with a Major in Allied Health, students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level, and a minimum 70.5 units of the University General Education requirements. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements. Refer to the section on undergraduate admission procedures for specific information regarding admission and evaluation. All students receiving an undergraduate degree in Nevada are required by State Law to complete a course in Nevada Constitution.

Requirements for Major

(10 courses; 45 quarter units)

HSC 310	Issues & Trends in Healthcare
BST 322	Intro to Biomedical Statistics
GER 310	Healthy Aging
HSC 400	Mgmt for Health Professionals
HSC 300	Legal/Ethical Issues & Hlth Pr
HSC 330	Health Education & Promotion
HSC 410	Informatics for Health Profs
HSC 420	Healthcare Research
HSC 430	Case and Outcomes Management
HSC 440	Allied Health Capstone Project <i>Prerequisite: Completion of the major requirements</i>

Students may choose to complete 6 upper-division electives or the concentration in Health Informatics.

Upper-Division Electives

(6 courses; 27 quarter units)

Students must complete a minimum of 27 quarter units (6 courses) of electives to fulfill the upper-division unit requirements for the Bachelor of Science in Allied Health.

The following courses are strongly recommended.

HTM 520	Health Information Exchange
HTM 552	EHR Meaningful Use
HTM 460	Health IT Virtual Simulation <i>Prerequisite: HSC 410 with a minimum grade of C</i>
COH 320	Chronic & Communicable Disease <i>Prerequisite: ILR 260</i>
COH 310	Culture and Health <i>Prerequisite: ILR 260</i>
COH 321	Health Behavior <i>Prerequisite: ILR 260</i>
BIO 305	Genetics <i>Prerequisite: BIO 100A, BIO 161, BIO 162, BIO 163, CHE 101A, CHE 141, CHE 142 and CHE 143</i>
HTM 310	Health Informatics
HCA 402	Intro to HA QA Management <i>Prerequisite: Completion of all Coursework in Preparation for the major</i>
CIS 301	Mgmt Information Systems

▲ Concentration in Health Informatics

The Health Informatics Concentration focuses on effective and innovative use of information and communication technologies in healthcare organizations. Graduates are prepared to advance their careers as entry level health informatics specialists in a healthcare profession, support informatics teams and communicate effectively with healthcare and technology professionals.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Describe the requirements, design usability, product selection and life cycle for the software system that supports the different clinical and administrative healthcare information and communication technologies.
- Communicate effectively with healthcare and information technology professionals and staff working in the healthcare ecosystem.
- Demonstrate the ability to effectively use clinical and administrative healthcare information and communication systems.
- Design the quality improvement in a healthcare organization following the implementation of information and communication technologies.

Degree Requirements

Students in the Health Informatics Concentration are required to complete six specialized courses in addition to the core major requirements for the BS with a Major in Allied Health.

Requirements for Concentration

(6 courses; 27 quarter units)

CIS 301	Mgmt Information Systems
HTM 520	Health Information Exchange
HTM 552	EHR Meaningful Use
HTM 460	Health IT Virtual Simulation <i>Prerequisite: HSC 410 with a minimum grade of C</i>
HTM 310	Health Informatics
HCA 402	Intro to HA QA Management <i>Prerequisite: Completion of all Coursework in Preparation for the major</i>

◆ MAJOR IN CLINICAL LABORATORY SCIENCE

Faculty Advisor: Patric Schiltz; (858) 309-3476; pschiltz@nu.edu

The Bachelor of Science in Clinical Laboratory Sciences provides students with diverse laboratory skills and prepares them for employment in a clinical or research setting. The program is designed to increase knowledge of the human body in health and disease with courses that include biochemistry, virology, immunology, physiology, chemistry, microbiology, hematology, quantitative analysis and molecular diagnostics. Graduates with a degree in clinical laboratory sciences may choose to find employment in areas such as clinical diagnostics, clinical research, medical device industry, or pursue advanced degrees in healthcare related fields of study.

This degree is also designed for students interested in becoming a licensed clinical laboratory scientist in the state of California. Students with this interest should review the requirements to obtain a trainee license from the Laboratory Field Services Branch of the California Department of Health at the website below: <https://www.cdph.ca.gov/programs/lfs/Pages/ClinicalLaboratoryScientistTrainee.aspx>.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Assess clinical laboratory practice and procedure by applying the knowledge of technical skills and theory obtained.
- Identify problems in the clinical laboratory and establish a course of action to correct them.
- Distinguish among laboratory methods which use advanced analytical, immunological, microbiological, hematological, and molecular techniques.
- Evaluate laboratory procedure theory, methodology and results.
- Utilize critical thinking skills in Clinical Laboratory situations.
- Conduct research using primary literature sources.

- Produce written work of the standards required by employers in the industry or post graduate programs.

Degree Requirements

To receive the Bachelor of Science degree with a Major in Clinical Laboratory Science, students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University. Upper-division level must consist of 76.5 quarter units and general education must be a minimum of 70.5 quarter units. Refer to the section on undergraduate admission procedures for specific information regarding admission and evaluation. All students receiving an undergraduate degree in Nevada are required by State Law to complete a course in Nevada Constitution.

Preparation for Major

(11 courses; 40.5 quarter units)

BIO 161*	General Biology 1
BIO 201*	Human Anatomy & Physiol I <i>Recommended: Prior completion of: BIO 100, BIO 100A, CHE 101 and CHE 101A or equivalent courses.</i>
BIO 201A*	Human Anatomy & Physiol Lab I (1.5 quarter units) <i>Prerequisite: BIO 201</i>
BIO 203*	Introductory Microbiology <i>Recommended: Prior completion of: BIO 201 and BIO 201A, BIO 202 and BIO 202A, BIO 100 and BIO 100A, CHE 101 and CHE 101A or equivalent courses</i>
BIO 203A*	Introductory Microbiology Lab (1.5 quarter units) <i>Prerequisite: BIO 203</i>
CHE 150	Introductory Organic Chemistry <i>Prerequisite: CHE 101 and CHE 101A, or CHE 141, CHE 142, CHE 143 and CHE 149A</i>
CHE 150A	Introductory Organic Chem Lab (1.5 quarter units) <i>Prerequisite: CHE 150</i>
CHE 141	General Chemistry 1 <i>Prerequisites: MTH 215 or equivalent and CHE 101</i>
CHE 142*	General Chemistry 2 <i>Prerequisite: CHE 141</i>
CHE 350	Organic Chemistry I <i>Prerequisite: CHE 142</i>
PHS 104*	Introductory Physics <i>Prerequisite: 2 years of high school algebra and MTH 204 or MTH 215 or MTH 216A and MTH 216B</i>

* May be used to meet a General Education requirement.

Core Requirements

(11 courses; 49.5 quarter units)

BST 322	Intro to Biomedical Statistics
HSC 300	Legal/Ethical Issues & Hlth Pr
CLS 320	Clinical Lab Management
CLS 301	Clinical Biochemistry <i>Recommended: Prior completion of: CHE 142</i>
CLS 401	Quantitative Analysis <i>Recommended: Prior completion of: CHE 142</i>
CLS 305	Clinical Immunology <i>Recommended: Prior completion of: CHE 101, BIO 161 and BIO 203 or equivalent</i>
CLS 315	Molecular Diagnostics <i>Recommended: Prior completion of: BIO 162 and CHE 142</i>
CLS 310	Clinical Virology <i>Recommended: Prior completion of: CHE 101, BIO 161 and BIO 203 or equivalent</i>
CLS 405	Clinical Microbiology <i>Recommended Preparation: CLS 301 with a minimum grade of B, CLS 305 with a minimum grade of B and CLS 315 with a minimum grade of B</i>

- CLS 410 Clinical Hematology
Recommended Preparation: CLS 301 with a minimum grade of B, CLS 315 with a minimum grade of B and CLS 305 with a minimum grade of B
- CLS 495 Clinical Lab Science Capstone
Prerequisite: Must have completed all required core classes.

Upper-Division Electives

(5 courses; 22.5 quarter units)

Students must complete a minimum of 31.5 quarter units of upper-division electives to fulfill the upper-division unit requirements for the B.S. with a Major in Clinical Laboratory Science.

The following courses are strongly recommended:

- COM 354 Professional Presentations
Prerequisite: ENG 101
- HSC 410 Informatics for Health Profs
- HSC 400 Mgmt for Health Professionals
- HSC 310 Issues & Trends in Healthcare
- HSC 420 Healthcare Research

◆ MAJOR IN HEALTHCARE ADMINISTRATION

Faculty Advisor: Peggy Ranke; (858) 309-3485; pranke@nu.edu

The Bachelor of Science, Major in Healthcare Administration (BSHA) is an undergraduate professional degree designed to prepare students for entry level administrative/management positions in healthcare organizations. Ideal candidates for the BSHA program are those students looking for career entry in administration and supervisory roles in the healthcare system. Graduates will enhance their opportunities for professional growth and job placement through carefully planned internships and a capstone experience.

Healthcare administration involves the organization, financing and delivery of services to prevent and treat illness and disease, including programs that serve the public and private sectors at all levels—local, state and federal. The BSHA program emphasizes the conceptual and analytical skills required to manage in contemporary healthcare organizations. The program features opportunities in project management, teamwork and leadership. The BSHA program is an associate member institution of the Association of University Programs in Health Administration (AUPHA).

Background Checks

Agencies used by the School of Health and Human Services may require criminal background and/or drug screening prior to acceptance of a student into an internship or practicum. Students who do not pass the background check and/or drug test may be unable to attend the internship or practicum course and, therefore, may be unable to complete the program of study. Any fee or cost associated with background checks and/or drug testing is the responsibility of the student.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Differentiate the roles and perspectives of clinical practitioners, nonclinical staff, supervisors, and managers within healthcare organizations.
- Describe the management, leadership and healthcare theories and components of the health care delivery system in the United States.
- Evaluate the impact of factors that affect the policies, management and operation of healthcare organizations.
- Analyze quantitative and qualitative healthcare data and information for effective decision-making.
- Explain the legal and ethical principles and responsibilities of healthcare organizations to individual patient and community healthcare needs.
- Solve problems and improve performance in healthcare organizations using principles of accounting, law, financial analysis, human resources management, operations analysis, management information systems analysis, strategic planning, and marketing.
- Explain strategic and marketing priorities of healthcare organizations in relationship to the needs and values of a community.

- Describe the determinants and measurements of health and disease in the population and the responsibilities of healthcare organizations to individual consumers and the community.
- Demonstrate principles of collaborative leadership and team building strategies.

Degree Requirements

To receive a Bachelor of Science degree in Healthcare Administration, students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level, and a minimum 70.5 units of the University General Education requirements. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements. Refer to the section on undergraduate admission requirements for specific information regarding admission and evaluation. All students receiving an undergraduate degree in Nevada are required by State Law to complete a course in Nevada Constitution

Preparation for Major

(13 courses; 58.5 quarter units)

- COH 100* Personal Health
- COH 150 Healthcare Terminology
- ACC 201 Financial Accounting Funds.
- ACC 202 Managerial Accounting Funds.
Prerequisite: ACC 201
- PSY 100* Introduction to Psychology
- or**
- SOC 100* Principles of Sociology
Prerequisite: ENG 100 and ENG 101
- BST 322* Intro to Biomedical Statistics
- COH 310 Culture and Health
Prerequisite: ILR 260
- COH 315 Introduction to Epidemiology
Prerequisite: BST 322 and ILR 260
- COH 320 Chronic & Communicable Disease
Prerequisite: ILR 260
- COH 321 Health Behavior
Prerequisite: ILR 260
- ECO 203* Principles of Microeconomics
- ECO 204* Principles of Macroeconomics
- SOC 350* Cultural Diversity
Prerequisite: ENG 100 and ENG 101

* May be used to meet a General Education requirement.

Requirements for Major

(15 courses; 67.5 quarter units)

- HCA 400 Foundations of HC Leadership
Recommended Preparation: Completion of all coursework in preparation for the major
- HSC 300 Legal/Ethical Issues & Hlth Pr
- HSC 310 Issues & Trends in Healthcare
- HTM 310 Health Informatics
- HCA 401 Intro to HA HR Management
Recommended: Prior completion of all coursework in preparation for the major
- HCA 402 Intro to HA QA Management
Recommended: Prior completion of all coursework in preparation for the major
- HSC 430 Case and Outcomes Management
- HCA 403 Intro to Health Economics
Recommended: Prior completion of all coursework in preparation for the major

HCA 405	Basic HA Budgeting & Finance <i>Recommended: Prior completion of all coursework in preparation for the major</i>
HCA 407	Intro to HC Planning and Eval <i>Recommended Preparation: Completion of all courses in preparation for the major, Recommended: Prior completion of: HSC 410, HCA 402, HCA 403 and HCA 405</i>
HCA 409	Intro to HC Marketing <i>Recommended Preparation: Completion of all courses in preparation for the major, Recommended: Prior completion of: HCA 407</i>
ODV 420	Intro to Organizational Behavior
HCA 425	Healthcare Politics & Policy <i>Recommended: Prior completion of all coursework in preparation for the major</i>
HCA 450	Global Health Systems <i>Recommended: Prior completion of all coursework in preparation for the major</i>
HCA 494A	Healthcare Internship <i>Prerequisite: HSC 300, HSC 310, HTM 310, HCA 400, HCA 401, HCA 402, HCA 403, HSC 430, HCA 405, HCA 407, HCA 409, HCA 425, HCA 450 and ODV 420</i>

◆ MAJOR IN PUBLIC HEALTH

Onsite Faculty Advisor: Marie Boman-Davis; (858) 309-3465; mbomandavis@nu.edu

The Bachelor of Science in Public Health features a broad-based foundation in the liberal arts and sciences and an ecological perspective of public health and the role that public health professionals play in preventing disease while maintaining or increasing quality of life. Graduates of the program will possess an understanding of the contributions of core public health disciplines to the nation's health. At the same time, graduates will also learn how to apply knowledge and skills relating to the interactions and interdependencies of health behavior, the physical and social environment, and public policy to affect health at local, state, national and international levels. The program is designed to prepare entry-level public health professionals to begin careers in a variety of health agencies: governmental health agencies, voluntary health agencies, community based/non-governmental agencies, medical care services, education agencies, and business and industry. Within these practice settings, entry-level public health practitioners address significant health challenges from individual, family, group, organization, neighborhood, community, and societal perspectives. Graduates will apply their competencies to assess needs, plan and implement prevention programs, assess program outcomes, communicate and advocate for public health issues, and participate in the development of public health as a profession. Graduates will also enhance their opportunities for professional growth and job placement through planned field practicum. Upon graduation, entry-level public health practitioners may be eligible to sit for the Certified Health Education Specialists exam (CHES) through the National Commission on Health Education Credentialing, Inc. Community Health (COH) courses in levels 300 and 400 are only offered in two formats: 1) Hybrid 50/50; 2) Online.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Explain the core principles of public health and their relationship to the health status of groups, communities, and populations at the local, state, national, and international levels.
- Describe behavioral and non-behavioral variables contributing to morbidity and mortality.
- Describe the contributions of health disparities to morbidity and mortality among specific groups, communities, and societies.
- Assess the need for health promotion programs in response to the characteristics of diverse communities of interest using primary and secondary data.
- Employ a variety of strategies to plan, implement, monitor and evaluate health promotion programs in a variety of settings to meet stated goals, objectives and established standards.

- Choose appropriate strategies and tactics to influence behavioral, environmental, and public policy change to address the health needs in a given community.
- Evaluate the progress and outcomes of prevention programs in meeting stated goals and objectives and established standards.
- Design a plan for lifelong learning incorporating high professional and ethical standards, leadership, and cultural competencies and their evolving role in society.

Degree Requirements

To receive a Bachelor of Science degree in Public Health, students must complete at least 180 quarter units as articulated below including a minimum 70.5 units of the University General Education requirements, 45 quarter units of which must be completed in residence at National University, 76.5 quarter units of which must be completed at the upper-division level. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. Refer to the section on undergraduate admission requirements for specific information regarding admission and evaluation. All students receiving an undergraduate degree in Nevada are required by State Law to complete a course in Nevada Constitution.

Preparation for Major

(14 courses; 54 quarter units)

PSY 100*	Introduction to Psychology
SOC 100*	Principles of Sociology <i>Prerequisite: ENG 100 and ENG 101</i>
BST 322*	Intro to Biomedical Statistics
BIO 201*	Human Anatomy & Physiol I <i>Recommended: Prior completion of: BIO 100, BIO 100A, CHE 101 and CHE 101A or equivalent courses.</i>
BIO 201A*	Human Anatomy & Physiol Lab I (1.5 quarter units) <i>Prerequisite: BIO 201</i>
BIO 202*	Human Anatomy & Physiol II <i>Recommended: Prior completion of: BIO 201 and BIO 201A, BIO 100 and BIO 100A, CHE 101 and CHE 101A or equivalent courses</i>
BIO 202A*	Human Anatomy & Physiol Lab II (1.5 quarter units) <i>Prerequisite: BIO 202</i>
BIO 203*	Introductory Microbiology <i>Recommended: Prior completion of: BIO 201 and BIO 201A, BIO 202 and BIO 202A, BIO 100 and BIO 100A, CHE 101 and CHE 101A or equivalent courses</i>
BIO 203A*	Introductory Microbiology Lab (1.5 quarter units) <i>Prerequisite: BIO 203</i>
COH 100*	Personal Health
COH 317*	Public Health Nutrition <i>Prerequisite: ILR 260</i>
COH 318*	Drug Use and Abuse <i>Prerequisite: ILR 260</i>
COH 319*	Human Sexuality <i>Prerequisite: ILR 260</i>
HTM 310	Health Informatics

* May be used to meet a General Education requirement.

Requirements for Major

(15 courses; 67.5 quarter units)

COH 300	The Ecology of Public Health <i>Prerequisite: COH 100, PSY 100, SOC 100, BIO 203A, COH 310 and COH 320</i>
COH 310	Culture and Health <i>Prerequisite: ILR 260</i>
COH 315	Introduction to Epidemiology <i>Prerequisite: BST 322 and ILR 260</i>
COH 320	Chronic & Communicable Disease <i>Prerequisite: ILR 260</i>

COH 321	Health Behavior <i>Prerequisite: ILR 260</i>
COH 380	HP Program Planning & Eval <i>Prerequisite: COH 300, COH 315 and HTM 310</i>
COH 400	Environmental Health <i>Prerequisite: COH 380</i>
COH 401	Health Promotion Concepts <i>Prerequisite: COH 300, COH 315, COH 400 and HTM 310</i>
COH 412	Injury Prevention <i>Prerequisite: COH 401</i>
COH 416	PH & Physical Activity <i>Prerequisite: COH 401</i>
COH 422	Global Health Promotion <i>Prerequisite: COH 401</i>
COH 430	HP Strategies & Tactics <i>Prerequisite: COH 401</i>
COH 435	PH Communications & Advocacy <i>Prerequisite: COH 430</i>
COH 440	Preparedness & Disaster Mgmt <i>Prerequisite: COH 401</i>
COH 499	Public Health Field Practicum <i>Prerequisite: COH 100, COH 300, COH 310, COH 315, COH 317, COH 318, COH 319, COH 320, COH 321, COH 380, COH 400, COH 401, COH 412, COH 416, COH 422, COH 430, COH 435 and COH 440</i>

◆ MAJOR IN RADIATION THERAPY

Faculty Advisor: Cheryl Young; (714) 429-5118; cyoung2@nu.edu

The Bachelor of Science in Radiation Therapy builds on a broad-based foundation in liberal arts and sciences designed to strengthen critical thinking and communication skills to work with a diverse population in multiple healthcare settings. Graduates of this major will be able to understand all aspects of radiation therapy including effective patient care and education, treatment planning and radiation physics as well as the biological effects of radiation in a rapidly advancing high touch, highly technical profession.

The Radiation Therapy major combines classroom with clinical experiences to prepare graduates for an entry level position in the profession as an integral member of the healthcare team using radiation to treat cancer and some benign diseases. Clinical internships are assigned by the Program and may require driving up to 100 miles from designated campus. This mileage is based on distance to the clinical setting from National University at each geographic site. Clinical internships require 40 hours per week in a clinical setting. Working while in the program is not encouraged. Graduates will use their competencies to assess the physical, emotional and educational needs of the patients they serve, determine the efficacy of a prescribed treatment and carry out the accurate delivery and documentation of treatment.

The Radiation Therapy major is a full-time, lock-step program in which each cohort of students' progress in unison, taking each of the courses in a sequenced manner. Courses in the program build on knowledge from courses previously completed with medical terminology as an integral component of all courses. Students will also take two courses in one month as scheduled. Students must pass each course with a C or better to progress in the program. Once the program is completed, students will be eligible to apply to sit for the American Registry of Radiologic Technologists (ARRT) national examination and apply for certification from the California Department of Public Health, Radiologic Health Branch. The Radiation Therapy Program has received accreditation by the California Department of Public Health, Radiologic Health Branch and has received accreditation by Joint Review Committee on Education in Radiologic Technology (JRCERT), 20 N. Wacker Drive, Suite 2850, Chicago, IL 60606 312.704.5300. www.jcert.org.

The Radiation Therapy Program prepares the graduate to be able to fulfill the following outcomes as an entry-level professional.

Mission Statement

The mission of the Radiation Therapy major is to prepare students to assume the professional role of a radiation therapist. Graduates of the major will be skilled

in critical thinking to provide the highest quality of patient care, education and treatment.

Goals

1. Students will be competent in the delivery of radiation therapy treatments.
2. Students will communicate effectively.
3. Students will utilize critical thinking and problem-solving skills.
4. Students will demonstrate professional and ethical behavior.

Student Learning Outcomes

- 1.1 Demonstrate patient, radiation and equipment safety at all times.
- 1.2 Demonstrate clinical competence in the areas of patient care, treatment, and simulation.
- 2.1 Effectively communicate with patient, families.
- 2.2 Effectively communicate with members of the health care team.
- 3.1 Formulate priorities in daily clinical practice.
- 3.2 Demonstrate the ability to think critically to apply knowledge to new situations.
- 4.1 Demonstrate the concepts of teamwork.
- 4.2 Demonstrate attitudes congruent with professional standards and actions.

Admission Requirements

Students seeking to study radiation therapy at National University must:

- Meet all requirements for admission to an undergraduate degree program at the University as outlined in the University Catalog.
- Have obtained a 2.50 cumulative GPA from all regionally accredited institutions attended.
- Students must complete a minimum of 40 hours of observation in a radiation therapy department. A completed time sheet must be signed by the therapist at the observation site. Time sheets are available in the radiation therapy office. Observation site placement is the student's responsibility and can be completed at any radiation therapy department.
- Submit a minimum of 2 letters of reference forms from radiations therapists in the department where the student observed, and 1 letter of reference form from a teacher, and/or an employer. Reference forms are available from the radiation therapy office. All letters of reference must use the reference form. No other letters will be accepted. All letters of reference must be mailed to National University/Radiation Therapy, 3390 Harbor Blvd., Costa Mesa, CA 92626.
- Submit a separate application for admissions to the Department of Health Science, Radiation Therapy major.
- Complete the written essay describing motivation to be a radiation therapist. Maximum one page, 12 point font, 1.5 spacing.
- Submit a current resume with application.
- Interview with the Radiation Therapy Admissions Committee.
- Have been formally evaluated by the University Office of the Registrar.
- Completed all General Education in all Areas A-G prior to the start of the program.
- Completed all preparation for major courses with a "C" grade or better.

* Application is found in the student portal under e-forms.

* **Note:** According to California Department of Public Health requirements, a student must be at least 18 years of age to participate in Clinical Internship.

* **Note:** Meeting the minimum requirements, as listed above, does not guarantee admissions into the radiation therapy program.

Admission Process

Admission to the radiation therapy program is a three-step process: 1) Application to the University; 2) Application to the respective radiation therapy major; and 3) Participation in an interview with the Radiation Therapy Admission Committee. Prospective students should follow the University application requirements listed

in the “General Admission Procedures” section of this catalog. In addition, prospective radiation therapy students will complete a separate application for admission. These applications, with supporting documentation, are accepted on January 30th of each year. A minimum GPA of 2.50 is required for entry into the Radiation Therapy Program.

A prospective student should first meet with an Admissions Advisor. The advisors are located at each of the University campus offices. The prospective student will arrange to have transcripts from all other Colleges and Universities sent to National University. These courses will be evaluated by the Registrar’s Office for equivalency. All prospective students will enroll in RTT 201 Introduction to Radiation Therapy. This course will review all aspects of the Radiation Therapy curriculum, major and profession to provide applicants with a knowledge base to form their decision to enter the program.

A Calculation Worksheet will be used to evaluate each prospective student’s application packet by the Radiation Therapy Admissions Committee. The prospective student will be ranked in comparison to the other applicants during that application year. Application deadline is January 30th.

The scoring will be based on:

- Quality of grades in the prerequisite courses.
- Ranking of the recommendation letters.
- Knowledge of the profession.
- Written essay included with the application packet.
- Ranked interview.

Once all prospective students for a given year have been interviewed, the Radiation Therapy Admissions committee will rank applicants based on the interview and application materials. The highest ranked individuals will be invited to enter the program at San Diego, Costa Mesa or Sacramento educational sites. While student education site preference is followed, students may be accepted to another educational site based on the number of spaces available. If a student is unwilling to relocate to the education site for which they were accepted, the student will not be able to join the program. Based on ranking, a student may be invited to enter the program at their second or third preferred education site. There is no waiting list. Students who are not accepted may re-apply for admission one more time in the following year. They are encouraged to speak with the Program Director about strategies to strengthen their application.

Before participating in clinical internship, students must submit proof of the Radiation Therapy Health Clearance, current health insurance and current Cardio-Pulmonary Resuscitation (CPR) certificate from the American Heart Association (BLS-Basic Life Support for Health Care Providers). Students are responsible for determining if their health insurance coverage includes provisions for emergency room visits in the event of a needle stick or other injury in the clinical setting, as well as the costs of anti-HIV drugs if the physician determines the medications are warranted.

Please note: If the student is out of the program for 5 months or more, she/he must re-do the drug screen and background check.

In addition, before engaging in clinical practice at health facilities, students will be required to obtain professional liability insurance in the amount of \$1,000,000 per occurrence/\$3,000,000 aggregate. Continued liability coverage as well as current health clearance, clear background check and drug screen, and immunity coverage is required throughout the program.

**** Note:** Failure to maintain health clearance and a clear background check during the radiation therapy program may result in dismissal from the nursing program and possible refusal of the ARRT to allow the student to take the Radiation Therapy licensure exam. Students are responsible for meeting all of the above requirements.

Background Checks

Radiation therapy departments used by the Radiation Therapy major require criminal background and drug screening prior to internship. Students who do not pass the background check and/or drug test may be unable to attend the internship, therefore, may be unable to complete the program of study. Any fee or cost associated with background checks and/or drug testing is the responsibility of the student. Students may be subject to random drug testing. Any fees associated with this will be the responsibility of the student.

Students will need to provide their own transportation to class and clinical internship. Proof of auto insurance and a valid driver’s license is required. Travel to clinical internships may require driving up to 100 miles as measured from the National University educational site.

Students successfully completing the Radiation Therapy major will be eligible to apply for state and national examinations. Upon successful completion of the final course within the program, application for the national exam will be provided in the last course of the Program. Students are responsible for submitting applications and fees to the State of California and the American Registry of Radiologic Technologists (ARRT).

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate patient, radiation, and equipment safety at all times.
- Effectively communicate with patients/families and members of the healthcare community.
- Demonstrate clinical competence in the areas of patient care, treatment, and simulation.
- Formulate priorities in daily clinical practice.
- Apply concepts of teamwork.
- Evaluate the clinical significance of treatment parameters as prescribed and suspend treatment as appropriate.
- Develop plans based on patient assessment to address physical, emotional, and educational needs.
- Demonstrate the ability to think critically and apply knowledge to new situations.
- Analyze clinical data to ensure safety and quality improvement of radiation therapy operations.
- Evaluate treatment plans to ensure accurate and effective treatment delivery.
- Demonstrate values and attitudes congruent with the profession’s standards and ethics.
- Analyze current health care research for application to radiation therapy practice.
- Apply strategies that promote professional development and lifelong learning.

Degree Requirements

To receive a Bachelor of Science degree in Radiation Therapy, students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level and a minimum 70.5 units of the University General Education requirements. In the absence of transfer credit, additional general education electives may be necessary to satisfy total units for the degree. Refer to the section on undergraduate admission requirements for specific information regarding admission and matriculation. All students receiving an undergraduate degree in Nevada are required by State Law to complete a course in Nevada Constitution.

Preparation for Major

(12 courses; 42.75 quarter units)

MTH 215*	College Algebra & Trigonometry <i>Prerequisite: Accuplacer test placement evaluation or MTH 12A and MTH 12B</i>
BST 322*	Intro to Biomedical Statistics
BIO 161*	General Biology 1
BIO 201*	Human Anatomy & Physiol I <i>Recommended: Prior completion of: BIO 100, BIO 100A, CHE 101 and CHE 101A or equivalent courses.</i>
BIO 201A*	Human Anatomy & Physiol Lab I (1.5 quarter units) <i>Prerequisite: BIO 201</i>
BIO 202*	Human Anatomy & Physiol II <i>Recommended: Prior completion of: BIO 201 and BIO 201A, BIO 100 and BIO 100A, CHE 101 and CHE 101A or equivalent courses</i>

- BIO 202A* Human Anatomy & Physiol Lab II (1.5 quarter units)
Prerequisite: BIO 202
- BIO 203* Introductory Microbiology
Recommended: Prior completion of: BIO 201 and BIO 201A, BIO 202 and BIO 202A, BIO 100 and BIO 100A, CHE 101 and CHE 101A or equivalent courses
- BIO 203A* Introductory Microbiology Lab (1.5 quarter units)
Prerequisite: BIO 203
- PHS 181* Physics for Non-Sci Majors I
Prerequisite: 2 years of high school algebra and MTH 204 or MTH 215 or MTH 216A or MTH 216B

or

- PHS 171* General Physics 1
Prerequisite: MTH 215 or MTH 216A and MTH 216B
- PHS 182* Physics for Non-Sci Majors II
Prerequisite: PHS 181

or

- PHS 172* General Physics 2
Prerequisite: PHS 171
- RTT 201 Introduction to Radiation Ther (2.25 quarter units)

* May be used to meet a General Education requirement.

Requirements for Major

(21 courses; 73.5 quarter units)

Students must pass all courses with a C or better to progress in the program. Students will need 76.5 quarter units of upper-division level coursework. In absence of units students may need to take additional upper-division electives to satisfy the total upper-division units for the degree.

- RTT 310 Sectional/Topographic Anatomy
Prerequisite: BIO 201 with a minimum grade of C and BIO 202 with a minimum grade of C
- RTT 300 Medical Imaging
Prerequisite: RTT 200 with a minimum grade of C Acceptance into the Radiation Therapy Program or RTT 201
- RTT 305 Patient Care I (3 quarter units)
Prerequisite: BIO 201 with a minimum grade of C, BIO 202 with a minimum grade of C, BIO 203 with a minimum grade of C, RTT 300 with a minimum grade of C and Corequisite: RTT 320
- RTT 320 Pro Ethics and Legal Issues (1.5 quarter units)
Prerequisite: RTT 300, Corequisite: RTT 305
- RTT 315 Clinical Concepts I
Prerequisite: RTT 305 with a minimum grade of C and RTT 306 with a minimum grade of C
- RTT 480 Internship I
Prerequisite: RTT 300 with a minimum grade of C, RTT 305 with a minimum grade of C, RTT 306 with a minimum grade of C, RTT 310 with a minimum grade of C and RTT 320 with a minimum grade of C
- RTT 410 Clinical Radiation Physics I
Prerequisite: MTH 215 with a minimum grade of C, PHS 171 with a minimum grade of C and RTT 300 with a minimum grade of C
- RTT 411 Clinical Radiation Physics II
Prerequisite: RTT 410 with a minimum grade of C
- RTT 306 Patient Care II
Prerequisite: RTT 305 with a minimum grade of C
- RTT 415 Clinical Oncology I (2.25 quarter units)
Prerequisite: RTT 305 with a minimum grade of C, RTT 306 with a minimum grade of C, RTT 310 with a minimum grade of C, RTT 480 with a minimum grade of C and Corequisite: RTT 316
- RTT 316 Clinical Concepts II (2.25 quarter units)
Prerequisite: RTT 315 with a minimum grade of C, RTT 480 and Corequisite: RTT 415

- RTT 416 Clinical Oncology II (2.25 quarter units)
Prerequisite: RTT 415 with a minimum grade of C
- RTT 317 Clinical Concepts III (2.25 quarter units)
Prerequisite: RTT 316 with a minimum grade of C and Corequisite: RTT 416
- RTT 481 Internship II
Prerequisite: RTT 480 with a minimum grade of C
- RTT 420 Radiation Biology (3 quarter units)
Prerequisite: RTT 410 with a minimum grade of C, RTT 411 with a minimum grade of C, RTT 415 with a minimum grade of C, RTT 416 with a minimum grade of C, RTT 481 with a minimum grade of C and Corequisite: RTT 460
- RTT 460 Operational Issues (1.5 quarter units)
Prerequisite: RTT 316 with a minimum grade of C, RTT 416 with a minimum grade of C and Corequisite: RTT 420
- RTT 455 Medical Dosimetry
Prerequisite: RTT 315 with a minimum grade of C, RTT 316 with a minimum grade of C, RTT 317 with a minimum grade of C, RTT 410 with a minimum grade of C and RTT 411 with a minimum grade of C
- RTT 440 Research in Radiation Therapy (2.25 quarter units)
Prerequisite: BST 322 with a minimum grade of C, RTT 315 with a minimum grade of C, RTT 316 with a minimum grade of C, RTT 317 with a minimum grade of C, RTT 410 with a minimum grade of C, RTT 411 with a minimum grade of C, RTT 415 with a minimum grade of C, RTT 416 with a minimum grade of C and Corequisite: RTT 450
- RTT 450 Quality Management (2.25 quarter units)
Prerequisite: RTT 410 with a minimum grade of C, RTT 411 with a minimum grade of C and Corequisite: RTT 440
- RTT 482 Internship III (6 quarter units)
Prerequisite: RTT 481 with a minimum grade of C
- RTT 490 Advanced Capstone
Prerequisite: Completion of major requirements.

NURSING PROGRAMS

INFORMATION APPLICABLE TO ALL PRELICENSURE NURSING PROGRAMS

1. Generic Entry
2. LVN to BSN
3. Second Bachelor

Individuals expressing interest in studying nursing at National University will be provided with objective counseling regarding all of the options available to them through the Department of Nursing. Enrollment in the University does not automatically include admission to a nursing program.

Admission Requirements

Students seeking to study nursing at National University must:

- Meet all requirements for admission to an undergraduate degree program at the University as outlined in the University Catalog.
- Have obtained a 2.75 cumulative GPA in the General Education and prerequisite courses (courses must have been taken at a regionally accredited institution).
- Have earned a grade of "C" or higher in all prerequisite courses.
- Have a clear criminal background check and drug screen.
- Submit a separate application for admission into a specific nursing program (see below).
- Complete all non-nursing courses prior to starting nursing courses.
- Attend a Pre-Nursing Program Information Forum which will describe the process for applying to and acceptance into the Nursing Program. The specifics described are: number of Nursing courses, sequence of courses, requirements for progression in the Program. Note: Prospective Students

must attend a Pre-Nursing Forum before submitting the application packet. These Forums will be offered monthly (schedules are available by e-mailing the student's assigned advisor or advisor@nu.edu).

- Attend the mandatory new nursing student orientation and sign the attendance roster to complete the admission process.

*** Note:** Meeting the minimum requirements, as listed above, does not guarantee admission into a nursing program.

Admission Process

Admission into the prelicensure nursing programs at National University is a two-step process:

1. Application to the University; and
2. Application to the respective nursing program.

Prospective students should follow the University application requirements listed in the "General Admission Procedures" section of the catalog.

In addition, prospective nursing students will complete a separate application for admission to a specific nursing program. These applications, with supporting documents, should be sent to the Department of Nursing, to the campus at which you plan to enroll; San Diego, Fresno, or Los Angeles. These addresses are found on the Nursing application, online, and on the back of the University Catalog. Students taking their preparation courses at National University are held to the same standard as those who transfer preparation courses in from other schools.

A prospective student should first meet with an Admissions Advisor. The Advisors are located at each of the University campus offices. The prospective student will arrange to have transcripts from all other Colleges and Universities sent to National University.

These courses will be evaluated for equivalency to National University Department of Nursing required prerequisite courses. All non-nursing courses required for the BSN degree must be completed with a passing grade prior to enrollment in the first nursing course.

A Calculation Worksheet will be used to evaluate each prospective student's application packet by the Admissions Committee of the Department of Nursing. The prospective student will be ranked in comparison to the other applicants for that application cycle. The scoring system will be explained at the pre-nursing forum. Items considered in the scoring system may include but are not limited to:

- Grades and other indicators of mastery of the prerequisite course content
- Testing: Including at least the Test of Essential Academic Skills Score (TEAS), (explained below) and a proctored essay
- CLEP English Composition Exam or a Department of Nursing proctored essay

Please Note: Students will be contacted by the Department of Nursing to schedule tests (such as the proctored essay and TEAS exam) once a complete Nursing application packet is on file, after the application deadline.

All prospective students must take the Test of Essential Academic Skills (TEAS) to be considered for admission to the Nursing Program, following completion of all Math and Science prerequisite courses. The procedure for taking the TEAS will be explained at the Pre-nursing Forum. The TEAS may be taken a total of 3 times (see Re-Application Process below), with no less than 60 days between tests.

All prospective students must take the CLEP English Composition Exam and request to have exam score sent to National University or take a proctored essay as designated by the Department of Nursing. Student will be required to obtain a score of 50 on the exam, which assesses writing skills taught in the first year college composition courses. Those skills include analysis, argumentation, synthesis, usage, ability to recognize logical development and research. Students may register for the CLEP English Composition Exam at <http://clep.collegeboard.org/exam/college-composition>.

Following the receipt of all application items, the prospective student's packet will be reviewed by the Admissions Committee for the Department of Nursing, and a decision made regarding acceptance. Tentative acceptance will be offered to students achieving the highest rank scores, until all class positions are filled for any one cohort. Final admission is confirmed upon the student signing the roster

during the mandatory New Nursing Student Orientation Session. All prospective students must attend Orientation before they will be admitted to the nursing program. The prospective student will receive a letter confirming admission to the nursing program.

Students who are not accepted may re-apply for admission to the Nursing Program, up to a maximum of three applications. If the prospective student chooses to re-take the TEAS, she/he will need to follow the TEAS application process, and is responsible for any associated fees. If the prospective student chooses to re-do the essay question, she/he must contact the Nursing Department at the campus where the student applied for admission. .

Students are not eligible for financial aid until the Nursing application, Evaluation Packet, and the formal degree evaluation is done by the Office of the Registrar.

Clinical Facility Requirements

National University wishes to inform prospective students of the general nature of qualifications and restrictions of the clinical facilities. Further, National University wishes to assist applicants in meeting all essential qualifications. Applicants should assess their own capability to meet requirements of nursing prior to application to the program.

Before participating in clinical practice, students must submit proof of a health clearance that complies with the health facility's requirements for immunizations and health screening tests. In addition, before engaging in clinical practice at health facilities, students will be required to obtain professional liability insurance in the amount of \$1,000,000 per occurrence/ \$3,000,000 aggregate. Continued liability coverage as well as current health clearance, clear background check and drug screen, and immunity coverage is required throughout the program.

*** Note:** Failure to maintain health clearance and a clear background check during the nursing program may result in dismissal from the nursing program, and possibly refusal of the BRN to allow the student to take the RN licensure exam. Students must possess a social security number to disclose to the California Board of Registered Nursing (BRN) at the time of Application for Licensure by Examination.

The Department of Nursing requires that students who participate in fieldwork in healthcare facilities maintain current health insurance coverage and Cardio-Pulmonary Resuscitation (CPR) certificate from the American Heart Association (BLS-Basic Life Support for healthcare Providers plus AED certification). The student is responsible to determine if his/her personal health insurance coverage includes provisions for emergency room visits in the event of a needle stick or other high risk exposure in the clinical setting, as well as the costs of anti-HIV drugs if the physician determines the medications are warranted.

Please Note: if a student is out of the program for 5 months or more, she/he must re-do the drug screen and background check. Students are responsible to meet all requirements established by clinical facilities. If a student's background check changes such that he/she has a flag on the report at any time during the program, the student will be dismissed from the nursing program if a clinical placement for his/her clinical course(s) cannot be obtained. A cleared background check, drug screen, and physical exam are required to be submitted on a yearly basis throughout the program or as required by clinical facilities.

Students must provide their own transportation to class and all clinical experiences.

*** Note:** Proof of auto insurance, a current car registration, and a valid driver's license is required for access to clinical facilities located on military installations.

Mental and Physical Qualifications for Professional Nursing

Please be advised that there are minimum mental and physical qualifications to professional nursing practice. Typically, each nursing employer sets minimal physical and mental standards for employment as a Registered Nurse. These employers are also in control of providing National University nursing students with the clinical placements necessary to complete a nursing program. Their restrictions may affect some students' decision about whether to pursue a nursing career. At the present time, all clinical placements forbid visible tattoos and piercings (other than a single small earring in one or both ears). Any tattoos or piercings must be able to be concealed with clothing for a student to be able to pursue a nursing degree at National University. Synthetic fingernails and nail polish are prohibited.

The following are MINIMUM mental and physical qualifications for admission of applicants to a professional nursing program:

- Frequently work in a standing position, and do frequent walking.
- Lift and transfer patients up to 6 inches from a stooped position, then push or pull the weight up to 3 feet.
- Lift and transfer patients from a stooped to an upright position to accomplish bed-to-chair and chair-to-bed transfers.
- Physically apply up to 10 pounds of pressure to bleeding sites, or in performing CPR.
- Respond and react immediately to auditory instructions/requests/monitor equipment, and perform auditory auscultation without auditory impediments.
- Physically perform a twelve hour clinical laboratory experience.
- Perform close and distance visual activities (may use glasses) involving objects, persons, and paperwork, as well as discriminate depth and color perception.
- Discriminate between sharp/dull and hot/cold when using hands.
- Perform mathematical calculations for medication preparation and administration.
- Communicate effectively, both orally and in writing, using appropriate English grammar, vocabulary and wording.
- Make appropriate and timely decisions under stressful situations.

All students of the Department of Nursing are required to meet these qualifications and to abide by the rules and policies of clinical placement facilities. Additionally, students must successfully complete other course requirements in the Nursing program. Individuals applying for admission to the Department of Nursing should consider their eligibility in light of these qualifications and restrictions, and assess their ability to meet the physical and mental qualifications required in nursing. In carrying out the nondiscrimination policy of the Department of Nursing with regard to students and applicants with disabilities, the Department will endeavor to make reasonable modifications and otherwise reasonably accommodate students and applicants with disabilities. Students with disabilities should consider their ability to meet the above qualifications with reasonable accommodation. Any requests for accommodation will be considered through the University's Student Accessibility Service office as described in the university catalog.

For those female students who become pregnant during the Program, the above physical and mental qualifications should be kept in mind both during the pregnancy and during the postnatal recovery period. The student may be asked to provide a physician's clearance for return to the Program. This is especially important for women who deliver via cesarean section where the typical recovery period is 6-weeks.

Program Advisement

All accepted students will be assigned a Nursing Faculty Counselor prior to the mandatory new student orientation. Students are encouraged to periodically communicate with both the Nursing Faculty Counselor and the Admissions Advisor throughout the program.

Progression Requirements

All transfer courses accepted from another college or university must be equivalent in content and credit. Students with previous preparation in nursing are admitted to the program as space is available, providing requirements are met for admission to the University and the Department of Nursing. Prior nursing courses will be evaluated for equivalence and comparable content to nursing courses at National University. Transfer credit is not assured for prior nursing courses taken at another institution. All students with healthcare coursework from a foreign institution must have a foreign transcript evaluation done by an approved agency. Healthcare coursework includes, but is not limited to, courses taken in pursuit of a nursing, physician, dental, or other medical profession licensure. Please contact foreignevaluations@nu.edu for additional information.

Students who have not had continual enrollment in National University's nursing program (defined as not taking nursing coursework for more than a one calendar year) or who are transferring from another nursing program must demonstrate level appropriate proficiency skills prior to readmission to the program, and may

be required to pass proficiency examinations for prior courses to demonstrate current competency. Likewise, these students will need to retake the medication calculation examinations successfully. The pre-licensure nursing programs at National University are Cohort programs. Students who are unsuccessful in their first attempt at any of the nursing courses or who take a break from the course sequencing for any reason will be placed in subsequent cohorts on a space available basis; that is if and when openings in the class are available. If a student leaves his/her original cohort for any reason, there is no guarantee of space in another cohort and the student might not be able to finish his/her nursing program.

Students who are absent for a period of 12 months or more are dis-enrolled from the nursing program, and must re-apply and will be held to the nursing requirements of the catalog requirements in force when they are readmitted. For students who take a break from the Program, a schedule change form must be submitted, which will then be evaluated by the Nursing Department. Students should contact the Nursing Department for assistance with this process.

Students must be aware that grading, scheduling, clinical and other department of nursing policies may change at any time during the program. Students will receive notice, if possible, at least 30 days in advance of policy changes. However, if hospitals and other clinical facilities change clinical policies, new policies may have to be implemented with no notice to satisfy the requirements for clinical placements. Due to requirements of clinical agencies in which we place students for clinical courses, class and clinical schedules may be changed at any time prior to the start of a course. Unfortunately, the Department of Nursing does not control access to clinical agencies, and if the agency requires a last minute change, students must be prepared to make that change in order to continue in the program. For this reason, and due to the intensity of study requirements in nursing, students are strongly urged to avoid working during the nursing program.

Any student who wishes to challenge a nursing course (with an NSG prefix) or earn academic credit by examination must successfully complete the culminating examination(s) appropriate to the course. University policies, found in this catalog, should be followed to apply for Challenge or Credit by Examination opportunities. In the nursing theory or non-clinical courses, the terminal measures are often a final exam and/or term paper. In nursing theory courses, the challenge exam is typically a nationally standardized comprehensive test for which the passing standards are provided by the vendor of the test, or a course final exam, which must receive a passing grade of 80 percent or higher. In the nursing clinical laboratory classes students will demonstrate competent clinical care by way of return demonstration for all skills listed in the course syllabus being challenged. In the clinical courses where critical or life-threatening maneuvers are required, the student must perform the return demonstration with 100 percent skill and accuracy. Regardless of how many courses students take as challenge/credit by exam, they must still meet National University residency requirements.

Students requesting to take one or more NSG courses in a non-degree status are required to submit a letter of intent to the Nursing Department Director in San Diego along with any BRN-issued documents related to course requirements. Students will complete a two-part interview process and may be required to demonstrate clinical competency in a nursing laboratory. Successful candidates will be enrolled in classes on a space available basis.

The Student Agreement

To ensure that graduates of National University's nursing programs are able to meet the legal requirements of the California Board of Registered Nursing (the Board), all newly admitted nursing students must enter into a student agreement. A copy of the student agreement is distributed at the mandatory student orientation.

The student agreement gives National University the right to suspend or terminate the student's participation in the nursing program upon showing that the student has:

- Committed acts or engaged in conduct that could constitute grounds for denial of an RN license.
- Failed to demonstrate the requisite skills, and qualifications to satisfy the requirements for an RN license.
- Become impossible to place in a clinical agency due to a flag on the background check, or conduct that results in the agency refusing to admit the student for a clinical course lab.
- Demonstrated other qualities or behaviors enumerated in the student agreement inconsistent with National University's recommendation of the student for an RN license. The student agreement also authorizes National University to release to the Board of Registered Nursing all pertinent information pertaining to the qualification or fitness for an RN license.

The student agreement also authorizes National University to release to the Board of Registered Nursing all pertinent information pertaining to the qualification or fitness for an RN license.

Time Management

The professional nursing program, with its intense clinical practice component, is very demanding in terms of time and energy allocation. Students are advised not to undertake a work schedule that could jeopardize successful completion of the program. Specifically, students who work more than 8 hours per week while in the nursing program are at jeopardy of being dismissed from the program due to failing nursing courses.

Student Assistance, Notice of Need to Improve, and Dismissal From School of Nursing Programs

National University is committed to maintaining quality standards throughout its nursing programs and to graduating competent professional nurses. As required by the Board, National University identifies and assists students who need special assistance, and retains in its programs only those students who are suited for entry into or advancement in the nursing profession. The Board is charged by the state with evaluating the moral character and fitness of all persons who wish to work as a registered nurse in California healthcare facilities. Every person who is an applicant for, or who now holds any nursing license is answerable to the Board for his or her fitness-related conduct.

Learning Support Plan

Learning support plans will be used by faculty to notify students of low performance in either the classroom or clinical lab. If the student fails to meet the standard set forth in the support plan, the following may result:

1. Immediate removal from a clinical laboratory or facility site
2. Immediate removal from a theory course, and/or
3. Recommendation of dismissal from the program of study if the situation warrants

Students will receive a copy of the learning support plan and an additional copy will be maintained in the student's file in the Department of Nursing.

Procedures Governing Problems with Progress in the Program

When a student is having an academic performance problem with the nursing program or a student is notified that she/he is not meeting the standards in either the classroom, nursing skills laboratory, or clinical facility, the student should meet first with the course lead or (if the deficit is in clinical practice) with the course lead and the clinical nursing faculty. The student should seek clarification of the deficit and work with the faculty to construct a plan for improvement which may or may not include the creation of a Student/Faculty Learning Contract.

Following the receipt of an unsatisfactory grade of C- or below (graded courses) or a U (a non-graded course) for any Nursing course, the student will receive a letter via mail notifying her/him of this unsatisfactory grade with a reminder that one more unsatisfactory grade of C-/U or below in any Nursing course will result in dismissal from the Program. The only appeal to dismissal for unsatisfactory grades as defined is if one of the unsatisfactory grades meets the grounds for a grade appeal. In that case students should follow the grade appeal process as noted in the Policies and Procedures section of this catalog.

Application for Licensure

Students seeking an RN license must apply to the Board of Registered Nursing for such a license. It is the student's responsibility to keep current on the laws pertaining to the practice of registered nursing, as these laws are subject to change. Students should submit the Application for Licensure by Examination at least four to six months before their graduation date. All requests for transcript forms must be signed after the completion/ graduation date. All first time applicants are required to submit fingerprints with the application.

The Board requires applicants to take an examination administered by computer. The number of questions may vary from a minimum of 75 to a maximum of 265. The standard testing time for such examinations is a maximum of six hours.

BACHELOR OF SCIENCE IN NURSING GENERIC ENTRY (BSN) (CALIFORNIA)

Faculty Advisor: Richard Guertin; (858) 525-3735; rguertin@nu.edu

The Bachelor of Science in Nursing (BSN) program prepares degree candidates to develop critical thinking, communication and therapeutic nursing skills within the framework of trans-cultural nursing. Graduates are able to manage the nursing care of culturally diverse clients in a variety of settings.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Develop caring, therapeutic nursing relationships with individuals, families and groups.
- Provide safe, high quality, culturally competent, patient-centered nursing care for individuals across the life span in a variety of settings.
- Participate in the continuous improvement of nursing care quality and safety.
- Use nursing judgment to manage, prioritize, and delegate patient care in a variety of health care settings.
- Effectively communicate and collaborate with patients and the interdisciplinary team.
- Demonstrate professional identity by incorporating established standards of practice within the legal and ethical framework of nursing.
- Apply best, current evidence into nursing practice to achieve desired outcomes.

Degree Requirements

To receive a Bachelor of Science in Nursing (BSN), students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level, and the University General Education requirements. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements. All students receiving an undergraduate degree in Nevada are required by State Law to complete a course in Nevada Constitution.

Required General Education Preparation

(18 courses; 69 quarter units)

The following areas of General Education must be completed prior to beginning any preparation for the Major or Nursing Major core coursework: Area A1, A2, Area B, Area C, Area E, and Area F.

AREA A: ENGLISH COMMUNICATION

(10.5 quarter units)

CATEGORY 1—Writing

(6 quarter units)

- ENG 100 Effective College English I (3 quarter units)
Prerequisite: Satisfactory performance on Accuplacer
- ENG 101 Effective College English II (3 quarter units)
Prerequisite: ENG 100

CATEGORY 2—Speech and Communication

(4.5 quarter units)

- COM 103 Public Speaking

AREA B: MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING

(4.5 quarter units)

- BST 322 Intro to Biomedical Statistics

AREA C: INFORMATION LITERACY AND TECHNOLOGY

(4.5 quarter units)

- ILR 260 Information Literacy
Prerequisite: ENG 100 and ENG 101

AREA D: ARTS, HUMANITIES AND LANGUAGES

(18 quarter units)

SPN 340A Spanish for the Work Place

SPN 341 Cross-Cultural Communication

For the remaining 9 units, see the General Education section of the catalog for applicable courses.

AREA E: SOCIAL AND BEHAVIORAL SCIENCES

(9 quarter units required)

PSY 100 Introduction to Psychology

SOC 100 Principles of Sociology
Prerequisite: ENG 100 and ENG 101

AREA F: PHYSICAL AND BIOLOGICAL SCIENCES

(18 quarter units)

BIO 201 Human Anatomy & Physiol I
Recommended: Prior completion of: BIO 100, BIO 100A, CHE 101 and CHE 101A or equivalent courses.

BIO 201A Human Anatomy & Physiol Lab I (1.5 quarter units)
Prerequisite: BIO 201

BIO 202 Human Anatomy & Physiol II
Recommended: Prior completion of: BIO 201 and BIO 201A, BIO 100 and BIO 100A, CHE 101 and CHE 101A or equivalent courses

BIO 202A Human Anatomy & Physiol Lab II (1.5 quarter units)
Prerequisite: BIO 202

BIO 203 Introductory Microbiology
Recommended: Prior completion of: BIO 201 and BIO 201A, BIO 202 and BIO 202A, BIO 100 and BIO 100A, CHE 101 and CHE 101A or equivalent course

BIO 203A Introductory Microbiology Lab (1.5 quarter units)
Prerequisite: BIO 203

AREA A-G: GENERAL EDUCATION

(4.5 quarter units)

SOC 500 Cultural Pluralism in the USA
Prerequisite: ENG 100 and ENG 101

or

HUB 500 Cross-Cultural Dynamics
Prerequisite: ENG 100, ENG 101, and PSY 100

Preparation for Major

(9 courses; 36 quarter units)

The following areas of General Education must be completed prior to beginning any preparation for the Major or Nursing Major core coursework: Area A1, A2, Area B, Area C, Area E, and Area F.

NSG 403 Nursing Theories and Models

NSG 211T** Health Assessment (3 quarter units)
Prerequisite: Admission to nursing program and completion of required general education preparation with a minimum GPA 2.75

NSG 211A** Health Assessment Clinical (1.5 quarter units)

NSG 304 Pharmacology in Nursing

NSG 422 Nursing Research
Prerequisite: BST 322

NSG 200** Foundations of Nursing
Prerequisite: "C" or better in NSG 211T and "S" in NSG 211A, Corequisite: NSG 200A

NSG 200A** Foundations Clinical Lab
Prerequisite: "C" or better in NSG211T and "S" in NSG 211A

NSG 205** Medical-Surgical Nursing I
Prerequisite: NSG 200 and NSG 200A or NSG 204 and NSG 204A

NSG 205A** Medical-Surgical I Clinical
Prerequisite: NSG 200 and NSG 200A or NSG 204 and NSG 204A

** Content required for licensure by CA Board of Registered Nursing.

Nursing Core Courses

(17 courses; 64.5 quarter units)

NSG 320** Medical-Surgical Nursing II
Prerequisite: "C" or better in NSG 315 and "S" in NSG 315A

NSG 320A** Medical-Surgical II Clinical
Prerequisite: "C" or better in NSG 315 and "S" in NSG 315A

NSG 314** Child-bearing Family Nursing
Prerequisite: "C" or better in NSG 205 and "S" in NSG 205A

NSG 314A** Child-bearing Family Clinical
Prerequisite: "C" or better in NSG 205 and "S" in NSG 205A

NSG 315** Pediatric Nursing
Prerequisite: NSG 314 and NSG 314A

NSG 315A** Pediatric Nursing Clinical
Prerequisite: NSG 314 and NSG 314A

NSG 325** Psychosocial Nursing
Prerequisite: "C" or better in NSG 320 and "S" in NSG 320A

NSG 325A** Psychosocial Nursing Clinical
Prerequisite: "C" or better in NSG 320 and "S" in NSG 320A or see specific degree

NSG 412 Community Healthcare Delivery
Corequisite: NSG 412A

NSG 412A*** Community Healthcare Delivery (1.5 quarter units)
Corequisite: NSG 412

NSG 411 Community Health Frameworks
Prerequisite: NSG 412, Corequisite: NSG 411A

NSG 411A*** Community Health Framework Prac (1.5 quarter units)
Corequisite: NSG 411

NSG 410 Community: Population Focus
Prerequisite: NSG 411, Corequisite: NSG 410A

NSG 410A*** Population Focus Practicum (1.5 quarter units)
Corequisite: NSG 410

NSG 340** Nursing Leadership/Management
Prerequisite: "C" or better in NSG 325 and "S" in NSG 325A

NSG 340A** Leadership/Management Clinical (1.5 quarter units)
Prerequisite: "C" or better in NSG 325 and "S" in NSG 325A

NSG 440 Professional Issues in Nursing

** Content required for licensure by CA Board of Registered Nursing.

*** This course requires a clinical practicum of 30 hours.

BACHELOR OF SCIENCE IN NURSING (B.S.N.) SECOND-BACHELOR DEGREE (CALIFORNIA)

Faculty Advisor: Richard Guertin; (858) 525-3735; rguertin@nu.edu

This program is for individuals with prior earned bachelor's degree (i.e., B.A., B.S.) who wish to be prepared for licensure as a registered nurse while simultaneously earning a Bachelor of Science in Nursing degree.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Develop caring, therapeutic nursing relationships with individuals, families and groups.
- Provide safe, high quality, culturally competent, patient-centered nursing care for individuals across the life span in a variety of settings.
- Participate in the continuous improvement of nursing care quality and safety.
- Use nursing judgment to manage, prioritize, and delegate patient care in a variety of health care settings.

- Effectively communicate and collaborate with patients and the interdisciplinary team.
- Demonstrate professional identity by incorporating established standards of practice within the legal and ethical framework of nursing.
- Apply best, current evidence into nursing practice to achieve desired outcomes.

Degree Requirements

To receive a Bachelor of Science in Nursing (BSN), students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level, and the University General Education requirements. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation. All students receiving an undergraduate degree in Nevada are required by State Law to complete a course in Nevada Constitution.

Preparation for Major

(19 courses; 72 quarter units)

COM 103*	Public Speaking
BST 322*	Intro to Biomedical Statistics
PSY 100*	Introduction to Psychology
SOC 100*	Principles of Sociology <i>Prerequisite: ENG 100 and ENG 101</i>
BIO 201*	Human Anatomy & Physiol I <i>Recommended: Prior completion of: BIO 100, BIO 100A, CHE 101 and CHE 101A or equivalent courses.</i>
BIO 201A	Human Anatomy & Physiol Lab I (1.5 quarter units) <i>Prerequisite: BIO 201</i>
BIO 202	Human Anatomy & Physiol II <i>Recommended: Prior completion of: BIO 201 and BIO 201A, BIO 100 and BIO 100A, CHE 101 and CHE 101A or equivalent courses</i>
BIO 202A	Human Anatomy & Physiol Lab II (1.5 quarter units) <i>Prerequisite: BIO 202</i>
BIO 203	Introductory Microbiology <i>Recommended: Prior completion of: BIO 201 and BIO 201A, BIO 202 and BIO 202A, BIO 100 and BIO 100A, CHE 101 and CHE 101A or equivalent courses</i>
BIO 203A	Introductory Microbiology Lab (1.5 quarter units) <i>Prerequisite: BIO 203</i>
NSG 403	Nursing Theories and Models
NSG 211T**	Health Assessment (3 quarter units) <i>Prerequisite: Admission to nursing program and completion of required general education preparation with a minimum GPA 2.75</i>
NSG 211A**	Health Assessment Clinical (1.5 quarter units)
NSG 304	Pharmacology in Nursing
NSG 422	Nursing Research <i>Prerequisite: BST 322</i>
NSG 200**	Foundations of Nursing <i>Prerequisite: "C" or better in NSG 211T and "S" in NSG 211A, Corequisite: NSG 200A</i>
NSG 200A**	Foundations Clinical Lab <i>Prerequisite: "C" or better in NSG211T and "S" in NSG 211A</i>
NSG 205**	Medical-Surgical Nursing I <i>Prerequisite: NSG 200 and NSG 200A or NSG 204 and NSG 204A</i>
NSG 205A**	Medical-Surgical I Clinical <i>Prerequisite: NSG 200 and NSG 200A or NSG 204 and NSG 204A</i>

** Content required for licensure by CA Board of Registered Nursing.

Nursing Core Courses

(17 courses; 64.5 quarter units)

NSG 320**	Medical-Surgical Nursing II <i>Prerequisite: C" or better in NSG 315 and "S" in NSG 315A,</i>
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NSG 320A**	Medical-Surgical II Clinical <i>Prerequisite: C" or better in NSG 315 and "S" in NSG 315A</i>
NSG 314**	Child-bearing Family Nursing <i>Prerequisite: "C" or better in NSG 205 and "S" in NSG 205A</i>
NSG 314A**	Child-bearing Family Clinical <i>Prerequisite: "C" or better in NSG 205 and "S" in NSG 205A</i>
NSG 315	Pediatric Nursing <i>Prerequisite: NSG 314 and NSG 314A</i>
NSG 315A	Pediatric Nursing Clinical <i>Prerequisite: NSG 314 and NSG 314A</i>
NSG 325	Psychosocial Nursing <i>Prerequisite: C" or better in NSG 320 and "S" in NSG 320A</i>
NSG 325A	Psychosocial Nursing Clinical <i>Prerequisite: "C" or better in NSG 320 and "S" in NSG 320A or see specific degree</i>
NSG 412	Community Healthcare Delivery <i>Corequisite: NSG 412A</i>
NSG 412A***	Community Healthcare Delivery (1.5 quarter units) <i>Corequisite: NSG 412</i>
NSG 411	Community Health Frameworks <i>Prerequisite: NSG 412, Corequisite: NSG 411A</i>
NSG 411A***	Community Health Framework Pra (1.5 quarter units) <i>Corequisite: NSG 411</i>
NSG 410	Community: Population Focus <i>Prerequisite: NSG 411, Corequisite: NSG 410A</i>
NSG 410A***	Population Focus Practicum (1.5 quarter units) <i>Corequisite: NSG 410</i>
NSG 340**	Nursing Leadership/Management <i>Prerequisite: "C" or better in NSG 325 and "S" in NSG 325A</i>
NSG 340A**	Leadership/Management Clinical (1.5 quarter units) <i>Prerequisite: "C" or better in NSG 325 and "S" in NSG 325A</i>
NSG 440	Professional Issues in Nursing

** Content required for licensure by CA Board of Registered Nursing.

*** This course requires a clinical practicum of 30 hours.

LICENSED VOCATIONAL NURSE TO BACHELOR OF SCIENCE IN NURSING (L.V.N.-TO-B.S.N.) (CALIFORNIA)

Faculty Advisor: Richard Guertin; (858) 525-3735; rguertin@nu.edu

Departmental Admission Requirements

To be eligible for admission to the LVN-BSN program, candidates must satisfy all of the following criteria:

- Have completed the National University undergraduate admission process.
- Hold a current, active license to practice as a licensed vocational nurse in the state of California.
- Submit the appropriate Nursing program application.
- Attend a Pre-Nursing Program Information Forum.
- Complete all prerequisites courses.
- Take the Test of Essential Academic Skills
- Complete a proctored written essay.
- Submit the appropriate nursing program application.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Develop caring, therapeutic nursing relationships with individuals, families and groups.
- Provide safe, high quality, culturally competent, patient-centered nursing care for individuals across the life span in a variety of settings.

- Participate in the continuous improvement of nursing care quality and safety.
- Use nursing judgment to manage, prioritize, and delegate patient care in a variety of health care settings.
- Effectively communicate and collaborate with patients and the interdisciplinary team.
- Demonstrate professional identity by incorporating established standards of practice within the legal and ethical framework of nursing.
- Apply best, current evidence into nursing practice to achieve desired outcomes.

Degree Requirements

To receive a Bachelor of Science in Nursing (BSN), students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level, and the University General Education requirements. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation. The following courses are specific degree requirements. In the absence of transfer credit, students may take additional general electives to satisfy the total units required for the degree. Students exiting after completing the courses required for licensure by the California Board of Registered Nursing (as designated below) without completing at least 180 quarter units (at National University or through credit transfer) will not be granted the BSN degree. All students receiving an undergraduate degree in Nevada are required by State Law to complete a course in Nevada Constitution.

Required General Education Preparation

(18 courses; 69 quarter units)

The following areas of General Education must be completed prior to beginning any preparation for the Major or Nursing Major core coursework: Area A1, A2, B, C, D E, and F.

AREA A: ENGLISH COMMUNICATION

(10.5 quarter units)

CATEGORY 1—Writing

(6 quarter units)

- ENG 100 Effective College English I (3 quarter units)
Prerequisite: Satisfactory performance on Accuplacer
- ENG 101 Effective College English II (3 quarter units)
Prerequisite: ENG 100

CATEGORY 2—Speech and Communication

(4.5 quarter units)

- COM 103 Public Speaking

AREA B: MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING

(4.5 quarter units)

- BST 322 Intro to Biomedical Statistics

AREA C: INFORMATION LITERACY AND TECHNOLOGY

(4.5 quarter units)

- ILR 260 Information Literacy
Prerequisite: ENG 100 and ENG 101

AREA D: ARTS, HUMANITIES, AND LANGUAGES

(18 quarter units)

- SPN 340A Spanish for the Work Place
- SPN 341 Cross-Cultural Communication

For the remaining 9 units, see the General Education section of the catalog for applicable courses.

AREA E: SOCIAL AND BEHAVIORAL SCIENCES

(9 quarter units)

- PSY 100 Introduction to Psychology
- SOC 100 Principles of Sociology
Prerequisite: ENG 100 and ENG 101

AREA F: PHYSICAL AND BIOLOGICAL SCIENCES

(18 quarter units)

- BIO 201 Human Anatomy & Physiol I
Recommended: Prior completion of: BIO 100, BIO 100A, CHE 101 and CHE 101A or equivalent courses.
- BIO 201A Human Anatomy & Physiol Lab I (1.5 quarter units)
Prerequisite: BIO 201
- BIO 202 Human Anatomy & Physiol II
Recommended: Prior completion of: BIO 201 and BIO 201A, BIO 100 and BIO 100A, CHE 101 and CHE 101A or equivalent courses
- BIO 202A Human Anatomy & Physiol Lab II (1.5 quarter units)
Prerequisite: BIO 202
- BIO 203 Introductory Microbiology
Recommended: Prior completion of: BIO 201 and BIO 201A, BIO 202 and BIO 202A, BIO 100 and BIO 100A, CHE 101 and CHE 101A or equivalent courses
- BIO 203A Introductory Microbiology Lab (1.5 quarter units)
Prerequisite: BIO 203

AREA A-G: GENERAL EDUCATION

(4.5 quarter units)

- SOC 500 Cultural Pluralism in the USA
Prerequisite: ENG 100 and ENG 101

or

- HUB 500 Cross-Cultural Dynamics
Prerequisite: ENG 100, ENG 101, and PSY 100

Nursing Core Courses

(19 courses; 69 quarter units)

- NSG 310 Professional Nursing Values
- NSG 403 Nursing Theories and Models
- NSG 211T Health Assessment (3 quarter units)
Prerequisite: Admission to nursing program and completion of required general education preparation with a minimum GPA 2.75
- NSG 211A Health Assessment Clinical (1.5 quarter units)
- NSG 404 Pharmacology for Nurses
- NSG 422 Nursing Research
Prerequisite: BST 322
- NSG 320 Medical-Surgical Nursing II
Prerequisite: C" or better in NSG 315 and "S" in NSG 315A
- NSG 320A Medical-Surgical II Clinical
Prerequisite: C" or better in NSG 315 and "S" in NSG 315A
- NSG 325 Psychosocial Nursing
Prerequisite: C" or better in NSG 320 and "S" in NSG 320A
- NSG 325A Psychosocial Nursing Clinical
Prerequisite: "C" or better in NSG 320 and "S" in NSG 320A or see specific degree
- NSG 412 Community Healthcare Delivery
Corequisite: NSG 412A
- NSG 412A*** Community Healthcare Delivery (1.5 quarter units)
Corequisite: NSG 412
- NSG 411 Community Health Frameworks
Prerequisite: NSG 412, Corequisite: NSG 411A
- NSG 411A*** Community Health Framework Pra (1.5 quarter units)
Corequisite: NSG 411
- NSG 410 Community: Population Focus
Prerequisite: NSG 411, Corequisite: NSG 410A
- NSG 410A*** Population Focus Practicum (1.5 quarter units)
Corequisite: NSG 410
- NSG 340 Nursing Leadership/Management
Prerequisite: "C" or better in NSG 325 and "S" in NSG 325A

NSG 340A* Leadership/Management Clinical (1.5 quarter units)
Prerequisite: "C" or better in NSG 325 and "S" in NSG 325A

NSG 440 Professional Issues in Nursing

** Content required for licensure by CA Board of Registered Nursing.

*** This course requires a clinical practicum of 32 hours.

■ BACHELOR OF SCIENCE IN NURSING (B.S.N.) RN COMPLETION

Faculty Advisor: Rebecca Dahlen; (714) 429-5188; rdahlen@nu.edu

INFORMATION APPLICABLE TO RN to BSN COMPLETION PROGRAM

The RN to BSN Program is delivered in a 100% online format. Courses are 4 or 8 weeks in length. The program provides a foundation for professional nursing practice at the baccalaureate level. The program is accredited by the Commission on Collegiate Nursing Education (CCNE).

Admission Requirements

Students seeking to study nursing at National University must:

- Meet all requirements for admission to an undergraduate degree program at the University as outlined in the University Catalog.
- Have obtained a 2.0 cumulative GPA from all regionally accredited institutions attended.
- Submit a separate application for admission into the RN to BSN Program.
- Provide proof of a current, active, and unencumbered RN license in the State of residence.
- Provide Evidence of current AHA Healthcare Provider BLS CPR Card throughout the program.
- Provide evidence of current, active professional liability and malpractice insurance coverage for practicum courses.
- Provide one official transcript from each college or university attended.

Additional Prerequisite Requirement

Students should be proficient in operating a personal computer, including: Demonstrated competency in standard computer operating systems, electronic filing systems, basic keyboarding skills, organizing and sorting electronic documents; Demonstrated knowledge of standard computer applications to include Microsoft Word, Excel, and PowerPoint and familiarity with using internet browsers and standard email systems such as MS Outlook.

Admission Process

Admission into the RN to BSN Program at National University is a two-step process:

1. Application to the University, and
2. Application to the RN to BSN Program

For information about the program and how to obtain the RN to BSN Program application, students should email the Nursing Coordinator at RNCompletion@nu.edu.

Prospective students should follow the University application requirements listed in the "Academic Information for Undergraduate Degree Admission Procedures" section of this catalog. A prospective student should first meet with an Admissions Advisor. Advisors are located at each of the University campus offices and are available online. The prospective student should arrange to have transcripts from all other colleges and universities sent to National University.

Following the receipt of all application items, the prospective student's packet will be reviewed. Admission will be offered to students achieving complete applicant files, until all class positions are filled. The prospective student will receive a letter via email regarding this decision.

Students are not eligible for financial aid until the RN to BSN Program application, evaluation packet, and the formal degree evaluation are completed by the Office of the Registrar.

The Department of Nursing requires that students who participate in practicums at healthcare related facilities maintain current health insurance coverage and a current AHA Healthcare Provider BLS CPR Card.

NOTE: Students may be required to provide proof of current immunizations and a clear background check depending on practicum location selection.

Program Advisement

All accepted students will be assigned a Nursing Faculty Advisor. Students are encouraged to periodically communicate with both the Nursing Faculty Counselor and their assigned Advisor throughout the program.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Develop caring, therapeutic nursing relationships with individuals, families, groups and populations.
- Provide safe, high quality, culturally competent, patient-centered nursing care for individuals across the life span in a variety of settings.
- Participate in the continuous improvement of nursing care quality and safety.
- Use nursing judgment to manage, prioritize, and delegate patient care in a variety of health care settings.
- Effectively communicate and collaborate with patients and the interdisciplinary team.
- Demonstrate professional identity by incorporating established standards of practice within the legal and ethical framework of nursing.
- Apply best, current evidence into nursing practice to achieve desired outcomes.

Degree Requirements

To receive a Bachelor of Science in Nursing (BSN), students must complete 180 quarter units as articulated in the general catalog, 45 quarter units must be completed at National University, 76.5 quarter units must be completed at the upper-division level and the program must fulfill a minimum 70.5 quarter units of the University General Education requirements. In absence of transfer credit, students may need to take additional general electives to satisfy the total units for the degree. Remedial courses accepted for the ASN degree may not transfer. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation. All students receiving an undergraduate degree in Nevada are required by State Law to complete a course in Nevada Constitution.

A maximum of 45 quarter units (30 semester units) of lower division credit may be allowed for clinical courses for a registered nurse who is a graduate of a three-year hospital nursing school. Up to 22.5 quarter units (15 semester units) of additional lower division credit may be granted for academically equivalent coursework. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation.

A maximum of 31.5 quarter units of upper division elective units may apply toward the baccalaureate nursing (RN-BSN) degree if a student has passed the NCLEX-RN examination.

Preparation for Major

(1 course; 4.5 quarter units)

SOC 350* Cultural Diversity
Prerequisite: ENG 100 and ENG 101

*May be used to meet a General Education requirement.

Nursing Core Courses

(10 courses; 43.5 quarter units)

HTM 310 Health Informatics

NSG 303 Professional Issues for RNs

BST 322 Intro to Biomedical Statistics

NSG 443 Evidence Based Practice
Prerequisite: BST 322

NSG 442 NSG Leadership and Management
Corequisite: NSG 442A

NSG 442A NSG LDRSH & MGMT Practicum (3 quarter units)
Corequisite: NSG 442

NSG 444	Community Population NSG (6 quarter units) <i>Corequisite: NSG 444A</i>
NSG 444A	Comm Pop NSG Practicum (3 quarter units) <i>Corequisite: NSG 444</i>
NSG 447	Qual Improvement <i>Corequisite: NSG 447A, Prerequisite: BST 322</i>
NSG 447A	Qual Improvement Practicum <i>Prerequisite: NSG 443, Corequisite: NSG 447</i>

Upper-Division Electives

(7 courses; 31.5 quarter units)

In the absence of upper-division transfer units, additional quarter units of upper-division coursework may be needed to meet the minimum upper-division requirement of 76.5 quarter units. Electives should be chosen in consultation with the faculty and/or admission advisor.

Students should choose from the following Upper-Division Electives or apply for the NCLEX-RN Prior Learning Credit:

HSC 330	Health Education & Promotion
HSC 310	Issues & Trends in Healthcare
HSC 300	Legal/Ethical Issues & Hlth Pr
SPN 340A	Spanish for the Work Place
SPN 341	Cross-Cultural Communication
PHL 337	Ethics <i>Prerequisite: ENG 100 and ENG 101</i>
GER 310	Healthy Aging

GRADUATE DEGREES

■ MASTER OF HEALTHCARE ADMINISTRATION

Faculty Advisor: Lockford Jones; (858) 309-3483; ljones2@nu.edu

The Master of Healthcare Administration (MHA) is a graduate professional degree designed to enhance the practice of healthcare administration/management by preparing students for entry level and middle management roles in healthcare organizations. Healthcare management involves the organization, financing and delivery of services to prevent and treat illness and disease, including programs that serve the public and private sectors at all levels—local, state, and federal. Faculty members have expertise in diverse fields such as management, economics, law, medicine, public health, planning, sociology, and statistics. They are united by a common commitment to solving problems and developing innovations related to the access, cost, and quality of healthcare.

The MHA program emphasizes the conceptual and analytical skills required to understand and manage today's healthcare organization and prepare for tomorrow's challenges. Special attention is given to the social contributions of the profession and its unique people dependent focus. Also featured are experiential opportunities in project management, teamwork and leadership. Ideal candidates for the MHA program are those students looking for career advancement from middle to upper middle management; those looking for career transition into healthcare administration from other professions; and those looking to advance from clinical/technical roles to management roles. Graduates will enhance their opportunities for professional growth and job placement through carefully planned internships and a capstone experience. The MHA program is an associate member institution of the Association of University Programs in Health Administration (AUPHA).

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Solve complex problems in a healthcare environment by employing analytical skills.
- Establish strategic priorities of a healthcare organization in line with the needs and values of the community it serves.
- Conduct financial analysis, explain financial and accounting information, and make long-term investment decisions for a healthcare organization.
- Apply healthcare management concepts for healthcare organizations.

- Utilize administrative and clinical information technology and decision-support tools in process and performance improvement.
- Incorporate the principles of quality management for improving outcomes in healthcare organizations.
- Synthesize best practices in healthcare leadership.
- Evaluate the ethical, legal, and regulatory requirements of the healthcare industry.

Degree Requirements

To receive an MHA degree, students must complete at least 72 quarter units of graduate work. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree and provided the units were not used in earning another advanced degree. Refer to the section on graduate admission requirements for specific information regarding application and evaluation.

Core Requirements

(16 courses; 72 quarter units)

HCA 600	U.S. Healthcare System
HCA 610	Health Policy <i>Prerequisite: HCA 600</i>
COH 602	Biostatistics <i>Prerequisite: HCA 600</i>
HCA 620	Health Organization Management <i>Prerequisite: COH 602</i>
HCA 626	Healthcare Information Systems <i>Prerequisite: HCA 620</i>
HCA 622	Quality Appraisal & Evaluation <i>Prerequisite: HCA 600, HCA 610, HCA 620, and COH 606</i>
COH 606	Epidemiology <i>Prerequisite: COH 602 and COH 605 or COH 616 or HCA 626</i>
HCA 660	Health Economics
HCA 628	HA Human Resources Management <i>Prerequisite: HCA 622</i>
HCA 630	Healthcare Law & Ethics
HCA 663	Healthcare Accounting/Finance <i>Prerequisite: HCA 628</i>
HCA 624	Healthcare Planning & Marketing <i>Prerequisite: COH 611</i>
COH 611	Public Health Research Methods <i>Prerequisite: COH 602</i>
HCA 670	Healthcare Leadership <i>Prerequisite: HCA 624</i>
HCA 691	Healthcare Internship <i>Prerequisite: HCA 600, COH 602, HCA 610, HCA 620, HCA 622, COH 606, HCA 624, HCA 626, HCA 628, HCA 630, HCA 660, HCA 663, COH 611, HCA 670 and permission by instructor</i>
HCA 692	Healthcare Capstone <i>Prerequisite: HCA 691 or permission by instructor.</i>

Recommended Elective

(1 course; 4.5 quarter units)

HCA 650	Medical Practice Management
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■ MASTER OF PUBLIC HEALTH

Faculty Advisor: Gina Marie Piane; (714) 429-5474; gpiane@nu.edu

The Master of Public Health (MPH) is a graduate professional degree designed to prepare students for leadership positions in health promotion and disease prevention, community mental health or public healthcare administration. Public Health involves multidisciplinary and collaborative strategies for solving health related problems and promoting social justice including programs that serve the public sector at all levels—local, state, federal, and global. Faculty members have expertise and experience in public health applied research and in higher education.

The MPH program emphasizes the application of broad-based, state-of-the-art quantitative and qualitative skills needed for problem-solving. Special attention is given to enhancement of communication skills needed to work with diverse populations. Ideal candidates for the MPH program are those students looking for career advancement within the public health sector; and those looking for career transition into public health from other health professions. Graduates will enhance their opportunities for professional growth and job placement through carefully planned internships and a comprehensive capstone experience. The MPH program is accredited by the Council on Education in Public Health (CEPH).

In accordance with the competency guidelines established by the National Commission for Health Education Credentialing (NCHEC) and the Council on Education in Public Health (CEPH), the Master of Public Health program prepares graduates to master the following program learning outcomes.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Analyze and interpret health data.
- Describe the distribution and determinants of disease, disabilities and death in human populations.
- Evaluate the environmental factors that affect the health of a community.
- Analyze the planning, organization, administration and policies of health care organizations.
- Apply the concepts and methods of social justice and social and behavioral sciences relevant to the identification and solution of public health problems.

Degree Requirements

To receive an MPH degree, students must complete at least 72 quarter units of graduate work including the core MPH requirements and one area of specialization. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree and provided the units were not used in earning another advanced degree. Refer to the section on graduate admission requirements for specific information regarding application and evaluation.

Core Requirements

(8 courses; 36 quarter units)

HCA 600	U.S. Healthcare System
COH 602	Biostatistics <i>Prerequisite: HCA 600</i>
COH 606	Epidemiology <i>Prerequisite: COH 602 and COH 605 or COH 616 or HCA 626</i>
COH 604	Theories of Health Behavior <i>Prerequisite: COH 603 or COH 621 or HCA 620</i>
COH 608	Public Health & the Enviro <i>Prerequisite: COH 606</i>
COH 611	Public Health Research Methods <i>Prerequisite: COH 602</i>
COH 500	Global Health Experience
or	
COH 691	Public Health Internship <i>Prerequisite: HCA 600, COH 602, COH 604, COH 606, COH 608, COH 611, COH 613 or COH 619 or HCA 670</i>
COH 692	Public Health Capstone <i>Prerequisite: COH 691</i>

Area of Specialization

(8 courses; 36 quarter units)

▲ Specialization in Health Promotion

Faculty Advisor: Gina Marie Piane; (714) 429-5474; gpiane@nu.edu

The specialization in Health Promotion will prepare MPH students for leadership positions in health promotion, health education and health enhancement. The program emphasizes the planning, implementation and evaluation of community-

wide prevention programs. The pursuit of social justice and global health are overarching concepts throughout the MPH program.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Assess individual and community needs for health education.
- Plan health education strategies, interventions, and programs.
- Implement health education strategies, interventions, and programs.
- Conduct evaluation related to health education.
- Administer health education strategies and interventions.
- Serve as a health education resource person.
- Communicate and advocate for health and health education.
- Apply appropriate research principles and techniques in health education.

Requirements for Specialization

(8 courses; 36 quarter units)

COH 601	Global Public Health <i>Prerequisite: HCA 600</i>
COH 603	Public Health Biology <i>Prerequisite: COH 602</i>
COH 607	Public Health Program Develop <i>Prerequisite: COH 606</i>
COH 609	PH Program Evaluation <i>Prerequisite: COH 607 or COH 616</i>
COH 605	Public Health Promotion <i>Prerequisite: COH 604</i>
COH 618	Health Promotion Strategies <i>Prerequisite: COH 605 and COH 609</i>
COH 613	Public Health Informatics <i>Prerequisite: COH 606 and COH 612</i>
COH 612	Health Policy and Advocacy <i>Prerequisite: COH 611</i>

▲ Specialization in Healthcare Administration

Faculty Advisor: Lockford Jones; (858) 309-3483; ljones2@nu.edu

The Specialization in Healthcare Administration will prepare MPH students for leadership positions in public and private healthcare. Healthcare management involves the organization, financing and delivery of services to prevent and treat illness and disease.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Conduct financial analysis, explain financial and accounting information, and make long-term investment decisions for a healthcare organization.
- Apply healthcare management methods to healthcare organizations.
- Use administrative and health information technology to develop process and performance improvement plans.
- Incorporate the principles of quality management for improving outcomes in healthcare organizations.
- Synthesize best practices in healthcare leadership.

Requirements for Specialization

(8 courses; 36 quarter units)

HCA 610	Health Policy <i>Prerequisite: HCA 600</i>
HCA 620	Health Organization Management <i>Prerequisite: COH 602</i>
HCA 626	Healthcare Information Systems <i>Prerequisite: HCA 620</i>
HCA 622	Quality Appraisal & Evaluation <i>Prerequisite: HCA 600, HCA 610, HCA 620 and COH 606</i>

HCA 628	HA Human Resources Management <i>Prerequisite: HCA 622</i>
HCA 663	Healthcare Accounting/Finance <i>Prerequisite: HCA 628</i>
HCA 624	Healthcare Planning & Marketin <i>Prerequisite: COH 611</i>
HCA 670	Healthcare Leadership <i>Prerequisite: HCA 624</i>

▲ Specialization in Mental Health

Faculty Advisor: Ritika Bhawal; (858) 309-3445; rbhawal@nu.edu

Students in the specialization in Mental Health will be prepared for leadership positions in planning, implementing and evaluating community-wide prevention programs to enhance mental health.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Assess the social, political, and environmental context of mental health in relation to public health practice.
- Plan mental health interventions and programs.
- Conduct evaluations related to mental health.
- Relate fundamental principles of epidemiology to mental and substance abuse disorders.
- Apply appropriate research principles and techniques to mental health.
- Advocate for mental health in communities.

Requirements for Specialization

(8 courses; 36 quarter units)

COH 601	Global Public Health <i>Prerequisite: HCA 600</i>
COH 621	PH Aspects of Drug Addiction
COH 616	Mental Health Promotion
COH 609	PH Program Evaluation <i>Prerequisite: COH 607 or COH 616</i>
COH 614	Psychosocial Epidemiology <i>Prerequisite: COH 606</i>
COH 617	PH Aspects of Violence <i>Prerequisite: COH 604 and COH 609</i>
COH 612	Health Policy and Advocacy <i>Prerequisite: COH 611</i>
COH 619	PH Aspects of Human Sexuality <i>Prerequisite: COH 604 and COH 612</i>

■ MASTER OF SCIENCE IN CLINICAL AFFAIRS

Faculty Advisor: Irvin Kluth; (858) 309-3478; ikluth@nu.edu

The Master of Science in Clinical Affairs provides a comprehensive program of graduate study in the need, design, implementation and management of clinical trials from the biomedical industry perspective. In particular, it focuses on global regulations, standards and statutes which are necessary for designing, developing, obtaining approval, performing, and reporting on clinical trials. The program will be based on lectures, case studies, research and comprehensive texts and articles associated with the global biomedical industry, regulatory agencies, and governmental authorities who are engaged in clinical trial research monitoring, coordination and compliance. This program will prepare the student with a comprehensive academic and practical knowledge of the field; an understanding of the clinical life cycle, data management, and critical role that clinical trial research plays in the development and commercialization of biologic, device and drug products; and the skills needed to develop and implement appropriate protocols and documents.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Employ the global regulations, standards, and GCPs involved in designing, implementing and managing clinical trials for biologics, medical devices, and drugs.
- Apply knowledge of human rights obligations, the clinical life cycle, and adverse events to the design of a clinical trial.
- Select and utilize standard biomedical clinical affairs operating policies, procedures, forms, templates, reports, and electronic records.
- Design a methodology for a clinical trial with supportive data management and data analysis.
- Write compliance documents for clinical trials.
- Conduct a clinical trial regulatory audit/inspection.
- Design and evaluate clinical trials.

Degree Requirements

To receive a Master of Science in Clinical Affairs, students must successfully complete at least 58.5 quarter units as required and identified in the curriculum. A total of 13.5 quarter units may be transferred and granted for graduate work successfully completed at another accredited institution provided the units were not used in earning another advanced degree. Students should refer to the section on graduate admission requirements for specific information regarding application, transfer and evaluation, and graduation policies, procedures, and requirements.

Core Requirements

(10 courses; 45 quarter units)

CAF 600	Clinical Research Survey <i>Recommended: Prior completion of: previous or concurrent work experience and/or employment within the biomedical industry specifically within the Clinical, Quality or Regulatory Affairs functions.</i>
CAF 605	Good Clinical Practice (GCP) <i>Recommended: Prior completion of: CAF 600</i>
CAF 615	CAF Data Mgmt & Statistics <i>Recommended: Prior completion of: CAF 600</i>
CAF 621	CAF Ethics & Pharmacovigilance <i>Recommended: Prior completion of: CAF 600</i>
CAF 635	Clinical Trial Design <i>Recommended: Prior completion of: CAF 600</i>
CAF 645	CAF Communications <i>Recommended: Prior completion of: CAF 600</i>
CAF 650	Clinical Operations Part 1 <i>Recommended: Prior completion of: CAF 600</i>
CAF 651	Clinical Operations Part 2 <i>Prerequisite: CAF 650</i>
CAF 660	Clinical Trial Project Mgmt <i>Recommended: Prior completion of: CAF 600</i>

Choose **one (1)** of the following courses:

CAF 699A	Capstone Thesis Option <i>Prerequisite: CAF 605, CAF 615, CAF 621, CAF 635, CAF 645, CAF 650, CAF 651 and CAF 660</i>
CAF 699B	Capstone Project Option <i>Prerequisite: CAF 605, CAF 615, CAF 621, CAF 635, CAF 645, CAF 650, CAF 651 and CAF 660</i>
CAF 699C	Capstone Internship Option <i>Prerequisite: CAF 605, CAF 615, CAF 621, CAF 635, CAF 645, CAF 650, CAF 651 and CAF 660</i>
CAF 699D	Capstone Comprehensive Exam <i>Prerequisite: CAF 605, CAF 615, CAF 621, CAF 635, CAF 645, CAF 650, CAF 651 and CAF 660</i>

Program Electives

(3 courses; 13.5 quarter units)

Students must choose **three (3)** courses from the following:

MRA 600	Intro to Regulatory Affairs
MRA 601	Clinical Documentation
MRA 602	Human Subjects in Clinical Tri
MRA 603	Medical Device and Pharmaceuti
MRA 604	Coordinating and Monitoring Cl
MRA 605	Analytical Methods for Regulat
MRA 606	FDA Regulations & Submissions

■ MASTER OF SCIENCE IN CLINICAL REGULATORY AFFAIRS ☑

Faculty Advisor: Irvin Kluth; (858) 309-3478; ikluth@nu.edu

The Master of Science in Clinical Regulatory Affairs provides a comprehensive program of graduate study in the field of clinical trials and the federal regulations associated with developing and performing clinical trials. The program will be based on didactic lectures, case studies, and comprehensive texts and articles associated with federal government regulations and clinical trial research monitoring and coordinating. This program will allow the student to have a comprehensive knowledge of the field, develop and implement appropriate protocols and documents, as well as understand data management and the clinical trial research industry.

Background Checks

Clinical agencies utilized by the School of Health and Human Services may require criminal background and/or drug screening prior to acceptance of the student into the clinical facilities. Students who do not pass the criminal background check and/or drug test may be unable to attend the clinical course and therefore may be unable to complete the program of study. Any fee or cost associated with background checks and/or drug testing is the responsibility of the student.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Understand the federal regulations in the approval process of a new drug, medical device, or biologic.
- Have a fundamental knowledge of human rights obligations, adverse events, clinical trial monitoring, and data collection.
- Understand good clinical and manufacturing process.
- Develop and implement standard operating procedures, clinical data collection forms, electronic records, clinical trial protocols, and federal regulatory forms.
- Develop and implement a methodology for a clinical trial with supportive data management and data analysis.
- Design and implement an investigational device exemption.
- Design and implement an investigational new drug application.
- File for pre-market approval, new drug approval, or biologic license approval.
- Develop compliance documents and quality assurance and quality control documentation.
- Prepare for an FDA meeting.
- Understand evidence based data and data management.
- Coordinate and monitor clinical trials.
- Understand and comply with FDA audits.
- Be proficient in statistical analysis of clinical results.

Degree Requirements

To receive a Master of Science in Clinical Regulatory Affairs, students must successfully complete at least 49.5 quarter units as required and identified in the curriculum. A total of nine (9) quarter units maybe transferred and granted for graduate work successfully completed at another accredited institution. Students should refer to the section on graduate admission requirements for specific information regarding application, transfer and evaluation, and graduation policies, procedures, and requirements.

Core Requirements

(11 courses; 49.5 quarter units)

MRA 600	Intro to Regulatory Affairs
MRA 601	Clinical Documentation
MRA 602	Human Subjects in Clinical Tri
HCA 609A	Healthcare Law, Policy, Politi
HTM 605	Healthcare Info Technologies
HCA 605	Evidenced Based Healthcare
MRA 603	Medical Device and Pharmaceuti
MRA 604	Coordinating and Monitoring Cl
MRA 605	Analytical Methods for Regulat
MRA 606	FDA Regulations & Submissions
MRA 610A	Regulatory Affairs Capstone

or

MRA 610B	Regulatory Affairs Internship
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■ MASTER OF SCIENCE IN COMPLEMENTARY & INTEGRATIVE HEALTHCARE ☑

Faculty Advisor: Ellen Kaye Gehrke; (858) 309-3482; ekayegerke@nu.edu

The Master of Science in Complementary and Integrative Health (MSCIH) is a graduate professional degree designed to provide the student with advanced knowledge and skills in complementary and integrative health practices. The program prepares students to master their ability to develop a therapeutic relationship between clients and practitioners that highlights the integration of mind, body and spirit, identifies appropriate evidence-based practices and incorporates multiple modalities to achieve optimal health and healing. The curriculum emphasizes prevention, health maintenance, early intervention and patient-driven care. Recognizing that integrative health is more than practicing modalities, students will also develop skills in communication and leadership, business management and how to work within a transforming healthcare system.

Graduates with this degree will be able to apply their new knowledge and skills in many healthcare environments including hospitals, integrative health facilities, acute care facilities, private clinical practices, nursing homes, hospice, wellness centers, health clubs and corporate settings.

The degree is divided into three distinct areas of concentration. Initially, students learn the evidence supporting the use of integrative health and the impact of the Affordable Care Act on integrative care delivery. Second, many of the proven modalities are studied and experienced including but not limited to Traditional Chinese Medicine (TCM) ayurvedic medicine, mind-body medicine, energy healing practices, nutrition, fitness, meditation, compassion cultivation, and expressive arts. Lastly, leadership, business management skills, coaching and consulting are included to provide graduates with practical competencies to lead an integrative health system.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Evaluate the numerous domains and principles of complementary and integrative healthcare practices.
- Develop practices and skills to be a mindful, reflective and culturally competent integrative healthcare practitioner.
- Design responsible management and leadership practices for integrative healthcare settings.
- Create evidence-based health and healing strategies for implementation and assessment with self and clients.
- Formulate an evidence-based research project related to complementary and integrative healthcare.

Degree Requirements

(12 courses; 54 quarter units)

To receive a Master of Science in Complementary and Integrative Healthcare students must complete at least 54 quarter units of graduate work. A total of

13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another graduate institution as it applies to this degree and provided that the units were not used in earning another advanced degree. Refer to the section on graduate admission requirements for specific information regarding application and evaluation.

Core Requirements

(12 courses; 54 quarter units)

CIH 600	Foundations of CIH
CIH 610	Evidence Based Practice
CIH 620	Health Policies and Issues
CIH 630	The Energetic Body
CIH 640	Lifestyle Management
CIH 650	Healing Envir & Modalities
CIH 660	Health Coaching & Consulting
CIH 670	Integrated Healing Modalities
CIH 680	Nutritional Medicine
CIH 685	Mindfulness & Stress Mgt
CIH 690	Business Mgt & Leadership
CIH 699	Integrative Health Capstone

Prerequisite: CIH 600, CIH 610, CIH 620, CIH 630, CIH 640, CIH 650, CIH 660, CIH 670, CIH 680, CIH 685 and CIH 690

■ MASTER OF SCIENCE IN HEALTH INFORMATICS

Faculty Advisor: Linda Travis Macomber; (858) 309-3495; lmacomber@nu.edu

As healthcare makes dramatic strides to adopt new information and communication technologies, there is a growing demand for health informatics professionals. This rapidly-developing field is only beginning to unlock the vast promise of using electronic-based information to advance health care and ultimately improve the health of individuals and populations. The MS in Health Informatics is a graduate professional degree designed to enhance the practice of health informatics by preparing students for career growth to mid-level and leadership positions within healthcare organizations, technology, and consulting firms. This program is intended for students interested in the effective use of information technologies and systems to improve the quality, safety, efficiency, and affordability of healthcare.

The MS Health Informatics program leverages the rich collective strengths, synergies, faculty, and resources of National University Center for Technology and Health Sciences and the Schools of Health and Human Services, Engineering and Computing, and Business and Management.

Program study includes coursework related to:

- 1. Information Systems**—Leadership and management of healthcare applications; including analysis, design, adoption, and optimization
- 2. Information Technology**—Effective use of database and systems administration, computer networks, security, programming, and wireless devices
- 3. Informatics**—The structured language of healthcare, standards, data structures, health information exchange, decision support, care coordination, consumer health, socio-technical aspects of health computing, human-computer interaction, and evidenced-based practice

Along with a broad understanding of health and human services, technology, information systems, leadership, and the culture of healthcare, students apply health informatics knowledge through experiential learning opportunities with case studies, research, simulations, and a capstone project. Graduates are prepared for various roles related to leveraging technology to enhance the collection, communication, exchange, aggregation, analysis, and use of information across the health care ecosystem.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Evaluate the healthcare delivery system in the US and the impact of social, cultural, political, economic, and environmental factors affecting the management and operation of healthcare organizations.

- Evaluate health data management standards, technologies and methods to improve the quality, efficiency, equity and safety of healthcare practice and organization.
- Develop policies and technologies to protect data integrity and validity, including information privacy and security policies and procedures.
- Develop strategies for improving healthcare delivery and achieving institutional strategic initiatives using information systems and technologies.
- Evaluate leadership principles and practices in health information technology staff development, technology adoption and change management in a healthcare organization.
- Evaluate a healthcare organization's processes and systems to ensure compliance with ethical, legal and regulatory mandates and professional standards of health information technology.
- Apply statistical and research methodologies to implement evidence-based health information technology management practice and healthcare quality improvement.
- Communicate knowledge of health information systems and technology to stakeholders of the healthcare ecosystem.

Degree Requirements

To receive a MS in Health Informatics degree, students must complete at least 54 quarter units of graduate work. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree and provided the units were not used in earning another advanced degree. Refer to the section on graduate admissions requirements for specific information regarding application and evaluation.

Core Requirements

(11 courses; 49.5 quarter units)

HCA 600	U.S. Healthcare System
HTM 552	EHR Meaningful Use
CIS 601	Information Systems Strategies
COH 602	Biostatistics
	<i>Prerequisite: HCA 600</i>
HCA 626	Healthcare Information Systems
	<i>Prerequisite: HCA 620</i>
HCA 622	Quality Appraisal & Evaluation
	<i>Prerequisite: HCA 600, HCA 610, HCA 620 and COH 606</i>
COH 611	Public Health Research Methods
	<i>Prerequisite: COH 602</i>
HTM 660	System Management and Planning
HTM 520	Health Information Exchange
HTM 680	Health Informatics Case Study
	<i>Prerequisite: HTM 520, HTM 552 and HTM 660</i>
HTM 692	Health Informatics Capstone
	<i>Prerequisite: HTM 680</i>

Please note that prerequisites for HCA and COH courses are not required for students in the MS Health Informatics program. HTM prerequisites are required.

Program Elective

(1 course; 4.5 quarter units)

LED 604	Leading Change and Adaptation
COH 613	Public Health Informatics
	<i>Prerequisite: COH 606 and COH 612</i>
HCA 663	Healthcare Accounting/Finance
	<i>Prerequisite: HCA 628</i>
CIS 604	Management and Security
	<i>Prerequisite: CIS 601</i>
CIS 606	End User Information Systems
	<i>Prerequisite: CIS 601</i>
HCA 670	Healthcare Leadership
	<i>Prerequisite: HCA 624</i>

HCA 691 Healthcare Internship
Prerequisite: HCA 600, COH 602, HCA 610, HCA 620, HCA 622, COH 606, HCA 624, HCA 626, HCA 628, HCA 630, HCA 660, HCA 663, COH 611, HCA 670 and permission by instructor

Please note that prerequisites for HCA and COH courses are not required for students in the MS Health Informatics program. HTM prerequisites are required.

■ MASTER OF SCIENCE IN HEALTH & LIFE SCIENCE ANALYTICS

Faculty Advisor: Tyler Smith; (858) 309-3487; tsmith@nu.edu

The Master of Science in Health & Life Science Analytics program is designed to provide students with a practical learning experience through application of statistical methods to solve real-life health and life science analytics problems. The goal of this program is to prepare students for careers in health analytics and the pharmaceutical industry.

To address the spectrum of issues in health and life science analytics, this curriculum has been designed to include specialized courses in analytic topics relative to the health and clinical fields. Topics include analytical and predictive modeling, data acquisition, data mining, health care information management systems, epidemiology, health management, clinical research, clinical trials, health outcomes research, teamwork, and communication. State-of-the-art analytical software, such as SAS, will be used in all courses so that students completing the MS degree will also be well prepared for external certification. Additionally, team projects are conducted using real data from sponsoring organizations or publicly available data.

Previous academic or industrial experience in such areas as statistics, computer programming, engineering, epidemiology, healthcare, clinical trials, or science are helpful prerequisites for this MS program. This degree is appropriate for both experienced professionals as well as recent college graduates.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Integrate components of data analytics to produce knowledge-based solutions for real-world challenges using public and private data sources.
- Evaluate data management methods and technologies used to improve integrated use of data.
- Construct data files using advanced statistical and data programming techniques to solve practical problems in data analytics.
- Design an analytic strategy to frame a potential issue and solution relevant to the community and stakeholders.
- Evaluate health data management technologies through integration and interoperability of health data.
- Synthesize data analytics and data in a health setting to produce actionable information.
- Analyze the distribution and determinants of disease and health outcomes in human populations.
- Analyze the planning, organization, administration and policies of healthcare organizations using health analytic methods.
- Integrate data and analytic techniques to establish financial priorities of a healthcare organization in line with the needs and values of the community and stakeholders it serves.
- Develop team skills to design, coordinate, conduct, and disseminate an analytic strategy to frame a relevant healthcare issue and solution.

Degree Requirements

To obtain the Master of Science in Health & Life Science Analytics, students must complete at least 58.5 graduate units. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree, and provided the units were not used to earn another advanced degree. Please refer to the General Catalog section on graduate admissions requirements for specific information regarding application and evaluation.

Core Requirements

(13 courses; 58.5 quarter units)

- BAN 600 Fundamentals of Analytics
- ANA 605 Analytic Models & Data Systems
Prerequisite: BAN 600
- ANA 610 Data Management for Analytics
- ANA 615 Data Mining Techniques
- ANA 620 Continuous Data Methods, Appl
Prerequisite: ANA 615
- ANA 625 Categorical Data Methods, Appl
Prerequisite: ANA 620
- ANA 630 Advanced Analytic Applications
Prerequisite: ANA 625
- HCA 626 Healthcare Information Systems
Prerequisite: HCA 620
- COH 606 Epidemiology
Prerequisite: COH 602, COH 605 or COH 616 or HCA 626
- ANH 604 Clinical Research Analytics
- ANH 607 Health Outcomes Research
Prerequisite: ANH 604
- ANA 699A Analytic Capstone Project I
Prerequisite: All core and specialization courses in an analytics program with a minimum GPA of 3.0 or approval of Lead Faculty.
- ANA 699B Analytic Capstone Project II
Prerequisite: ANA 699A

■ MASTER OF SCIENCE IN NURSE ANESTHESIA

Faculty Advisor: Bryan Tune; (559) 256-4946; btune@nu.edu

The Nurse Anesthesia Program will provide graduate students with a solid foundation in the basic sciences pertinent to anesthesia care delivery. The program will provide education and exposure to all aspects of clinical anesthesia to include, but not be limited to: regional anesthesia, general anesthesia, monitored anesthesia care, local infiltration techniques, and pain management. The curriculum is delivered in a two phase model. Phase I is composed of didactic instruction only, with the majority of course work conducted on campus. Phase I is composed of four quarters and is one year in length. Phase II is dedicated to clinical practicum and follows directly after Phase I. Phase II is fifteen months in length following Phase I. All coursework in the first phase of the program must be completed prior to starting the second phase of the program and entry into the clinical setting. Clinical practicums provide the opportunity for administration of anesthesia under the direct supervision of a staff CRNA or anesthesiologists. Clinical rotations will be throughout California with supplemental rotations in Arizona, Washington, Oregon, Colorado, and Florida. Respective state nursing licensure for rotations out of California will be required. Housing and travel expense will be the responsibility of the student. The clinical rotations will provide the student with exposure to anesthesia delivery in large academic institutions as well as rural and outpatient settings. Specialty anesthesia rotations in cardiac, obstetrics, neurosurgery, pediatrics, transplant, and pain management will prepare the graduate to practice in a wide range of specialties.

The didactic and clinical education that the student receives throughout the Nurse Anesthesia Program will prepare them to take the national board certification exam administered by the National Board on Certification and Recertification of Nurse Anesthetists (NBCRNA) to become a Certified Registered Nurse Anesthetist. Application to the Master of Science in Nurse Anesthesia program is initiated by first applying to National University, then applying directly to the nurse anesthesia program via the supplemental nurse anesthesia application. The supplemental application will be submitted directly to the nurse anesthesia program office at the address listed on the application. The applications will be thoroughly screened for completeness and to assure all requirements have been met. Applicants who meet the screening criteria will be invited for a personal interview with program staff and local clinicians. Admission offers to the nurse anesthesia program will be given via letter, telephone, or email shortly after all interviews have been completed. All applicants to the program will be notified of their status for acceptance.

*** Note:** The Nurse Anesthesia Program is fully accredited by the Council on Accreditation for Nurse Anesthesia Educational Programs (COA).

MS Anesthesia Fees

Application Fee \$60
(In addition to University Application fee.)

Unit Fee \$329.70
(In addition to tuition fee.)

Admission Requirements

- Successful admission to National University.
- Bachelor of Science in Nursing (BSN) from a NLNAC or CCNE accredited College or University or Bachelor of Science in a related physical science with licensure as a registered nurse.
- Current unrestricted/unencumbered (clear/active) license as a registered nurse in one of the states of the United States, with eligibility for licensure throughout all states in the United States.
- A cumulative grade point average (GPA) of 3.0 on all undergraduate courses or 3.0 on the last 60 units of undergraduate courses on a 4.0 scale.
- Science GPA of 2.75 or greater.
- A minimum of one full year of critical care experience in an intensive care unit within the past three years as a registered nurse. Trauma emergency department and other experiences will be considered on an individual basis. Operating room, OB, and PACU experience is not accepted as critical care experience.
- Three favorable evaluations/recommendations from:
 - a. Current clinical supervisor
 - b. CRNA, Anesthesiologist or RN
 - c. Academic faculty member familiar with your academic performance
- Professional certification in any of the following preferred: CCRN, TNC, or CFRN.
- Current ACLS and PALS certification.
- Shadow experience in the OR with a CRNA or Anesthesiologist.
- Undergraduate Biochemistry course strongly recommended.
- Successful personal interview.
- Background check and drug screening test.
- The successful completion of the following undergraduate prerequisite courses:
 - a. Pharmacology (3 semester; 4 quarter)
 - b. Anatomy with Lab (4 semester; 6 quarter)
 - c. Physiology (4 semester; 6 quarter)
 - d. General Chemistry (3 semester; 4 quarter)
 - e. Statistics (3 semester; 4 quarter)
 - f. Biochemistry is not required but strongly recommended
 - g. Basic Research (1 course); Statistics (1 course) – must complete with a grade of B or better

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Appraise the integration of scholarship into evidence based clinical anesthesia practice.
- Formulate anesthesia management plans for all complexities of anesthesia care through the entire perioperative phase using all available technologies.
- Appraise policy, issues, and trends in healthcare for their impact on anesthesia care and professional practice.
- Evaluate the broad context or system within which nurse anesthesia is practiced.
- Select, assemble, and maintain proper equipment, anesthetic agents, and accessories in preparation for sedation, general anesthesia, and/or regional anesthetic techniques.

- Develop critical thinking to anticipate and solve problems, make decisions, and apply basic science knowledge to nurse anesthesia practice.
- Appraise multi-system anesthesia related problems in terms of pathogenesis, mechanisms of system-to-system interactions and potential complications.
- Develop and sustain relationships and partnerships with patients and other interdisciplinary professionals to facilitate optimal care and patient outcomes.
- Evaluate ethical principles to decision making in nurse anesthesia practice and healthcare systems.
- Evaluate the patient's physical and psychological status identifying abnormalities that will have implications on the anesthesia care plan, including evaluation of all laboratory, radiographic, and other diagnostic test data.
- Select therapeutic interventions based on scientific knowledge and emerging approaches to nurse anesthesia practice and healthcare delivery to promote optimal outcomes.

Degree Requirements

To receive an MSNA, students must complete 100.5 graduate quarter units. The program is designed in a cohort model and all courses must be taken in the set sequence. Due to the nature of the program, no transfer credit is allowed. Further information on graduate admission and evaluation may be found in the Academic Information for Graduate Degrees section of the catalog.

NOTE: All course work must be completed with a grade of B- or higher to avoid academic probation and/or program dismissal.

Program Requirements

(24 courses; 100.5 quarter units)

Phase I

- ANE 600 Nurse Anesthesia Human Anatomy
Prerequisite: Admission to the Nurse Anesthesia Program and or approval from the course lead and Nurse Anesthesia Program Lead.
- ANE 600A Nurse Anesthesia Anatomy Lab (1.5 quarter units)
Corequisite: ANE 600
- ANE 610 Nurse Anesthesia Assessment
Prerequisite: Admission to the Nurse Anesthesia Program and/or permission from course lead and Nurse Anesthesia Program Lead.
- ANE 620 Advanced Pharmacology I (2.25 quarter units)
Prerequisite: ANE 600 and ANE 610
- ANE 615 Advanced Physiology/Patho I
Prerequisite: ANE 600 and ANE 610
- ANE 630 Anesthesia Pharmacology I
Prerequisite: ANE 600 and ANE 610, Corequisite: ANE 620 and ANE 615
- ANE 635 Principles of Anesthesia I (7 quarter units)
Prerequisite: ANE 600 and ANE 610, Corequisite: ANE 615, ANE 620 and ANE 630
- ANE 616 Advanced Physiology/Patho II
Prerequisite: ANE 600, ANE 615, ANE 610, ANE 620, ANE 630 and ANE 635
- ANE 621 Advanced Pharmacology II (2.25 quarter units)
Prerequisite: ANE 600, ANE 610, ANE 615, ANE 620, ANE 630 and ANE 635, Corequisite: ANE 616 and ANE 640
- ANE 640 Principles of Anesthesia II (7 quarter units)
Prerequisite: ANE 600, ANE 610, ANE 615, ANE 620, ANE 630 and ANE 635, Corequisite: ANE 616
- ANE 631 Anesthesia Pharmacology II
Prerequisite: ANE 600, ANE 610, ANE 615, ANE 620, ANE 621, ANE 630 and ANE 635, Corequisite: ANE 616 and ANE 640
- ANE 650 Nurse Anesthesia EBP/Research
Prerequisite: ANE 600, ANE 610, ANE 615, ANE 620, ANE 630, ANE 635, ANE 616, ANE 640, ANE 621 and ANE 631, Corequisite: ANE 645

ANE 645 Principles of Anesthesia III (7 quarter units)
Prerequisite: ANE 600, ANE 610, ANE 615, ANE 620, ANE 630, ANE 635, ANE 616, ANE 640, ANE 621 and ANE 631

ANE 655 Aspects of CRNA Practice

Phase II

ANE 660 Nurse Anesthesia Clinical I
Prerequisite: ANE 600, ANE 610, ANE 615, ANE 620, ANE 630, ANE 616, ANE 640, ANE 621, ANE 631, ANE 645, ANE 650 and ANE 655

ANE 661 Nurse Anesthesia Seminar I (3 quarter units)
Prerequisite: ANE 600, ANE 610, ANE 615, ANE 620, ANE 630, ANE 635, ANE 616, ANE 640, ANE 621, ANE 631, ANE 645, ANE 650 and ANE 655

ANE 666 Nurse Anesthesia Seminar II (3 quarter units)
Corequisite: ANE 665, Prerequisite: ANE 660 and ANE 661

ANE 665 Nurse Anesthesia Clinical II
Prerequisite: ANE 660 and ANE 661

ANE 671 Nurse Anesthesia Seminar III (3 quarter units)
Corequisite: ANE 670, Prerequisite: ANE 665 and ANE 666

ANE 670 Nurse Anesthesia Clinical III
Prerequisite: ANE 665 and ANE 666, Corequisite: ANE 671

ANE 675 Nurse Anesthesia Clinical IV
Prerequisite: ANE 670 and ANE 671, Corequisite: ANE 676

ANE 676 Nurse Anesthesia Seminar IV (3 quarter units)
Corequisite: ANE 675, Prerequisite: ANE 670 and ANE 671

ANE 680 Nurse Anesthesia Clinical V
Prerequisite: ANE 675 and ANE 676, Corequisite: ANE 681

ANE 681 Nurse Anesthesia Seminar V (3 quarter units)
Corequisite: ANE 680, Prerequisite: ANE 675 and ANE 676

■ MASTER OF SCIENCE IN NURSING

Faculty Advisor: Barbara Piper; (702) 531-7831; bpiper@nu.edu

The Master of Science in Nursing (MSN) degree program is for baccalaureate prepared nurses. In keeping with the standards for graduate education for advanced practice nursing delineated by the American Association of Colleges of Nursing in the Essentials of Master's Education for Advanced Practice Nurses, the purpose of the MSN program is to prepare students to assume leadership roles in their particular specialization. Masters level nursing education is the appropriate level of education for nursing professionals who are seeking roles that require advanced practice skills in order to function as providers and organizers of the health care delivery process.

Admission Requirements

To be eligible for admission to the MSN program at National University, candidates must:

- Meet the University requirements for graduate study, listed in the General Catalog under admission requirements.
- Hold a BSN degree from a State Board of Nursing approved and accredited school of nursing (State Board of Nursing, and CCNE and/or NLNAC).
- Provide proof of current, active, and unencumbered RN license in the State of residence.
- Have completed the following prerequisite courses:
 - » MTH 210 or undergraduate college level course in statistics
 - » NSG 422 or an equivalent undergraduate course in nursing research methodology and application
 - » NSG 412, 411, & 410, or equivalent undergraduate coursework in Community Health Nursing
- Have a cumulative GPA of at least 3.0 on a 4.0 scale. Applicants with a GPA of 2.5 - 2.99 will be considered by the MSN admissions committee on a case by case basis.
- Have completed the University Application for Graduate Admissions, including the application fee.

- Provide one official transcript from each college or university attended to the Nursing Department.
- Have completed the MSN online application.
- Have three letters of professional reference.
- Provide evidence of current, active professional liability and malpractice insurance coverage throughout the program.
- Provide evidence of specified immunizations, a report of a recent physical examination, and current BLS-AED certification.
- Have a cleared background check and drug screen.

Additional Prerequisite Requirements

Students should be proficient in operating a personal computer, including: demonstrated competency in standard computer operating systems and electronic filing systems, basic keyboarding skills, organizing and sorting electronic documents; demonstrated knowledge of standard computer applications to include Microsoft Word and Excel; familiarity with using internet browsers and standard email systems such as MS Outlook.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Implement appropriate theories, models, frameworks, and concepts from nursing and non-nursing disciplines when designing interventions that influence healthcare outcomes for diverse populations in a variety of settings.
- Collaborate with interdisciplinary teams, to evaluate fiscally appropriate healthcare delivery systems that integrate research and clinical expertise to provide evidence-based, patient-centered care.
- Evaluate economic, policy, environmental, and social forces that impact nursing practice, health care delivery and quality of health care.
- Participate in the analysis, implementation and evaluation of strategies for improving nursing practice through the implementation of health information systems and technologies.
- Demonstrate a professional commitment to creating an environment of lifelong learning for patients, families, communities, and other healthcare practitioners.

Degree Requirements

The Master of Science in Nursing requires a minimum of 49.5 graduate quarter units, with 45 of those units completed at National University. A total of 9 units of graduate credit may be granted for graduate work completed at another institution as it applies to this program and provided the units were not used to earn another advanced degree. Refer to the General Catalog section on graduate admission requirements for specific information regarding admission and evaluation.

NOTE: FNP and PMHNP Fees \$14,500
(In addition to tuition.)

Prerequisites

(8 courses; 27 quarter units)

MTH 210	Probability and Statistics <i>Prerequisite: Accuplacer test placement evaluation or MTH 12A and MTH 12B</i>
NSG 422	Nursing Research <i>Prerequisite: BST 322</i>
NSG 412	Community Healthcare Delivery <i>Corequisite: NSG 412A</i>
NSG 412A	Community Healthcare Delivery (1.5 quarter units) <i>Corequisite: NSG 412</i>
NSG 411	Community Health Frameworks <i>Prerequisite: NSG 412, Corequisite: NSG 411A</i>
NSG 411A	Community Health Framework Pra (1.5 quarter units) <i>Corequisite: NSG 411</i>
NSG 410	Community: Population Focus <i>Prerequisite: NSG 411, Corequisite: NSG 410A</i>
NSG 410A	Population Focus Practicum (1.5 quarter units) <i>Corequisite: NSG 410</i>

Core Requirements

(6 courses; 27 quarter units)

Students should take all Core Courses before taking Specialization courses.

NSG 600	Advanced Practice Nursing
NSG 620	Theory in Advanced Practice
NSG 623	Biomedical Statistics
NSG 606	Health Policy & Finance
NSG 622	QI & Project Management
NSG 607	EBP for Advanced NSG Practice

▲ Specialization in Family Nurse Practitioner

Faculty Advisor: Tina Ho; (858) 521-3919; tho@nu.edu

The Family Nurse Practitioner (FNP) specialization will prepare advanced practice nurses to manage the care of individuals and families across the lifespan. The FNP Program is designed for nurses who hold a Baccalaureate Degree in Nursing (BSN) who wish to advance their knowledge, education, and skills to practice in an Advanced Practice role as a FNP. Graduates are eligible to sit for the FNP national certification examinations offered by the American Nurses Credentialing Center (ANCC) or the American Academy of Nurse Practitioners. The Program emphasis is to foster the FNP's abilities to critically think; make differential diagnoses; use evidence-based findings to improve healthcare outcomes; and be accountable for the provision of healthcare to diverse individuals and families in the areas of health promotion, disease prevention, management of acute and chronic health conditions and primary care. The FNP provides clinical management of primary care conditions in a variety of clinics and community-based settings.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Synthesize theoretical and empirical knowledge derived from the physical and behavioral sciences and humanities as a basis for professional advanced clinical nursing practice.
- Devise evidence-based health promotion and disease prevention strategies at the patient, family, organizational, community, and population levels for the purpose of improving healthcare outcomes.
- Utilize current technologies to deliver, enhance, and document care across multiple settings to achieve optimal outcomes.
- Advocate for culturally sensitive health care systems and policies that meet ethical and legal standards as a means to improve outcomes and reduce disparity.
- Model collaboration with interdisciplinary and intradisciplinary teams in healthcare systems delivering care to complex, multi-need patients, families, and communities.
- Analyze the impact of national and global health policy on the cost, quality, and access to care in diverse patient populations.

Specialization Requirements

(12 courses; 55.5 quarter units)

NSG 681	Advanced Physical Assessment (6 quarter units)
NSG 682	Advanced Pathophysiology
NSG 641	Advanced Pharmacology I
NSG 642	Advanced Pharmacology II
FNP 683A	Primary Care of Adult and Aged Corequisite: FNP 683B
FNP 683B	Care of Adult & Aged Practicum Corequisite: FNP 683A
FNP 680	Diversity Issues in APN
FNP 684A	Primary Care-Women & Children Corequisite: FNP 684B
FNP 684B	Women and Children Practicum Corequisite: FNP 684A
FNP 685A	FNP Residency Corequisite: FNP 685B

FNP 685B FNP Residency Practicum
Corequisite: FNP 685A

FNP 689 FNP Capstone

▲ Specialization in Nursing Administration

Faculty Advisor: Barbara Piper; (858) 309-3469; bpiper@nu.edu

The Master of Science in Nursing, Specialization in Nursing Administration prepares nurse managers who will provide leadership and management services to clinical care organizations. Successful decision-making strategies, evidence-based practice, team building and collaboration, fiscal management, quality improvement, and creating a learning culture that supports high quality and safe patient care are considered within a systems approach to management. The specialization courses offered in the MSN, Specialization in Nursing Administration are designed using the Interprofessional Education Model to develop IPE competencies.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Effectively communicate with members of the multidisciplinary healthcare team in the design and management of healthcare delivery systems.
- Employ best evidence and judgment to make sound and ethical decisions that advance the quality and safety of healthcare and care delivery systems.
- Create and implement a plan for day-to-day operations for a clinical facility in order to maintain accreditation, meet organizational goals, achieve quality and safety outcomes, and carry out the mission of the facility.
- Provide effective, caring, culturally sensitive and fiscally responsible leadership to other members of the healthcare team in order to facilitate excellence in patient care services to diverse patient populations.
- Apply principles of leadership and management to foster an organizational culture that engenders lifelong learning, quality, safety, and competence in a clinical care organization.

Specialization Requirements

(5 courses; 22.5 quarter units)

Students take the MSN Core courses, then take the Specialization courses. The Capstone course is the final course of the program; all other courses must be taken before the Capstone.

HCA 600	U.S. Healthcare System
HCA 620	Health Organization Management Prerequisite: COH 602
HCA 624	Healthcare Planning & Marketing Prerequisite: COH 611
HCA 670	Healthcare Leadership Prerequisite: HCA 624
HCA 692	Healthcare Capstone Prerequisite: HCA 691 or permission by instructor.

Please note that COH and HCA prerequisites are NOT required for students in the Specialization in Nursing Administration.

▲ Specialization in Nursing Informatics

Faculty Advisor: Barbara Piper; (858) 309-3469; bpiper@nu.edu

The Specialization in Nursing Informatics is designed for nurses who seek advanced education in informatics theory and practice. Nurses play an important leadership role in the implementation of health information technology in health care delivery organizations. Potential students include nurses who participate and in some instances lead the successful deployment of health information technologies to achieve improvement in the quality, safety, outcomes and thus value of health services in the United States. The goal is to equip RNs for leadership roles in informatics that includes the information and knowledge management best practices and effective technology capabilities for nurses identified through the Technology Informatics Guiding Education Reform Initiative (<http://www.tiger-summit.com/>).

The Specialty courses offered in the MSN Program of Study in Nursing Informatics are designed using the Interprofessional Education (IPE) Model to develop IPE Competencies.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Collaborate with interprofessional teams to conduct a needs assessment, plan, design, transition to and evaluate information systems and innovative technologies.
- Employ evidenced-based practice resources and references to support the adoption and use of healthcare technologies at the point of care.
- Evaluate ongoing quality and process improvement for patient-centered care systems that optimize clinical workflow, care coordination, and patient outcomes.
- Appraise the healthcare technology environment to ensure compliance with ethical, legal and regulatory mandates and professional standards for advanced practice.

Specialization Requirements

(5 courses, 22.5 quarter units)

After completion of the MSN core classes, the students will complete the Informatics specialization courses.

HTM 552	EHR Meaningful Use
HTM 660	System Management and Planning
HTM 520	Health Information Exchange
HTM 680	Health Informatics Case Study <i>Prerequisite: HTM 520, HTM 552 and HTM 660</i>
HTM 692	Health Informatics Capstone <i>Prerequisite: HTM 680</i>

Please note that CIS, COH, & HCA prerequisites are NOT required for students in the Specialization in Informatics. HTM prerequisites are required.

▲ Specialization in Psychiatric-Mental Health Nurse Practitioner – Lifespan

Faculty Advisor: Jovita Ezirim; (310) 662-2181; jezirim@nu.edu

The Psychiatric-Mental Health Nurse Practitioner-Lifespan (PMHNP) is a registered nurse prepared at the master's degree level who specializes in primary mental health care for individuals, groups and populations across the lifespan. The PMHNP Program is designed for nurses who hold a Bachelor of Science in Nursing (BSN) who wish to advance their knowledge, education, and skills to practice in an advanced practice role as a PMHNP. This advanced practice nurse maintains a critical role in the health care team and ensures collaboration and the provision of safe, effective, coordinated care. As an independent member of the health care team, and in partnership with patients, the PMHNP provides a variety of evidence-based services and therapies. The PMHNP assesses, makes diagnoses and plans care for complex psychiatric and concomitant medical issues, including the prescription and management of psychopharmacologic agents. The PMHNP advocates for patients and their families within a recovery and trauma-informed paradigm. The PMHNP ensures that patients and their families are engaged and actively participate in their behavioral health (mental health and substance use) care as they respond to the illness experience. The PMHNP continuously enhances their care through quality improvement and safety efforts and influences policy at the local, regional and national levels. The PMHNP melds the art and science of professional nursing and skillfully manages the acute and enduring issues posed by people with behavioral health issues across the lifespan. Graduates of this PMHNP Program are eligible to sit for the American Nurses Credentialing Center (ANCC) Psychiatric-Mental Health Nurse Practitioner (Lifespan; formerly known as Family Psychiatric-Mental Health Nurse Practitioner) competency-based examination.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Synthesize theoretical and empirical knowledge derived from the physical and behavioral sciences and humanities as a basis for professional advanced clinical nursing practice.
- Devise evidence-based health promotion and disease prevention strategies at the patient, family, organizational, community, and population levels for the purpose of improving health care outcomes.
- Utilize current technologies to deliver, enhance, and document care across multiple settings to achieve optimal outcomes

- Apply organizational and systems leadership to current healthcare issues for the promotion of quality, effective and safe patient care, including the emphasis on ethical and critical decision making, effective working relationships, and a systems-perspective approach.
- Model collaboration and coordination with interprofessional teams in health care systems delivering care to complex, multi-need patients, families and communities.
- Synthesize broad organizational, client-centered, and culturally appropriate concepts in the planning, delivery, management, and evaluation of evidence-based clinical prevention and population behavioral health care and services to individuals, families, and identified populations.

Specialization Requirements

(12 courses, 55.5 quarter units)

NSG 681	Advanced Physical Assessment (6 quarter units)
NSG 682	Advanced Pathophysiology
NSG 641	Advanced Pharmacology I
MNP 643	Psychopharmacology in MH Care
MNP 694	MH Care: Adults/Aging Adults
MNP 696A	Adults/Aging Adults Practicum <i>Corequisite: MNP 694</i>
MNP 687	MH Care: Children/Adolescents
FNP 680	Diversity Issues in APN
MNP 696B	Children/Adoles Practicum <i>Corequisite: MNP 687</i>
MNP 688A	Introduction to Psychotherapy <i>Corequisite: MNP 688B</i>
MNP 688B	Intro Psychotherapy Practicum <i>Corequisite: MNP 688A</i>
MNP 697	PMHNP Capstone

UNDERGRADUATE CERTIFICATE

■ LVN “30 UNIT” OPTION CERTIFICATE

Faculty Advisor: Richard Guertin; (858) 521-3910; rguertin@nu.edu

Licensed vocational nurses (LVNs) who desire to complete the minimum number of units required to take the licensure examination may apply for this option. LVNs who select the “30- Unit Option” method to satisfy the requirements for licensure as a Registered Nurse should consult the Chair of the Department of Nursing for an individual program consultation to discuss the advantages and disadvantages of this option.

Departmental Admission Requirements

To be eligible for admission to the “30 Unit” certificate, candidates must satisfy all of the following criteria:

- Have completed the National University undergraduate admission process.
- Hold a current, active license to practice as a licensed vocational nurse.
- Have successfully completed the required preparation courses.
- Submit the appropriate nursing program application.
- For advising purposes only, complete the ACCUPLACER math and English tests.

After completing the interview process, successful candidates will be enrolled in classes as spaces become available.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Develop a critical stance on professional issues related to nursing practice, education, and knowledge development by analyzing the historical and contemporary environments in nursing.
- Use computer technologies to augment productivity and to gain access to multiple informational resource services.

Requirements for Certificate

To receive the “30 Unit Option” certificate, students must complete the 40.5 quarter units as outlined below. The following courses are specific certificate requirements.

Required Preparation

(4 courses; 12 quarter units)

Each core theory course is 8 weeks in length.

BIO 202	Human Anatomy & Physiol II <i>Recommended: Prior completion of: BIO 201 and BIO 201A, BIO 100 and BIO 100A, CHE 101 and CHE 101A or equivalent courses*</i>
BIO 202A	Human Anatomy & Physiol Lab II (1.5 quarter units) <i>Prerequisite: BIO 202*</i>
BIO 203	Introductory Microbiology <i>Recommended: Prior completion of: BIO 201 and BIO 201A, BIO 202 and BIO 202A, BIO 100 and BIO 100A, CHE 101 and CHE 101A or equivalent courses*</i>
BIO 203A	Introductory Microbiology Lab (1.5 quarter units) <i>Prerequisite: BIO 203</i>

Nursing Core Courses

(6 courses; 27 quarter units)

NSG 310**	Professional Nursing Values
NSG 320**	Medical-Surgical Nursing II <i>Prerequisite: C” or better in NSG 315 and “S” in NSG 315A,</i>
NSG 320A**	Medical-Surgical II Clinical <i>Prerequisite: “C” or better in NSG 315 and “S” in NSG 315A</i>
NSG 325**	Psychosocial Nursing <i>Prerequisite: C” or better in NSG 320 and “S” in NSG 320A</i>
NSG 325A**	Psychosocial Nursing Clinical <i>Prerequisite: “C” or better in NSG 320 and “S” in NSG 320A or see specific degree</i>
NSG 342**	RN-BSN Nursing Management

** Content required for licensure by CA Board of Registered Nursing.

GRADUATE CERTIFICATES

■ CLINICAL LAB SCIENCE DIDACTIC CERTIFICATE

Faculty Advisor: Gabriel Pineda; (858) 309-3548; gpineda@nu.edu

The Clinical Laboratory Science (CLS) Training Program is a full-time, post-baccalaureate one-year educational program that leads to a career in diagnostic laboratory medicine. This program is an internship in a clinical setting consisting of two components, a didactic component and a clinical practical training component. The lecture courses required for this program are offered through Extended Learning in special sessions to students accepted into the program. In the learning environments of National University and its clinical affiliates, participants acquire the academic knowledge, technical skills, and critical thinking experiences necessary to become proficient healthcare professionals. Participants put their scientific knowledge into practice, and are prepared to perform laboratory procedures related to patient diagnosis and treatment. Upon successful completion of the program, participants are awarded the CLS Training Program Certificate and are prepared to take the California CLS licensing exam. Graduates are also eligible to take national certification exams.

Application and Admission Procedure

Admission is by application only. A minimum science GPA of 2.75 is required. Transcripts from all schools attended must be provided along with 3 letters of recommendation. A resume and a one or two page letter of interest in CLS must accompany other application materials. Applications are obtained from the program director. Applications must be complete and applicants must meet all minimum requirements to be considered for the program. The admission committee, comprised of the program director and faculty involved in the program, reviews all eligible applicants for admission into the program. Top applicants are contacted for a scheduled interview by the selection committee and the education coordinators from the clinical affiliates. A standardized set of questions is asked of all

candidates and ample time is provided for the applicants to ask any questions that they may have regarding the program. Student applications are accepted by the program director in conjunction with the availability of clinical site placements. Unless otherwise specified by the program director, applications will be accepted starting in April of each year, with the application deadline being the 3rd week of May. Selected students are offered interviews in June. After the interviews, students are asked to rank order their clinical site preferences, and clinical sites are asked to rank order the interviewed candidates. The two lists are reconciled and offers of positions in the program at a specific training site are sent to accepted students shortly after the interview process. Students offered positions must confirm acceptance via email. Training starts in September. Work hours vary from section to section depending on the laboratory. Typical workdays begin at 7 or 7:30 AM and end at 3:30 or 4 PM. Students are not required to work weekends or holidays. Some clinical sites are able to offer supplemental employment and/or a stipend if so desired, but it is NOT required as part of the training.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate basic knowledge and technical ability essential to the practice of Clinical Laboratory Science.
- Interpret clinical significance, clinical procedures, and laboratory test data accurately.
- Apply principles and concepts of lab operations to clinical decision making.
- Comply with established laboratory safety regulations and regulations governing regulatory compliance related to lab/pathology services.
- Exhibit analytical and critical thinking skills necessary to succeed in laboratory medicine.
- Practice professionalism through ethical behavior and attitudes.

Degree Requirements

One of the following:

- A Bachelor of Science Degree in CLS
- A Bachelor of Science Degree in a related science that contains the following course work:
 - 18 semester or equivalent quarter hours of Biological Science with courses in Medical Microbiology, Hematology and Immunology
 - 16 semester or equivalent quarter hours in Chemistry with courses in Analytical Chemistry (Quantitative Analysis) and Biochemistry
 - 3 semester or equivalent quarter hours in Physics Including instruction in Principles of Light and Electricity
- A pending application to Laboratory Field Services for a Clinical Laboratory Scientist Trainee License (https://secure.cpsr.us/ctreg/cls_trainee_infoasp). Final acceptance for admission to the program is contingent upon receiving this license.
- A signed Statement of General Health form from the student’s primary healthcare provider.

Requirements for Major

(8 courses; 36 quarter units)

CLS 6005X	Microbiology Didactic Lectures <i>Prerequisite: CLS 405 with a minimum grade of A Completion of B.S. degree in Biological Science or Clinical Laboratory Science. Within the degree requirements, the student should have previously completed an Introductory Microbiology (with laboratory) and Clinical Microbiology CLS 405.</i>
CLS 6010X	Urinalysis Didactic Lectures <i>Recommended: Prior completion of: CLS 301 with a minimum grade of B Trainees would benefit from having previously taken and completed Introduction to Chemistry (with laboratory), Introduction to Biochemistry, Organic Chemistry, Microbiology to include Parasitology.</i>
CLS 6020X	Serology Didactic Lectures <i>Recommended: Prior completion of: CLS 305 with a minimum grade of B Trainees would benefit from having previously taken and completed Introduction to Chemistry, Biochemistry, Organic chemistry, Introduction to Immunology (if available).</i>

- CLS 6030X Chemistry Didactic Lectures
Recommended: Prior completion of: CLS 301 with a minimum grade of B Trainees would benefit from having previously taken and completed Introduction to Chemistry (with laboratory), Introduction to Biochemistry, Organic Chemistry, Analytical Chemistry, and Quantitative Analysis.
- CLS 6040X Hematology Didactic Lecture
Recommended: Prior completion of: CLS 410 with a minimum grade of B Completion of B.S. degree in Biological Science or Clinical Laboratory Science. Within the degree requirements, the student should have previously completed an Introductory Hematology course to include laboratory or similar, and the CLS 410 Clinical Hematology.
- CLS 6050X Blood Bank Didactic Lectures
Recommended: Prior completion of: CLS 305 with a minimum grade of B Students would benefit from having taken the Upper Division CLS Biochemistry, CLS Immunology, and lower division Chemistry, Organic Chemistry, Biochemistry, and Anatomy and Physiology.
- CLS 6060X Phlebotomy Didactic Lectures
Prerequisite: Must have completed B.S. degree in Clinical Laboratory Science and currently accepted and enrolled in the National University Clinical Laboratory Scientist training programs.
- CLS 6070X Lab. Mgmt. Didactic Lectures
Prerequisite: Must have completed B.S. degree in Clinical Laboratory Science and currently accepted and currently enrolled in affiliate National University Clinical Laboratory Scientist 52 week California State licensed training program

■ GRADUATE CERTIFICATE IN HEALTH COACHING

Faculty Advisor: Patric Schiltz; (858) 309-3476; pschiltz@nu.edu

This certificate is designed for integrative health professionals seeking to extend and improve their ability to coach patients through lifestyle and health changes. Potential students include physicians, nurses, chiropractors, nutritionists, pharmacists, acupuncture practitioners, naturopathy practitioners, physical fitness trainers, weight management coaches, and physical therapists, among others.

For admission to the graduate certificate program, students must meet all requirements for admission to a graduate degree program. For integrative practitioners and other interested individuals who are professionally prepared and licensed, but may not have completed a bachelor's degree, six of the eight courses are offered in partnership with Extended Learning and may be taken for nonacademic credit. Please see extended learning section for more information on non-academic coursework.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate an understanding of coaching the “whole person”.
- Recognize how to use self-awareness tools to facilitate personal development and growth in self and in coaching clients.
- Evaluate health coaching models and methods.
- Demonstrate knowledge of the coaching relationship.
- Be able to discuss the three phases of transition: endings, neutral zone, and new reality; recognize how to use exercises/tools to facilitate transition through coaching.
- Demonstrate an understanding of the core skills of motivational interviewing and when to use it, as well as why it is important for health coaching.
- Demonstrate knowledge of emotional intelligence and social intelligence.
- Demonstrate an understanding of the use of EQ assessment tools and how assessment results are useful in the coaching practice.
- Practice core coaching competencies with clients.
- Write a project focused research paper, which results in the development of a coaching application, tool or training method.
- Describe the key elements of healing environments
- Demonstrate understanding of the elements and implications of holistic stress management.

- Differentiate between allopathic and complementary and integrative health care practices.

Certificate Requirements

(8 courses; 36 quarter units)

To receive a Certificate in Health Coaching, students must complete the eight courses listed below. These include the six core courses, a practicum experience that requires students to complete 120 hours of coaching, and an independent study course that required a project-focused research paper.

IHC 600	Intro to Complementary Healing
IHC 610	Self as Coach
IHC 615	Fundamentals of Health Coaching
IHC 620	The Coaching Relationship
IHC 635	Multiple Intelligences in Heal
IHC 630	Advanced Health Coaching Semin
IHC 632	Practicum in Health Coaching
IHC 640	Independent Study

■ GRADUATE CERTIFICATE IN HEALTH INFORMATICS

Innovations in information and communication technologies are empowering and transforming healthcare. Meeting significant healthcare challenges and demands for quality, value, access, and connectivity requires new more collaborative interprofessional, patient/citizen-focused, and technology-enabled approaches. The Graduate Certificate in Health Informatics supports students interested in addressing these challenges and advancing their careers at the intersection of technological innovation and human health.

Students acquire and develop a professional portfolio to demonstrate competencies needed to contribute to the development, adoption, and progress of technology applications into healthcare delivery. In addition to healthcare professionals such as nurses, physicians, pharmacists, therapists, and lab scientists, this certificate also provides value for those with broader backgrounds including information systems and computer technologies, business, the sciences, law, engineering, and liberal arts.

Graduates then qualify for positions working as analysts, coordinators, project managers, and specialists contributing in healthcare delivery, and with consulting firms, health insurance companies, government agencies, and businesses providing innovative products and services to the over 3 trillion-dollar US and the larger global healthcare industry. Upon completion of this four-course four-month certificate, those who wish to continue their education and further grow into leadership roles in health information technology can also use all of these course credits towards their informatics master's degree.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Communicate innovative technology applications and health information system solutions to stakeholders of the healthcare ecosystem.
- Evaluate the effective adoption of information and communication technologies in healthcare organizations using effective project management, interprofessional teams, and leadership practices.
- Analyze health technologies, languages, standards, and methods that improve systems interoperability, communications, and patient-centered care coordination.
- Evaluate best practices that advance the health of individuals and populations through technology-enabled improvements in care delivery quality, efficiency, safety, access, and value.

Certificate Requirements

(4 courses; 18 quarter units)

HTM 552	EHR Meaningful Use
HTM 660	System Management and Planning
HTM 520	Health Information Exchange
HTM 680	Health Informatics Case Study
<i>Prerequisite: HTM 520, HTM 552 and HTM 660</i>	

■ GRADUATE CERTIFICATE IN INTEGRATIVE HEALTH

Faculty Advisor: Ellen Kaye Gehrke; (858) 309-3482; ekayegerke@nu.edu

The Certificate in Integrative Health and Wellness is designed for health care practitioners, students, and those interested in seeking to understand more about the emerging field of integrative health and healing. Combining the therapies and practices of conventional medicine and complementary and alternative medicine, integrative health focuses on healing rather than disease. It emphasizes a therapeutic relationship between client and practitioner, utilizes a holistic perspective, and supports the integration of mind, body, and spirit.

Topics in this unique Certificate Program examine spirituality and health, stress management, legal and ethical issues of integrative health, healing environments, energy medicine, Chinese medicine, Ayurveda, and nutrition and fitness.

The Certificate in Integrative Health and Wellness will enhance the learner's knowledge, skill, and experience through a thoughtfully designed curriculum that:

- Provides a broad foundation of evidence-based information addressing the complexities of this field of study;
- Addresses the interconnectedness of mind, body, and spirit;
- Explores healing philosophies and health systems as well as the impact of social, cultural, environmental, and global perspectives on healing;
- Describes the importance of personal responsibility and the dynamic, integral relationship between client and practitioner in the healing process; and
- Examines the emerging and complex ethical and legal issues surrounding this field of study.

Graduates of this certificate program will be able to apply their new knowledge and skills in many settings including acute care facilities, private clinical practices, nursing homes, wellness centers, chronic disease centers, health clubs, and corporate settings.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Examine the nature of stress as an integrative approach to balance the mind, body, and spirit.
- Describe the philosophies that support healing environments and describe creating the sacred spaces and spiritually healing environments.
- Examine energy medicine as an integrative approach to balance the mind, body, and spirit, and differentiate the meridians as energy pathways.
- Explain the role of herbs and herbalism in nutrition and health.
- Describe the physiological effects of movement and exercise.
- Compare and contrast spirituality in different groups.
- Differentiate between religion and spirituality.
- Describe the origins of Ayurvedic medicine and explain how diseases are manifested in the doshas.
- Explain the seven elements used by states to define the practice of medicine.
- Explain the impact of key food and drug laws and clinical drug trials relative to complementary and alternative therapies.

Program Requirements

(8 courses; 36 quarter units)

IHM 600	Integrative Stress Management
IHM 605	Healing Environments
IHM 615	Nutrition and Fitness
IHM 625	Energy Medicine
IHM 630	Spirituality, Health & Healing
IHM 632	Chinese Medicine
IHM 635	Ayurveda
IHM 640	Legal and Ethical Issues

SCHOOL OF PROFESSIONAL STUDIES

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Ph.D., Geography, Kent State University

- 284 Degrees Offered**
- 285 Degrees Offered By Department**
- 286 Faculty**
- 287 Undergraduate Degrees**
- 294 Minors**
- 295 Graduate Degrees**
- 303 Undergraduate Certificates**



DEGREE PROGRAMS OFFERED

UNDERGRADUATE DEGREES

Associate of Science

with a Major in:

- Paralegal Studies

Bachelor of Arts

with Majors in:

- Digital Journalism 
- Digital Media Design 
- Film Arts 
- Pre-Law Studies 

Bachelor of Public Administration

Bachelor of Science

with Majors in:

- Criminal Justice Administration 
- Homeland Security and Emergency Management 
- Paralegal Studies

MINORS

- Alternative Dispute Resolution 
- Business Law 
- Criminal Justice Administration 
- Pre-Law Studies 

TRANSITION PROGRAMS

- Bachelor of Public Administration to Master of Public Administration
- Bachelor of Science in Criminal Justice Administration to Master of Criminal Justice
- Bachelor of Science in Criminal Justice Administration to Master of Forensic Science
- Bachelor of Science in Criminal Justice Administration to Master of Public Administration
- Bachelor of Science in Criminal Justice Administration to Master of Science in Juvenile Justice
- Bachelor of Science in Homeland Security and Emergency Management to Master of Public Administration
- Bachelor of Science in Homeland Security and Emergency Management to Master of Science in Criminal Justice
- Bachelor of Science in Homeland Security and Emergency Management to Master of Science in Homeland Security and Emergency Management

GRADUATE DEGREES

Master of Arts

with a Field of Study in:

- Digital Journalism 

Master of Criminal Justice

Master of Fine Arts

with Fields of Study in:

- Digital Cinema Production 
- Professional Screenwriting 

Master of Public Administration

with Specializations in:

- Human Resource Management 
- Organizational Leadership 

Master of Science

with Fields of Study in:

- Homeland Security and Emergency Management 
- Juvenile Justice Studies

UNDERGRADUATE CERTIFICATES

- Alternative Dispute Resolution
- Criminal Justice Administration

 Entire program can be completed online.

 Online program with residency in Los Angeles.

 On-site program with possible online courses or prerequisites.

Not all courses or programs are available at every campus.

Consult an admissions advisor for online course availability.

DEPARTMENT OF JOURNALISM, FILM AND ENTERTAINMENT ARTS

Bachelor of Arts

with Majors in:

- Digital Journalism 
- Digital Media Design 
- Film Arts 

GRADUATE DEGREES

Master of Arts

with a Field of Study in:

- Digital Journalism 

Master of Fine Arts

with Fields of Study in:

- Digital Cinema Production 
- Professional Screenwriting 

DEPARTMENT OF PROFESSIONAL STUDIES

Associate of Science

with a Major in:

- Paralegal Studies

Bachelor of Arts

with a Major in:

- Pre-Law Studies 

Bachelor of Public Administration

Bachelor of Science

with Majors in:

- Criminal Justice Administration 
- Homeland Security and Emergency Management 
- Paralegal Studies

Minors

- Alternative Dispute Resolution 
- Business Law 
- Criminal Justice Administration 
- Pre-Law Studies 

Undergraduate Certificates

- Alternative Dispute Resolution
- Criminal Justice Administration

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SCHOOL OF PROFESSIONAL STUDIES

UNDERGRADUATE DEGREES

■ ASSOCIATE OF SCIENCE

◆ MAJOR IN PARALEGAL STUDIES

Faculty Advisor: Bryan Hance; (310) 662-2115; bhance@nu.edu

The Associate of Science in Paralegal Studies degree is designed to provide students with a solid foundation of professional legal studies leading to a career as a paralegal or legal assistant. The course work and accompanying credits in this program may be transferred to the Bachelor of Science or a professional certificate in Paralegal Studies if all other requirements for admission are met. This degree is offered and ABA-approved only at the Los Angeles and Woodland Hills campuses and housed within the School of Professional Studies.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Describe the role of the paralegal in the American legal system.
- Analyze the basic issues of a legal problem.
- Develop paralegal skills in investigation, legal research, and client and witness interviews.
- Identify common paralegal tasks in substantive areas of the law.
- Develop written and oral communication skills in a legal environment.
- Explain how ethical standards generally apply to paralegals in the practice of law.

Degree Requirements

To receive an Associate of Science degree in Paralegal Studies, students must complete at least 90 quarter units, including 49.5 quarter units of legal specialty courses, one 4.5 quarter unit course of English for Professionals, and the required minimum of 35.5 units of the Associate of Science General Education as specified in the University catalog. Please note a minimum of 27 quarter units of general education course work (across at least three disciplines such as social science, natural science, mathematics, humanities, foreign language and English) is required by the American Bar Association. All students receiving an undergraduate degree in Nevada are required by State Law to complete a course in Nevada Constitution.

All lower division general education courses must be completed at National University or another regionally-accredited institution. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree.

Requirements for Major

(12 courses; 54 quarter units)

PLA 200	Legal Theory & Ethics
PLX 2100X	Torts
PLA 201	English for Professionals
PLX 2101X	Leg Res Wrtg-Briefing/Analysis
PLX 2102X	Contracts
PLX 2103X	Leg Res Wrtg-Legal Memo
PLA 202	Property
PLA 203	Leg Res Wrtg-Persuasive Wrtg.
PLX 2105X	Computers & the Law
PLA 303	Law Office Administration
PLA 318	Remedies & Dispute Resolution <i>Prerequisite: PLA 202, PLX 2100X and PLX 2102X</i>
PLA 325	Litigation I

Paralegals may not provide legal services directly to the public, except as permitted by law.

■ BACHELOR OF ARTS

◆ MAJOR IN DIGITAL JOURNALISM

Faculty Advisor: Sara Kelly; (858) 642-8505; skelly@nu.edu

The Bachelor of Arts in Digital Journalism is a pre-professional program that provides students with both a solid foundation in journalism fundamentals and mastery in delivering news and information using multiple media and platforms. The course of study includes the theory and methods of gathering information, and reporting and writing for specialized audiences. The program also introduces students to the professional responsibilities faced by journalists and news organizations through in-depth study of the ethical and legal ramifications of news gathering and dissemination.

Throughout their course of study, students will report, write and produce news stories that will contribute to a professional employment portfolio. Students are expected to have access to a high-speed Internet connection on a laptop or desktop computer, as well as an Internet-enabled mobile device such as a tablet computer or smart phone. Program graduates will be prepared to embark on varied journalism career paths at print, broadcast and online news outlets, or to work as journalism entrepreneurs.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Tell compelling stories across platforms in a variety of forms.
- Demonstrate mastery of the elements of style and structure across story forms.
- Demonstrate mastery of copy editing and fact-checking techniques.
- Exhibit mastery of journalism ethics in reported stories.
- Balance journalistic freedom with responsibility in reported stories.
- Exhibit a global perspective in reported stories.
- Evaluate the impact of one's own published stories.

Degree Requirements

To receive a Bachelor of Arts degree with a Major in Digital Journalism, students must complete at least 180 quarter units as articulated below. Forty-five (45) quarter units must be completed in residence at National University and 76.5 must be completed at the upper-division level, with a minimum of 70.5 units of the University General Education requirements. In the absence of transfer credit, students may need to take additional general electives to satisfy the total units for the degree. All students receiving an undergraduate degree in Nevada are required by State Law to complete a course in Nevada Constitution.

Prerequisites for Major

(4 courses; 15 quarter units)

ENG 100*	Effective College English I (3 quarter units) <i>Prerequisite: Satisfactory performance on Accuplacer</i>
ENG 101*	Effective College English II (3 quarter units) <i>Prerequisite: ENG 100</i>
COM 100*	Intro to Mass Communication
JRN 200*	History of Journalism

* May be used to meet a General Education requirement.

Requirements for Major

(13 courses; 58.5 quarter units)

JRN 301	News Writing and Editing <i>Prerequisite: ENG 100 and ENG 101</i>
JRN 302	New Journalism Technology <i>Prerequisite: ENG 100 and ENG 101</i>
JRN 303	Global Journalism <i>Prerequisite: ENG 100 and ENG 101</i>
JRN 306	Mobile Reporting <i>Prerequisite: ENG 100 and ENG 101</i>
JRN 309	Documentary Techniques <i>Prerequisite: ENG 100 and ENG 101</i>

JRN 311	Editing Multimedia <i>Prerequisite: JRN 306</i>
JRN 326	Enterprise Reporting <i>Prerequisite: JRN 306</i>
JRN 330	Investigative Reporting <i>Prerequisite: JRN 200 and JRN 301</i>
JRN 360	Journalism on Screen <i>Prerequisite: ENG 100 and ENG 101</i>
JRN 421	Journalism Law and Ethics <i>Prerequisite: ENG 100 and ENG 101</i>
JRN 422	Long-form Nonfiction <i>Prerequisite: ENG 100 and ENG 101</i>
JRN 492	Journalism Business Skills
JRN 495	Capstone Project in Journalism <i>Prerequisite: JRN 310, JRN 330, JRN 335, JRN 340 or JRN 430, JRN 431 and JRN 315</i>

Upper-Division Elective Courses

(3 courses; 13.5 quarter units)

To complete the requirements for the major in journalism students must take at least three elective courses. Elective courses should be chosen based on student career plans and may be taken in any subject that provides the student with an expertise in a particular area or field of journalism (i.e., business, economics, political science, the arts). Students should seek guidance from the program lead faculty before selecting elective courses.

◆ MAJOR IN DIGITAL MEDIA DESIGN

Faculty Advisor: Scott Campbell; (858) 642-8506; scampbell@nu.edu

The Bachelor of Arts in Digital Media Design consists of courses that prepare the student for a broad range of positions requiring a background in computer transmedia design theory, production, and project management. Students receive hands-on training in leading software applications, while they learn and apply media development theory and practice for online and mobile delivery. Successful completion of the program will enable graduates to compete for employment because they possess a relevant combination of skills and knowledge vital to today's workplace. Positions in the fields of gaming, video, production, motion graphics and design include Art Director, Web Designer, Game Designer, Video Editor, Project Manager and Multimedia Specialist.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Develop a personal vision in the creation of original multimedia content.
- Apply the principles of graphic and information design in the generation of digital media projects.
- Examine current trends and key technologies in the media industry.
- Demonstrate oral, visual, and written communication skills with clients, project managers, and media production team members.
- Describe and implement the phases of media production, from the initial planning to the final delivery of a professional product.
- Explain the legal and ethical issues related to media production and distribution.
- Create active and interactive content with graphics, animation, sound and video using media authoring software.

Degree Requirements

To receive a Bachelor of Arts degree with a Major in Digital Media Design, students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level and a minimum 70.5 units of the University General Education requirements. The following courses are specific degree requirements. In the absence of transfer credit, students may need to take additional general electives to satisfy the total units for the degree.

Preparation for Major

(3 courses; 10.5 quarter units)

ENG 100*	Effective College English I (3 quarter units) <i>Prerequisite: Satisfactory performance on Accuplacer</i>
ENG 101*	Effective College English II (3 quarter units) <i>Prerequisite: ENG 100</i>

COM 220*	Media Literacy
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* May be used to meet a General Education requirement.

Requirements for Major

(16 courses; 72 quarter units)

MUL 300	Convergence Media <i>Prerequisite: COM 220, ENG 100 with a minimum grade of B and ENG 101 with a minimum grade of B</i>
BRO 305	Media Storytelling <i>Prerequisite: ENG 100, ENG 101 and COM 100 or COM 103 or COM 220</i>
MUL 305	Graphic Design and Artistry <i>Prerequisite: ENG 100 with a minimum grade of B</i>
MUL 309	Camera and Image <i>Prerequisite: ENG 100 with a minimum grade of B</i>
MUL 365	Digital Video Editing <i>Prerequisite: ENG 100 with a minimum grade of B, ENG 101 with a minimum grade of B and COM 220 with a minimum grade of B. Online Course requires fluent communication.</i>
MUL 461	Motion Graphics <i>Prerequisite: ENG 100 with a minimum grade of B, ENG 101 with a minimum grade of B and COM 220</i>
MUL 345	Applied Web Design <i>Prerequisite: ENG 100 with a minimum grade of B, ENG 101 with a minimum grade of B and COM 220</i>
MUL 370	Digital Interactivity <i>Prerequisite: ENG 100 with a minimum grade of B, ENG 101 with a minimum grade of B and COM 220</i>
MUL 315	Video Game Design <i>Prerequisite: ENG 100 with a minimum grade of B, ENG 101 with a minimum grade of B and COM 220</i>
MUL 355	Game Scripting <i>Prerequisite: ENG 100 with a minimum grade of B, ENG 101 with a minimum grade of B and COM 220</i>
MUL 375	3-D Modeling for Game Art <i>Prerequisite: ENG 100 with a minimum grade of B, ENG 101 with a minimum grade of B and COM 220</i>
MUL 462	Digital Audio Creation <i>Prerequisite: ENG 100 with a minimum grade of B, ENG 101 with a minimum grade of B and COM 220</i>
MUL 399	Emerging Technologies <i>Prerequisite: ENG 100 with a minimum grade of B, ENG 101 with a minimum grade of B and COM 220</i>
MUL 445	Digital Project Management <i>Prerequisite: ENG 100 with a minimum grade of B, ENG 101 with a minimum grade of B and COM 220</i>
MUL 430	Advanced Design Project <i>Prerequisite: COM 100 or COM 103 and COM 220</i>
MUL 471	Adv Digital Interactivity Proj <i>Prerequisite: ENG 100 with a minimum grade of B, ENG 101 with a minimum grade of B and COM 220</i>

Capstone Core Course

(1 course; 4.5 quarter units)

MUL 420*	Multimedia Arts Portfolio Proj <i>Prerequisite: All general core courses and concentration courses</i>
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* This is a two-month long class occurring after concentration courses.

◆ MAJOR IN FILM ARTS

Faculty Advisor: Brian Arnold; (310) 425-5822; barnold@nu.edu

This Bachelor of Arts in Film Arts prepares graduates for entry-level positions in professional film and media content. Students develop skills and techniques necessary to collaborate with creative partners in writing, production and post-production of visual content for a distributed digital media environment. The curriculum includes the origin and development of contemporary cinematic techniques, creative story development, script and proposal writing, professional digital film-making and post-production techniques, and digital media asset management.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate the principles of film by communicating assessments in oral, written or visual modes.
- Analyze the communication objectives of media content creators by communicating assessments in oral, written or visual modes.
- Generate coherent pre-production assets usable in the development of narrative media.
- Apply collaborative creative processes to the development of narrative media.
- Utilize storytelling techniques to present a coherent digital media based narrative.

Degree Requirements

To earn a bachelor's degree, students must complete 180 quarter units, 45 of which must be completed at National University, 76.5 units must be at the upper-division level, and a minimum 70.5 units of University General Education units are required. All students receiving an undergraduate degree in Nevada are required by State Law to complete a course in Nevada Constitution.

Requirements for Major

(17 courses; 76.5 quarter units)

FLM 300	Film Foundations <i>Recommended Preparation: COM 101</i>
FLM 305	Narrative Film History <i>Prerequisite: FLM 300</i>
FLM 310	Sound Editing <i>Prerequisite: FLM 300</i>
FLM 320	Screenplay Writing I <i>Prerequisite: FLM 300</i>
FLM 325	Video Editing <i>Prerequisite: FLM 310</i>
FLM 330	Producing <i>Prerequisite: FLM 300</i>
FLM 340	Directing I <i>Prerequisite: FLM 330</i>
FLM 355	Post-production I <i>Prerequisite: FLM 325</i>
FLM 370	Screenplay Writing II
FLM 380	Directing II Cinematography <i>Prerequisite: FLM 340</i>
FLM 405	Narrative Film Contemporary <i>Prerequisite: FLM 305</i>
FLM 420	Screenplay Writing III <i>Prerequisite: FLM 370</i>
FLM 440	Directing III <i>Prerequisite: FLM 380</i>
FLM 455	Post-production II <i>Prerequisite: FLM 355</i>
FLM 460	Crowdsourcing Production Team <i>Prerequisite: FLM 405, FLM 420, FLM 440 and FLM 455</i>

FLM 480 Capstone I
Prerequisite: All courses required in the student's advanced area of study must be completed prior to taking Capstone I.

FLM 490 Capstone II
Prerequisite: FLM 480

Elective

(1 course; 4.5 quarter units)

Select **one (1)** of the following electives. Other upper-division electives can be proposed. Contact lead faculty for more information.

FLM 470	Internship / Elective
ART 329	World Art <i>Prerequisite: ENG 100 and ENG 101</i>
ART 400	Expressive and Integrative Art
COM 385	Interactive Storytelling <i>Prerequisite: ENG 101</i>
COM 394	Strategic Writing <i>Prerequisite: ENG 101</i>
ENG 401	Fiction Workshop <i>Prerequisite: ENG 301</i>
MUL 315	Video Game Design <i>Prerequisite: ENG 100 with a minimum grade of B, ENG 101 with a minimum grade of B and COM 220</i>
MUL 345	Applied Web Design <i>Prerequisite: ENG 100 with a minimum grade of B, ENG 101 with a minimum grade of B and COM 220</i>
MUL 375	3-D Modeling for Game Art <i>Prerequisite: ENG 100 with a minimum grade of B, ENG 101 with a minimum grade of B and COM 220</i>

◆ MAJOR IN PRE-LAW STUDIES

Faculty Advisor: Bryan Hance; (310) 662-2115; bhance@nu.edu

The Bachelor of Arts in Pre-Law Studies program provides students with the well-rounded education needed for admission to law schools. Emphasis is placed on the verbal, critical thinking, and analytical skills that are considered vital for success as a law student and as a member of the legal profession. This major also allows students interested in a career in business or government to gain an understanding of the complex legal issues they will face in their professions.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Develop legal and critical thinking skills in judicial issues.
- Describe, analyze, and anticipate legal issues in a business environment.
- Analyze contemporary legal issues in the state, federal, and administrative law forums.
- Analyze issues by application of relevant rules of law, ethical standards, and social mores.
- Develop concise legal arguments.
- Demonstrate written, oral communication, and presentation skills used in pre-law.
- Describe need for effective planning in preparation for the negotiation process.

Degree Requirements

To earn a Bachelor of Arts with a Major in Pre-Law Studies, students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level, and minimum of 70.5 units of the University General Education requirements. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation. All students receiving an undergraduate degree in Nevada are required by State Law to complete a course in Nevada Constitution.

Prerequisites for Major

(5 courses; 19.5 quarter units)

- ENG 100* Effective College English I (3 quarter units)
Prerequisite: Satisfactory performance on Accuplacer
- ENG 101* Effective College English II (3 quarter units)
Prerequisite: ENG 100
- SOC 100* Principles of Sociology
Prerequisite: ENG 100 and ENG 101

or

- PSY 100* Introduction to Psychology
- POL 201* American Politics
Prerequisite: ENG 100 and ENG 101

or

- PHL 100 Introduction to Philosophy
Prerequisite: ENG 100 and ENG 101
- LAW 200 Intro to Law & Legal Writing

* May be used to meet a General Education requirement.

Requirements for Major

(9 courses; 40.5 quarter units)

- LAW 400 Current Legal Issues
- LAW 304 Legal Aspects of Business I
- LAW 305 Legal Aspects of Business II
Prerequisite: LAW 304
- LAW 310 Litigation
- LAW 402 The Art of Negotiation

or

- ADR 405 Negotiation Fundamentals
- LAW 405 Analytical Reasoning
- LAW 408 Legal Writing Research and Ora

Capstone

- LAW 420 Advocacy

or

- LAW 470 Pre-Law Senior Project
Prerequisite: LAW 310, LAW 400 and LAW 408
- ADR 400 Alternative Dispute Resolution

Upper-Division Electives

(7 courses; 31.5 units)

Choose **seven (7)** upper-division degree related electives. The courses noted with an * below are strongly recommended.

- LAW 430* Constitutional Law
- LAW 440 Comparative International Law
- LAW 445 Administrative Law for Business
- LAW 455 Public Contracting
- LAW 460* Law School Portfolio Project
- ADR 410* Facilitation Fundamentals
- ADR 415* Mediation Fundamentals
- ADR 420* Communication & Conflict
- ADR 425* Issues in Conflict Management
- ADR 430* Ethics and Neutrality
- CJA 464 Constitutional Law for CJ
- SOC 445 Contemporary Social Problems
Prerequisite: ENG 100 and ENG 101
- PHL 337 Ethics
Prerequisite: ENG 100 and ENG 101

■ BACHELOR OF PUBLIC ADMINISTRATION

Faculty Advisor: Maryam Davodi-Far; (619) 563-7218; mdavodi-far@nu.edu

The Bachelor of Public Administration (BPA) is designed to meet the educational and professional needs of individuals in the public sector who are interested in professional or career advancement. It also prepares individuals for challenging and dynamic careers in government at the local, state, and federal levels. Individuals completing the program are prepared for mid-level positions, teaching, or training assignments, or research in the government and nonprofit organizations.

BPA/MPA Transition Program

Students who are currently enrolled in the Bachelor of Public Administration program and have at least a GPA of 3.0 and are within six courses of graduation, may register for the BPA/MPA transition program by taking two MPA classes as electives during the BPA program. To be eligible, students must apply for and begin the MPA program within six months of completing their BPA program. Students may choose up to two of the graduate-level public administration courses (with the exception of PAD 631 and PAD 644). For students in the BPA/MPA transition program, the University will waive up to two graduate-level public administration courses taken as part of the bachelor's degree, but these students must still meet the residency requirements for the MPA. Students must complete graduate level coursework taken as part of the BPA degree with a grade of "B" or better. A complete description of Transition Program requirements can be found in the Policies and Procedures section of this Catalog.

CAEL Portfolio

In partnership with the Council on Adult and Experiential Learning (CAEL), National University has developed a portfolio-based system of demonstrating that a student has achieved the course outcomes for University undergraduate courses. Credit may apply towards both the lower division and upper division credit requirements of the University's undergraduate degree programs unless specified otherwise in policy or limited by the state or jurisdiction of a student's residence. In our Portfolio program, students demonstrate that what they already know is equivalent to what they would have learned in an equivalent college course. The program is designed to be as flexible as possible to meet students' needs. Students may have acquired this knowledge through past employment, independent reading and study, training programs or in-service courses, volunteer service, cultural or artistic pursuits, hobbies and recreational pastimes, community or religious activities, organizational memberships, adult education, non-credit courses, study abroad, military training not evaluated for credit by ACE, or other experiences. A portfolio enables students to identify and articulate this knowledge, and potentially earn credit for it. Students learn the process of identifying areas of course-equivalent learning and portfolio development skills through the PRLX 2100X course offered through the Division of Extended Learning. The resulting portfolio is submitted for review by Subject Matter Experts for potential award of credit. For further information regarding the Portfolio program, please contact extlearning@nu.edu.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Synthesize the theories of public administration.
- Analyze the operations and procedures of public management and non-profits.
- Develop skills in managing a public sector or nonprofit organization.
- Apply the theories and practices in program and resource management.
- Apply the theories and practices of accounting and budgeting in government and nonprofits.
- Evaluate the role of community groups in local government.
- Analyze ethical situations in the public sector.
- Utilize research process to address a current problem in public administration.
- Collect data, conduct a literature review, analyze data, write and explain findings, and present results orally and/or in writing.

Degree Requirements

To receive a Bachelor of Public Administration, students must complete at least 180 quarter units as described below, 76.5 of which must be completed at the upper-division level, 45 of which must be completed in residence at National

University, with a minimum of 70.5 units of the University General Education requirements. In the absence of transfer credit, students may need to take additional general electives to satisfy the total units for the degree. Refer to the section on undergraduate admission procedures for specific information regarding application and evaluation. All students receiving an undergraduate degree in Nevada are required by State Law to complete a course in Nevada Constitution.

Preparation for Major

(3 courses; 13.5 quarter units)

MNS 205* Intro to Quantitative Methods
Prerequisite: Placement Evaluation

ECO 203* Principles of Microeconomics

ACC 201 Financial Accounting Funds.

* May be used to meet a General Education requirement.

Requirements for Major

(12 courses; 54 quarter units)

ODV 420 Intro to Organizational Behavior

PAD 400* Intro to Public Administration

PAD 401* Public Policy Development

PAD 402* Urban Environments

MGT 400* Ethics in Law, Business & Mgmt

PAD 403* Government Relations

MNS 407 Management Science
Prerequisite: MNS 205

PAD 404* Nonprofit Management

ACC 434 Government and Nonprofit Acct
Prerequisite: ACC 201

MGT 422 Team Bldg, Interpers Dynamics

LED 420 Adaptive Leadership in Change

PAD 405* Senior Research Project
Prerequisite: Satisfactory completion of 36 quarter units of BPA major coursework

* Prior learning credit eligible course.

Upper-Division Electives

(4 courses; 18 quarter units)

Students are encouraged to take any minors or electives in the following prefix areas: CJA, MGT, HRM, ODV, LAW, ACC, FIN, BKM, HUB, LED and ECO.

■ BACHELOR OF SCIENCE

◆ MAJOR IN CRIMINAL JUSTICE ADMINISTRATION

Faculty Advisor: James Guffey; (916) 855-4109; jguffey@nu.edu

The Bachelor of Science in Criminal Justice Administration degree is designed to meet the educational and professional needs of individuals in law enforcement who are interested in professional development or career advancement. It also prepares individuals for challenging and dynamic careers in the justice system at the local, state, and federal levels. Individuals completing the program are prepared for entry- and advanced-level positions, teaching, or training assignments, private security employment, research, or employment as consultants within the field.

The major consists of upper-division courses that include basic forensic science, research methods, juvenile justice, corrections, criminology, leadership and management, civil and criminal investigations, court systems, criminal law, and a senior project supervised by full-time, associate, and select core adjunct faculty. Additionally, students select elective courses from psychology, sociology, addictive disorders, behavioral science, legal studies, information technology, and human resource management to provide a broader perspective in human behavior.

Transition Programs

There are **four (4)** transition programs available to students in the Criminal Justice program:

- BS in Criminal Justice Administration/
Master of Criminal Justice (MCJ) Program
- BS in Criminal Justice Administration/
Master of Forensic Science (MFS) Program
- BS in Criminal Justice Administration/
Master of Public Administration (MPA) Program
- BS in Criminal Justice Administration/
Master of Juvenile Justice (JJS) Program

The CJA BS/MA transition programs allow students who are enrolled in the BS in CJA and have a cumulative GPA of at least 3.0 and who are within completing their last 6 courses to register for 2 courses in the MSCJA, MFS, or MPA program as electives for the bachelor's degree or one MS Juvenile Justice (JJS) as an elective in the BSCJA program. Transition graduate electives are restricted to those courses that do not require a prerequisite. Students must complete all transition course work with a grade of B or better. A complete description of Transition Program requirements can be found in the Policies and Procedures section of this Catalog.

BS in Criminal Justice Administration/Master of Criminal Justice (MCJ) Program

BS in Criminal Justice Administration/Master of Forensic Science (MFS) Program

Students pursuing the BSCJA/MCJ/MFS can choose any two classes which do not require a prerequisite.

BS in Criminal Justice Administration/Master of Public Administration (MPA) Program

Students pursuing the BSCJA/MPA Program can take any two courses, with the exception of PAD 631 and PAD 644.

BS in Criminal Justice Administration/Master of Juvenile Justice (JJS) Program

For the BSCJA/JJS, students can choose one 600-level juvenile justice course, with the exception of JJS 625 or JJS 690 as long as prerequisites have been met.

The number of courses required to earn a MCJ, MFS, or MPA degree for transition program students is reduced from 12 to as few as 10 courses. For JJS students, the JJS required courses can be reduced from 11 to 10.

Graduate-level course work taken as part of the criminal justice administration program cannot be applied to the Master of Criminal Justice Program, Master of Forensic Science Program, Master of Public Administration Program, or the Master of Juvenile Justice Program. A complete description of Transition Program requirements can be found in the Policies and Procedures section of this Catalog.

CAEL Portfolio

In partnership with the Council on Adult and Experiential Learning (CAEL), National University has developed a portfolio-based system of demonstrating that a student has achieved the course outcomes for University undergraduate courses. Credit may apply towards both the lower division and upper division credit requirements of the University's undergraduate degree programs unless specified otherwise in policy or limited by the state or jurisdiction of a student's residence. In our Portfolio program, students demonstrate that what they already know is equivalent to what they would have learned in an equivalent college course. The program is designed to be as flexible as possible to meet students' needs. Students may have acquired this knowledge through past employment, independent reading and study, training programs or in-service courses, volunteer service, cultural or artistic pursuits, hobbies and recreational pastimes, community or religious activities, organizational memberships, adult education, non-credit courses, study abroad, military training not evaluated for credit by ACE, or other experiences. A portfolio enables students to identify and articulate this knowledge, and potentially earn credit for it. Students learn the process of identifying areas of course-equivalent learning and portfolio development skills through the PRLX2100X course offered through the Division of Extended Learning. The resulting portfolio is submitted for review by Subject Matter Experts for potential award of credit. For further information regarding the Portfolio program, please contact extlearning@nu.edu.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Apply biological, psychological, sociological, and economic explanations for criminal behavior from a variety of disciplines.
- Identify the causes and patterns of juvenile delinquency.
- Distinguish the leadership and management styles commonly employed in the Criminal Justice System.
- Demonstrate the criminal investigation process to include preliminary investigation, evidence collection and preservation, submission, and testimony in a courtroom.
- Explain the role of criminal sanctions in relationship to victims and offenders.
- Examine the importance of ethics when applied to all three branches of the criminal justice system.
- Analyze problems within the Criminal Justice System.

Degree Requirements

To receive a Bachelor of Science in Criminal Justice Administration, students must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University, 76.5 of which must be completed at the upper-division level, and a minimum 70.5 units of the University General Education requirements. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements. Refer to the section on undergraduate admission procedures for specific information regarding application and evaluation. All students receiving an undergraduate degree in Nevada are required by State Law to complete a course in Nevada Constitution.

Preparation for Major

(1 course; 4.5 quarter units)

CJA 229** Introduction to Policing

** Students who are currently in law enforcement should contact the Lead Faculty for any potential course waivers.

Requirements for Major

(9 courses; 40.5 quarter units)

CJA 431 Criminology

CJA 337 The Juvenile Offender

CJA 446* CJ Management and Leadership

CJA 460* Principles of Investigation

CJA 351* Courts & the Judicial Process

CJA 352* Criminal Law and Procedure

CJA 340* Corrections

CJA 453 Ethics and the C J System

CJA 470** Criminal Justice Capstone
*Recommended: Prior completion of: all of the prior core courses.
CJA 470 Capstone should be the final course in the BSCJA major.*

Students who do not complete the Senior Project within the two month period are eligible, at the discretion of the instructor, to receive a grade of "IP" with a maximum of a one-time six month extension. Students who do not complete the project at the end of the extension period will need to retake CJA 470. No grade of "I" (Incomplete) can be given for this course.

* Prior learning credit eligible course.

** A two-month course that meets once per week for 4.5 quarter units. (Grading is by H, S, and U only.) Accelerated study is not permitted with CJA 470.

Upper-Division Electives

(7 courses; 31.5 quarter units)

Students must complete a minimum of **seven (7)** courses (31.5 quarter units) of electives from the courses below:

CJA 356*	Criminal Evidence
CJA 400*	Gangs in America
CJA 401*	Criminal Intelligence
CJA 434	Survey of Forensic Sciences
CJA 441*	Organized & White Collar Crime
CJA 443*	Curr Issues in Law Enforcement
CJA 448*	Violence and Society
CJA 457	Minorities/Crime/Soc. Justice
CJA 458	Financial Investigations
CJA 459	Crime and the Media
CJA 464*	Constitutional Law for CJ
CJA 465	Practicum in Criminal Justice (variable units)
CJA 467	Intl. & Domestic Terrorism

* Prior learning credit eligible course.

◆ MAJOR IN HOMELAND SECURITY AND EMERGENCY MANAGEMENT

Faculty Advisor: Kenneth Christopher; (858) 642-8624; kchristopher@nu.edu

The Bachelor of Science in Homeland Security and Emergency Management (BS-HSEM) program provides graduates with a foundation in the security issues; practices, politics and cultures of terrorism; best practices to cope with a pending emergency; and operations during and recovery from an emergency. The program also focuses on the management aspects of disasters and emergencies. More importantly, the program focuses on developing well rounded decision makers with a background in leadership and ethics. Students will conduct research on various government and private sector entities and report on suggested improvements in preparing for an emergency. The program prepares graduates to work in a variety of homeland security and emergency preparedness capacities such as land borders, seaports and airports, threat assessment, disaster management, and crisis response planning and management. The goal of the program is to develop both the critical acumen and theoretical outcomes before, during, and after emergencies. Graduates will develop the ability to write emergency plans, implement and manage emergency plans, and assist decision makers on recovery issues.

The BS-HSEM program is designed for students who aspire to work in the security, business continuity and disaster management fields in the public sector (city, state or federal governments), nonprofit organizations and private industry. It is also appropriate for military personnel of all ranks, mid-level managers, and managers seeking promotion within the various levels of government and private industry.

The BS-HSEM program is composed of eleven core courses and five electives offered in accelerated one-month onsite and online formats. As an introduction, students are offered a broad overview of security management, current issues in homeland security, and the culture and politics of terrorists. The remaining five courses expose the student to direct management strategies for preparing for emergencies and responding to disasters including related ethical issues. Together these courses provide a theoretical and practical foundation for managing security issues and addressing emergencies.

Bachelor of Science Homeland Security and Emergency Management/ Master of Public Administration (BS-HSEM/MPA) Transition Program

Students who are currently enrolled in the Bachelor of Science in Homeland Security and Emergency Management program and have at least a GPA of 3.0 and are within six courses of graduation, may register for the BS-HSEM/MPA transition program by asking their admission advisor to submit a plan change into the transition program and by taking two MPA classes as electives during the BS-HSEM program. To be eligible, students must apply for and begin the MPA program within six months of completing their BS-HSEM program. Students may choose up to two of the graduate-level public administration courses with the exception of PAD 631 and PAD 644.

For students in the BS-HSEM/MPA transition program, the University will waive two graduate-level public administration courses taken as part of the bachelor's degree, but these students must still meet the residency requirements for the MPA. A complete description of Transition Program requirements can be found in the Policies and Procedures section of this Catalog.

Bachelor of Science Homeland Security and Emergency Management/ Master of Science Homeland Security and Emergency Management (BS-HSEM/MS-HSEM) Transition Program

Students who are currently enrolled in the Bachelor of Science in Homeland Security and Emergency Management program and have at least a GPA of 3.0 and are within six courses of graduation, may register for the BS-HSEM/MS-HSEM transition program by asking their admission advisor to submit a plan change into the transition program and by taking two MS-HSEM classes as electives during the BS-HSEM program. To be eligible, students must apply for and begin the MS-HSEM program within six months of completing their BS-HSEM program. Students may choose up to two of the graduate-level HSEM courses with the exception of SSE 610A or a course that has unfulfilled prerequisite.

For students in the BS-HSEM/MS-HSEM transition program, the University will waive two graduate-level HSEM courses taken as part of the bachelor's degree, but these students must still meet the residency requirements for the MS-HSEM. A complete description of Transition Program requirements can be found in the Policies and Procedures section of this Catalog.

Supervised Senior Project Information

The Supervised Senior Project is designed to be a comprehensive project. Therefore, students should schedule HSE490 toward the end of their degree program. The minimum requirements are the completion of at least 27 quarter units of the major requirements in the HSEM program.

To complete the project satisfactorily, students apply extensive effort in research and writing over a period of two months. Due to the time and effort required for this project, it is recommended that students dedicate themselves to the completion of this project without academic distraction.

Students who do not complete the Supervised Senior Project within the two-month period are eligible, at the discretion of the instructor, to receive a grade of "IP" which allows 12 months from the start date of the class for the student to complete. Students who do not complete the project by the end of the specified time period will need to retake HSE490. No grade of "I" (Incomplete) can be given for this course.

CAEL Portfolio

In partnership with the Council on Adult and Experiential Learning (CAEL), National University has developed a portfolio-based system of demonstrating that a student has achieved the course outcomes for University undergraduate courses. Credit may apply towards both the lower division and upper division credit requirements of the University's undergraduate degree programs unless specified otherwise in policy or limited by the state or jurisdiction of a student's residence. In our Portfolio program, students demonstrate that what they already know is equivalent to what they would have learned in an equivalent college course. The program is designed to be as flexible as possible to meet students' needs. Students may have acquired this knowledge through past employment, independent reading and study, training programs or in-service courses, volunteer service, cultural or artistic pursuits, hobbies and recreational pastimes, community or religious activities, organizational memberships, adult education, non-credit courses, study abroad, military training not evaluated for credit by ACE, or other experiences. A portfolio enables students to identify and articulate this knowledge, and potentially earn credit for it. Students learn the process of identifying areas of course-equivalent learning and portfolio development skills through the PRLX2100X course offered through the Division of Extended Learning. The resulting portfolio is submitted for review by Subject Matter Experts for potential award of credit. For further information regarding the Portfolio program, please contact extlearning@nu.edu.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Apply relevant criticism in sustained analysis and interpretations of security management thinking.
- Evaluate emergency disaster pre-plans, recovery plans, and after-action reports.
- Engage in informed critical discussion, both oral and written, pertaining to domestic security management and past breaches of security within the United States.
- Apply analytical skills in approaching ethical dilemmas and implications of technology and other areas faced in government and private industry.

- Describe the political and religious implications of the terrorist climate.
- Describe and analyze the role groups and teams have in organizations as they relate to addressing homeland security and emergency management issues.
- Describe the roles local, state and federal government agencies have in addressing homeland security and emergency management issues.
- Develop written, oral communication and critical thinking skills.

Degree Requirements

To earn a Bachelor of Science with a major in Homeland Security and Emergency Management, students must complete at least 180 quarter units as described below. 76.5 quarter units must be completed at the upper division level. 45 quarter units must be completed in residence at National University and a minimum of 70.5 units of the University General Education requirements must be completed. In the absence of transfer credit, students may need to take additional general electives to satisfy the total units for the degree. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation. All students receiving an undergraduate degree in Nevada are required by State Law to complete a course in Nevada Constitution.

Requirements for Major

(11 courses; 49.5 quarter units)

HSE 401*	Domestic Security Management
PAD 400	Intr to Public Administration
LED 410	Leading Diverse Groups & Teams
CJA 467	International & Domestic Terrorism
HSE 475*	Interviewing and Interrogation
HSE 420*	Information Security
HSE 430*	Border-Transportation Security
HSE 440*	Crisis Management
HSE 470	Legal Issues in Security
HSE 444*	Disaster Management
HSE 490	Supervised Senior Project <i>Prerequisite: Students must have fulfilled all General Education and at least six Core Courses prior to beginning this course.</i>

* Prior learning credit eligible course

Upper-Division Electives

(5 courses; 22.5 quarter units)

Students can select any five upper division courses from the School of Professional Studies, School of Business and Management, School of Health and Human Services, School of Engineering and Computing and the College of Letters and Sciences.

◆ MAJOR IN PARALEGAL STUDIES

Faculty Advisor: Bryan Hance; (310) 662-2115; bhance@nu.edu

This Bachelor of Science degree in Paralegal Studies is approved by the American Bar Association only at the Los Angeles and Woodland Hills campuses, and at the College of the Canyons. The degree program is intended to provide students with the professional skills required to serve the legal community effectively and ethically as a paralegal or legal assistant. The paralegal degree combines both a comprehensive academic curriculum and practical education in the role of the paralegal in a legal environment. The curriculum is designed to enable students to understand and articulate legal theory and apply it ethically to paralegal professional practice.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Describe the American legal system and major areas of the law, such as Torts, Contracts, Property, and others, and understand the legal terminology in those areas.
- Identify legal issues and apply basic legal analysis in the context of a legal problem.
- Conduct legal research using manual and computer-assisted methods.

- Identify and apply proper legal remedies in the context of a legal problem.
- Use computers and other technology for law office and case management, document preparation, discovery, law and motion, and trial preparation.
- Demonstrate effective communication skills and the ability to convey relevant information to attorneys, clients, witnesses, and other persons.
- Demonstrate the ability to assist with preparing legal documents, and handling pre-trial and trial preparation tasks.
- Perform paralegal tasks competently in a law office, corporate law department, governmental agency, judicial setting, or other comparable legal environment.
- Integrate legal theory with the practical aspects of working as a paralegal in a law practice.
- Articulate applicable ethics laws and codes of ethical conduct.

Degree Requirements

To receive a Bachelor of Science, paralegal degree students must complete at least 180 quarter units, 76.5 of which must be completed at the upper division level, 45 units which must be completed in residence at National University, and a minimum 70.5 units of the University General Education requirements. A minimum of 27 quarter units of general education course work is required by the American Bar Association to be completed in at least three disciplines, such as social sciences, natural sciences, mathematics, humanities, foreign language, and English. The paralegal degree coursework comprises 18 legal specialty courses and one English for Professionals course as set forth below. In the absence of transfer credit, additional general electives may be necessary to satisfy the 180 quarter units for the paralegal degree. Students should refer to the section on undergraduate admission procedures for specific information on admission and evaluation. All students receiving an undergraduate degree in Nevada are required by State Law to complete a course in Nevada Constitution.

Preparation for Major

(9 courses; 40.5 quarter units)

PLA 200	Legal Theory & Ethics
PLX 2100X	Torts
PLA 201	English for Professionals
PLX 2101X	Leg Res Wrtg-Briefing/Analysis
PLX 2102X	Contracts
PLX 2103X	Leg Res Wrtg-Legal Memo
PLA 202	Property
PLA 203	Leg Res Wrtg-Persuasive Wrtg.
PLX 2105X	Computers & the Law

Requirements for Major

(10 courses; 45 quarter units)

PLA 303	Law Office Administration
PLA 318	Remedies & Dispute Resolution <i>Prerequisite: PLA 202, PLX 2100X and PLX 2102X</i>
PLA 325	Litigation I
PLA 329	Corporations I
PLA 333	Criminal Law I
PLA 426	Litigation II <i>Prerequisite: PLA 325</i>
PLA 430	Corporations II <i>Prerequisite: PLA 329</i>
PLA 434	Criminal Law II <i>Prerequisite: PLA 333</i>
PLA 495	Objective Writing Capstone <i>Prerequisite: All other courses required for the major (except PLA 496) must be completed prior to enrolling in this course.</i>
PLA 496	Persuasive Writing Capstone <i>Prerequisite: All other courses required for the major must be completed prior to enrolling in this course</i>

Upper-Division Electives

(6 courses; 27 quarter units)

Students must complete a minimum of 27 quarter units of electives to fulfill the upper-division unit requirements to earn the Bachelor of Science in Paralegal Studies. Students can select from the following recommended electives or choose from any upper-division course in the College of Letters and Sciences or the School of Professional Studies.

LAW 402	The Art of Negotiation
LAW 430	Constitutional Law
LAW 440	Comparative International Law
ADR 400	Alternative Dispute Resolution
ADR 405	Negotiation Fundamentals
ADR 415	Mediation Fundamentals
ADR 430	Ethics and Neutrality

Paralegals may not provide legal services directly to the public, except as permitted by law.

MINORS

● MINOR IN ALTERNATIVE DISPUTE RESOLUTION

Faculty Advisor: Margaret Price; (559) 920-1059; mprice@nu.edu

Although designed for those students majoring in business administration who may seek entry into the Alternative Dispute Resolution field, a minor in Alternative Dispute Resolution is available to all students in any bachelor's degree program. ADR is in high demand in the business community, local, state and federal governments, and neighborhood communities. The successful completion of the minor in ADR will provide students with the necessary skills to become effective negotiators, mediators, and facilitators and to promote peace and understanding between diverse cultures.

Requirements for Minor

(6 courses; 27 quarter units)

ADR 400	Alternative Dispute Resolution
ADR 405	Negotiation Fundamentals
ADR 410	Facilitation Fundamentals
ADR 415	Mediation Fundamentals

Choose any **two (2)** of the following courses:

ADR 420	Communication & Conflict
ADR 425	Issues in Conflict Management
ADR 430	Ethics and Neutrality

● MINOR IN BUSINESS LAW

Faculty Advisor: Bryan Hance; (310) 662-2115; bhance@nu.edu

This minor is designed to provide students who have an interest in a career in law, business, or government, with an understanding of the complex legal issues that exist in today's business environment.

Requirements for Minor

(6 courses; 27 quarter units)

LAW 400	Current Legal Issues
LAW 304	Legal Aspects of Business I
LAW 305	Legal Aspects of Business II <i>Prerequisite: LAW 304</i>
ADR 400	Alternative Dispute Resolution
ADR 405	Negotiation Fundamentals

Choose **one (1)** from the following courses:

LAW 440	Comparative International Law
LAW 445	Administrative Law for Business
LAW 455	Public Contracting

● MINOR IN CRIMINAL JUSTICE ADMINISTRATION

Faculty Advisor: James Guffey; (916) 855-4109; jguffey@nu.edu

The Minor in Criminal Justice Administration is designed to provide students with a selective overview of the criminal justice system.

Requirements for Minor

(6 courses; 27 quarter units)

To fulfill the requirements for the minor, students can take any **six (6)** courses listed as upper-division requirements for the major and beginning with CJA prefixes. (Prerequisites may be required depending on courses chosen.)

● MINOR IN JOURNALISM

Faculty Advisor: Sara Kelly; (858) 642-8505; skelly@nu.edu

The minor is designed for students who seek specialized knowledge of the field, including its most recent innovations. It emphasizes traditional foundations, including ethics, but also covers the latest technology and practice.

Requirements for Minor

(6 courses; 27 quarter units)

JRN 301	News Writing and Editing <i>Prerequisite: ENG 100 and ENG 101</i>
JRN 302	New Journalism Technology <i>Prerequisite: ENG 100 and ENG 101</i>
JRN 303	Global Journalism <i>Prerequisite: ENG 100 and ENG 101</i>
JRN 306	Mobile Reporting <i>Prerequisite: ENG 100 and ENG 101</i>
JRN 421	Journalism Law and Ethics <i>Prerequisite: ENG 100 and ENG 101</i>
JRN 492	Journalism Business Skills

● MINOR IN PRE-LAW STUDIES

Faculty Advisor: Bryan Hance; (310) 662-2115; bhance@nu.edu

Requirements for Minor

(6 courses; 27 quarter units)

A minor in pre-law studies helps prepare business professionals for the increasing legal implications of business in a global environment.

LAW 304	Legal Aspects of Business I
LAW 305	Legal Aspects of Business II <i>Prerequisite: LAW 304</i>
LAW 408	Legal Writing Research and Ora
LAW 400	Current Legal Issues
ADR 405	Negotiation Fundamentals
MGT 400	Ethics in Law, Business & Mgmt

GRADUATE DEGREES

■ MASTER OF ARTS IN DIGITAL JOURNALISM

Faculty Advisor: Sara Ellen Amster; (714) 429-5311; samster@nu.edu

The goal of the Master of Arts in Digital Journalism is to prepare learners to become dynamic new media professionals capable of using emerging technologies to generate, create and disseminate news and analysis in a competitive, fast-moving global information environment. The changing nature of 21st century journalism requires professionals who are ready to answer the call for more highly skilled news and communication practitioners in the 24-hour information-on-demand cycle. The program covers theoretical and practical approaches to news coverage and packaging and contemporary business and marketing models relevant to news organizations.

The entire program is offered online with coursework that marries non-traditional multimedia skills with professional journalistic practices, legal underpinnings and the ethics of traditional journalistic practice. Other classes include computer-

assisted reporting, the business of journalism, producing online publications, investigative reporting and international reporting. In the capstone, students will be matched with mentors in professional media and communication fields based upon their interests. Students also create an electronic portfolio designed to help them gain employment and build their career as a professional journalist.

Graduates will acquire a host of intellectual, managerial and journalistic skills including: an understanding of emerging media business models; the ability to create original enterprise projects about public issues, events and individuals; the knowledge to engage in public journalism by conducting polling, interviewing and interactive audience research; the training to develop, implement and evaluate appropriate strategies of investigative journalism using the Web for both research and presentation; and professional instruction in the foundations of shoe-leather journalism, as well as story-generation and reporting.

Applicants must already possess a Bachelor of Arts degree and should be able to write in English at an advanced level, and be flexible enough to learn the latest technological skills that new media professionals need to survive. Applicants must prove basic competency in digital video and audio skills or take JRN 502, Essential Digital Competencies prior to JRN 610 Backpack Digital Audio & Video. If a student's writing skills need improvement, he or she may be required to enroll in a remedial writing class before continuing in the program. Applicants for whom English is a second language are encouraged to take the Accuplacer English test. Contact the program lead faculty for more information.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Develop digital informational content (text, graphics, audio, video) for dissemination across multiple media platforms.
- Evaluate the effect of information and knowledge management structures on accuracy and reliability in news media publications.
- Employ emerging media practices within ethical and legal boundaries.
- Create interactive online publications for a global audience.
- Evaluate contemporary business and marketing models used by media journalists to disseminate news products.
- Analyze news and information gathered from computer databases.
- Compare past and present trends in news writing, reporting, and editing.

Degree Requirements

(14 courses; 63 quarter units)

To receive a Master of Arts in Digital Journalism students must complete at least 63 quarter units of graduate work, of which a minimum of 49.5 quarter units must be taken in residence at National University. Students can transfer up to 13.5 quarter units at the graduate level from a regionally accredited institution provided the units have not been used to satisfy the requirements of an awarded degree and the Faculty Advisor determines the course content is applicable to the program. Students wishing to transfer credits into the program should contact the program faculty advisor. Refer to the section in the graduate admission requirements for additional specific information regarding application and evaluation. The capstone in this program will be developed individually with the advisor and may include an internship in a student's home community or one arranged through National University's student publication.

Program Prerequisite

(1 course; 1.5 quarter units)

JRN 502 Essential Digital Competencies (1.5 quarter units)

Students who feel they have met the competencies of this class should speak to the Faculty Advisor regarding the requirements needed to submit a waiver.

Core Requirements

(14 courses; 63 quarter units)

JRN 600	The New News
JRN 605	Advanced Non-Fiction Writing
JRN 610	Backpack Digital Audio & Video <i>Prerequisite: JRN 502</i>
JRN 615	International Reporting
JRN 620	Online Publishing

JRN 630	Professional Editing
JRN 640	Emerging News Business Models
JRN 645	Marketing the News
JRN 650	Computer-Assisted Research
JRN 655	Communication Law
JRN 656	Ethics in the New Media World
JRN 660	Investigative Methods
JRN 670	Producing Enterprise Projects
JRN 680	Capstone Project

■ MASTER OF CRIMINAL JUSTICE

Faculty Advisor: Ponzio Oliverio; (858) 642-8541; poliverio@nu.edu

The Master of Criminal Justice (MCJ) is designed to provide students with the required knowledge and competence in administration, management and problem solving skills in the challenging and demanding careers of Criminal Justice in the fields of criminal justice administration and criminal justice research and development. Students completing the Master in Criminal Justice are exposed to both theoretical and applied models and concepts in criminal justice administration, as well as qualitative and quantitative research methods. The Master of Criminal Justice program integrates theory with practice to provide graduates with the skills and knowledge needed to address the complex issues and challenges of criminal justice in the 21st century. Students in this program develop the problem solving and research skills as well as technological expertise necessary to analyze reality-based cases and assignments to develop strategies and solutions that are both practical and effective. Challenging and demanding careers in government at the local, state, and federal level in the administration of justice, law enforcement management, correctional administration, security administration, and criminal justice research as well as teaching and training assignments await graduates with a Master's Degree in Criminal Justice.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Evaluate the managerial practices that have shaped the criminal justice professions.
- Analyze court decisions involving police or criminal justice agencies in terms of criminal sanctions.
- Analyze issues of police morale, motivation, retention, selection and recruitment.
- Evaluate and determine what should be the consequences of unethical conduct by police officers.
- Evaluate and compare the American criminal justice system with other criminal justice systems.
- Evaluate disciplinary, theoretical, criminological, and philosophical foundations in the management of criminal justice.
- Develop oral, written, and technological communication for criminal justice professionals.
- Utilize critical thinking and problem solving skills to identify quality scholarship and research in the field of criminal justice.

Degree Requirements

To receive a Master of Criminal Justice, students must complete at least 54 quarter units of graduate work. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree, and provided the units have not been used to satisfy the requirements of an awarded degree.

For students in the BS in Criminal Justice Administration/MCJ transition program, the University will waive the criminal justice course(s) taken as part of the bachelor's degree (see BS in Criminal Justice Administration transition program) if the grade earned is a "B" or higher but no graduate units will be awarded. A complete description of Transition Program requirements can be found in the Policies and Procedures section of this Catalog.

Students should refer to the section on graduate admission requirements for specific information regarding application and evaluation.

Core Requirements

(8 courses; 36 quarter units)

CJA 600	CJ Theory, Practice & Policy
CJA 610	Critical Issues in CJ
CJA 620	Legal Issues in CJ
CJA 622	Professional Ethics in CJ
CJA 627	Comparative CJ Systems
CJA 650	Advanced Criminological Theory
CJA 655	Advanced Research Methods
CJA 690	Research Project Thesis

Prerequisite: CJA 600, CJA 610, CJA 620, CJA 622, CJA 627, CJA 650 and CJA 655

Program Electives

(4 courses; 18 quarter units)

Select **four (4)** courses from the following:

CJA 625	Security Management & Planning
CJA 660	Drugs, Alcohol & Public Policy
CJA 665	Violence and Victimization
FSC 622	Law and Criminal Procedure
FSC 631	Major Case Investigation
FSC 643	Forensic Psychology

■ MASTER OF FINE ARTS IN DIGITAL CINEMA PRODUCTION

Faculty Advisor: Edward Alyn Warren III; (714) 429-5131; awarren@nu.edu

The Digital Cinema Production MFA prepares graduates to produce compelling visual stories for an expanding digital media marketplace. It provides hands on experience applying dramatic narrative and cinematic concepts and professional techniques from the Hollywood and Independent film traditions to the creative development and production of entertainment and other media content. The program focuses on developing filmmakers well versed in all aspects of low budget, independent filmmaking that can be applied to a variety of media content production environments including commercial, corporate and industrial promotion and communication projects; film, television and other entertainment media distribution channels; and instructional media programs. Students are prepared to collaborate efficiently with a creative team and to adapt to the dynamic digital landscape and media distribution marketplace. Graduates are also prepared to teach in film and media arts programs at the college and university level.

Offered in a hybrid online/low-residency format, the MDC-MFA program affords students living outside the major media markets and entertainment production centers the opportunity to study professional film production at the graduate level with film industry professionals and to develop the technical skills and practical experience necessary to function as media production entrepreneurs. The hybrid program offers instruction for a majority of courses delivered online, with a required one-month intensive residency at the Los Angeles campus. The program is also offered full-time at the National University Los Angeles campus with a significant number of classes offered onsite that includes access to digital editing and production facilities and equipment.

The first year of the MDC-MFA immerses students in the applied cinematic arts, narrative structure, cinematic design and grammar, short film forms, sound design and cinematography, and professional editing techniques and postproduction workflow. In the second year, graduate fellows take six MFA Production Sequence courses taking a short film script through a professional film producing cycle from development to festival distribution over a five-month period. Working from the perspective of the producer, each fellow produces a professional film production and distribution plan and look book used to pitch a project to potential funders and distributors.

Next working as a director, each student prepares a director's production book that details a personal approach to directing the film. In the third class, the students are assigned department leadership positions on a production team that takes the project through preproduction, preparing a production book that will be the guide to the production of the short in the fourth month during the MDC-MFA residency

in Los Angeles. All MFA students serve in one of the following leadership positions during preproduction and production - producer, director, director of photography, production designer - and rotate through other key production crew positions depending on interests and career goals. After principal photography has been completed, each student is responsible for bringing the project through all aspects of postproduction in preparation for a screening in Hollywood.

As a result of this second year production sequence, the graduate MFA production fellows are prepared for the development and production of their thesis films.

Program Residency Requirements

All Digital Cinema fellows must take the intensive residency consisting of three courses onsite at the National University Los Angeles campus: MDC 683P Production Practicum, MDC 688 Production and MDC 689 Postproduction. The MDC 688 Production workshop lasts the first two weeks of the month and the second, MDC 689 Post-Production, runs for two weeks during the second half of the month. MDC 683P runs for the whole month. These three workshops provide students with hands-on production experience in a collaborative environment using professional equipment and must be completed prior to the thesis sequence.

Students who are unable to devote a full month onsite for both MDC 688 and MDC 689 may elect to split the onsite residency by taking MDC 689 first and then later scheduling MDC 683P and MDC 688, which must be taken concurrently. For more information on the residency workshops, contact the program lead faculty advisor.

Thesis Sequence

The Digital Cinema Production MFA thesis sequence consists of four courses, MDC 692, 693, 694 and 695 and may last from 12-18 months. Classes cover the producing cycle for a professional film project: development, preproduction, production, postproduction, picture lock and final postproduction in preparation for release and distribution to a film festival.

To be eligible for thesis, the MFA candidate must have successfully completed all core courses by maintaining a "B" average, and have completed the second-year Production and Residency courses with a minimum grade of "B". Candidates who do not meet these criteria can be required to successfully repeat a course based upon consultation with the program lead faculty and policies for Graduate programs published in the National University catalog.

The thesis project consists of a short subject digital motion picture and written thesis. The finished short film should represent professional quality production values, be between 12 and 22 minutes in length, and present a dramatically compelling visual story that sustains the interest of a discriminating audience. Projects may be documentary or fiction. Although animation projects are not discouraged, to be accepted a thesis candidate must demonstrate previous mastery in that genre and the ability to bring such a project to completion under the parameters of the thesis courses. Specifications and qualification criteria for the project are developed in consultation with the thesis advisors assigned to thesis courses.

MDC-MFA candidates must also complete a written thesis that demonstrates the candidate's ability to communicate coherently, critically, and creatively. The written thesis will be drawn from work completed during the thesis process, including the complete production documentation, an approved proposal, a locked step outline, a screenplay or documentary production treatment, and project funding, budget, scheduling and distribution plans. In addition, the thesis will present a critical analysis of the finished project, an evaluation of relevant genre influences, and a self-assessment of the thesis candidate's evolution as a filmmaker during the thesis producing cycle, including lessons learned and recommendations for future projects.

The MFA thesis process is collaborative and thesis fellows are responsible for maintaining regular communication with thesis advisors and making satisfactory progress on the project. Thesis advisors provide oral and written critiques and notes for discussion and incorporation into the creative development of the story and project plan and to help guide subsequent revisions of the film and lead to a successful qualification of the film.

A fellow must satisfactorily complete each thesis course within the specified term of the course. MDC 692 Thesis Development is four months. MDC 693 Production and MDC 694 Postproduction courses are three months each, and the MDC 695 Qualification course is two months. Incompletes may be considered based on the satisfactory progress of the thesis fellow in each of the phases of the producing cycle and University policy. Any thesis course that receives an unsatisfactory final evaluation must be repeated.

Upon satisfactory completion of thesis post-production, the thesis project enters the Thesis Qualification class to complete the final revision of the film and compile the written thesis. The MDC-MFA thesis qualification review committee will provide a final review of the thesis film to determine whether the film has met or exceeded the qualification requirements for the Master of Fine Arts.

Fees

Production and course material fees listed below cover the additional costs of the residency including workshop and production, expendables, materials, supplies and related expenses. Expenses for accommodation and transportation are not included in the fees or tuition, and students are responsible for arranging their own accommodations and transportation during the onsite residency. Additional equipment fees may apply to some onsite workshop courses.

For more information on program formats, residency workshops, onsite courses and fees, contact the program lead faculty advisor.

Production and Course Material Fees

MDC 688 Course Fee	\$1,250
MDC 689 Course Fee	\$550

Thesis Qualification Fee

MDC 695 Course Fee	\$300
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The Thesis Qualification Fee provides compensation for qualification committee member's time for final review and providing comments on thesis projects prior to qualification.

Program Application Requirements

To be considered for admission to the Digital Cinema Production MFA program, applicants must meet the University graduate admission requirements listed in the catalog under General Information for Graduate Degrees and the following program criteria. Applicants must submit an application packet and pass a personal interview with the program lead faculty advisor. The MDC-MFA program application and interview will assess the applicant's technical proficiency, experience and skill level in digital photography and editing, relevant formal education, training or informal experience with film production, storytelling and film history, as well as writing and communication in English at the graduate level. A portfolio, resume, certificate or other proof may be required. Program start dates may vary depending on applicant experience, skills and proficiencies.

Students interested in enrolling in this program should contact the MDC-MFA program lead faculty advisor by e-mail for further information regarding the application process. Please use the subject line "Digital Cinema Production MFA application information." The MDC application and personal interview will determine whether or not an applicant meets the program prerequisites. The enrollment date and class schedule will be determined by the program lead faculty after the interview has been completed. Applicants should allow 30 days for review and scheduling of the interview.

Program Prerequisites

To be successful students in the MDC-MFA program are expected to be able to conduct independent research on films, filmmaking issues using valid and reliable sources and be able to write at the graduate level. It is recommended that students have had undergraduate courses or experience in some of the following areas: communication, film, literature, media studies, graphic design, multimedia arts, history, philosophy, psychology or sociology. A successful applicant should have beginner to intermediate level knowledge of video editing software and be able to create new projects, capture digital video and audio assets, assemble and insert, edit, and export sequences to a variety of QuickTime formats for DVD, Internet and streaming formats.

Students are also required to have the basic technical knowledge and skills needed to operate a digital camera using manual settings and be familiar with photographic principles like exposure, iris, and shutter, as well as such digital concepts as white balance, image resolution, frame rate and screen ratio. Students who do not have such experience or skills should take a basic noncredit video editing and digital photography course as preparation for the degree. Students may also be asked to submit a short digital video project for consideration.

Technical Requirements

Students admitted to the program are expected to have reliable access to a high-speed Internet connection, an email account outside of National University for

course projects and assignments, access to a DVD rental service for watching films and television programs, and a headset for collaboration in live online class meetings.

Students need to own a personal computer that meets the system requirements for professional digital video editing software currently available. (Always check the manufacturer's web site for system requirements before purchasing software. Students may need to upgrade their computer or components to meet those specifications.) Access to one of the following professional level editing software is required: AVID Media Composer, Adobe Premiere Production Suite (CS6) or Final Cut Pro (version 7). These programs are used for the onsite editing and post-production. Students should plan to learn how to operate required software before taking related classes (MDC 652 and 689).

The following software is required to complete program course work: Microsoft Office (Word, Excel, PowerPoint, Internet Explorer) or comparable software capable of outputting PDF documents (e.g. Adobe Acrobat Professional), a variety of standard browser plug-ins (i.e. JavaScript, Flash, QuickTime, etc.), an FTP client software (such as Fetch, CoreFTP, FileZilla, etc.), Adobe Photoshop Elements (or equivalent photo image processing program (MDC661 and 651), Apple QuickTime Pro, Compressor or another media transcoding program compatible with the above mentioned digital video editing software package (MDC 662 and 652), project management software like GanttProject, Gorilla or Movie Magic (MDC 650, 683, 683P), and a script writing program such as CELTX, MovieMagic or Final Draft (MDC 664, 664P and 692).

Access to the following additional equipment is required prior to taking MDC 652, 661, and 651: external FireWire (400 or 800, IEEE 1394), USB 3 or Thunderbolt hard drive for media storage, a digital still camera with manual controls, a digital video camera with manual controls capable of recording HD or HDV signals, an external microphone and stand, a tripod, a basic lighting kit, and the above mentioned nonlinear editing software.

For more information on any of the above requirements contact the program lead faculty advisor.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Critique the creative works of others using relevant critical models and professional vocabulary.
- Evaluate professional and theoretical issues and processes pertaining to movies and aspects of digital filmmaking based on recognized industry models and standards.
- Incorporate research from primary and secondary sources into sustained analyses and interpretations of screenplays, films and television programs.
- Generate an original narrative screenplay that incorporates standard industry format, dramatic narrative elements in a coherent plot structure.
- Create an original short fiction or non-fiction narrative film with a coherent structure and compelling storyline that engages and sustains the interest of a discriminating audience.
- Generate the standard industry documentation required to effectively communicate and collaborate with a production team during the development, production, editing and distribution of a professional motion picture.
- Generate original digital motion picture sequences using current cinematic theory and techniques to support the thematic concepts and story objectives of a script.
- Construct digital motion picture sequences using current film and sound editing techniques and theory that engage and sustain the interest of a discriminating audience.
- Implement film industry production and post-production workflow processes to capture, edit, finish and export digital video assets to appropriate distribution media.
- Create an original short motion picture based on an original concept with a coherent storyline that is significant and complex enough to engage and sustain the interest of a discriminating audience and is suitable for distribution or submission to a film festival.

Degree Requirements

To receive a Master of Fine Arts, students in the Digital Cinema program must complete at least 81 quarter units of graduate work, of which a minimum of 67.5 quarter units must be taken at National University. Students can transfer up to 13.5 quarter units at the graduate level from a regionally accredited institution in the areas of communication, film, media studies, or production, provided the units have not been used to satisfy the requirements of an awarded degree. Program applicants wishing to transfer credits into the program should contact the program lead faculty advisor and arrange for an evaluation in advance. Refer to the section in the graduate admission requirements for additional specific information regarding application and matriculation.

First Year

(10 courses; 38.25 quarter units)

- MDC 660 Narrative Structure in Film
- MDC 663 Cinematic Storytelling
- MDC 664 Short Film Colloquium
- MDC 664P Short Film Practicum (2.25 quarter units)
Prerequisite: MDC 664
- MDC 652 Digital Editing
Corequisite: MDC 652P
- MDC 652P Editing Practicum (2.25 quarter units)
Corequisite: MDC 652, Recommended Preparation: MUL 365
Digital editing competencies may also be achieved by taking Lynda.com or equivalent training courses in at least one non-linear editing program: Adobe Premiere, AVID Media Composer or Final Cut Pro. Contact the program lead faculty for more information.
- MDC 662 Sound Design
Prerequisite: MDC 652
- MDC 661 Cinematic Design
- MDC 651 Digital Cinematography
Corequisite: MDC 651P, Prerequisite: MDC 661
- MDC 651P Cinematography Practicum (2.25 quarter units)
Corequisite: MDC 651

Second Year

(6 courses; 24.75 quarter units)

- MDC 650 Film Producing
Prerequisite: MDC 651 with a minimum grade of B and MDC 652 with a minimum grade of B
- MDC 653 Film Directing
Prerequisite: MDC 651, MDC 660 and MDC 662
- MDC 683 Production Management
Prerequisite: MDC 650, MDC 651, MDC 652, MDC 662 and MDC 653, Corequisite: MDC 683P, MDC 688 and MDC 689
- MDC 683P Production Practicum (2.25 quarter units)
Four-week practicum only offered onsite and must be taken concurrently with MDC 688.
Prerequisite: MDC 683, Corequisite: MDC 688
- MDC 688 Production
Two-week workshop is only offered onsite and must be taken concurrently with MDC 683P.
Corequisite: MDC 683, Prerequisite: MDC 651 and MDC 653
- MDC 689 Digital Cinema Post-Production
Two-week workshop is only offered onsite and recommended to be taken after MDC 688 and concurrently with MDC 683P.
Corequisite: MDC 683, Prerequisite: MDC 650 and MDC 652

The production sequence courses MDC 653 through MDC 688 must be taken in sequence. MDC 683P and MDC 688 and MDC 689 are only offered in an onsite residency at the National University Los Angeles Learning Center. This production residency is only offered in July of each academic year.

MDC 650 and MDC 688 may be taken separately by splitting the production residency into two visits. However the time to degree may be extended by up to 12 months. Contact the program Lead Faculty for more information.

Program Electives

(2 courses; 6.75 quarter units)

Students doing a short documentary film for their thesis must select MDC 670 and MDC 670P documentary courses as electives prior to starting the MDC MFA thesis sequence. Otherwise students may take MDC 664P Short Film Practicum for a second time and one other 4.5 unit course. Contact the lead faculty advisor to discuss scheduling options.

MDC 670 Producing Documentaries
Prerequisite: MDC 650 and MDC 683

and

MDC 670P Documentary Practicum (2.25 quarter units)
Prerequisite: MDC 670, MDC 651P and MDC 688

or

MDC 664P Short Film Practicum (2.25 quarter units)
Prerequisite: MDC 664

and

COM 610 Integrated Marketing Comm

or

SCR 671 Character and Dialog

or

SCR 650 Script Reading and Coverage

or

SCR 680 Screenwriting I
Prerequisite: SCR 679

and

SCR 680P Screenwriting I Practicum (2.25 quarter units)
Prerequisite: SCR 680

Thesis Sequence

(4 courses; 11.25 quarter units)

MDC 692 Thesis Development
Prerequisite: Satisfactory completion of all MDC core requirements

MDC 693 Thesis Production (2.25 quarter units)
Prerequisite: MDC 692

MDC 694 Thesis Postproduction (2.25 quarter units)
Prerequisite: MDC 693

MDC 695 Thesis Qualification (2.25 quarter units)
Prerequisite: MDC 694

■ MASTER OF FINE ARTS IN PROFESSIONAL SCREENWRITING

Faculty Advisor: Bettina Moss; (323) 337-2016; bmoss@nu.edu

The MFA in Professional Screenwriting program provides an in-depth study of the art of film, TV and transmedia writing wherein students learn to create compelling, well-structured stories with memorable characters. Students will also acquire a foundational understanding of how to market themselves and their work in the entertainment industry.

This program is hybrid, with the majority of classes delivered online. There is a two week required on-site residency in Los Angeles. Graduate candidates develop skills in advanced film, television and/or transmedia writing, the ability to critically evaluate film, television and/or transmedia scripts for practical and commercial outcomes and critical acumen in the area of media studies.

After foundational screenwriting instruction, students may choose one of three advanced tracks: screenwriting, television writing or transmedia writing. Students may take courses within the three areas and produce thesis projects in more than one area. Graduate candidates will complete the program with one feature length screenplay and a second screenplay or teleplay or transmedia project. Other thesis deliverables include an aesthetic statement reflecting their artistic development and a marketing plan and pitch.

The program prepares graduates to work in a variety of capacities in the following fields: commercial, industrial or independent film, TV and transmedia writing

and/or development, digital entertainment media and communication, and educational or instructional media programs. Course work covers screenwriting, television writing, transmedia writing (graphic novels, comics, web narratives, etc.), script analysis, script development, pitching and marketing as well as business aspects of entertainment programming. Internships and special extra-curricular electives are also available.

Upon completion of the Master of Fine Arts in Professional Screenwriting program, students will possess the knowledge and skills needed to evolve their writing to a professional level, participate in ongoing scholarly and critical discussions of issues in the field of film, TV and Transmedia writing and present their work to the entertainment industry. The MFA also provides the graduate with the degree required to teach at the university level.

Application Requirements and Program Prerequisites

To be considered for admission, prospective students must meet the University graduate admission requirements listed in the catalog under general information for graduate degrees. There is no separate application process for this program.

Students are expected to possess or have reliable access to a high-speed Internet connection including an email account outside of National University for course projects and assignments. Students need to have access to a DVD rental and/or streaming service or other reliable source for obtaining access to films, television shows and transmedia. Students must have personal access to a computer that meets the system requirements for viewing films and film clips online and other relevant media.

The following software (at a minimum) is required: Microsoft Office (Word, Excel, PowerPoint) or comparable software capable of outputting PDF documents, and a variety of standard browser plug-ins (i.e. JavaScript, Flash, Shockwave, QuickTime, Real player etc.) Access to screenwriting software such as Final Draft or Scriptwriter is necessary. The use of free screenwriting software is discouraged due to technical issues. Students must also have reliable access to a headset and microphone capable of supporting online course technological requirements.

Students enrolling in the program are expected to have written and spoken proficiency in English at the graduate level. If in doubt about your English language skills, please contact the faculty advisor for the program.

Program Prerequisites

The Professional Screenwriting MFA is a rigorous, graduate level program. Prior to entry it is expected that students have acquired the knowledge and skills needed to write, evaluate and engage in critical thought at the graduate level. Proficiency in basic writing skills such as spelling and grammar is a must. Prospective students are expected to have written and spoken proficiency in English at the graduate level.

Students who do not have such experience or skills should take appropriate courses before entering the program. It is recommended (although not absolutely required) that students have had undergraduate courses or experience in one or more of the following areas: communication, film, television, English, literary or media studies, history, philosophy, psychology or sociology or other relevant areas.

Faculty and Content Creators

Instructors bring the benefit of professional film, television and other industry experience to their teaching. Faculty, content creators and guest speakers include writers, directors, executives, agents, producers and others who have worked in affiliation with high level industry entities such as (but not limited to); DreamWorks, Warner Bros., Lawrence Bender Productions, Cruise/Wagner Productions, HBO, Showtime, PBS, Sony Pictures, ABC, CBS, NBC, Miramax, Disney and Fox Studios.

Faculty, content creators and guest speakers include Emmy, Humanitas and Nicholls Fellowship award-winning writers who have worked on such diverse projects, as Wall Street, Masters of the Universe, Little Fockers, Ray, Life As We Know It, Red Eye, Disturbia, Source Code, Snow White and the Huntsman and TV series such as From Earth To The Moon, Band Of Brothers, Deadwood, The District, Nip/Tuck, Picket Fences, Law And Order, Camarena Drug Wars, among many others, and transmedia projects such as, The Adventures of Kavalier and Clay (graphic novel), and Todd, The Ugliest Kid on Earth.

Program Curriculum

Core and Advanced Core

The program is offered as a hybrid, online/on-site low-residency program. All core courses, electives and advanced courses with studio practica are delivered online. After completing the core sequence, students may elect one of three Advanced Focus Tracks: Screenwriting, Television Writing or Transmedia Writing. Each track has three required courses that must be taken to fulfill that track. In addition, students may select two elective courses from the electives list. A three-course thesis sequence completes the program requirements.

Residency

The residency component of the program consists of two courses which are taken concurrently. One is online and one is on site at the Los Angeles campus.

The residency courses provide students with the opportunity to learn in a collaborative environment which introduces them to working professionals. Students will synthesize crucial elements of film, TV and transmedia writing, pitch presentations and learn how business is conducted in the entertainment community. The two residency courses are educational opportunities to create relationships with professors and industry professionals and learn about the entertainment industry by direct experience. They are not designed to serve as venues for sale of creative material, for obtaining agent or manager representation or to procure employment.

Thesis Sequence

To excel in the Master of Fine Arts in Professional Screenwriting thesis sequence, the successful MFA candidate must demonstrate her/his ability to work under the guidance of a thesis advisor(s). Students must have a minimum 3.0 GPA upon entering thesis. All prior required courses must be taken before thesis can begin. The thesis advisor and/or thesis committee determines whether or not the student has met or exceeded the qualification requirements for the Professional Screenwriting Master of Fine Arts. The final thesis course is IP (In Progress) grade eligible. A candidate must satisfactorily complete each thesis course within the maximum specified time period. A candidate who is unable to satisfactorily complete each course during the specified time period must retake the course. Any thesis course that receives an unsatisfactory evaluation must be repeated. For thesis portfolio, students are expected to complete the following under the guidance of thesis advisor(s):

- Independently develop, write and revise two projects (i.e., screenplays and/or TV scripts and/or transmedia projects and/or critical paper).
- Independently develop and write an aesthetic statement documenting the artistic choices that resulted in the student's thesis projects and their overall evolution as a writer.
- Create a marketing plan and audio or video pitch to introduce the student's work to the entertainment community.

The Professional Screenwriting thesis portfolio is developed during a three-course sequence that may last from 6-12 months and students should anticipate the longer timeline.

For thesis portfolio students are expected to accomplish the following under the guidance of thesis advisor(s):

Program Fees

All fees are financial aid eligible.

Residency Fees

SCR 675 Course Fee	\$750
SCR 670P Course Fee	\$250

Additional fees may apply to residency workshops including purchase of film or tour tickets, expendables, supplies and some meals. These can vary and are determined at the time of each on-site residency. Costs for accommodation and transportation are not included in the tuition or fees. Students are responsible for arranging their own accommodations and transportation as well as any meals not provided. For more information contact the program lead faculty advisor.

Thesis Fees

SCR 690 Course Fee	\$350
SCR 691 Course Fee	\$350

Thesis fees provide compensation for committee member's time and attention to thesis projects.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Differentiate critical points of view in the analyses and interpretation of films, television shows, screenplays and other entertainment content.
- Using films, television programs and transmedia IP's analyze the principles of writing in these varied media.
- Demonstrate critical reflection and viewpoint in evaluating the work of peers and others.
- Generate original and/or adapted narrative screenplays, TV Scripts or transmedia IP's employing the principles of these respective disciplines through various stages from introductory level to mastery.
- Articulate a critical understanding of self in relation to creativity and the influence of cultural and societal issues.
- Analyze and/or design and generate a marketing plan/pitch using the principles of entertainment industry marketing.
- Collaborate with others in achieving writing and/or pitching goals.

Degree Requirements

To receive a Master of Fine Arts, students in the Professional Screenwriting program must complete at least 78.75 quarter units of graduate work, of which a minimum of 65.25 quarter units must be taken at National University. With approval of lead faculty advisor, students may be able to transfer up to 13.5 quarter units at the graduate level from a regionally accredited institution in the areas of screenwriting, communication, film or media studies, or other appropriate areas of study provided the units have not been used to satisfy the requirements of an awarded degree. Students wishing to transfer credits into the program should contact the program lead faculty advisor. Refer to the section in the graduate admission requirements for additional specific information regarding application and evaluation.

Core Requirements

(6 courses; 22.5 quarter units)

Note: Practica are the "Studio labs" generally associated with writing workshops.

SCR 650	Script Reading and Coverage
SCR 679	Cinematic Writing
SCR 680	Screenwriting I <i>Prerequisite: SCR 679</i>
SCR 680P	Screenwriting I Practicum (2.25 quarter units) <i>Prerequisite: SCR 680</i>
SCR 681	Screenwriting II <i>Prerequisite: SCR 680, Corequisite: SCR 681P</i>

and

SCR 681P	Screenwriting II Practicum (2.25 quarter units) <i>Prerequisite: SCR 680P, Corequisite: SCR 681</i>
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Advanced Core Requirements

(6 courses; 22.5 quarter units)

SCR 671	Character and Dialog
SCR 682	Adv Screenwriting Workshop <i>Prerequisite: SCR 681 and SCR 681P</i>
SCR 682P	Adv Screenwriting Practicum (2.25 quarter units) <i>Prerequisite: SCR 682</i>
SCR 670	Dev-Prod Writing <i>Prerequisite: SCR 681 and SCR 681P</i>
SCR 670P	Development/Production Practic (2.25 quarter units) <i>Prerequisite: SCR 681, SCR 670 and SCR 681P, Corequisite: SCR 675</i>

and

SCR 675	The Business of Screenwriting <i>Prerequisite: SCR 681, SCR 681P and SCR 670, Corequisite: SCR 670P</i>
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Advanced Focus Elective Track

(3 courses; 11.25 quarter units)

Select **one (1)** of the following Advanced Focus Tracks: Screenwriting, Television Writing, Transmedia Writing

SCR 683 Adaptation Workshop
Prerequisite: SCR 681 and SCR 681P

and

SCR 683P Adaptation Practicum (2.25 quarter units)
Prerequisite: SCR 681, SCR 681P and SCR 683

or

SCR 665 Introduction to TV Writing

and

SCR 684 TV Pilot/Series Writing Worksh
Prerequisite: SCR 665 with a minimum grade of B

and

SCR 684P TV Writing Practicum (2.25 quarter units)
Prerequisite: SCR 665 and SCR 684

or

SCR 668 Introduction To Transmedia

and

SCR 685 Transmedia Writing Workshop
Prerequisite: SCR 668 with a minimum grade of B

and

SCR 685P Transmedia Writing Practicum (2.25 quarter units)
Prerequisite: SCR 685 and SCR 668

Electives

(2 courses; 9 quarter units)

Select **two (2)** courses from the following list of approved electives. Students may not repeat a course as an elective that is taken as a core requirement.

SCR 665 Introduction to TV Writing

SCR 667 Marketing for Film & TV

SCR 668 Introduction To Transmedia

SCR 692 Graduate Internship
Prerequisite: SCR 675 with a minimum grade of B, SCR 670P with a minimum grade of B. For MFA in Professional Screenwriting students an internship can only be taken after onsite residency is completed. Recommended Preparation: MFA Students from other disciplines may be required to fulfill specific prerequisites prior to taking an internship. TBD by lead faculty for program.

SCR 693 Guided Study
Recommended Preparation: Students must demonstrate advanced skills and talent in order to be considered for participation.

SCR 693P Guided Study Practicum (2.25 quarter units)
Prerequisite: SCR 670P with a minimum grade of B and SCR 675 with a minimum grade of B

Thesis Sequence

(3 courses; 13.5 quarter units)

Thesis courses must be taken in order (SCR690, SCR690A and SCR691).

SCR 690 Screenwriting Thesis
Prerequisite: All other program courses with potential exception of one elective and/or the onsite residency (by lead faculty approval only)

SCR 690A Advanced Rewriting
Prerequisite: SCR 690

SCR 691 Thesis Qualification & Review
Prerequisite: SCR 690

■ MASTER OF PUBLIC ADMINISTRATION

Faculty Advisor: Maryam Davodi-Far; (619) 563-7218; mdavodi-far@nu.edu

The Master of Public Administration (MPA) is designed for students who want to pursue a career in government management at the federal, state, or local level and nonprofit management. The program is delivered and maintained through designed structured learning objectives within each class, all of which are foundational to the culminating research activity. The degree provides a wide range of skills in financial management, budgeting, quantitative methods, urban planning and redevelopment, personnel policies, politics, and grant writing. The focus on continuous improvement of written and oral communication skills through course requirements utilizing case studies, research papers and oral presentations further strengthens the skills developed and mastered. The requirement for the MPA student to complete research in a Capstone Project further bridges theory and practice.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Utilize critical thinking and research methods relevant to public administration in a multi-cultural environment.
- Evaluate the concept of new public management within a historical context.
- Analyze the impact of political influences on the public sector decision-making process.
- Analyze the division of power within American government as established by the U.S. Constitution.
- Describe, analyze, and evaluate the various approaches to managing government employees.
- Evaluate the effectiveness of public administration strategies for dealing with the media, community, and local government agencies.
- Evaluate the impact of public administration decisions on urban planning and redevelopment.
- Synthesize resources and approaches for developing grant proposals for community programs and services.

Degree Requirements

To be awarded a Master of Public Administration, students must complete at least 54 quarter units of graduate work. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree and provided the units were not used in earning another advanced degree. Students should refer to the section on graduate admission requirements for specific information regarding application and evaluation.

Transition Program

For students in the Bachelor of Public Administration/BS in Criminal Justice Administration/BS in Domestic Security Management/BA Political Science/MPA transition program, the University will waive up to two public administration courses taken as part of the bachelor's degree (see BS in Bachelor of Public Administration/Criminal Justice Administration/BS in Domestic Security Management/BA Political Science transition program), but these students must still meet the residency requirements for the MPA. The number of courses waived is dependent on the courses taken and grades earned in the transition program. A complete description of Transition Program requirements can be found in the Policies and Procedures section of this Catalog.

Core Requirements

(8 courses; 36 quarter units)

PAD 620 Foundations of Public Admin

PAD 622 Seminar in Urban Affairs

PAD 626 Public Personnel Policy

PAD 627 Quantitative Methods

PAD 628 Ethics

PAD 631 Urban Planning & Redevelopment

PAD 632 Finance Mgt & Grant Admin

PAD 644 MPA Project

Program Electives

(4 courses; 18 quarter units)

Students must complete **four (4)** graduate courses from the following subject areas to meet the elective requirement: CJA, HUB, PAD, SCD, HRM, LED. Students who elect to have an area of specialization are not required to take additional elective requirements.

▲ Specialization in Human Resource Management

Faculty Advisor: Bernadette Baum; (858) 642-8404; bbaum@nu.edu

This area of specialization focuses on managing people, the human resource of the organization. Moving beyond common sense and good interpersonal skills, these courses provide students with the knowledge to recruit, select, train, evaluate and compensate employees. Students learn how changes in the workplace, such as governmental regulations, global competition, developing technologies and organizational transformations, influence the performance and productivity of workers. Technical knowledge and practical skills for dealing with a multicultural workforce offer students new ideas on leadership and effective tools for managing human resource.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Complete a job analysis of a specific job to be used for recruiting, selection, performance appraisal, training and compensation.
- Develop a recruiting plan and design a selection process for recruiting, interviewing, and selecting candidates for employment for jobs within an organization.
- Conduct a needs assessment and design a training program for current employees on a specific topic related to organizational goals.
- Assess benefits relevant to the employee population and organizational structure, and formulate a compensation system based upon merit, knowledge, and skill acquisition.
- Recognize, analyze, and effectively address ethical, legal and safety challenges faced in the workplace, and develop methods designed to prevent employer liability.

Requirements for Specialization

(5 courses; 22.5 quarter units)

HRM 660	Theory & Practice of HRM
HRM 630	Legal, Ethical & Safety Issues
HRM 637	Workforce Plan, Dev & Outsource
ODV 606	Seminar in Training & Developm
HRM 667	Compensation & Benefits

▲ Specialization in Organizational Leadership

Faculty Advisor: Julia Buchanan; (858) 642-8453; jbuchanan@nu.edu

The purpose of the area of specialization in organizational leadership is to provide students with the skills and theoretical concepts that will assist them when seeking promotions or positions in management and supervision. This area of specialization is designed to prepare diverse adult learners to become effective, change oriented leaders in an international society by adding distinctive and challenging curricula.

This area of specialization is ideal for individuals who desire to understand the technical and reflective processes that often accompany opportunities to exercise leadership in profit and not for profit organizations.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Distinguish between multiple approaches for exercising leadership to promote innovation and confront complex issues within organizations.
- Interpret organizational dynamics, group dynamics and engage in systems thinking in order to promote the development of a learning organization capable of innovation, adaptation, and orchestrating conflict.

- Evaluate ethical issues and aid organizational members in creating ethical culture appropriate to the organizational and global environment that supports operating in environments of diversity, uncertainty and unpredictability.
- Distinguish between the functions of authority, power, the practice of leadership, and utilize frameworks that serve organizational purposes.

Requirements for Specialization

(4 courses; 18 quarter units)

LED 602	Developing Groups and Teams
LED 603	Leadership in the 21st Century
LED 604	Leading Change and Adaptation
LED 605	Conflict and Power Dynamics

■ MASTER OF SCIENCE IN HOMELAND SECURITY AND EMERGENCY MANAGEMENT

Faculty Advisor: Kenneth Christopher; (858) 642-8624; kchristopher@nu.edu

The Master of Science in Homeland Security and Emergency Management (MSHSEM) program represents an interdisciplinary area of research and application that brings together the fields of homeland security, terrorism and emergency management as they relate to man-made and natural disasters. The terrorist events of 9/11 highlighted the national and international need for highly educated and experienced professionals in the area of Homeland Security and Emergency Management. Naturally occurring events such as Hurricane Katrina, Southern California Wildfires, Joplin tornados, and Japanese tsunami are further evidence of the ongoing requirement for specialized knowledge in this area. Businesses, governments, and private industry must be able to prepare for, respond to, and recover from potentially debilitating natural and man-made catastrophes.

MSHSEM Transition Program

National University students who completed a transition program as part of their undergraduate degree and who satisfy MSHSEM transition program requirements described in the catalog must complete a minimum of 45 quarter units for their MSHSEM degree. The number of units required for the MSHSEM program is dependent on the coursework completed in the Bachelors transition program and the grades earned. A complete description of Transition Program requirements can be found in the Policies and Procedures section of this Catalog.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Illustrate the issues related to homeland security of both natural and man-made disasters.
- Integrate tools, resources and organizational systems for the successful implementation of homeland security and emergency management issues.
- Formulate global mindset to terrorism, homeland security and emergency management issues.
- Assess the impact of security issues for the operation of the public and private sectors with respect to manmade and natural disasters.
- Integrate resources, organizational systems, and decision making processes for the successful implementation of homeland security and emergency management plans.
- Assess the impact of communications and the media on terrorism, homeland security and emergency management messaging.
- Analyze the impact of national immigration policy on homeland security issues.
- Critique legal and ethical issues in homeland security and emergency management.
- Master oral and written communication skills appropriate with this profession.

Degree Requirements

To be awarded a Master of Science in Homeland Security and Emergency Management, students must complete at least 54 quarter units of graduate work. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree and provided the units were not used in earning another advanced degree. Students should refer to the section on graduate admission requirements for specific information regarding application and evaluation.

For students in the BS in Homeland Security and Emergency Management/MS in Homeland Security and Emergency Management program, the University will waive up to two homeland security and emergency management courses taken as part of the bachelor's degree (see the BS in Homeland Security and Emergency Management/BS in Criminal Justice Administration/Bachelor of Public Administration transition program), but these students must still meet the residency requirements for the MS in Homeland Security and Emergency Management. The number of courses waived is dependent on the courses taken and grades earned in the transition program. A complete description of Transition Program requirements can be found in the Policies and Procedures section of this Catalog.

Core Requirements

(12 courses; 54 quarter units)

HSE 613	Policies of Homeland Security
HSE 614	Infrastructure Protection
HSE 640	Leading Complex Environments
HSE 625	Domestic Terrorism
HSE 611	Emergency/Disaster Response
HSE 615	Fundamentals of Recovery
HSE 606	Managing Information Security
HSE 635	Communication and Security
HSE 620	Global Lessons in Security
HSE 630	Immigration Issues in Security
HSE 690A	Capstone Course <i>Prerequisite: Completion of at least six core courses of the program. HSE 690A with a minimum grade of S. Students must complete HSE 690A before starting HSE 690B.</i>
HSE 690B	Capstone Course <i>Prerequisite: HSE 690A with a minimum grade of S, Completion of at least six core courses of the program.</i>

■ MASTER OF SCIENCE IN JUVENILE JUSTICE

Faculty Advisor: Cynthia Sytsma; (858) 642-8572; csytsma@nu.edu

The Master of Science in Juvenile Justice is designed to prepare candidates who want to work in education, law enforcement, probation, social work, etc. with the skills necessary to develop specific strategies and solutions that are practical and effective when working with juveniles with disabilities. Candidates will integrate theory with practice to address the complex issues and challenges of the juvenile justice system to conduct in depth research, write behavior plans, develop a network with cooperating agencies and conduct interviews to better prepare themselves as professionals guiding youth with disabilities who have a delinquent and neglectful background.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Develop professional level written, verbal communication, and presentation skills.
- Assess critical thinking skills when designing interventions, functional behavioral assessments, and behavior management plans to mitigate youth behavioral problems.
- Create a reference guide of professionals from interacting and coordinating agencies to network with.
- Analyze the Individuals with Disabilities and Education Act, federal, and state law requirements in non-public and residential placements.
- Design interventions and best practices for students in the juvenile justice system that are culturally relevant.
- Design strategies for working with individuals with emotional/behavior problems.

Degree Requirements

To receive a Master of Science in Juvenile Justice, students must complete at least 46.5 quarter units of graduate work. Students may transfer in up to 6 quarter units of graduate credit that may be granted for equivalent graduate work completed at another institution, as it applies to this degree and if the units were not used in

earning another advanced degree. Course equivalence cannot be granted for life experience.

Core Requirements

(11 courses; 46.5 quarter units)

JJS 601	Field Experience & Orientation (1.5 quarter units)
CJA 665	Violence and Victimization
or	
HUB 642	Theories of Behavior Change
EXC 639	Childhood and Adolescence
CJA 660	Drugs, Alcohol & Public Policy
JJS 602	Creating Alliances in Alt. Ed <i>Prerequisite: JJS 601</i>
JJS 603	Role of Profess in Alt Ed <i>Prerequisite: JJS 601</i>
JJS 604	Mgmt. of Behaviors <i>Prerequisite: JJS 601</i>
JJS 605	Prof Ethics in Juv Justice Sys <i>Prerequisite: JJS 601</i>
or	
CJA 622	Professional Ethics in CJ
JJS 606	Delinquency & Gang Impact <i>Prerequisite: JJS 601</i>
JJS 625	Advanced Research Methods
JJS 690	Capstone Project <i>Recommended: Prior completion of: All 7 other core JJS classes.</i>

UNDERGRADUATE CERTIFICATES

■ UNDERGRADUATE CERTIFICATE IN ALTERNATIVE DISPUTE RESOLUTION

Faculty Advisor: Margaret Price; (559) 920-1059; mprice@nu.edu

The successful completion of the ADR certificate program will provide students with the necessary skills to become effective negotiators, mediators, and facilitators. These skills are in high demand in the business community, local, state, and federal governments, and neighborhood communities.

Students who wish to pursue a baccalaureate degree or a second baccalaureate degree can apply some or all the academic credits awarded in the certificate program toward that degree, assuming they meet the GPA and other requirements of that degree program.

Employment and volunteer opportunities exist for mediators in both the private and government sectors such as:

- Ombudsperson for a corporation or university
- Education, teaching and training
- Human Resources Departments
- U.S. Military
- State Mediation and Conciliation Service (SMCS)
- State of California Department of Fair Employment and Housing
- San Diego City Attorney's Office
- Federal Mediation and Conciliation Service
- Equal Employment Opportunity Commission (EEOC)
- Mediation and Arbitration Private Practice
- Small Claims Courts
- Nonprofit Organizations and Community Mediation Programs
- Restorative Justice Program

Certificate Requirements

(6 courses; 27 quarter units)

To receive a Certificate in Alternative Dispute Resolution, students must complete **four (4)** courses for the major and two electives from the courses listed below.

- ADR 400 Alternative Dispute Resolution
- ADR 405 Negotiation Fundamentals
- ADR 410 Facilitation Fundamentals
- ADR 415 Mediation Fundamentals

Electives

Choose **two (2)** of the following courses:

- ADR 420 Communication & Conflict
- ADR 425 Issues in Conflict Management
- ADR 430 Ethics and Neutrality

■ UNDERGRADUATE CERTIFICATE IN CRIMINAL JUSTICE ADMINISTRATION

Faculty Advisor: James Guffey; (916) 855-4109; jguffey@nu.edu

This coursework and the accompanying credits may be transferred to appropriate degree programs if all other requirements for admission to a degree program are met.

This certificate provides students with an overview of some of the most important pillars of the criminal justice field. Students will gain insight into the principles, problems and solutions of supervision and management of personnel in the criminal justice agencies, the issues and theories surrounding the field of corrections, an understanding of the behavioral, psychological, sociological motivational factors of criminality and finally, a study of the intricacies within the judicial process of criminal justice.

Certificate Requirements

(4 courses; 18 quarter units)

- CJA 446 CJ Management and Leadership
- CJA 340 Corrections
- CJA 431 Criminology
- CJA 351 Courts & the Judicial Process

NEVADA PROGRAMS

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National University's Henderson Campus has been authorized by the State of Nevada Commission on Postsecondary Education to offer the following programs onsite. In addition, the State of Nevada's Department of Education has approved all teacher education programs leading to teacher licensing in the State of Nevada. The Master of Arts in Counseling Psychology meets the academic requirements necessary to sit for the Marriage and Family Therapist License examinations mandated by the State Board of Examiners for the State of Nevada.

Henderson, Nevada Campus

2850 West Horizon Ridge Parkway, Suite 300
Henderson, NV 89052-4395
Phone: (702) 531-7800 Fax: (702) 531-7894

Hours of Operation

Monday - Thursday 8:00 am - 10:00 pm
Friday - Saturday 8:00 am - 6:00 pm

The Henderson Campus occupies over 16,000 square feet on a single floor. The campus includes 5 classrooms, Science Lab, Nursing Lab, and Computer Lab with computers and printers available for student use. Additionally, wireless Internet access is available. The Henderson Campus also includes Faculty Offices, an Admissions Office, and a Student Lounge for students to learn and work.

NEVADA PROGRAMS

All students receiving an undergraduate degree in Nevada are required by State Law to complete a course in Nevada Constitution.

- Bachelor of Arts in Elementary Education with Nevada Elementary Licensure
- Bachelor of Arts in Mathematics Education with Nevada Secondary Licensure
- Bachelor of Arts in English Education with Nevada Secondary Licensure
- Bachelor of Arts in Special Education with Nevada Licensure
- Master of Education with Nevada Elementary Licensure
- Master of Education with Nevada Secondary Licensure
- Master of Arts in Counseling Psychology
- Master of Science in Educational Administration with Nevada Endorsement as Administrator of a School Option (NEVADA ONLY)
- Master of Science in Special Education with Nevada Licensure and Endorsement for Generalist Resource Room

FINANCIAL AID

In addition to the financial aid outlined in the financial aid section of the catalog, the following programs are available to Nevada residents:

VA Educational Benefits

On site Nevada students interested in using Military benefits as listed in the Financial Aid and Scholarships section must request transcripts for all/any previous training: college/university, vocational, military, etc.

Please call or visit the Veteran Affairs Office for additional information at:

2850 W. Horizon Ridge Parkway
Suite 301
Henderson, NV 89052
Phone: 702.531.7800

State Grants

Nevada public colleges and universities offer various grant opportunities that are funded by the state. Each college has designed programs that best serve its student population. Some programs are only for Nevada residents, while others are open to nonresidents. Most grants are need-based, but some may not require documented need. Information on two of the grant programs follows. Keep in mind that not all programs are offered at all colleges.

Access Grant

The Access Grant is for undergraduate and graduate students who have financial need and are Nevada residents. The maximum award is \$3,000 for graduate students and \$2,500 for undergraduates, but the amount can vary depending on cost of attendance, enrollment status, living arrangements and availability of funds.

Nevada Student Incentive Grant

This grant is for qualified low-income undergraduate and graduate students who are Nevada residents. The award amount varies by type of college, college costs, enrollment status and living arrangements.

Tribal Scholarships

If you are a Native American, your tribe or nation may offer scholarships. To learn more, contact your tribe or call the regional office of the Bureau of Indian Affairs in Sacramento, California, at 916.978.6058 or go to www.oiep.bia.edu. Many tribes and the BIA require a "needs analysis" from the college's financial aid office to document eligibility, so be sure to file your FAFSA early. You will also find scholarships for Native Americans at www.collegefund.org.

Foster Youth Grants

Up to \$5,000 a year for college or vocational training is available for foster youth who have aged out of foster care or who were adopted after age 16. To learn more, talk to your high school counselor, your independent living coordinator, your college's financial aid administrator, go to www.statevoucher.org and click on "Nevada," or call 775.684.4450.

A number of foundations also offer tuition waivers and scholarships for foster youth. The Otto A. Huth Scholarship Trust Fund is available to children who have been in the custody of the Nevada Division of Child and Family Services in a foster or group home. The application deadline is March 15 of each year. For more information, go to www.dcfcs.state.nv.us (click on "Scholarships"). In addition, the CASA Foundation provides up to \$500 per semester for foster youth. For details, call 702.455.4306.

Refund Policy

Students are accepted and registered for classes with the understanding that they will attend the entire course. Faculty contracts, the commitment of space, and other University resources are made on that assumption, creating financial obligations that students who withdraw must share. National University's refund policy reflects this position. Students may withdraw themselves from class prior to midnight of the ninth (9th) day of the session by contacting their admissions advisor.

To accurately count session days, note that the first day of a session—not the actual day a student attends class—counts as day one of that session. The University counts calendar days rather than business days for determining refunds. As such, if the first day of the session is a Monday, the student would need to withdraw prior to midnight of the following Tuesday, the ninth day of that session.

If a student does not complete a course, a tuition refund is made according to the following schedule, which is based upon a 28-day month.

Students who withdraw from a course prior to midnight of the:

- Ninth (9th) day of the session will receive a 100 percent refund
- Tenth (10th) day of the session will receive a 64 percent refund
- Eleventh (11th) day of the session will receive a 60 percent refund
- Twelfth (12th) day of the session will receive a 57 percent refund
- Thirteenth (13th) day of the session will receive a 54 percent refund
- Fourteenth (14th) day of the session will receive a 50 percent refund
- Fifteenth (15th) day of the session will receive a 46 percent refund
- Sixteenth (16th) day of the session will receive a 43 percent refund
- Seventeenth (17th) day of the session will receive a 40 percent refund

Students who withdraw from a course after midnight of the seventeenth (17th) day of the session will not receive a refund.

Students must have a credit balance in their account to receive a refund. Refunds, depending on the verification of funds, are processed and mailed within fifteen (15) days from the later of:

- The date from when a student cancels enrollment
- The date from when the institution terminates a student's enrollment
- The last day of an authorized leave of absence (if the student fails to return after this period)
- The last day of attendance of a student

All refunds are mailed to the student's home address. Students must make sure that the address on file is correct.

■ MASTER OF ARTS IN COUNSELING PSYCHOLOGY (NEVADA)

****THIS PROGRAM IS CURRENTLY NOT ACCEPTING APPLICANTS****

The Master of Arts in Counseling Psychology degree provides the academic pathway for students who are committed to the practice of professional counseling. The program includes core courses that all students must take and two optional tracks:

- **The MA Counseling Psychology**—Nevada LCPC is based on the academic requirements to be eligible for licensing as a licensed clinical professional counselor by the Nevada Board of Examiners for Marriage and Family Therapists and Licensed Professional Counselors.
- **The MA Counseling Psychology**—Nevada MFT Specialization is based on the academic requirements to be eligible for licensure as a marriage and family therapist by the Nevada Board of Examiners for Marriage and Family Therapists and Licensed Professional Counselors.

The Nevada Board of Examiners for Marriage and Family Therapists and Licensed Professional Counselors does not approve programs in Professional Counseling or Marriage and Family Therapy. The Board of Examiners reviews each applicant's transcript to determine whether certain substantive subject matter areas have been adequately studied. National University has designed, to the best of its ability, a program that meets the Board of Examiners requirements based on the best available information from the Board. However, because the Board of Examiners does not approve any sequence of courses as meeting its requirements, National University cannot guarantee that any specific course sequence will fully meet Board requirements. The degree may not meet requirements in other states. Students should consult the licensing boards of the appropriate states for information about the MFT outside of Nevada. The degree also prepares students for the pursuit of doctoral studies in practitioner-oriented programs such as counseling or clinical psychology.

Program Specifications

- Students must complete all coursework with a grade point average (GPA) of 3.0 for all courses in this program. Students who receive a grade of "C+" or lower in two (2) or more courses must repeat all such courses before being allowed to continue in the program. Students who receive a "D" or "F" grade in any course must repeat the course.
- Students must complete a minimum of 10 hours of individual, marital, family, or group psychotherapy before taking the first Counseling Practicum course and another 15 hours before graduation for a total of 25 hours.
- MAC/NV-LCPC & MFT Students must obtain a total of 100 hours of counseling experience at a designated practicum site with an approved practicum site supervisor during PSY 651A, B, C, and D. During each of these courses, 75 hours must involve face-to-face psychotherapy with clients.
- Independent studies are not allowed in this program without departmental approval.
- Nevada students seeking licensure must register with the Nevada Board of Examiners for Marriage and Family Therapists and Licensed Clinical Professional Counselors after graduation and fulfill all NV licensing requirements.
- Students are also urged to join their respective professional association. Students in the NV-MFT and NV-LCPC specializations must obtain malpractice insurance, which may be obtained through their professional association another professional organization.
- Students must complete all coursework within seven years. Any courses taken more than seven years ago must be repeated.

Application Requirements

Students interested in enrolling in this program should contact the Henderson campus for further information regarding the application process. To be considered for admission, applicants must meet the University graduate admission requirements listed in the general information for graduate degrees as well as the Master of Arts in Counseling Psychology program criteria. All applicants are evaluated in terms of the requirements for preparation for the psychotherapy profession, regardless of career goals. Students must submit an application packet, pass a personal interview, and attend the program orientation before they may begin classes.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Establish professional relationships with diverse clients that provide the necessary conditions for therapeutic change.
- Diagnose and assess categories of mental distress, psychopathology, and problems in living in diverse individuals, couple, families, and systems according to the current diagnostic systems.
- Demonstrate ability to develop strategies and detailed plans for successful and ethical psychotherapeutic interventions with diverse client groups in various clinical contexts, including crisis intervention and case management assessment.
- Demonstrate knowledge of various models of psychotherapy, capacity to critically evaluate and assess their effectiveness, and execute psychotherapeutic interventions within diverse relationships.
- Integrate professional and personal development through self-reflection and introspective awareness.

Degree Requirements

To receive the Master of Arts in Counseling Psychology, students must complete the number of credits listed above for their selected specialization. A total of 13.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree and if the units were not used in earning another advanced degree. Students should refer to the section on graduate admission requirements for specific information regarding application and evaluation.

With Area of Specialization in Clinical Professional Counseling
(18 Courses; 75 quarter units)

With Area of Specialization in Marriage and Family Therapy
(19 Courses; 79.5 quarter units)

Prerequisite Recommended Preparation

(1 course; 4.5 quarter units)

Candidates who have not previously completed this course or its equivalent are strongly urged to do so. PSY429 can be taken either online or in a classroom.

PSY 429 Intro to Personality Theory
Prerequisite: ENG 100, ENG 101 and PSY 100

Core Requirements

(12 courses; 54 quarter units)

PSY 635 Childhood and Adolescence
PSY 629A Adulthood and Aging
PSY 625 Counseling Techniques and Prac
PSY 623 Diagnosis and Assessment
PSY 627A Legal and Ethical Issues
PSY 636 Child and Adolescent Therapy
PSY 628 Group Therapy
PSY 637 Cultural Competencies
PSY 642 Relational Violence
PSY 653 Research and Evaluation
CHD 640 Treatment of Addictions
PSY 626 Human Sexuality

Students must choose **one (1)** of the following specializations:

▲ Specialization in Licensed Clinical Professional Counselor (Nevada)

The Master of Arts in Counseling Psychology degree-Licensed Clinical Professional Counselor Specialization emphasizes counseling techniques and theories, including those related to career development, and is designed for students who are committed to the practice of individual and group counseling. This version of the degree is in alignment with the academic requirements of the Nevada Board of Examiners for LCPC.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Establish professional relationships with diverse clients that provide the necessary conditions for therapeutic change.
- Diagnose and assess categories of mental distress, psychopathology, and problems in living in diverse individuals and groups according to the current diagnostic systems.
- Develop strategies and detailed plans for successful and ethical psychotherapeutic interventions with diverse client groups in various clinical contexts, including crisis intervention and case management.
- Critically evaluate and assess various models of counseling and execute psychotherapeutic interventions within diverse relationships.
- Integrate professional and personal development through self-reflection and introspective awareness.
- Apply clinical and counseling theories, research, and related literature within the field of counseling psychology.
- Apply professional ethics, values, and relevant laws and legal codes to the professional roles and relationships related to the practice as a Licensed Clinical Professional Counselor.

Requirements for Specialization

(6 courses; 21 quarter units)

PSY 616	Counseling Theories
PSY 654	Career & Lifestyle Development
PSY 651A	Counseling Practicum I (3 quarter units) <i>Prerequisite: Regional Lead Faculty Approval</i>
PSY 651B	Counseling Practicum II (3 quarter units) <i>Prerequisite: Regional Lead Faculty Approval</i>
PSY 651C	Counseling Practicum III (3 quarter units) <i>Prerequisite: Regional Lead Faculty Approval</i>
PSY 651D	Counseling Practicum IV (3 quarter units) <i>Prerequisite: Regional Lead Faculty Approval</i>

The practicum seminar meets once a week for 1.5 hours during three consecutive months in addition to the onsite practicum requirements. This seminar may meet in the late afternoon.

▲ Specialization in Marriage and Family Therapy (Nevada)

(7 courses; 25.5 quarter units)

Students choosing the MFT Specialization must complete the following **seven (7)** courses in addition to the MAC core coursework in order to complete their MAC degree.

PSY 632A	Family Therapy
PSY 632B	Couples Therapy
PSY 617A	Family Systems
PSY 651A	Counseling Practicum I (3 quarter units) <i>Prerequisite: Regional Lead Faculty Approval</i>
PSY 651B	Counseling Practicum II (3 quarter units) <i>Prerequisite: Regional Lead Faculty Approval</i>
PSY 651C	Counseling Practicum III (3 quarter units) <i>Prerequisite: Regional Lead Faculty Approval</i>
PSY 651D	Counseling Practicum IV (3 quarter units) <i>Prerequisite: Regional Lead Faculty Approval</i>

■ BACHELOR OF ARTS IN ELEMENTARY EDUCATION WITH NEVADA ELEMENTARY LICENSURE

Faculty Advisor: Cristina Grandy; (702) 531-7808; cgrandy@nu.edu

The Bachelor of Arts in Elementary Education with Nevada Elementary Licensure provides a broad, rigorous education that prepares candidates for a career as a teacher at the elementary level. The program introduces candidates to essential knowledge, connections across the disciplines and application of knowledge to life beyond the University. This degree program gives candidates an enriched and provocative curriculum that incorporates content across subject areas and with specific educational methodology courses. This program prepares candidates for professional work as elementary teachers in a changing cultural and economic environment.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate an understanding of interdisciplinary theory and the practice of critical thinking for the collection, validation, analysis and synthesis of historical data and new information.
- Explain the integration of knowledge in a global context and engage in collaborative research across disciplines.
- Identify and appreciate the cultural perspectives of world views.
- Use information communications technology for knowledge sharing and the interdisciplinary approach.
- Demonstrate a deep and flexible understanding of subject matter.
- Demonstrate application of educational technology to meet the needs of all learners including those with special needs and linguistically and culturally diverse students; this was originally one—split into 2 for clarity and language.
- Demonstrate knowledge of child and adolescent development in order to explain how to support growth in cognitive, social, physical and emotional domains.
- Utilize different teaching strategies to accomplish the teaching and learning goals.
- Demonstrate a thorough understanding of the learning needs and developmental issues of students to create positive learning environments that ensures healthy human growth.
- Demonstrate understanding through use of systematic observations, documentation and other effective assessment strategies in a responsible manner to facilitate and account for learning, and to support positive growth.
- Design, implement and evaluate standards-based lesson plans for learning and achievement in content areas.
- Consider students' knowledge when designing, implementing, and assessing curriculum to promote developmentally appropriate learning outcomes for all children.
- Adhere to professional standards and ethics.

Degree Requirements

To receive a Bachelor of Arts in Elementary Education with Nevada Licensure, candidates must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University and 76.5 of which must be completed at the upper division level. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements. Candidates must demonstrate competency with passing scores on Praxis Core and Praxis Content Area Tests.

Preparation for Major

(3 courses; 10.5 quarter units)

LIT 100*	Introduction to Literature <i>Prerequisite: ENG 100 and ENG 101</i>
HIS 375	Nevada History, Gov't and Cons <i>Prerequisite: ENG 100 and ENG 101</i>
TED 320	Introduction to Teaching (1.5 quarter units)

Passage of Praxis Core Academic Skills for Educators is required before beginning course work in the major.

* May be used to meet a General Education requirement.

Requirements for Major

(24 courses; 106.5 quarter units)

All Teacher Education courses (TED) have a field experience component. Students must maintain a 3.0 GPA within all TED course work and grades of “D” or “F” are not acceptable in TED courses. All major course work must be completed and the following exam passed prior to student teaching: Praxis Elementary Education: Instructional Practice and Applications. TED 320 must be satisfactorily passed prior to beginning course work in the major.

Elementary Education Major Requirements

(19 courses; 85.5 quarter units)

BIS 301	Intro to Interdisc. Studies
COM 380	Democracy in the Info. Age <i>Prerequisite: ENG 100 and ENG 101</i>
SOC 350	Cultural Diversity <i>Prerequisite: ENG 100 and ENG 101</i>
ENG 350	Fundamentals of Linguistics <i>Prerequisite: ENG 100 and ENG 101</i>
MTH 301	Fundamentals of Mathematics II <i>Prerequisite: MTH 209A or Accuplacer test placement evaluation</i>
BIS 401	Interdisciplinary Practice: In <i>Prerequisite: BIS 301 and four additional courses from the major</i>
TED 300	Fundamentals of Education <i>Prerequisite: TED 320 or TED 305 or TED 306</i>
TED 310	Development and Learning <i>Prerequisite: TED 305 or TED 320 or TED 306</i>
TED 330A	Reading and Lang. Arts Methods <i>Prerequisite: TED 305 or TED 320 or TED 306</i>
TED 340	Content Area Reading Methods <i>Prerequisite: TED 305 or TED 320</i>
TED 350	Math and Science Methods <i>Prerequisite: TED 305 or TED 320 or TED 306</i>
TED 355	Hist/Social Science Methods <i>Prerequisite: TED 305 or TED 320 or TED 306</i>
TED 380	Arts/PE/Health Methods <i>Prerequisite: TED 305 or TED 320 or TED 306</i>
TED 410	Survey of Multicultural Lit. <i>Prerequisite: TED 305 or TED 320 or TED 306</i>
TED 430	Special Needs Students <i>Prerequisite: TED 305 or TED 320 or TED 306</i>
TED 440	Leadership and Assessment <i>Prerequisite: TED 305 or TED 320 or TED 306</i>
TED 538	Parent Engagement

Choose **one (1)** from the following courses:

ART 329	World Art <i>Prerequisite: ENG 100 and ENG 101</i>
MUS 327	World Music <i>Prerequisite: ENG 100 and ENG 101</i>
ART 400	Expressive and Integrative Art

Choose **one (1)** from the following courses:

SCI 300	Geography
EES 301	Earth & Planetary Sciences
BIO 310	Evolution <i>Prerequisite: BIO 161, BIO 162, BIO 163 and BIO 100A</i>

EES 335 Environmental Science

BIO 411 Biodiversity

Recommended: Prior completion of: BIO 161, BIO 162, BIO 163 and BIO 100A or BIO 100 and BIO 100A or equivalent

Capstone Course

(1 course; 4.5 units)

BIS 499 Interdisciplinary Studies Proj

Student Teaching Requirements

(4 courses; 16.5 quarter units)

Candidates must pass Praxis Core Academic Skills for Educators and Praxis Content Area Tests and have 60 hours of field experience documented prior to Student Teaching. TED 470 and 465 A, B, and C are field experience or seminar courses receiving a Satisfactory or Unsatisfactory grade and are not factored into the cumulative GPA.

TED 465A	Student Teaching I <i>Prerequisite: Completion of all upper division course requirements, including all TED coursework.</i>
TED 465B	Student Teaching II <i>Prerequisite: Completion of all upper-division course requirements, including all TED coursework.</i>
TED 465C	Student Teaching III <i>Prerequisite: Completion of all upper-division course requirements, including all TED coursework.</i>
TED 470	Student Teach/E-Portfolio (3 quarter units) <i>Prerequisite: Completion of all course requirements and Admission to Student Teaching, this course must be taken concurrently with TED 465A-C</i>

■ BACHELOR OF ARTS IN ENGLISH EDUCATION WITH NEVADA SECONDARY LICENSURE

Faculty Advisor: Patricia Traynor-Nilsen; (702) 531-7807; ptraynornilsen@nu.edu
Faculty Advisor: John Miller; (949) 733-0632; jmiller@nu.edu

The Bachelor of Arts in English Education with Nevada Secondary Licensure provides a rigorous education that prepares candidates for a career as a teacher of English at the middle and secondary school levels. The program stresses literary analysis, diversity and critical thinking and written and oral communication skills through a rigorous curriculum of literature, composition, language and linguistics and a communication studies. This program prepares candidates for professional work as secondary teachers in a changing cultural and economic environment.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate familiarity with major British and American writers and their works.
- Demonstrate knowledge of the major periods and movements of British and American literary history.
- Demonstrate an appreciation of the role of marginalized or oppositional voices in the evolution of the literary tradition and literary history.
- Demonstrate the ability to analyze and interpret literary works within their historical and cultural contexts.
- Demonstrate the ability to analyze and interpret works of literature in the context of generic conventions.
- Demonstrate the ability to analyze and interpret the use and effects of literary and rhetorical features of literary texts.
- Demonstrate understanding of major critical approaches to the interpretation of literature.
- Demonstrate the ability to compose sophisticated written works of literary analysis, incorporating appropriate close reading, research, and writing skills.
- Demonstrate application of educational technology to meet the needs of all learners including those with special needs linguistically and culturally diverse students.

- Demonstrate knowledge of adolescent development in order to explain how to support growth in cognitive, social, physical and emotional domains.
- Demonstrate a thorough understanding of the learning needs of students to create positive learning environment that ensure healthy human growth.
- Utilize systematic observations, documentation, and other effective assessment strategies in a responsible manner to facilitate and account for learning and to support positive growth.
- Design, implement, and evaluate standards-based lesson plans for learning and achievement in content areas.
- Demonstrate professional standards and ethics.
- Utilize different teaching strategies to accomplish the teaching and learning goals.

Degree Requirements

To receive a Bachelor of Arts in English Education with Nevada Secondary Licensure candidates must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University and 76.5 of which must be completed at the upper-division level. The following courses are specific degree requirements. Candidates must receive passing scores on Praxis Core Academic Skills for Educators and Praxis Content Area Tests.

Preparation for Major

(4 courses; 15 quarter units)

ENG 310	English Grammar <i>Prerequisite: ENG 101</i>
ENG 350	Fundamentals of Linguistics <i>Prerequisite: ENG 100 and ENG 101</i>
HIS 375	Nevada History, Gov't and Cons <i>Prerequisite: ENG 100 and ENG 101</i>
TED 320	Introduction to Teaching (1.5 quarter units)

Passage of Praxis Core Academic Skills for Educators is required before beginning coursework for the major.

Requirements for Major

(24 courses; 106.5 quarter units)

All Teacher Education courses (TED) have a field experience component. Students must maintain a 3.0 GPA within all TED coursework and grades of "D" or "F" are not acceptable in TED courses. All major coursework must be completed and the following exams passed prior to student teaching: Praxis English Language Arts: Content Knowledge and Praxis Principles of Learning and Teaching Grades 7-12.

English Major Requirements

(10 courses; 45 quarter units)

COM 360	Representation in the Media <i>Prerequisite: ENG 100 and ENG 101</i>
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or

ART 315	Film as Art <i>Prerequisite: ENG 100 and ENG 101</i>
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and

ENG 375	Nature Writing <i>Prerequisite: ENG 100 and ENG 101</i>
LIT 311	British Literature I <i>Prerequisite: ENG 240 and LIT 100</i>
LIT 312	British Literature II <i>Prerequisite: ENG 240 and LIT 100</i>
LIT 321	American Literature I <i>Prerequisite: ENG 240 and LIT 100</i>
LIT 322	American Literature II <i>Prerequisite: ENG 240 and LIT 100</i>
LIT 338	Shakespeare <i>Prerequisite: ENG 240 and LIT 100</i>

LIT 463	20th Century World Literature <i>Prerequisite: ENG 240 and LIT 100</i>
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LIT 360	Literary Theory <i>Prerequisite: LIT 100</i>
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Choose **one (1)** of the following courses:

LIT 345	Mythology <i>Prerequisite: ENG 240 and LIT 100</i>
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LIT 430	Children's Literature <i>Prerequisite: ENG 240 and LIT 100</i>
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LIT 460	Gender and Literature <i>Prerequisite: ENG 240 and LIT 100</i>
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Education Theory and Methodology Major Requirements

(10 courses; 45 quarter units)

TED 300	Fundamentals of Education <i>Prerequisite: TED 320 or TED 305 or TED 306</i>
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TED 310	Development and Learning <i>Prerequisite: TED 305 or TED 320 or TED 306</i>
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TED 330B	Reading and Language Arts <i>Prerequisite: TED 305 or TED 320</i>
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TED 340	Content Area Reading Methods <i>Prerequisite: TED 305 or TED 320</i>
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TED 410	Survey of Multicultural Lit. <i>Prerequisite: TED 305 or TED 320 or TED 306</i>
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TED 420	Diversity in Schooling <i>Prerequisite: TED 305 or TED 320</i>
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TED 430	Special Needs Students <i>Prerequisite: TED 305 or TED 320 or TED 306</i>
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TED 440	Leadership and Assessment <i>Prerequisite: TED 305 or TED 320 or TED 306</i>
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TED 450	Methods of Teaching English <i>Prerequisite: TED 305 or TED 320</i>
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TED 538	Parent Engagement
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Student Teaching Requirements

(4 courses; 16.5 quarter units)

Candidates must pass Praxis Core Academic Skills for Educators, Praxis English Language Arts Content Knowledge and Praxis Principles of Learning and Teaching Grades 7-12 and must have documented 60 hours in field experience prior to student teaching. TED 465 A, B, and C are field experiences receiving an honors, satisfactory, or unsatisfactory grade and are not factored into the cumulative GPA.

TED 465A	Student Teaching I <i>Prerequisite: Completion of all upper division course requirements, including all TED coursework.</i>
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TED 465B	Student Teaching II <i>Prerequisite: Completion of all upper-division course requirements, including all TED coursework.</i>
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TED 465C	Student Teaching III <i>Prerequisite: Completion of all upper-division course requirements, including all TED coursework.</i>
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TED 470	Student Teach/E-Portfolio (3 quarter units) <i>Prerequisite: Completion of all course requirements and Admission to Student Teaching, this course must be taken concurrently with TED 465A-C</i>
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■ BACHELOR OF ARTS IN MATHEMATICS EDUCATION WITH NEVADA SECONDARY LICENSURE

Faculty Advisor: Patricia Traynor-Nilsen; (702) 531-7807; ptraynornilsen@nu.edu
Faculty Advisor: Igor Subbotin; (310) 662-2150; isubboti@nu.edu

The Bachelor of Arts in Mathematics Education with Nevada Secondary Licensure provides a rigorous education that prepares candidates for a career as a teacher of Mathematics at the middle and secondary school levels. The program

stresses foundation in mathematics and its application. This program prepares candidates for professional work as single subject teachers in a changing cultural and economic environment. Candidates are required to complete all required coursework as well as the Praxis Core Academic Skills for Educators, Praxis Mathematics Content Knowledge and Praxis Principles of Learning and Teaching Grades 7-12 to receive a license.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Employ a variety of reasoning skills and effective strategies for solving problems both within the discipline of mathematics and in applied settings that include non-routine situations.
- Use language and mathematical symbols to communicate mathematical ideas in the connections and interplay among various mathematical topics and their applications that cover range of phenomena across appropriate disciplines.
- Use current technology tools, such as computers, calculators, graphing utilities, video, and interactive programs that are appropriate for the research and study in mathematics.
- Employ algebra and number theory ideas and tools as a base of a fundamental language of mathematics research and communication.
- Develop fundamental knowledge in geometry.
- Model real world problems with a variety of algebraic and transcendental functions.
- Use advanced statistics and probability concepts and methods.
- Use educational technology to meet the needs of all learners including those with special needs linguistically and culturally diverse students.
- Explain how to support growth in cognitive, social, physical and emotional domains.
- Create positive learning environment that ensures healthy human growth.
- Utilize systematic observations, documentation, and other effective assessment strategies in a responsible manner to facilitate and account for learning and to support positive growth.
- Design, implement, and evaluate standards-based lesson plans for learning and achievement in content areas.
- Demonstrate professional standards and ethics.
- Utilize different teaching strategies to accomplish the teaching and learning goals.

Degree Requirements

To receive a Bachelor of Arts in Mathematics Education with Nevada Secondary Licensure, candidates must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University and 76.5 of which must be completed at the upper-division level. In the absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree.

Preparation for Major

(5 courses; 19.5 quarter units)

TED 320	Introduction to Teaching (1.5 quarter units)
HIS 375	Nevada History, Gov't and Cons <i>Prerequisite: ENG 100 and ENG 101</i>
MTH 221	Calculus II <i>Prerequisite: MTH 220</i>
MTH 222	Calculus III <i>Prerequisite: MTH 221</i>
MTH 223	Calculus IV <i>Prerequisite: MTH 222</i>

Passage of Praxis Core Academic Skills for Educators is required before beginning coursework for the major.

Requirements for Major

(23 courses; 102 quarter units)

Mathematics Major Requirements

(11 courses; 49.5 quarter units)

MTH 311 Topics from Geometry
Prerequisite: Accuplacer test placement or MTH 216B or MTH 215

MTH 325 Discrete Mathematics
Prerequisite: MTH 215 or MTH 216A and MTH 216B

or

CSC 331 Discrete Structures and Logic
Prerequisite: CSC 252 and CSC 310

MTH 411 Number Theory
Prerequisite: MTH 216B or MTH 215 or MTH 301

MTH 435 Linear Algebra
Prerequisite: MTH 220 and MTH 325

MTH 416 Algebraic Structures
Prerequisite: MTH 435 and MTH 325

MTH 417 Foundations of Geometry
Prerequisite: MTH 216A and MTH 216B or MTH 215 and MTH 311

MTH 418 Statistical Analysis
Prerequisite: MTH 210 and MTH 220

MTH 412 History of Mathematics
Prerequisite: MTH 215 or MTH 301 or MTH 216A and MTH 216B

MTH 410 Technology in Math Education
Prerequisite: MTH 215 or MTH 216A and MTH 216B or MTH 301

MTH 460 Problem Solving Strategies
Prerequisite: MTH 416 and MTH 417

MTH 461 Methods of Teaching Math
Prerequisite: MTH 311, MTH 412, MTH 210 and MTH 460

Education Theory and Methodology Requirements

(8 courses; 36 quarter units)

All Teacher Education coursework has a field experience component. Students must maintain a 3.0 GPA within all TED coursework. Grades of "D" or "F" are not acceptable in TED courses.

TED 300 Fundamentals of Education
Prerequisite: TED 320 or TED 305 or TED 306

TED 310 Development and Learning
Prerequisite: TED 305 or TED 320 or TED 306

TED 330B Reading and Language Arts
Prerequisite: TED 305 or TED 320

TED 340 Content Area Reading Methods
Prerequisite: TED 305 or TED 320

TED 420 Diversity in Schooling
Prerequisite: TED 305 or TED 320

TED 430 Special Needs Students
Prerequisite: TED 305 or TED 320 or TED 306

TED 440 Leadership and Assessment
Prerequisite: TED 305 or TED 320 or TED 306

TED 538 Parent Engagement

Student Teaching Requirements

(4 courses; 16.5 quarter units)

Students must pass Praxis Core Academic Skills for Educators, Praxis Mathematics Content Knowledge and Praxis Principles of Learning and Teaching Grades 7-12 prior to Student Teaching I. TED 470 and 465 A, B, and C are field experience courses receiving a Satisfactory or Unsatisfactory grade and are not factored into the cumulative GPA.

TED 465A Student Teaching I
Prerequisite: Completion of all upper division course requirements, including all TED coursework.

TED 465B	Student Teaching II <i>Prerequisite: Completion of all upper-division course requirements, including all TED coursework.</i>
TED 465C	Student Teaching III <i>Prerequisite: Completion of all upper-division course requirements, including all TED coursework.</i>
TED 470	Student Teach/E-Portfolio (3 quarter units) <i>Prerequisite: Completion of all course requirements and Admission to Student Teaching, this course must be taken concurrently with TED 465A-C</i>

■ MAJOR IN SPECIAL EDUCATION WITH NEVADA LICENSURE

Faculty Advisor: David Rago; (702) 531-7812; drago@nu.edu

The Bachelor of Arts in Special Education provides a broad, rigorous education that prepares candidates for a career as a special education teacher, grades K through 12. The program introduces candidates to essential knowledge, connections across the disciplines and application of knowledge to life beyond the University. This degree program gives candidates an enriched and provocative curriculum that incorporates content across subject areas and with specific educational methodology courses. This program prepares candidates for professional work as K-12 special education teachers in a changing cultural and economic environment.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate knowledge of typical and atypical development and characteristics of students with disabilities and other special needs.
- Design the environment, teaching and learning strategies including fairness, equity and access to meet the needs of diverse student learning.
- Apply best practice standards, learning theories, methodologies, technology, and assessments across content areas to manage, monitor, and engage student learning.
- Use technology, collaboration with other professionals, and systematic reflection of one's own teaching practice to target student learning.
- Demonstrate an understanding of effective leadership by advocating for exceptional individuals, including those with diverse needs and by collaborating within the professional education community.

Degree Requirements

To receive a Bachelor of Arts in Special Education, candidates must complete at least 180 quarter units as articulated below, 45 of which must be completed in residence at National University and 76.5 of which must be completed at the upper division level, and a minimum of 70.5 units of university general education requirements. In absence of transfer credit, additional general electives may be necessary to satisfy total units for the degree. The following courses are specific degree requirements. Candidates must demonstrate competency with passing scores on Praxis Core Academic Skills for Educators and Praxis Content Area Tests.

Preparation for Major

(3 courses; 10.5 quarter units)

LIT 100*	Introduction to Literature <i>Prerequisite: ENG 100 and ENG 101</i>
HIS 375	Nevada History, Gov't and Cons <i>Prerequisite: ENG 100 and ENG 101</i>
TED 320	Introduction to Teaching (1.5 quarter units)

* May be used to meet a General Education requirement.

Requirements for Major

(23 courses; 104.25 quarter units)

ALL Teacher Education courses (TED) have a field experience component. Students must maintain a 3.0 GPA within all TED course work and grades of "D" or "F" are not acceptable in TED courses. All major course work must be completed and the following exams passed prior to student teaching: Praxis Core Academic Skills for Educators, Praxis Special Education Generalist Resource Room: Knowledge and Applications and Praxis Principles of Learning and Teaching Grades K-6 or 7-12. TED 320 must be satisfactorily passed prior to beginning course work in the major.

Major Requirements

(9 courses; 40.5 quarter units)

BIS 301	Intro to Interdisc. Studies
COM 380	Democracy in the Info. Age <i>Prerequisite: ENG 100 and ENG 101</i>
SOC 350	Cultural Diversity <i>Prerequisite: ENG 100 and ENG 101</i>
ENG 350	Fundamentals of Linguistics <i>Prerequisite: ENG 100 and ENG 101</i>
MTH 301	Fundamentals of Mathematics II <i>Prerequisite: MTH 209A or Accuplacer test placement evaluation</i>
BIS 401	Interdisciplinary Practice: In <i>Prerequisite: BIS 301 and four additional courses from the major</i>
TED 300	Fundamentals of Education <i>Prerequisite: TED 320 or TED 305 or TED 306</i>
TED 330A	Reading and Lang. Arts Methods <i>Prerequisite: TED 305 or TED 320 or TED 306</i>
or	
TED 330B	Reading and Language Arts <i>Prerequisite: TED 305 or TED 320</i>
TED 410	Survey of Multicultural Lit. <i>Prerequisite: TED 305 or TED 320 or TED 306</i>

Special Education Major Requirements

(11 courses; 49.5 quarter units)

SPD 404	Psychological Foundations <i>Prerequisite: TED 320 and Completion of General Education Requirements Section of the program.</i>
SPD 408	Introduction to Special Ed <i>Prerequisite: TED 320 and Completion of General Education Requirements Section of the program.</i>
SPD 414	Classroom & Behavior Mgt <i>Prerequisite: TED 320 and Completion of General Education Requirements Section of the program.</i>
SPD 416	Collab, Law, & Transitions <i>Prerequisite: TED 320 and Completion of General Education Requirements Section of the program.</i>
SPD 422	Assessment of Diverse Learners <i>Prerequisite: TED 320 and Completion of General Education Requirements Section of the program.</i>
SPD 428	Reading and Language Arts M/M <i>Prerequisite: TED 320 and Completion of General Education Requirements Section of the program.</i>
SPD 430	Preparing Teachers to Use Tech <i>Prerequisite: TED 320 and Completion of General Education Requirements Section of the program.</i>
SPD 432	Instructional Strategies <i>Prerequisite: TED 320 and Completion of General Education Requirements Section of the program.</i>
SPD 436	Math/Writing for M/M <i>Prerequisite: TED 320 and Completion of General Education Requirements Section of the program.</i>
SPD 438	Differentiation of Instruction <i>Prerequisite: TED 320 and Completion of General Education Requirements Section of the program.</i>
TED 538	Parent Engagement

Student Teaching Requirements

(3 courses; 14.25 quarter units)

Candidates MUST pass Praxis Core Academic Skills for Educators, Praxis Special Education Generalist Resource Room: Knowledge and Applications and Praxis Principles of Learning and Teaching Grades K-6 or 7-12 prior to Student

Teaching. SPD 481A, 487 and 481B courses receive a Satisfactory or Unsatisfactory grade and are not factored into the cumulative GPA.

SPD 481A Student Teaching (6 quarter units)
Corequisite: SPD 487

SPD 481B Student Teaching (6 quarter units)
Prerequisite: SPD 481A and SPD 487

SPD 487 Student Teaching Seminar (2.25 quarter units)
Corequisite: SPD 481A

GRADUATE DEGREES

■ MASTER OF EDUCATION WITH NEVADA ELEMENTARY LICENSURE

Faculty Advisor: Cristina Grandy; (702) 531-7808; cgrandy@nu.edu

The Master of Education with Nevada Elementary Licensure is designed for students who are committed to being instructional leaders in the K-8 setting. Courses for this degree meet the Nevada Department of Education requirements for an initial teaching license. They also meet requirements for a master's degree from National University that inter-relates theory and practice as well as promotes life-long learning. The program is intended for students who want to obtain an initial teaching license and master's degree at the same time.

The student teaching courses are required for the initial teaching license. Students must have met subject matter competency prior to student teaching. Elementary and Secondary Education teacher candidates meet subject matter competence by passing the appropriate Praxis Core Academic Skills for Educators and Praxis Content Area Tests. Candidates must meet all state requirements for the Elementary Education Teaching License to apply to the Nevada Department of Education for licensure.

An electronic portfolio is required for the assessment of all teacher licensure candidates. The purpose of the portfolio is for candidates to show how their work in teacher education is linked to their own competency in the InTASC Domains of Professional Competence. The portfolio must be reviewed and approved by a National University faculty member prior to exiting the licensure program.

Application for a Nevada Teacher License

- Successful completion of the coursework with a minimum grade point average of 3.0 for graduate coursework. (Grades of "D" and "F" are not accepted.) All coursework must be completed within seven years to be accepted.
- Fulfillment of all financial obligations to the University before applying for the credential.

Each candidate must have on file:

- A zero account balance.
- Official transcripts from all colleges/universities attended.
- Passing score in Praxis Core Academic Skills for Educator.
- Passing score in Praxis Elementary Education: Instructional Practice and Applications.
- Proof of passing with a grade of "C" or better coursework or an examination covering the U.S. Constitution, Nevada Constitution, and Nevada School Law.
- Written evaluations of performance in field experiences, internships, educational projects, student teaching and other practica.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Integrate knowledge and abilities in designing and implementing developmentally appropriate and challenging learning experiences that respect cognitive, linguistic, social, emotional, and physical differences.
- Integrate knowledge and abilities in establishing and maintaining inclusive learning environments enabling all learners to meet high standards while recognizing individual and cultural differences.

- Integrate knowledge and abilities in establishing and maintaining learning environments that support individual and collaborative learning, and encourage positive social interaction, active engagement in learning, and self-motivation.
- Integrate the discipline(s)' central concepts, tools of inquiry, and structures to create learning experiences accessible and meaningful for learners in mastering the content.
- Integrate concepts and differing perspectives to engage learners in critical thinking, creativity, and collaborative problem solving related to authentic local and global issues.
- Integrate knowledge and abilities in designing and using multiple methods of assessment that learners use to monitor their own growth and decision-making as well as guide the teacher in instructional planning.
- Integrate knowledge of learners and the community context in planning instruction that supports every student in meeting rigorous learning goals of content areas.
- Integrate knowledge and abilities in using a variety of instructional strategies to encourage learners to develop deep understanding of content areas and build skills to apply knowledge in meaningful ways.
- Integrate knowledge and abilities in ongoing professional learning by using evidence to evaluate the influences of professional practices, choices, and actions on learners, families, other professionals, and the community.
- Seek appropriate leadership roles and opportunities by collaborating with learners, families, colleagues, other school professionals, and community members to ensure learner growth, and advancement in the profession.
- Evaluate the application of educational research, evidence-based practices, and academic writing with a focus on elementary education.

Degree Requirements

To receive a Master of Education with Nevada Elementary Licensure, students must complete at least 54 quarter units of graduate work, 40.5 of which must be taken in residence at National University. Students enrolled in the joint degree-licensure program will not be awarded the master's degree until they complete all graduate and licensure coursework, excluding student teaching.

Program Requirements for Degree and Nevada Licensure (15 courses; 70.5 quarter units)

TED 602	Educational Foundations
SPD 604	Psychological Fdns of Educ.
SPD 608	Exceptionalities
EDT 608	Technology in the Classroom
TED 621A	Lang. Dev. Methods: Elem. Sch. Prerequisite: SPD 604, SPD 608, TED 602, TED 606, Pass CBEST and CSET
TED 621B	Reading/Lang. Arts Methods Prerequisite: TED 621A
TED 616A	C&I I: History & Social Science
TED 616B	C&I II: Math & Science
TED 616C	C&I III: V & P Arts Health & PE
TED 538	Parent Engagement
TED 626	Classroom Management Prerequisite: TED 621A or TED 623
TED 640A	Student Teaching I (6 quarter units)
TED 640B	Student Teaching II (6 quarter units)
TED 649	Student Teaching Seminar
TED 690	Capstone Prerequisite: TED 530B with a minimum grade of S or TED 628B with a minimum grade of S or TED 628I with a minimum grade of S or TED 640B with a minimum grade of S

TED 640A, TED 640B and TED 649 do not grant graduate credit.

Course of Study

National University's Master of Education with Nevada Elementary Licensure is structured in four, intra- and inter-related areas: foundation courses, elementary education method courses, student teaching courses, and research course. This curricular organization is developmental in theoretical knowledge, applied skills, field K-6 classroom experiences, and learning outcomes. As a result, teacher candidates move from the foundation block of courses, to the method courses before applying for student teaching. The research course is last course in the degree. Candidates who successfully complete the Professional Teacher Preparation courses and related requirements will be eligible for a Nevada teaching license; those students who choose to earn a Master of Education degree must complete one additional course.

Foundation Courses

The **five (5)** foundation courses are considered the foundation family because all the courses provide fundamental conceptual knowledge and skill, field experiences, and assessments. The foundation family is the theoretical basis for skill development and acquisition in the elementary education method courses.

The courses that comprise this family are:

TED 602	Educational Foundations
EDT 608	Technology in the Classroom
SPD 604	Psychological Fdns of Educ.
SPD 608	Exceptionalities
TED 538	Parent Engagement

Elementary Education Methods Courses

TED 621A	Lang. Dev. Methods: Elem. Sch. <i>Prerequisite: SPD 604, SPD 608, TED 602, TED 606, Pass CBEST and CSET</i>
TED 621B	Reading/Lang. Arts Methods <i>Prerequisite: TED 621A</i>
TED 616A	C&I I: History & Social Science
TED 616B	C&I II: Math & Science
TED 616C	C&I III: V & P Arts Health & PE
TED 626	Classroom Management <i>Prerequisite: TED 621A or TED 623</i>

Student Teaching Courses

Student Teaching candidates must pass Praxis Core Academic Skills for Educators and Praxis Elementary Educator Instructional Practice and Applications prior to Student Teaching.

TED 649*	Student Teaching Seminar
TED 640A	Student Teaching I (6 quarter units)
TED 640B	Student Teaching II (6 quarter units)

* TED 649 is taken concurrently with TED 640A and TED 640B. TED 640A, TED 640B and TED 649 do not grant graduate credit.

Master in Education

TED 690	Capstone <i>Prerequisite: TED 530B with a minimum grade of S or TED 628B with a minimum grade of S or TED 628I with a minimum grade of S or TED 640B with a minimum grade of S</i>
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NEVADA LICENSING PROGRAMS

Certain licensing programs may require enrollment into an electronic portfolio. Please see your faculty advisor for further information.

■ MASTER OF EDUCATION WITH NEVADA SECONDARY LICENSURE

Faculty Advisor: Patricia Traynor-Nilsen; (702) 531-7807; ptraynornilsen@nu.edu

The Master of Education with Nevada Secondary Licensure is designed for students who are committed to being instructional leaders in grades 7-12 classrooms.

Courses for this degree meet the Nevada Department of Education requirements for an initial teaching license. They also meet requirements for a master's degree from National University that inter-relates theory and practice as well as promotes lifelong learning. The program is intended for students who want to obtain an initial teaching license and master's degree at the same time. The student teaching courses are required for the initial teaching license. Students must have met subject matter competency prior to student teaching. Secondary Education teacher candidates meet subject matter competence by passing the appropriate Praxis Content Area Test. Candidates must meet all state requirements for the Secondary Education Teaching License to apply to the Nevada Department of Education for licensure. An electronic portfolio is required for the assessment of all teacher licensure candidates. The purpose of the portfolio is for candidates to show how their work in teacher education is linked to their own competency in the InTASC Domains of Professional Competence. The portfolio must be reviewed and approved by a National University faculty member prior to exiting the licensure program.

Application for a Nevada Teacher License

- Successful completion of the coursework with a minimum grade point average of 3.0 for graduate coursework. (Grades of "D" and "F" are not accepted.) All coursework must be completed within seven years to be accepted.
- Fulfillment of all financial obligations to the University before applying for the credential.

Each candidate must have on file:

- A zero account balance
- Official transcripts from all colleges/universities attended.
- Passing score in Praxis Core Academic Skills for Educator.
- Passing score in Praxis Content Area Tests.
- Passing score in Praxis Principles of Learning and Teaching Grades 7-12.
- Proof of passing with a grade of "C" or better coursework or an examination covering the U.S. Constitution, Nevada Constitution, and Nevada School Law.
- Written evaluations of performance in field experiences, internships, educational projects, student teaching and other practica.
- Comprehensive major in content area (minimum of 54 quarter units).

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Integrate knowledge and abilities in designing and implementing developmentally appropriate and challenging learning experiences that respect cognitive, linguistic, social, emotional, and physical differences.
- Integrate knowledge and abilities in establishing and maintaining inclusive learning environments enabling all learners to meet high standards while recognizing individual and cultural differences.
- Integrate knowledge and abilities in establishing and maintaining learning environments that support individual and collaborative learning, and encourage positive social interaction, active engagement in learning, and self-motivation.
- Integrate the discipline(s) central concepts, tools of inquiry, and structures to create learning experiences accessible and meaningful for learners in mastering the content.
- Integrate concepts and differing perspectives to engage learners in critical thinking, creativity, and collaborative problem solving related to authentic local and global issues.
- Integrate knowledge and abilities in designing and using multiple methods of assessment that learners use to monitor their own growth and decision-making as well as guide the teacher in instructional planning.
- Integrate knowledge of learners and the community context in planning instruction that supports every student in meeting rigorous learning goals of content areas.
- Integrate knowledge and abilities in using a variety of instructional strategies to encourage learners to develop deep understanding of content areas and build skills to apply knowledge in meaningful ways.

- Integrate knowledge and abilities in ongoing professional learning by using evidence to evaluate the influences of professional practices, choices, and actions on learners, families, other professionals, and the community.
- Seek appropriate leadership roles and opportunities by collaborating with learners, families, colleagues, other school professionals, and community members to ensure learner growth, and advancement in the profession.
- Evaluate the application of educational research, evidence-based practices and academic writing, a focus on secondary education matters.

Degree Requirements

To receive a Master of Education with Nevada Secondary Licensure, students must complete at least 49.5 quarter units of graduate work, 40.5 of which must be taken in residence at National University. Students enrolled in the joint degree-licensure program will not be awarded the master's degree until they complete all graduate and licensure coursework, excluding student teaching, and student teaching seminar.

Program Requirements

(14 courses; 66 quarter units)

TED 602	Educational Foundations
SPD 604	Psychological Fdns of Educ.
SPD 608	Exceptionalities
TED 538	Parent Engagement
EDT 608	Technology in the Classroom
TED 623	Lang. Dev. Methods: Secondary <i>Prerequisite: TED 602, SPD 604, TED 606, SPD 608, Pass CBEST and CSET</i>
TED 632	Content Area Curriculum <i>Prerequisite: TED 623</i>
TED 633	Content Area Instruct-Assess <i>Prerequisite: TED 623 with a minimum grade of C</i>
TED 634	Content Area Literacy <i>Prerequisite: TED 623</i>
TED 626	Classroom Management <i>Prerequisite: TED 623 or TED 621A</i>
TED 640A	Student Teaching I (6 quarter units)
TED 640B	Student Teaching II (6 quarter units)
TED 649	Student Teaching Seminar
TED 690	Capstone <i>Prerequisite: TED 530B with a minimum grade of S or TED 628I with a minimum grade of S or TED 640B with a minimum grade of S or TED 628B with a minimum grade of S</i>

TED 640A, TED 640B and TED 649 do not grant graduate credit.

Course of Study

National University's Master of Education with Nevada Secondary Licensure is structured in four, intra- and inter-related areas: foundation courses, secondary education method courses, student teaching courses, and research course. This curricular organization is developmental in theoretical knowledge, applied skills, G7-12 classroom experiences, and learning outcomes. As a result, teacher candidates move from the foundation block of courses, to the method courses before applying for student teaching. The research course is the last course in the degree. Candidates who successfully complete the Professional Teacher Preparation courses and related requirements will be eligible for a Nevada teaching license; those students who choose to earn a Master in Education degree must complete one additional course.

Foundation Courses

The **five (5)** foundation courses build upon conceptual knowledge and skills, field experiences, and assessments. Teacher candidates will complete the five foundation courses prior to beginning the secondary education method courses.

The five foundation courses:

TED 602	Educational Foundations
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SPD 604	Psychological Fdns of Educ.
SPD 608	Exceptionalities
EDT 608	Technology in the Classroom
TED 538	Parent Engagement

Secondary Education Methods Courses

As with the foundations courses, the five secondary education (methods) pedagogy courses reflect adult learning theory and experiences. The method courses represent integrated coursework and field experiences designed to prepare candidates for the upcoming student teaching experiences in the grades 7-12 classrooms. Teacher candidate will move in a sequenced manner, from one course to another in the secondary education method block.

TED 623	Lang. Dev. Methods: Secondary <i>Prerequisite: TED 602, SPD 604, TED 606, SPD 608, Pass CBEST and CSET</i>
TED 632	Content Area Curriculum <i>Prerequisite: TED 623</i>
TED 633	Content Area Instruct-Assess <i>Prerequisite: TED 623 with a minimum grade of C</i>
TED 634	Content Area Literacy <i>Prerequisite: TED 623</i>
TED 538	Parent Engagement
TED 626	Classroom Management <i>Prerequisite: TED 623 or TED 621A</i>

Student Teaching

Student Teaching candidates must pass Praxis Core Academic Skills for Educators and Praxis Content Area Test and Praxis Principles of Learning and Teaching Grades 7-12 prior to Student Teaching.

TED 649	Student Teaching Seminar
TED 640A	Student Teaching I (6 quarter units)
TED 640B	Student Teaching II (6 quarter units)

*TED 640A, TED 640B and TED 649 do not grant graduate credit.

Master in Education

TED 690	Capstone <i>Prerequisite: TED 530B with a minimum grade of S or TED 628I with a minimum grade of S or TED 640B with a minimum grade of S or TED 628B with a minimum grade of S</i>
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■ MASTER OF SCIENCE IN EDUCATIONAL ADMINISTRATION WITH NEVADA ENDORSEMENT AS ADMINISTRATOR OF A SCHOOL OPTION (NEVADA ONLY)

Faculty Advisor: Patricia Traynor-Nilsen; (702) 531-7807; ptraynornilsen@nu.edu

This program is designed for students who are committed to improving education and who are interested in advancing their careers by becoming school site or district administrators. It can be completed with or without a preliminary credential option for those pursuing a career in the nonpublic education sector.

For those interested in pursuing a Nevada endorsement of Administrator of a School, please see the Sanford College of Education Credentialing section in the Catalog.

Program Learning Outcomes:

Upon successful completion of this program, students will be able to:

- Create a vision of learning that is shared and supported by the school community.
- Develop a school culture conducive to student learning and staff professional growth.
- Analyze the organization, operations, and resources necessary to foster a safe, efficient, and effective learning environment.

- Design a system of collaboration that includes families and community members, and responds to diverse community interests and needs, and mobilizes community resources.
- Analyze aspects of professional and personal ethics that are conducive to leading a school or school system.
- Analyze the larger political, social, economic, legal, and cultural context that impacts a school or school district.
- Critically analyze a topic related to educational leadership through the lens of a researcher.
- Evaluate leadership within the lens of ethics and philosophy.

Degree Requirements

To receive a Master of Science in Educational Administration, students must complete at least 45 quarter units of graduate work. A total of 4.5 quarter units of graduate credit may be granted for equivalent graduate work completed at another institution, as it applies to this degree and if the units were not used in earning another advanced degree. Course equivalence cannot be granted for life experience.

Core Requirements

(10 courses; 45 quarter units)

EDA 673N	Field Experience
EDA 670N	Introduction to Leadership
EDA 677N	Ethics & Philosophy of Leaders
EDA 676N	Community & Diversity
EDA 674N	Instructional Leadership
EDA 671N	School Law and Policy
EDA 672N	School Resource Management
EDA 675N	Supervision of Instruction
ILD 625	Educational Research
EDA 637	Action Research
	<i>Prerequisite: ILD 625</i>

■ MASTER OF SCIENCE IN SPECIAL EDUCATION WITH NEVADA LICENSURE AND ENDORSEMENT FOR GENERALIST RESOURCE ROOM

Faculty Advisor: David Rago; (702) 531-7812; drago@nu.edu

The Master of Science in Special Education with Nevada Licensure and Endorsement for Generalist Resource Room is designed for students who are committed to being instructional leaders in the K-12 setting. Courses for this degree meet the Nevada Department of Education requirements for a teaching license. They also meet requirements for a master's degree from National University that inter-relates theory and practice and promotes lifelong learning. The program is intended for students who want to obtain an initial teaching license and master's degree at the same time.

The purpose of this Special Education endorsement program is to prepare students to instruct learners with disabilities in the K-12 system.

This Special Education endorsement program at National University is based on the premise that meeting the special instructional needs of students in today's schools requires knowledge of a wide array of teaching strategies, as no one strategy can meet the needs of every special needs student. Another major premise is that all prospective teachers must develop an awareness and acceptance of cultural, linguistic, ethnic, economic, gender, lifestyle, and ability differences. The program is designed to present a variety of research validated methods, techniques, and opportunities to develop knowledge and skills to create and implement instructional programs that will positively impact the learning of K-12 students with special needs across developmental domains.

The student teaching courses are required for the initial teaching license. Students must have met subject matter competency prior to student teaching. An electronic portfolio is required for the assessment of all teacher licensure candidates. The purpose of the portfolio is for candidates to show how their work in teacher education is linked to their own competency in the Domains of Professional Competence. The portfolio must be reviewed and approved by a National University faculty member prior to exiting the licensure program.

Application For a Nevada Teacher License

- Successful completion of the coursework with a minimum grade point average of 3.0 for graduate coursework. (Grades of "D" and "F" are not accepted.) All coursework must be completed within seven years to be accepted.
- Fulfillment of all financial obligations to the University before applying for the credential.

Each candidate must have on file:

- A zero account balance.
- Official transcripts from all colleges/universities attended.
- Passing score in Praxis Core Academic Skills for Educators.
- Passing score in Praxis Special Education Generalist Resource Room: Knowledge and Applications.
- Proof of passing with a grade of "C" or better coursework or an examination covering the U.S. Constitution, Nevada Constitution, and Nevada School Law.
- Written evaluations of performance in field experiences, internships, educational projects, student teaching and other practica.

Program Learning Outcomes:

Upon successful completion of this program, students will be able to:

- Candidates demonstrate knowledge of typical and atypical development and characteristics of students with disabilities and other special needs.
- Candidates integrate fairness, equity, and access in designing the environment, teaching, and learning strategies to meet diverse student learning.
- Candidates integrate best practices, apply learning theories, methodologies, technology tools, and assessments across content areas to manage, monitor, and engage student learning. NVTL: B. V, VIII
- Candidates demonstrate the ability to focus on student learning using technology tools through systematic study and reflection of one's own teaching practices and through shared knowledge gained from purposefully formed professional learning communities. NVTL: B. VIII
- Candidates demonstrate an understanding of effective leadership by advocating for exceptional individuals, including those with diverse needs and by collaborating within the learning community to advance professional practice.
- Candidates demonstrate competence in the application of research methods including critiquing and synthesizing current, evidence-based education literature.

Degree Requirements

(16 courses; 72.75 quarter units)

To receive a Master of Science in Special Education with Nevada Licensure and Endorsement for Generalist Resource Room, students must complete at least 54 quarter units of graduate work, 40.5 of which must be taken in residence at National University. Students enrolled in the joint degree-licensure program will not be awarded the master's degree until they complete all graduate and licensure coursework, excluding student teaching and student teaching seminar.

Candidates in the program must demonstrate mastery of methods and techniques that accommodate the increasing diversity in contemporary Special Education and General Education programs where students with special needs are served.

Core Requirements

(11 courses; 49.5 quarter units)

SPD 604	Psychological Fdns of Educ.
SPD 608	Exceptionalities
TED 538	Parental Engagement
SPD 614	Classroom and Behavior Mgmt
SPD 618	Law, Transition, & Collab
SPD 622	Assessment
	<i>Prerequisite: TED 621B or equivalent, Pass CBEST and CSET.</i>

SPD 628	Teaching Reading/Lang Arts <i>Prerequisite: TED 621B or equivalent, Pass CBEST and CSET.</i>
SPD 630	Tech for Teaching & Learning
SPD 632	Charac/Instr Stds w/ M/M Disab
SPD 636	Teaching Math/Writing for M/M
SPD 674	Collaborative Partners

Student Teaching

(3 courses; 14.25 units)

Student Teaching candidates must pass Praxis Core Academic Skills for Educators and Praxis Special Education Generalist Resource Room: Knowledge and Applications and Praxis Principles of Learning and Teaching Grades K-6 or 7-12 prior to Student Teaching.

SPD 681A Nevada Student Teaching M/M (6 quarter units)
Prerequisite: SPD 604, SPD 608, SPD 614, SPD 618, SPD 622, SPD 628, SPD 630, SPD 632, SPD 636, SPD 674, Candidates must be enrolled in SPD 687A Clinical Practice Seminar concurrently with SPD 681A, Student teaching candidates must have successfully completed all coursework in the licensure program (Corequisite, Core and Advanced Specialization Courses) with an overall GPA of 3.0 or better.

SPD 687A Portfolio Clinical Seminar (2.25 quarter units)
Prerequisite: Candidates must be enrolled in SPD 687A Clinical Practice Seminar concurrently with SPD 681A

SPD 681B Nevada Student Teaching M/M II (6 quarter units)
Prerequisite: SPD 681A and SPD 687A

* SPD 681A, SPD 681B and SPD 687A do not grant graduate credit.

Project Courses

(2 courses; 9 units)

SPD 695 Understanding Edu. Research

SPD 696 Capstone Project
Prerequisite: SPD 695

■ ALTERNATIVE ROUTE TO LICENSURE ELEMENTARY

Faculty Advisor: Cristina Grandy; (702) 531-7808; cgrandy@nu.edu

The Alternative Route to Licensure Program provides a pathway to a Nevada Elementary license for candidates who hold a Bachelor's Degree and have an offer of employment with a Nevada School District.

■ MASTERS OF EDUCATION WITH NEVADA ELEMENTARY LICENSURE

All course work in this program may be transferred into the Masters of Education with Nevada Elementary Licensure.

Application For Alternative Route to Licensure

Candidates must complete TED 621A Language Development Methods and TED 626 Classroom Management before beginning to teach in a classroom as an ARL. These two courses provide the candidates with both field experiences and pedagogy to be able to manage a classroom and meet the needs of diverse learners.

In order to be admitted to the program a candidate will need to hold a bachelor's degree, and have passed the Praxis Core Academic Skills for Educators. Candidates must also complete the National University Application for admission into the University. All candidates must be fingerprinted. Each Candidate will have an interview with a faculty member to discuss their interest in the ARL program as well as their background knowledge of schools. All candidates will attend an ARL orientation meeting.

All ARL Participants Must Meet the Following Eligibility Requirements

1. Hold a bachelor's degree from an accredited university with a GPA of 2.5 or 2.75 for the last 60 semester units.
2. Prior to being admitted to the program pass the Praxis Core Academic Skills for Educators.
3. Apply to National University Sanford College of Education.

4. Meet with a faculty member for an interview.
5. Fingerprinted.
6. Attend an orientation session.

After completing the Praxis Core Exam and Praxis Elementary Education Instruction in Practice and Application and TED 621A and TED 626 candidates will be recommended for the ARL Conditional License. Candidates will then be assigned a university support provider. Candidates will also then complete the additional course work that is listed below.

Exit Requirements

The candidate must complete the requirements for the conditional license and are then eligible for employment while working on completing all of the requirements for the program. Candidates need to remain in good standing with the employer and National University throughout the program. This is a non-degree program and is comprised of courses required for Nevada Elementary Licensure.

Application For a Nevada Teacher License

- Successful completion of the coursework with a minimum grade point average of 3.0 for graduate coursework. (Grades of "D" and "F" are not accepted.) All coursework must be completed within seven years to be accepted.
- Fulfillment of all financial obligations to the University before applying for the credential.

Each candidate must have on file:

- A zero account balance.
- Official transcripts from all colleges/universities attended.
- Passing score in Praxis Core Academic Skills for Educator.
- Passing score in Praxis Elementary Education: Instructional Practice and Applications.
- Proof of passing with a grade of "C" or better coursework or an examination covering the U.S. Constitution, Nevada Constitution, and Nevada School Law.
- Written evaluations of performance in field experiences, internships, educational projects, student teaching and other practica.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Integrate knowledge and abilities in designing and implementing developmentally appropriate and challenging learning experiences that respect cognitive, linguistic, social, emotional, and physical differences.
- Integrate knowledge and abilities in establishing and maintaining inclusive learning environments enabling all learners to meet high standards while recognizing individual and cultural differences.
- Integrate the discipline(s)' central concepts, tools of inquiry, and structures to create learning experiences accessible and meaningful for learners in mastering the content.
- Integrate knowledge and abilities in establishing and maintaining learning environments that support individual and collaborative learning, and encourage positive social interaction, active engagement in learning, and self-motivation.
- Integrate concepts and differing perspectives to engage learners in critical thinking, creativity, and collaborative problem solving related to authentic local and global issues.
- Integrate knowledge and abilities in designing and using multiple methods of assessment that learners use to monitor their own growth and decision-making as well as guide the teacher in instructional planning.
- Integrate knowledge of learners and the community context in planning instruction that supports every student in meeting rigorous learning goals of content areas.
- Integrate knowledge and abilities in using a variety of instructional strategies to encourage learners to develop deep understanding of content areas and build skills to apply knowledge in meaningful ways.

- Integrate knowledge and abilities in ongoing professional learning by using evidence to evaluate the influences of professional practices, choices, and actions on learners, families, other professionals, and the community.
- Seek appropriate leadership roles and opportunities by collaborating with learners, families, colleagues, other school professionals, and community members to ensure learner growth, and advancement in the profession.

Degree Requirements

(9 courses; 42 quarter units)

There are two courses (TED 621A and TED 626) required for the conditional Nevada License. After completing these courses and passing the Praxis Core Academic Skills for Educators the candidate may apply for a conditional license. The rest of the sequence is completed to apply for the initial teaching license.

TED 621A	Lang. Dev. Methods: Elem. Sch. <i>Prerequisite: SPD 604, SPD 608, TED 602, TED 606, Pass CBEST and CSET</i>
TED 626	Classroom Management <i>Prerequisite: TED 621A or TED 623</i>
TED 621B	Reading/Lang. Arts Methods <i>Prerequisite: TED 621A</i>
TED 616A	C&I I: History & Social Science
TED 616B	C&I II: Math & Science
TED 616C	C&I III: V & P Arts Health & PE
SPD 608	Exceptionalities
TED 538	Parent Engagement
TED 640A	Student Teaching I (6 quarter units)

Prerequisites are waived for the Nevada ARL programs only.

■ ALTERNATIVE ROUTE TO LICENSURE SECONDARY

Faculty Advisor: Patricia Traynor-Nilsen; (702) 531-7807; ptraynormilsen@nu.edu

The Alternative Route to Licensure Program provides a pathway to a Nevada Secondary license for candidates who hold a Bachelor's Degree and have an offer of employment with a Nevada School District.

■ MASTERS OF EDUCATION WITH NEVADA SECONDARY LICENSURE

All course work in this program may be transferred into the Masters of Education with Nevada Secondary Licensure.

Application For Alternative Route to Licensure

Candidates must complete TED 623 Language Development Methods: Secondary and TED 626 Classroom Management before beginning to teach in a classroom as an ARL. These two courses provide the candidates with both field experiences and pedagogy to be able to manage a classroom and meet the needs of diverse learners.

In order to be admitted to the program a candidate will need to hold a bachelor's degree, and have passed the Praxis Core Academic Skills for Educators. Candidates must also complete the National University Application for admission into the University. All candidates must be fingerprinted. Each Candidate will have an interview with a faculty member to discuss their interest in the ARL program as well as their background knowledge of schools. All candidates will attend an ARL orientation meeting.

All ARL Participants Must Meet the Following Eligibility Requirements

1. Hold a bachelor's degree from an accredited university with a GPA of 2.5 or 2.75 for the last 60 semester units.
2. Prior to being admitted to the program pass the Praxis Core Academic Skills for Educators.
3. Apply to National University Sanford College of Education.
4. Meet with a faculty member for an interview.
5. Fingerprinted.
6. Attend an orientation session.

After completing the Praxis Core Academic Skills for Educators and Praxis Content Area Tests and TED 623 and TED 626 candidates will be recommended for the ARL Conditional License. Candidates will then be assigned a university support provider. Candidates will also then complete the additional course work that is listed below.

Exit Requirements

The candidate must complete the requirements for the conditional license and are then eligible for employment while working on completing all of the requirements for the program. Candidates need to remain in good standing with the employer and National University throughout the program. This is a non-degree program and is comprised of courses required for Nevada Elementary Licensure.

Application For a Nevada Teacher License

- Successful completion of the coursework with a minimum grade point average of 3.0 for graduate coursework. (Grades of "D" and "F" are not accepted.) All coursework must be completed within seven years to be accepted.
- Fulfillment of all financial obligations to the University before applying for the credential.

Each candidate must have on file:

- A zero account balance.
- Official transcripts from all colleges/universities attended.
- Passing score in Praxis Core Academic Skills for Educator.
- Passing score in Praxis Content Area Tests.
- Passing score in Praxis Principles of Learning and Teaching Grades 7-12.
- Proof of passing with a grade of "C" or better coursework or an examination covering the U.S. Constitution, Nevada Constitution, and Nevada School Law.
- Written evaluations of performance in field experiences, internships, educational projects, student teaching and other practica.
- Comprehensive major in content area (minimum of 54 quarter units).

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Integrate knowledge and abilities in designing and implementing developmentally appropriate and challenging learning experiences that respect cognitive, linguistic, social, emotional, and physical differences.
- Integrate knowledge and abilities in establishing and maintaining inclusive learning environments enabling all learners to meet high standards while recognizing individual and cultural differences.
- Integrate the discipline(s)' central concepts, tools of inquiry, and structures to create learning experiences accessible and meaningful for learners in mastering the content.
- Integrate knowledge and abilities in establishing and maintaining learning environments that support individual and collaborative learning, and encourage positive social interaction, active engagement in learning, and self-motivation.
- Integrate concepts and differing perspectives to engage learners in critical thinking, creativity, and collaborative problem solving related to authentic local and global issues.
- Integrate knowledge and abilities in designing and using multiple methods of assessment that learners use to monitor their own growth and decision-making as well as guide the teacher in instructional planning.
- Integrate knowledge of learners and the community context in planning instruction that supports every student in meeting rigorous learning goals of content areas.
- Integrate knowledge and abilities in using a variety of instructional strategies to encourage learners to develop deep understanding of content areas and build skills to apply knowledge in meaningful ways.
- Integrate knowledge and abilities in ongoing professional learning by using evidence to evaluate the influences of professional practices, choices, and actions on learners, families, other professionals, and the community.

- Seek appropriate leadership roles and opportunities by collaborating with learners, families, colleagues, other school professionals, and community members to ensure learner growth, and advancement in the profession.

Degree Requirements

(8 courses; 37.5 quarter units)

There are two courses TED 626 and TED 623 required for the conditional Nevada License. After completing these courses and passing the Praxis Core Academic Skills for Educators the candidate may apply for a conditional license. The rest of the sequence is completed to apply for the initial teaching license.

TED 626	Classroom Management <i>Prerequisite: TED 623, or TED 621A</i>
TED 623	Lang. Dev. Methods: Secondary <i>Prerequisite: TED 602, SPD 604, TED 606, SPD 608, Pass CBEST and CSET</i>
SPD 608	Exceptionalities
TED 632	Content Area Curriculum <i>Prerequisite: TED 623</i>
TED 633	Content Area Instruct-Assess <i>Prerequisite: TED 623 with a minimum grade of C</i>
EDT 608	Technology in the Classroom
TED 538	Parent Engagement
TED 640A	Student Teaching I (6 quarter units)

Prerequisites are waived for the Nevada ARL programs only.

■ SPECIAL EDUCATION GENERALIST ALTERNATIVE ROUTE TO LICENSURE

Faculty Advisor: David Rago; (702) 531-7812; drago@nu.edu

The purpose of this special Education program is to prepare students to instruct learners with disabilities in the K-12 system. Courses for this program meet the Nevada Department of Education requirements for a teaching license. The program is based on the premise that meeting the special instructional needs of students in today's schools requires knowledge of a wide array of teaching strategies, as no one strategy can meet the needs of every special needs student. The program is designed to present a variety of research validated methods, techniques, and opportunities to develop knowledge and skills to create and implement instructional programs that will positively impact the learning of K-12 students with special needs across developmental domains.

■ MASTERS OF SCIENCE IN SPECIAL EDUCATION OPTION

All course work in this program may be transferred into the Masters of Science in Special Education.

Application For Alternative Route to Licensure

In order to be admitted to the program a candidate will need to hold a bachelor's degree, and have passed the Praxis Core Academic Skills for Educators. Candidates must also complete the National University Application for admission into the University. All candidates must be fingerprinted. Each Candidate will have an interview with a faculty member to discuss their interest in the ARL program as well as their background knowledge of schools. All candidates will attend an ARL orientation meeting.

All ARL Participants Must Meet the Following Eligibility Requirements

1. Hold a bachelor's degree from an accredited university with a GPA of 2.5 or 2.75 for the last 60 semester units.
2. Prior to being admitted to the program pass the Praxis Core Academic Skills for Educators.
3. Apply to National University Sanford College of Education.
4. Meet with a faculty member for an interview.
5. Fingerprinted.
6. Attend an orientation session.

After completing the Praxis Core Academic Skills for Educators and Praxis Special Education Generalist Resource Room: Knowledge and Applications and Application candidates will be recommended for the ARL Conditional License. Candidates will then be assigned a university support provider. Candidates will also then complete the additional course work that is listed below.

Exit Requirements

The candidate must complete the requirements for the conditional license and are then eligible for employment while working on completing all of the requirements for the program. Candidates need to remain in good standing with the employer and National University throughout the program. This is a non-degree program and is comprised of courses required for Nevada Special Education Generalist Licensure.

Application For a Nevada Teacher License

- Successful completion of the coursework with a minimum grade point average of 3.0 for graduate coursework. (Grades of "D" and "F" are not accepted.) All coursework must be completed within seven years to be accepted.
- Fulfillment of all financial obligations to the University before applying for the credential.

Each candidate must have on file:

- A zero account balance.
- Official transcripts from all colleges/universities attended.
- Passing score in Praxis Core Academic Skills for Educators.
- Passing score in Praxis Special Education Generalist Resource Room: Knowledge and Applications.
- Proof of passing with a grade of "C" or better coursework or an examination covering the U.S. Constitution, Nevada Constitution, and Nevada School Law.
- Written evaluations of performance in field experiences, internships, educational projects, student teaching and other practica.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Analyze the implications of characteristics of students with M/M disabilities and autism for service delivery such as placement decisions, IEP development, and instruction.
- Evaluate a variety of appropriate assessments procedures and communicate results in order to use evidence based strategies and the core curriculum in the development of IEP goals and instructional plans for students with M/M disabilities and autism.
- Maintain appropriate educational environments and positive behavioral support to include the school-wide behavior support process for students with M/M disabilities and autism.
- Implement effective methods for teaching reading, speaking, listening, written language, and mathematics to ensure access to the general education curriculum across instructional settings for students with M/M disabilities and autism.
- Exhibit collaborative case management to coordinate the IEP process and address the legal and instructional requirements based on the individual needs of the student with M/M disabilities and autism.

Degree Requirements

(11 courses; 51 quarter units)

There are two courses (SPD 608 and SPD 614) required for the conditional Nevada License. After completing these courses and passing the Praxis Core Academic Skills for Educators the candidate may apply for a conditional license. The rest of the sequence is completed to apply for the initial teaching license.

SPD 604	Psychological Fdns of Educ.
SPD 608	Exceptionalities
SPD 614	Classroom and Behavior Mgmt
SPD 616	Law, Collaboration & Transition

- SPD 622 Assessment
Prerequisite: TED 621B or equivalent, Pass CBEST and CSET.
- SPD 628 Teaching Reading/Lang Arts
Prerequisite: TED 621B or equivalent, Pass CBEST and CSET.
- SPD 632 Charac/Instr Stds w/ M/M Disab
- SPD 636 Teaching Math/Writing for M/M
- SPD 674 Collaborative Partners
Prerequisite: ECSE Added-Authorization Candidates: Individuals who hold a valid preliminary, Level I, professional clear, clear, Level II, or life special education teaching credential may take this course.
- TED 538 Parent Engagement
- SPD 681A Nevada Student Teaching M/M (6 quarter units)
Prerequisite: SPD 608, SPD 614, TED 621B, Candidates must be admitted to the University internship program.

Prerequisites are waived for the Nevada ARL programs only.

NATIONAL UNIVERSITY LANGUAGE INSTITUTE

9388 Lightwave Avenue, 185A, San Diego, CA 92123
P (858) 541-7747 • F (858) 541-7791 • E elp@nu.edu

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NATIONAL UNIVERSITY LANGUAGE INSTITUTE

The National University Language Institute serves the needs of a wide range of domestic and international students. Programs promote language acquisition and global learning, build individual, community, and global relationships, and expand the intercultural, academic, and leadership potential of learners.

MEMBERSHIPS AND ACCREDITATIONS

- American Association of Intensive English Programs (AAIEP) - English USA
- National Association of International Educators (NAFSA)
- Teachers of English to Speakers of Other Languages (TESOL)
- California Teachers of English to Speakers of Other Languages (CATESOL)
- Professional International Educators Roundtable (PIER) - San Diego region
- International Society for Technology in Education (ISTE)
- Western Association of Schools and Colleges (WASC)

NON-CREDIT COURSES

These courses carry neither academic credit nor CEUs. They are offered in response to the growing need for quality language and cultural educational opportunities for professional, career, personal growth, or general cultural interest and knowledge.

GRADING SYSTEM

S = Satisfactory

U = Unsatisfactory

FINANCIAL AID

Language Institute students are generally not eligible to receive federal financial aid, although alternative funding options are available. Students planning to enroll in non-credit courses may apply for an IT Skills Loan, Key Career Loan, or Sallie Mae Career Loan. These agencies are not affiliated with the Language Institute or National University. Additionally, the Language Institute provides guidance to students who are utilizing funds through Tuition Assistance, Veteran's Assistance, and/or the Workforce Investment Act. The Language Institute does work with students who are seeking financial aid for certificate programs that grant academic credit. Financial aid is available through two methods: National University Tuition Assistance Loan and Federal Financial Aid through Title IV.

VETERANS' INFORMATION

Students wishing to apply for programs administered by the Department of Veterans' Affairs can obtain information on how to apply for their benefits by calling or visiting the Veterans' Affairs Office located at:

9388 Lightwave Avenue

San Diego CA

Phone: 541.7970, or 800.628.8648, ext. 7970

For more information, please call 800.628.8648 ext. 8600.

REFUND/WITHDRAWAL REQUESTS

In order to receive a refund you must drop before the first day of class.

PAYMENT OPTIONS

Payment can be made by telephone, fax, online, or in person. Checks and any one of the following credit cards are accepted for your convenience: American Express, Discover, Visa, or MasterCard. Company invoicing is also available.

AGE REQUIREMENT

In order to be eligible to enroll in courses at the National University Language Institute students must be 18 years of age.

ENGLISH FOR ACADEMIC PURPOSES (EAP)

Students with qualifying English proficiency test scores or placement test scores may enroll in the Academic English courses to improve their academic English proficiency and academic skills and performance prior to taking university-level

academic courses. Students can complete the University's language proficiency requirement by successfully completing the English for Academic Purposes (EAP) program. This is an intensive program designed for international high school graduates, university students, or professionals who plan to attend National University or another U.S. college or university and/or want to improve their academic skills for professional career advancement. This program follows a four-week format, and classes are offered every month. Successful completion of the highest level (EAP 1800X Academic English: Advanced Performance II) fulfills the National University English language proficiency requirement; therefore, the Test of English as a Foreign Language (TOEFL) examination or the International English Language Testing System (IELTS) examination is not required. English language levels consist of core courses increasing in difficulty and complexity from academic English language and academic skill development to advanced academic English proficiency and advanced academic performance expectations.

The English for Academic Purposes Program (EAP) goals are:

Goal 1

Develop strategies for learning in a higher education culture and academic learning environment.

Goal 2

Apply advanced grammar and build academic vocabulary.

Goal 3

Develop and enhance professional and academic writing skills.

Goal 4

Demonstrate competency in critical discourse and formal presentation skills.

Goal 5

Demonstrate academic text comprehension, critical thinking ability, and text analysis skills.

Goal 6

Develop listening skills toward enhanced comprehension of lectures, discourse, or other aural communications related to academics.

Goal 7

Develop metacognitive, reflective, and collaborative skills.

Goal 8

Expand spectrum of insights and understandings through themes and topics related to global learning, intercultural issues, and human perspectives.

Goal 9

Engage in collaborative projects, interactivities, and peer exchange to foster teamwork and develop leadership skills.

Goal 10

Broaden ability to apply technology-based productivity tools and engage in Web-enhanced learning.

Length: Each level is one month long.

Cost: Tuition rates for:

EAP 1100X - 1600X are \$750 per course

EAP 1700X - 1800X are \$1,215 per course

* Scholarship students will need to enroll in the 5-day program if applicable.

Onsite Program Levels

EAP 1100X Academic English: Foundation I

EAP 1200X Academic English: Foundation II

EAP 1300X Academic English: Skill Development

EAP 1400X Academic English: Skill Development II

EAP 1500X Academic Development: Performance Development I

EAP 1600X Academic Development: Performance Development II

EAP 1700X Academic English: Advanced Performance I

EAP 1800X Academic English: Advanced Performance II

Program Learning Outcomes

Upon completion of the University Preparation program students shall be able to:

- Listen to an academic lecture, take notes, formulate questions, summarize, answer questions related to academic content and academic vocabulary in context.
- Define, interpret, and apply the denotations and connotations of the Academic Word List (AWL).
- Participate effectively in discussions, debate, or study groups.
- Speak and write applying advanced grammar.
- Demonstrate mastery of English pronunciation, intonation, stress, and tone.
- Demonstrate mastery of formal presentation skills and impromptu speaking skills.
- Read, annotate, paraphrase, and critically analyze.
- Write narrative, descriptive, expository, definition, compare-contrast, cause and effect, reflection, persuasive, and argumentative academic essays using appropriate organization, topic development, sentence structure, word usage, grammar, mechanics, and formal academic structure.
- Paraphrase, quote, summarize, and write an abstract.
- Conduct research, evaluate sources, and write a formal academic research paper.
- Apply communication, collaboration, and metacognitive skills.

ENGLISH COMMUNICATION SERIES (ECS)

Designed to help students improve their English communication skills while learning more about American intercultural and workplace communication. The 5-day ECS course is suitable for students seeking to prepare for English proficiency tests, such as the TOEFL or IELTS examinations.

Hours: 72 hours per month/course

Length: 3 days per week (Tuesday-Wednesday-Thursday)

Cost: \$500 per course

Scholarship students will need to enroll in the Intensive English Communication Series, if applicable.

Hours: 90 hours per month/course

Length: 5 days per week

Cost: \$750 per course

Exit Exam (Optional)

Students who would like to transition to English for Academic Purposes (EAP) have the option of taking the ECS Exit Exam. Upon passing the ECS course and successfully passing the ECS Exit Exam, the student will be placed in the lowest level of the EAP program.

Courses

ECS 1900X - English Communication Skills I: Basic Personal and Workplace Communication

ECS 1910X - English Communication Skills II: Interpersonal Communication

ECS 1920X - English Communication Skills III: Functional Communication

ECS 1930X - English Communication Skills IV: Cross-cultural Communication

ECS 1940X - English Communication Skills V: Communication through Teamwork

ECS 1950X - English Communication Skills VI: Communicative Confidence

ECS 1960X - English Communication Skills VII: Collaborative Problem-Solving

ECS 1970X - English Communication Skills VIII: Using Data to Communicate

ECS 1975X - English Communication Skills IX: Graphic Organizers to Communicate Ideas

ECS 1980X - English Communication Skills X: Communication through Fiction

ECS 1985X - English Communication XI: Communication through Non-Fiction

ECS 1990X - English Communication XII: Communication through Storytelling

ENGLISH FOR SPECIFIC PURPOSES (ESP)

This program is designed for domestic or international undergraduate or graduate students—individuals or groups—who have met the National University English language proficiency requirements. The program focuses on strengthening English communication skills in a discipline-related context (terminology, concepts, themes, topics), increasing confidence in subject-specific areas (student's field of study), and expanding discipline-specific skills (conceptualization, critical analysis). The student's field of study may be in the field of health, business, accounting, engineering, computer science, communication, education, economics, finance, environmental science, hospitality, public relations, and other related fields. The courses are open to students who have graduated from the English For Academic Purposes (EAP) program, and have successfully completed the highest level of the University Preparation Program (UPP), or can provide evidence of advanced English proficiency as required by NU.

Students must have advanced English language proficiency (IELTS 5.5; TOEFL 70).

Hours: 72 hours per month/course

Length: 3 days per week (Tuesday-Wednesday-Thursday)

Cost: \$750 per course

Option: Students may enroll for a minimum of 1 month and extend their enrollment up to 6 terms. Classes may be taken concurrently with academic program courses.

Courses

ESP 1900X Foundations of Your Discipline

ESP 1910X Research in Your Discipline

ESP 1920X Framework of Your Discipline

ESP 1930X Changes & Challenges in Your Discipline

ESP 1940X Impact of Your Discipline

ESP 1950X Innovations in Your Discipline

ESP 1901X Business English*

* 8 week course, cost: \$1,500

English Camps – English Communication & Culture

This program is offered to international groups of learners wishing to improve their English language and communication skills while participating in the American cultural experience, including various social and recreational interactivities.

Package includes:

- Standard or customizable curriculum
- Orientation and end-of-camp celebration
- Activity costs/admission tickets
- Transportation
- Homestay housing (two meals per day: breakfast/dinner)

Course: ECC 1902X

Length: 1-4 weeks

Age Requirement: Students must be 18 years of age and older

Dates and Cost: Contact isa@nu.edu for details

Students will experience American culture by participating in a variety of Southern California excursions, such as:

- Venues of historical or cultural significance
- Visits to museums
- Amusement parks
- Shopping trips
- Beach barbecues
- Major League Baseball games

Activities

Activities are customizable.

Location

Spectrum Business Park Campus

Customized Group Programs

ESP offers customized curriculum that meets the needs and expectations of the group.

LANGUAGE INSTITUTE COURSE DESCRIPTIONS

EAP 1100X - Academic English: Foundation I

This course is designed for non-native speakers of English as an introductory English language course focusing on the fundamentals of reading, writing, listening, and speaking in a school and social environment.

EAP 1200X - Academic English: Foundation II

This course is designed for non-native speakers of English who are in the preproduction phase of language development. Students develop basic conversational English used in school, work, and social settings, engage in listening, speaking, reading, and writing skill development, and explore learning strategies for future academic success.

EAP 1300X - Academic English: Skill Development I

This course introduces academic English and academic skill development in listening, formal speaking, academic reading and vocabulary, and academic writing.

EAP 1400X - Academic English: Skill Development II

This course expands the student's confidence and competence in Cognitive Academic Language Proficiency (CALP) and develops skills in formal speaking, academic reading, and academic writing with emphasis on communicative competence, utilization of learning strategies, and application of technology tools.

EAP 1500X - Academic English: Performance Development I

This course focuses on academic English and academic performance by promoting critical thinking and metacognitive development. Students review and analyze academic lectures, interpret and annotate academic text, give formal and impromptu speeches, and write 5-paragraph academic essays.

EAP 1600X - Academic English: Performance Development II

The emphasis in this course is on academic English and academic performance development in lecture note-taking, formulation of questions, summarizing, content analysis, and academic vocabulary expansion. Students apply academic essay writing skills that include citations, paraphrasing, and referencing, analyzing lectures, annotating academic text, and creating informative and critical formal presentations.

EAP 1700X - Academic English: Advanced Performance I

This course introduces students to the research process, term paper format and organization, and utilization of library database and resources. Students give formal presentations based on topics relevant to their future field of study and engage in debates about controversial issues. Students will write a 7- to 8-page term paper applying academic organization, content, and format, including in-text and parenthetical citations (quotes, paraphrasing) and referencing, and the application of higher-order thinking skills. Students learn to validate online sources and write annotated bibliographies.

EAP 1800X - Academic English: Advanced Performance II

The highest level of the English For Academic Purposes (EAP) program is designed to prepare students for success in undergraduate and graduate programs. Students develop metacognitive skills through text analysis, discussions and debate, collaborative projects, and critical writing. Emphasis is placed on mastering advanced academic writing requirements, research, and formal academic presentations.

ECC 1902X - English Conversation & Culture

Designed to improve English conversation skills and to learn more about American culture. Classroom instruction in conversation is combined with various social and recreational activities, emphasizing the study of American culture and lifestyle.

ECS 1900X - English Communication I: Basic Personal and Workplace Communication

From first impressions to basic business correspondence (letters, faxes, memos, note-taking, and reports), students develop confidence in personal and workplace English communication skills. Strengthen foundation skills, improve organization, incorporate time management skills, and develop all four language modalities in English.

ECS 1901X - 5 days per week program

ECS 1910X - English Communication II: Interpersonal Communication

From money matters and international trade to working together with colleagues and dealing with problems, students engage in English communication as they address work-related and interpersonal communication challenges. Students conduct a learning style inventory and develop all four language modalities in English.

ECS 1911X - 5 days per week program

ECS 1920X - English Communication III: Functional Communication

From conferences, interviews, and meetings to travel, marketing, and operations, students apply functional English communication skills, engage in interactivities (discussion, problem-solving and role play), and complete collaborative projects. Students explore multiple intelligences, and develop all four language modalities in English.

ECS 1921X - 5 days per week program

ECS 1930X - English Communication IV: Cross-Cultural Communication

Students develop useful language skills to ask questions or ask for clarification and apply expressions for language activation. Students engage in role play, make contributions in discussion groups, and practice the role of conversation leader. Students develop all four language modalities in English.

ECS 1931X - 5 days per week program

ECS 1940X - English Communication V: Communication through Teamwork

Students learn about the roles of team members and engage in teamwork activities to encourage reflection and application of higher-order thinking skills. Students develop all four language modalities in English through teamwork activities.

ECS 1941X - 5 days per week program

ECS 1950X - English Communication VI: Communicative Confidence

Students identify and practice listening and speaking techniques and increase confidence through interactivities as well as continue to develop all four language modalities in English through performance-based activities.

ECS 1951X - 5 days per week program

ECS 1960X - English Communication VII: Collaborative Problem-Solving

Students explore different types of problems and discover why problem-solving skills are essential for their studies. Through collaborative projects that require the students to apply all four language modalities in English, students use imagination and creative thinking to figuring solutions to a variety of relevant problems.

ECS 1961X - 5 days per week program

ECS 1970X - English Communication VIII: Using Data to Communicate

Students create and explain graphs, charts, and diagrams in conjunction with formal presentations and written assignments including the application of all four language modalities.

ECS1971X - 5 days per week program

ECS 1975X - English Communication IX: Graphic Organizers to Communicate Ideas

Students use a variety of graphic organizers to take notes, brainstorm, organize ideas, and prepare oral or written assignments, including the application of all four language modalities in English.

ECS 1976X - 5 days per week program

ECS 1980X - English Communication X: Communication through Fiction
Students read, analyze, and discuss fiction from cultures around the world applying metacognitive skills and four language modalities in English.

ECS 1981X - 5 days per week program

ECS 1985X - English Communication XI: Communication through Non-Fiction

Students read, analyze and discuss a variety of non-fiction works applying to metacognitive skills and four English Language modalities.

ECS 1986X - 5 days per week program

ECS 1990X - English Communication XII: Communication through Storytelling

Students read, analyze and discuss stories passed from generation to generation following the oral traditions of the Native Americans and other indigenous cultures from around the world and the role musical instruments played. Using strategies, such as Flower Power, Story boards, graphic organizers, and journal writing, students will recite and create legends and tales applying the four English language modalities.

ECS 1991X - 5 days per week program

ESP 1900X - Foundations of Your Discipline

Explore the history, structure, and branches of your discipline, the role of practitioners, and the influence in the global community. Develop an awareness of the interconnectivity of the global community and investigate the benefits and challenges associated with globalization in your discipline. Prepare for a lecture given in your discipline, apply the Cornell note-taking system, and give a presentation about your discipline. Develop fundamental vocabulary and terminology used in your discipline and apply to written and oral work.

ESP 1901X - Business English

Students will explore the important components of the business plan and explore content areas of human resources, business organization, finance, and marketing while developing a working knowledge and application of business English. Topics Include:

- Exploring, and analyzing multiculturalism / diversity.
- Assessment and exploration of Business Plans.
- Investigation of the various roles within Finance.
- Exploring, analyzing and differentiating goals, core values, management and leadership.
- Effective Resumes and Interviewing Skills.
- Delivery of effective presentations.
- Effective international marketing analysis models.
- Functions of Human Resources.
- Extensive Business Terminology.

ESP 1910X - Research in Your Discipline

Explore current research and discuss significant issues associated with your discipline. Investigate the role of the individual, in terms of personal identity and community responsibility, and how the role of practitioners in your field impact the local, national, and international community. Prepare a lecture about a pressing issue and write a paper about current research findings associated with the issue. Effectively use databases for research, analyze peer-reviewed articles, and evaluate research findings.

ESP 1920X - Framework of Your Discipline

Explore the organization, markets, ethical considerations, and impact of your discipline. Determine cultural applications and implications and investigate how personal and cultural experiences influence perceptions and understandings of your discipline. Conduct a case study in your discipline. Recognize signpost language in lectures and make effective contributions to a seminar.

ESP 1930X - Changes & Challenges in Your Discipline

Examine the characteristics of co-cultures and a pluralistic society. Research changes and challenges in your discipline, make predictions and recommen-

dations, and report on future developments. Collaborate with classmates on a cross-disciplinary quest for answers to problems and sustainability issues associated with your discipline. Give an oral defense of your position, and write an argumentative essay defending your position.

ESP 1940X - Impact of Your Discipline

Conduct case studies related to your discipline and apply case study format and procedures. Engage in a semiotic investigation of verbal and non-verbal communication and gain a deeper understanding of the diversity of interpreted meanings related to your discipline. Explore a controversial topic in your discipline and analyze and evaluate positions taken by different experts. Compare and contrast views orally and in formal writing (including quotes by experts).

ESP 1950X - Innovations in Your Discipline

Explore social, cultural, economic, and/or political issues associated with innovations and advancements in your discipline. Engage in a critical analysis of ethical, environmental, and global issues. Discuss cultural assumptions and values, engage in critical reflection about the challenges of implementing innovations, and develop recommendations for implementing change.



NATIONAL UNIVERSITY

COURSE DESCRIPTIONS

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329 Course Descriptions



PREFIX/SUBJECT AREA BY NATIONAL UNIVERSITY SCHOOL

COLLEGE OF LETTERS AND SCIENCES

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BGS	General Studies.....	336
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CHE	Chemistry.....	344
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HUM	Humanities.....	382
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University Course Numbering System

0- to 99-Level Courses: Remedial courses that do not grant collegiate credit.

100- to 200-Level Courses: Lower-Division courses applicable to Associate degrees.

300- to 400-Level Courses: Upper-Division courses applicable to Bachelor degrees.

500-Level Courses: Courses which may be applicable as advanced upper-division credit or as graduate credit, as specified by the requirements of each program.

600-Level Courses: Graduate level courses.

800-Level Courses: Doctoral level courses.

Note: All courses are 4.5 quarter units unless otherwise specified.

Course Type	Units	Contact Hours
Undergraduate (100-499) Lecture	4.5	45
Undergraduate (100-499) Lecture	3	30
Undergraduate (100-499) Lab	1.5	45
Graduate (600-699) Lecture	4.5	40
Graduate (600-699) Lab	1.5	40
<i>Contact hours for 500 level courses are dependent on program course is completed for (Undergraduate/Graduate)</i>		
Fieldwork, Internship, Practica	1	40
<i>Depending on the academic program, the number of required hours may be governed or regulated by that particular program's board of accreditation</i>		
Nursing Clinical	4.5	135

AAL – Advanced Assessment Literacy

AAL 650 Purposeful Assessment

Prerequisites: ATP 600

Introduction to framework for a balanced systems approach to assessment. Investigate summative assessment requirements from the federal government through the state, district, and school. Articulate how formative classroom assessment is essential for student learning. Develop a well-articulated initial assessment plan understood by all stakeholders in making cohesive student-centered educational decisions.

AAL 652 Creating Clear Lrng Trgt

Prerequisites: ATP 600 and AAL 650

Identify, design and develop clear learning targets in order to determine the assessment methods to be used. Select and develop formative assessment tools for ongoing continuous improvement and learn how to interpret and apply data analysis to increase student learning.

AAL 654 Quality Assess for Stu Lrng

Prerequisites: ATP 600, AAL 650 and AAL 652

Introduction to the principles of educational testing, criteria for quality assessments, and how and when to use the correct assessment for the purpose.

AAL 656 Assessment for Learning

Prerequisites: ATP 600, AAL 650, AAL 652 and AAL 654

Identify formative assessment methods for assessment for learning, a concept that helps students to promote their own growth. Select evidence of personal growth and learning in support of Teaching Growth Plans for inclusion in the portfolio.

ABA – Applied Behavioral Analysis

ABA 600 Basics of Behavior Analysis

Overview of the major components - philosophical as well as applied - of Applied Behavior Analysis. Major topics include functional behavioral assessment and analysis, single-subject research design, basic principles of behavior shaping and reduction, how to achieve behavioral generalization and maintenance, aspects of stimulus control and its relation to the three term contingency model, discrete trial training, and aversive control.

ABA 601 Assessment in ABA

Prerequisites: ABA 600

Introduction to the philosophy of behaviorism and the basic tenets of applied behavior analysis. Focuses on behavioral assessment and observation, and time series research design and its use in the scientific evaluation of behavior-environment relations. Students are required to purchase a one year subscription to the CBA Learning Module Series from Behavior Development Solutions (BDS). See Program Description for more details.

ABA 602 Processes of ABA

Prerequisites: ABA 601

Focuses on the fundamental aspects of behavior change strategies and tactics, such as stimulus control and the nature of reinforcing and aversive stimuli and their properties, and how these properties

influence behavior change processes. Basic and applied empirical research demonstrating these strategies are covered. Students are required to purchase a one year subscription to the CBA Learning Module Series from Behavior Development Solutions (BDS). See Program Description for more details.

ABA 603 Applications of ABA

Prerequisites: ABA 602

Continuation of ABA 602, and covers the complex aspects of behavior change strategies that are built upon the fundamental behavioral principles. Detailed examples of behavior change strategies from the basic and applied research literature are covered. Major topics covered include verbal behavior, generalization and maintenance, contingency contracting, and self-management. Students are required to purchase a one year subscription to the CBA Learning Module Series from Behavior Development Solutions (BDS). See Program Description for more details.

ABA 604 Advanced Applications

Prerequisites: ABA 603

Examines functional assessment and functional analysis procedures with a focus on mental health and educational settings. Emphasis is on providing students with an understanding of both procedural and conceptual issues surrounding evidence-based intervention design for persons with severe behavior problems. Students are required to purchase a one year subscription to the CBA Learning Module Series from Behavior Development Solutions (BDS). See Program Description for more details.

ABA 606 Ethics for Behavior Analysts

Overview of the major issues in the ethical use of applied behavior analytic practices. Students will be exposed to scenarios and case studies which impact the ethical and legal treatment of persons receiving behavior change treatments. This course meets the ethics requirements established by the Behavior Analyst Certification Board. Students are required to purchase a one year subscription to the CBA Learning Module Series from Behavior Development Solutions (BDS). See Program Description for more details.

ABA 607 ABA Intensive Practicum

Prerequisites: Permission of Program Lead Faculty

This practicum is designed to provide students with frequent, direct, on-site supervision of applied behavior analysis activities. The practicum is designed to meet the Behavior Analyst Certification Board criteria for an intensive, 750 hr. practicum experience

ABA 610 Role and Function of Schools

This course explores the workings of schools and how to integrate Advanced Behavior Analysis into the school setting. The role of norms in the school setting and how it affects working in schools will be investigated. Working collaboratively in the school environment will be examined.

ABA 611 Positive Behav Inter/Support

This course provides candidates with effective behavioral management strategies in a comprehensive K-12 school setting. The focus is on the development and implementation of positive behavioral intervention supports (PBIS). Effective positive behavioral approaches for both individual students as well as small groups of students are addressed. The course

provides students with the knowledge to assist in the development, implementation, and evaluation of a Functional Behavioral Analysis, Behavior Intervention Plan, and Individual Education Plan.

ABA 612 Behavioral Consultation

This course provides effective behavioral consultation strategies in a comprehensive K-12 school setting. The focus is on the development and implementation of behavioral consultation in the school setting. It also offers an additional emphasis on home-school collaboration, teacher-resource provider collaboration, and collaboration in and socioeconomic and culturally diverse population. Knowledge and skills for effective behavioral collaboration with teachers, parents, and other resource providers is provided. The course provides candidates strategies for the development, implementation, and evaluation of behavioral consultation.

ACC – Accounting

ACC 201 Financial Accounting Funds.

A survey of basic accounting theory and the application of accounting principles, this course includes the recording and summarization of business transactions in the form of financial statements under the rules of generally accepted accounting principles. (GAAP). It is designed for students who have little or no prior knowledge of financial accounting, this course corresponds to Principles of Accounting I at other colleges.

ACC 202 Managerial Accounting Funds.

Prerequisites: ACC 201

This course is an overview of the use of financial accounting and cost accounting data for the design and preparation of reports to aid management in organizing, directing, controlling, and decision-making functions. The topics include the fundamentals of cost accounting, budgeting and responsibility accounting for cost and profit centers.

ACC 300 Applied Tech for Accountants

Prerequisites: ACC 201

Emphasis on the design and internal control perspectives of accounting information systems, including systems analysis, decision support systems, system implementation, and the audit of management information systems.

ACC 410A Intermediate Accounting I

Prerequisites: ACC 201

Often referred to as "Intermediate Accounting," ACC 410A, B and C cover a substantial portion of the U.S. accounting standards known as GAAP (generally accepted accounting principles). In particular, ACC 410A entails a more in-depth and detailed study of the principal financial statements, accounting concepts, revenue and expense recognition, and accounting for cash, receivables, and inventories.

ACC 410B Intermediate Accounting II

Prerequisites: ACC 410A

Often referred to as "Intermediate Accounting," (See ACC 410A for a series description.) ACC 410B covers accounting for plant, property and equipment, intangible assets, leases, current and long-term liabilities, and stockholders' equity and retained earnings.

ACC 410C Intermediate Accounting III

Prerequisites: ACC 410B

Often referred to as “Intermediate Accounting,” (See ACC 410A for a series description.) ACC 410C covers earnings per share, investments, deferred income taxes, pensions, accounting changes and errors, preparation of the statement of cash flows, and full disclosures with emphasis on segment and interim reporting.

ACC 431 Advanced Accounting

Prerequisites: ACC 410C

An examination of advanced concepts of accounting for business combinations, with emphasis on the consolidation of parent/subsidiary balance sheet and income statement reporting. It also covers accounting for the formation, operation, and liquidation of partnerships, as well as special reporting requirements for multinational entities.

ACC 432A Taxation-Individual

Prerequisites: ACC 431

An introduction to the theory and practice of federal income taxation of individuals, including income, deductions, exemptions, credits, capital gains, depreciation, and deferred compensation plans. As a course requirement, students prepare Form 1040 income tax returns.

ACC 432B Taxation-Business

Prerequisites: ACC 432A

An introduction to the theory and practice of federal income taxation of partnerships, subchapter S, and subchapter C corporations. Students learn the use of tax research publications.

ACC 433A Managerial Accounting I

Prerequisites: ACC 201

A study of cost accounting principles and procedures including fixed, variable and mixed costs, break-even point analysis, job order costing, process costing, standard costing, activity based costing, variance analysis for variable and fixed costs, budgeting (static and flexible budgets), and preparation of variable and absorption costing statements.

ACC 433B Managerial Accounting II

Prerequisites: ACC 433A

A continuation of Managerial Accounting I, this course covers additional managerial accounting topics for decision-making including relevant costs, balanced scorecard, value added and non-value added costs, allocations of indirect costs using direct, step, and reciprocal methods, allocating joint cost, main and by-product costing, determination of Economic Order Quantity (EOQ), accounting for spoilage, transfer pricing, performance measurement, and capital budgeting techniques.

ACC 434 Government and Nonprofit Acct

Prerequisites: ACC 201

A study of the specialized accounting principles applicable to state and local governments and other non-profit organizations, with an emphasis on fund accounting principles used in the recording of assets, liabilities, equity, revenues and expenditures. Also covers the analysis and interpretation of financial statements of such governmental and nonprofit entities.

ACC 435A Auditing I

Prerequisites: ACC 431

A study of financial statement audits in accordance with auditing standards promulgated by authoritative bodies. Topics include planning of the audit engagement, auditor’s responsibility for fraud, review of internal controls, gathering substantive evidence using analytical procedures and test of account balances for the revenues, acquisition and expenditures, and inventory processes.

ACC 435B Auditing II

Prerequisites: ACC 435A

A continuation of ACC 435A, this course focuses on sampling plan and techniques, gathering substantive evidence for cash and investment cycle, long-term debts and owners’ equity, and contingent liabilities. It also covers audit work papers, audit opinions, attestation services, compilation and reviews, and auditor’s legal liability associated with an audit engagement.

ACC 501 Accounting Fundamentals

(1.5 quarter units)

An introduction to accounting for students with no previous exposure to the subject, this two-week course covers accounting and financial statement terminology and the analysis of financial statements. Grading is by S or U only.

ACC 515 Accounting Ethics

Studies the fundamentals of accounting ethics focusing on case and scenarios analysis, discussions, identification of possible solutions focusing on students acquisition of good ethical judgement. The objective of the course is to increase a student’s ethical sensitivity to major areas of ethical concern in the study of accounting. At the present time, completion of the course provides credit for CPA licensing in the State of California.

ACC 520 Professional Exam Review 1

Recommended: Prior completion of: Should have completed approximately 72 quarter units of accounting and/or business.

This course is designed to help student pass the professional examination for various licensures in accounting. Passing professional exams provides additional opportunities and greater versatility to employment options within the accounting profession and other areas of business. Whether the professional exam is the CPA, CMA, CIA, or other, the review for the exam takes time, commitment, and dedication. Grading is S/U only. The professional exam review emphasizes learning through preparation and practice. The professional review is a review and reflection of some of the content of prior accounting and business courses as well as introduction of new material necessary to pass various professional exams.

ACC 525 Professional Exam Review 2

Prerequisites: ACC 520

This course is designed to help student pass the CPA Exam. Passing professional exams provides additional opportunities and greater versatility to employment options within the accounting profession and other areas of business. The review for the CPA exam takes time, commitment, and dedication. The professional exam review emphasizes learning through preparation and practice. The professional review is a review and reflection of some of the content of prior accounting and business courses as well as introduction of new material necessary to pass various professional exams.

ACC 550 Business Professional Develop.

Emphasis is on development of business professional soft skills to help a student prepare for a successful job search by knowing about their own personal profile, their career opportunities, and the skills necessary to effectively interact with other business professionals. Grading is S/U only.

ACC 555 Data Analytics

Provides skills to input, manage, and analyze large sets of data. Other skills emphasized are the extraction of relevant data and the effective communication of that information to the end user. Exposure will be provided to one or more ERP systems.

ACC 591 Accounting Internship

Internship Project is a supervised work experience for those students who have identified an employer offering an internship opportunity. It is designed to provide qualified applicants with practical experience, enable students to assess various career choices, advance in their careers, and apply concepts and ideas in a real world setting. Normally, 90 hours on-the-job are needed to qualify for 4.5 quarter units. Course is scheduled for each student individually, for two academic months, but can be extended for up to six months. International students are subject to special restrictions and should consult their international student admissions advisor. Grading is H, S, or U only.

ACC 601M Foundations of Financial Acc

Basic financial accounting theory, including the recording of business transactions and preparation of financial statements using “generally accepted accounting principles” (GAAP). Analysis and interpretation of financial data to assist users in their decision-making. Spreadsheets and accounting system software.

ACC 604 Managerial Accounting

Prerequisites: ACC 501

A study of accounting concepts and reporting techniques applied in a management decision-making context. Students analyze accounting data from real-world case studies and present their analysis, conclusions, and recommendations. Managerial accounting models used by diverse enterprises in virtually all industrialized nations include cost accounting and the behavior of costs, budgeting, differential analysis, and responsibility accounting are examined. Reporting techniques involving the use of current spreadsheet and graphic presentation technology are presented.

ACC 610M Financial Accounting I

Prerequisites: ACC 601M

The first course in a comprehensive three course sequence covering a substantial portion of U.S. financial reporting principles known as GAAP including an in-depth review of the conceptual framework and principal financial statements. Emphasis on revenue and expense recognition, together with accounting for current assets.

ACC 611M Financial Accounting II

Prerequisites: ACC 610M

The second course of a comprehensive three-course sequence covering a substantial portion of U.S. financial reporting principles known as GAAP, accounting for tangible assets, natural resources and intangible assets, current and long-term liabilities, leases, and shareholder equity.

ACC 612M Financial Accounting III*Prerequisites: ACC 611M*

The third course of a comprehensive three-course sequence covering a substantial portion of U.S. financial reporting principles known as GAAP, accounting for earnings per share, deferred income taxes, pensions, investments, changes and errors, the statement of cash flows, and full disclosures.

ACC 615M Advanced Financial Accounting*Prerequisites: ACC 612M*

Examination of concepts of accounting for business combinations, with emphasis on the consolidation and financial reporting of parent/subsidiary relationships. Accounting for the formation, operation, and liquidation of partnerships, foreign currency translation and hedging, segment reporting, and international financial reporting standards.

ACC 620M Taxation of Individuals*Prerequisites: ACC 615M*

Study of the statutory provisions, judicial doctrines, and implementation of the theory and practice of federal income taxation of individuals.

ACC 621M Taxation of Bus & Oth Entities*Prerequisites: ACC 620M*

Study of the statutory provisions, judicial doctrines, and implementation of the theory and practice of federal income taxation of "C" corporations, "S" corporations, and partnerships.

ACC 630M Cost Accounting*Prerequisites: ACC 601M*

The first course in a two course sequence. Tracking, recording, and analyzing costs associated with the products or activities of an organization. Cost terminology, cost measurement concepts, cost accumulation systems, accumulating and allocating overhead costs using various cost drivers.

ACC 631M Advanced Managerial Accounting*Prerequisites: ACC 630M*

The second course in a two course sequence. Measurement, analysis, and use of accounting information for management decision-making. Variable costing and inventory management, capital budgeting and operational budgeting decisions, and performance measurement and control of cost/profit/investment centers.

ACC 640M Acc for Gov't & NFP Entities*Prerequisites: ACC 601M*

Accounting principles used by governmental units and non-profit organizations. Concepts of fund accounting and the analysis and interpretation of the financial statements.

ACC 650M Auditing Principles*Prerequisites: ACC 621M*

The first course in a two course sequence. Audits of financial statements by Certified Public Accountants. Topics include: professional ethics, legal liability, planning of audit engagements, internal control, EDP and sampling.

ACC 651M Auditing Procedures*Prerequisites: ACC 650M*

The second in a two course sequence. Auditing procedures (compliance and substantive) for cash, receivables, inventory, payables, long-term debt,

equity balances and related income statement accounts. Writing of auditor's reports, including special reports, and review/compilation reports in accordance with AICPA standards.

ACC 657 Accounting Information Systems*Prerequisites: ACC 601M*

Study of the design and internal control perspectives of accounting information systems, including systems analysis, decision support systems, system implementation, and the audit of management information systems.

ACC 672 International Acctg Standards*Prerequisites: ACC 501 or ACC 201*

Anticipating the transition by U.S. companies from U.S. GAAP to International Financial Reporting Standards (IFRS), this course is designed to familiarize current and future accounting and finance professionals with the conceptual framework and major provisions of IFRS, with emphasis on differences between IFRS and U.S. GAAP.

ACC 690 Guided Study (variable units)

This course is individual study under the direction of an instructor. It requires prior approval of the appropriate academic department.

ACC 695M Cases in Accounting & Auditing*Prerequisites: Completion of prior core requirements*

A capstone course in which students apply the knowledge and skills acquired in preceding coursework to their analysis of real life situations involving financial accounting and reporting, cost/managerial accounting, tax and/or auditing issues. Selected cases may require the researching of relevant authoritative pronouncements, laws, regulations and the like. Course is eligible for In Progress (IP) grading.

ACEX – Athletic Coaching Education (Extended Education)**ACEX 2100X History of Sport**

A survey of the history of American sport with a focus on European influences, as well as the influences of technological, cultural, racial, and economic diversity from Colonial American to present day.

ACEX 2101X Philosophy of Coaching

A survey of basic coaching philosophies in sports. The concepts of motivation, planning, player development, and training will be explored. Historical examples will be used to highlight the importance and development of coaching techniques.

ADC – Alcohol & Drug Counseling**ADC 205 Intro to Substance Abuse***Prerequisites: PSY 100 and SOC 100*

Focus on the definitions and diagnostic criteria for substance abuse and dependence, theories of etiology, medical and social model approaches, and the use of 12-step programs as adjuncts to treatment. It introduces the twelve core functions of chemical dependency counseling.

ADC 215 Physiology of Substance Abuse*Prerequisites: PSY 100 and SOC 100*

A survey of drug classifications and medical complications of their use, and the basic mechanisms of drug absorption, metabolism, distribution and elimination. Mechanisms of tolerance, dependence and withdrawal are emphasized. Also covered is an overview of brain systems involved in drug use, abuse and dependence.

ADC 225 Law and Ethics*Prerequisites: PSY 100 and SOC 100*

This course explores the ethical and legal issues related to substance abuse counseling. Topics include laws related to confidentiality, mandated reporting, scope of practice, informed consent, and record keeping as well as ethical systems and standards. Students will practice the application of standards in a case study format.

ADC 235 Case Management*Prerequisites: PSY 100 and SOC 100*

The 12 Core Functions related to the assessment and management of client progress while in chemical dependency treatment are covered. Skills related to intake assessment, diagnosis, treatment planning and developing effective referrals will be taught and practiced. Concepts related to psychoeducation, special populations, prevention, and community outreach will be discussed.

ADC 245 Individual Counseling I*Prerequisites: PSY 100, SOC 100 and ADC 205*

Focus on the major theories and techniques of substance abuse counseling. Emphasis will be on strategies related to assisting clients in accepting the diagnosis of substance abuse and the early stages of recovery. Considerations for working with special populations will be discussed. Students will use case studies to apply techniques.

ADC 255 Individual Counseling II*Prerequisites: ADC 245*

This course focuses on the application of the counseling techniques learned in ADC 245. Students will be expected to role-play techniques with volunteer(s) in their professional/social environment and submit videos of those sessions for discussion. Discussion of assessment techniques for clients with other psychiatric disorders will be covered.

ADC 265 Group & Family Counseling*Prerequisites: PSY 100 and SOC 100*

This course examines group counseling and family systems theories related to working with substance abuse clients and their families. Students will learn the application of these theories through the use of video sessions and case studies.

ADC 275 Personal & Professional Growth*Prerequisites: PSY 100 and SOC 100*

This course examines two inter-related concepts of counseling: personal awareness and growth with professional growth. This course is designed to assist students to begin the process of becoming aware of their personal issues and how those may impact their work with clients.

ADC 285 Practicum in Substance Abuse

Prerequisites: Satisfactorily complete 5 courses in the major, and Program lead faculty approval

A two-part field practicum in which students work in an approved practicum site doing 255 hours of substance abuse counseling. They also participate in an academic seminar where they discuss their field work. This course is a minimum of 6 months in length.

ADC 295 Guided Study (variable units)

Individual study of a selected topic or content area under the guidance of the instructor.

ADL – Advanced Digital Literacy

ADL 630 Instrctnl Dsgn for Dig Envrntmt

Prerequisites: ATP 600

Explore the relationship between instructional design, cognition and learning and learning theory, and how these are combined in the design of dynamic, collaborative learning environments. Candidates focus on the new science of learning and the impact on digital environments.

ADL 632 Instrctnl Devmnt and Eval

Prerequisites: ATP 600 and ADL 630

Explore current research regarding technology and its applications for teacher and student creativity and productivity.

ADL 634 Online and Mobile Learning

Prerequisites: ATP 600, ADL 630 and ADL 632

Examine the strengths, weaknesses, and challenges of designing and teaching for online environments and accommodating different mobile devices.

ADL 636 Assmnt & Eval in Dig Classroom

Prerequisites: ATP 600, ADL 630, ADL 632 and ADL 634

Explore the role of digital technologies to differentiate instruction and assess learning outcomes. Develop an evaluation plan that can be implemented in candidates own educational settings that demonstrates their ability to select or develop appropriate matrices to identify the impact of technology on the teaching learning process.

ADR – Alternative Dispute Resolution

ADR 400 Alternative Dispute Resolution

This introductory course will provide students with a broad understanding of ADR. The course will cover Negotiation, Mediation, Arbitration how each is used, and the advantages and disadvantages of each method. The course utilizes role plays, simulations, and case studies.

ADR 405 Negotiation Fundamentals

An introductory interactive course designed for students and the business professional to develop the verbal and analytical skills required to perform effectively as a negotiator in conflict situations. Students will participate in negotiating exercises, and learn different negotiating techniques through simulations, videos, and case studies.

ADR 410 Facilitation Fundamentals

An interactive, introductory course designed for students and business professionals to develop an understanding of group dynamics and decision making as a basis for learning the roles, processes and techniques of group facilitation. The course utilizes role plays, simulations, and case studies.

ADR 415 Mediation Fundamentals

An introductory interactive and entertaining course designed for students and business professionals to develop the skills required to perform effectively as a mediator. Students will be introduced to different mediation styles such as facilitative, transformative, and evaluative methods. The course utilizes negotiating principles, role plays, videos, and case studies.

ADR 420 Communication & Conflict

This course will explore workplace, interpersonal and team conflict dynamics and methods for effective communication in such conflict situations. Participants will learn communication skills for resolving such conflicts for themselves, between others and within a team or group, and strategies for preventing or defusing rising conflict. Additionally, participants will learn how to integrate conflict resolution into various organizational cultures.

ADR 425 Issues in Conflict Management

This course will explore the nature of cultural differences in various conflict situations. Through the examination of various cultural perceptions, participants will learn how to apply concepts of cultural fluency in a variety of conflicting cultural scenarios, and employ personal, interpersonal and inter group skills to bridge cultural differences and achieve mutually beneficial outcomes. Students will participate in role plays, videos, and case studies to enhance their understanding of these issues.

ADR 430 Ethics and Neutrality

This course explores the behavior of mediators, arbitrators and other neutrals to avoid conflicts of interest and perceived partiality. Through case study and role playing the participant will learn appropriate behavior that improves the quality of the process, enhances competency and promotes acceptance of and confidence in ADR processes. Students will be introduced to topics such as how to remain impartial during a mediation, avoiding conflicts of interest, quality of the process, competency, confidentiality and promoting public confidence in the mediation process.

AGE – Applied Gerontology

AGE 601 Foundations of Gerontology I

Foundations of Gerontology I: Global and Societal Impacts of Aging Populations presents an overview of the global and societal aspects of aging through examination of critical, complex issues ranging from health care and social policy to new roles in the second half of life. Topics include long-term care and rationing of health care; autonomy and end-of-life decisions; the age-versus-need debate; Social Security and the future of retirement; and longevity and the biological basis of aging. Emphasis on trends and future developments is balanced by attention to case studies and practice and policy issues.

AGE 602 Foundations of Gerontology II

This course reviews a broad range of topics relating to the personal and interpersonal aspects of aging. Through the major theoretical and methodological traditions in gerontology, the seeming paradox of continuity versus change for older adults in areas relating to self and others: health and wellness promotion, cognitive changes in aging, resilience of older women and elders of color, intergenerational relationships, and social and public policies for older adults.

AGE 610 Wellness/Engagement in Aging

Prerequisites: AGE 602

Wellness and Engagement in Older Adults examines the coping, expressive, contributive, and influence needs of older adults. Topics include holistic geriatric care, reminiscence and autobiography, wisdom and creativity, lifelong learning, spirituality and contemplative practice, and social and civic engagement.

AGE 611 Psychology of Older Adults

Prerequisites: AGE 602

Psychology and Neuropsychology of Older Adults will examine age-related changes in neurological and psychological function and methods for assessing them. Specific areas of study will include the age-related changes in memory, intellectual development in older adults, motivation and emotion over the life course, personality, and aging and mental health.

AGE 612 Public Policy and Aging

Prerequisites: AGE 601

Public Policy, Politics, and Aging reviews major legislation and programs impacting older adults, including the analysis of current legal and regulatory issues and examination of policy-making and political processes affecting development and implementation of aging services. Learners will compare United States aging policies to those of other countries and develop resources for effectively advocating for policy changes.

AGE 613 Counseling Older Adults

Prerequisites: AGE 602

Counseling Older Adults examines current theories and applications of assessment and intervention techniques with older adults and their families. Topics include innovative treatment modalities, ethical and legal issues affecting clinical practice with this population, and personhood in aging and dementia.

AGE 614 Cross-cultural Practice

Prerequisites: AGE 601

Cross-cultural Practice with Aging Populations focuses on the processes of aging and the problems of older adults in the United States and throughout the world from both theoretical and applied perspectives. Particular emphasis is given to understanding the relationship between non-Western and Western experiences in terms of social, cultural, economic, political, and demographic concomitants.

AGE 615 Managing Aging Services

Prerequisites: AGE 601

Administration/Management in Programs for Older Adults applies theories of administration and system management to public and volunteer programs and services for older adults including residential insti-

tutions and community programs; emphasis is on bringing a person-centered, life course perspective to the development of competencies needed to perform core managerial functions in aging services organizations: program planning, organizational design, human resource management, supervision, finance, information system, and program evaluation

AGE 616 Physical Change and Aging

Physiology of Development and Aging examines the lifespan physiology of human development, growth, and aging; major emphasis on the physiology of the later years and implications for health maintenance and longevity.

AGE 620 Integrative Project A

Prerequisites: AGE 601 and AGE 602

First course of two-course sequence providing an interdisciplinary forum for exploring current issues in aging and culminating in a project that addresses a specific challenge or opportunity facing older adults and their communities. Topic areas will reflect the background and interests of students in the program.

AGE 630 Integrative Project B

Prerequisites: AGE 601, AGE 602 and AGE 620

The second course of a two-course sequence providing an interdisciplinary forum for exploring current issues in aging and culminating in a project that addresses a specific challenge or opportunity facing older adults and their communities. Topic areas will reflect the background and interests of students in the program.

AIL – Advanced Instructional Literacy

AIL 620 Learner Literacy

Prerequisites: ATP 600

Explore a range of evidence-based theories of learning and development to effectively incorporate the diverse learning needs of students into instructional practices that promote deep understanding.

AIL 622 Organizing Learning

Prerequisites: AIL 620 and ATP 600

Expand candidate understanding of the interrelationships and dependencies among learner needs, and research-based and evidence-based instructional literacy.

AIL 624 Expert Instruct Lit Approach

Prerequisites: ATP 600, AIL 620 and AIL 622

Analyze and evaluate a variety of research-based instructional approaches to determine their application across a variety of content and varying learner characteristics.

AIL 626 Instructional Literacy Port.

Prerequisites: ATP 600, AIL 620, AIL 622 and AIL 624

Supports and facilitates the enhanced application and meaningful use of instructional literacy knowledge, skills and dispositions (philosophies) gained across the full specialization, and to encourage and inspire continuous development and contributions to the profession of education and systems level change.

ANA – Analytics

ANA 605 Analytic Models & Data Systems

Prerequisites: BAN 600

Forms of data, databases, gap analysis, and model building, analysis, and interpretation will form the foundation for students to ethically apply data analytics to facilitate modern knowledge discovery techniques. Visualization and discovery strategies using analytic models will be used to explore the interactivity and integration of data systems.

ANA 610 Data Management for Analytics

Application of the data management process for analytics including data acquisition, cleaning, structure, security, and working with customer-centered databases. Evaluation of how these data relate and aggregate in analytic databases, data marts, data warehouses, and how they are used by analytical decision tools will be explored through case studies and projects.

ANA 615 Data Mining Techniques

Application of methods using techniques in data mining, text mining, and predictive modeling for exploration and knowledge discovery. Design of objectives, data selection and preparation, analytic method selection such as classification and decision trees, and predictive modeling will be used for a variety of case studies and practical industry applications. Applying data mining using real world data will leverage statistical assessment and interpretation from database information.

ANA 620 Continuous Data Methods, Appl

Prerequisites: ANA 615

Application of methods for analyzing continuous data for knowledge discovery. Analytic continuous data concepts and methods are developed with practical skills in exploratory data analysis. Descriptive statistics, goodness-of-fit tests, correlation measures, single and multiple linear regression, and analysis of variance and covariance are covered. Applying continuous data methods using case studies and real world data will leverage statistical assessment and interpretation.

ANA 625 Categorical Data Methods, Appl

Prerequisites: ANA 620

Application of methods for analyzing categorical data for knowledge discovery. Analytic categorical data analysis concepts and methods are developed with practical skills in exploratory data analysis. Descriptive statistics of discrete data, contingency tables, and methods of generalized linear models are covered. Applying categorical methods using case studies and real world data will leverage statistical assessment and interpretation.

ANA 630 Advanced Analytic Applications

Prerequisites: ANA 625

Advanced application of data analytics methods for knowledge discovery. This course will explore several of the advanced topics in data analytics such as methods for longitudinal data, factor and principal components analysis, multivariate logistic regression, and multivariate analysis of variance (ANOVA). Application using case studies and real world data will leverage statistical assessment and interpretation.

ANA 650 Database Design for Analytics

Analysis of database design and implementation for analytical applications in “big data.” Topics include requirements collection, conceptual and logical database design, normalization, an introduction to SQL, and the designing of a data mart.

ANA 655 Data Warehouse Design & Devel

Prerequisites: ANA 650

A course on how to design and develop a data warehouse application for “big data.” Topics include user requirement collection, dimensional modeling, ETL (Extraction, Transformation, Loading) procedures, information access and delivery, as well as the optimization and long-term maintenance of a data warehouse.

ANA 660 Advanced SQL Programming

Prerequisites: ANA 655

An in-depth treatment of data manipulation with Structured Query Language (SQL). This course covers views, triggers, sequences, reporting, sub-queries, query optimization and how to use SQL for data warehouse manipulation.

ANA 665 Data Mining & Machine Learning

Prerequisites: ANA 660

This advanced data mining course focuses on various machine learning and artificial intelligence techniques. Topics include data mining methods ranging from classification rules, association rules, and instance-based learning to semi-supervised learning and multi-instance learning.

ANA 699A Analytic Capstone Project I

Prerequisites: All core and specialization courses in an analytics program with a minimum GPA of 3.0 or approval of Lead Faculty.

Master’s level research in analytic project design, problem framing, hypothesis generation, and literature review. Team building, team collaboration, ethics, and conflict resolution are implemented. Strategic aspects such as mission and vision statements and managing an evolving analytic landscape are also incorporated into the analytic project scope.

ANA 699B Analytic Capstone Project II

Prerequisites: ANA 699A

Master’s level research in analytic project implementation, technical writing, and project presentation. Team building, collaboration, ethics, and conflict resolution are implemented. Strategic and technical aspects are implemented and presented to project advisors and stakeholders.

ANE – Anesthesia

ANE 600A Nurse Anesthesia Anatomy Lab

(1.5 quarter units)

Corequisites: ANE 600

An advanced human anatomy laboratory course that explores the anatomical structure of the human body. Body structure will be studied by organ systems and will involve a balance between gross anatomical study and histology. Form-function relationships will be emphasized. The laboratory study will involve working with human skeletal collections and dissection of cadaveric and preserved specimens.

ANE 610 Nurse Anesthesia Assessment

Prerequisites: Admission to the Nurse Anesthesia Program and/or permission from course lead and Nurse Anesthesia Program Lead.

Development of advanced clinical reasoning and assessment skills to determine client health status and needs. Application of physiological, pathophysiological, and psychosocial concepts with implications for Nurse Anesthesia.

ANE 615 Advanced Physiology/Patho I

Prerequisites: ANE 600 and ANE 610

Nurse Anesthesia Physiology/Pathophysiology I is a comprehensive examination of cellular, membrane, neurological, gastrointestinal and endocrine physiology with particular emphasis on how these topics relate to anesthesia management. Graduate nurse anesthesia students will also explore the common disorders and pathophysiology of each system.

ANE 616 Advanced Physiology/Patho II

Prerequisites: ANE 600, ANE 615, ANE 610, ANE 620, ANE 630 and ANE 635

This is the second of a 2-course advanced physiology series. Nurse Anesthesia Physiology II is a comprehensive examination of cardiovascular, renal and respiratory physiology with particular emphasis on how these topics relate to anesthesia management. Graduate nurse anesthesia students will also learn the common disorders of each system.

ANE 620 Advanced Pharmacology I

(2.25 quarter units)

Prerequisites: ANE 600, ANE 610

This is the first of two courses that provide the base of information necessary for advanced clinical prescribing of medications. It includes pharmacokinetics, pharmacodynamics and pharmacotherapeutics. Within each class of therapeutic drugs, the course examines drug actions, interactions, reactions, and contraindications. The course will also include principles of prescribing and patient compliance.

ANE 621 Advanced Pharmacology II

(2.25 quarter units)

Prerequisites: ANE 600, ANE 610, ANE 615, ANE 620, ANE 630, ANE 635 and ANE 640

Corequisites: ANE 616

The second course of a 2 course series. Clinical application of advanced pharmacology and pharmacotherapeutics for the advanced practice nurse managing complex and common disease conditions.

ANE 630 Anesthesia Pharmacology I

Prerequisites: ANE 600 and ANE 610

Corequisites: ANE 620 and ANE 615

The anesthesia pharmacology course examines the unique pharmacologic agents that are specific to anesthesia administration. Focus will be placed on inhalation agents, induction drugs, neuromuscular blocker, adrenergic agents, and local anesthetics.

ANE 631 Anesthesia Pharmacology II

Prerequisites: ANE 600, ANE 610, ANE 615, ANE 620, ANE 621, ANE 630 and ANE 635

Corequisites: ANE 616 and ANE 640

The second of a two course anesthesia pharmacology sequence. Continued exploration of pharmacokinetics and pharmacodynamics of anesthesia specific drugs. Factors modifying anesthetic management of patients are thoroughly explored.

ANE 635 Principles of Anesthesia I

(7 quarter units)

Prerequisites: ANE 600 and ANE 610

Corequisites: ANE 615, ANE 620 and ANE 630

An in depth study of the administration of anesthesia utilizing principles of anesthesia with a pathophysiological approach for the use of anesthesia equipment, the anesthesia gas machine, documentation, patient preoperative assessment, and basic patient care. Basic and advanced clinical monitoring, patient positioning, and thermoregulation are covered. Airway anatomy, basic and advanced airway management with practical laboratory applications.

ANE 640 Principles of Anesthesia II

(7 quarter units)

Prerequisites: ANE 600, ANE 610, ANE 615,

ANE 620, ANE 630 and ANE 635

Corequisites: ANE 616

Exploration of anesthetic delivery to patients with increasing co-morbidities, advanced pathophysiology, and complex anesthesia needs. Airway management and regional anesthesia techniques are thoroughly covered. Anesthetic techniques for the specialty practice of cardiac, thoracic, and vascular anesthesia is analyzed.

ANE 645 Principles of Anesthesia III

(7 quarter units)

Prerequisites: ANE 600, ANE 610, ANE 615,

ANE 620, ANE 630, ANE 635, ANE 616,

ANE 640, ANE 621 and ANE 631

Detailed study of anesthetic techniques for differing surgical procedures for patients with acute and chronic pathophysiology requiring complex anesthesia management. Specialty practice of neurosurgery, renal, urology, transplant, hepatic, endocrine, trauma, pediatric, and high risk OB covered.

ANE 650 Nurse Anesthesia EBP/Research

Prerequisites: ANE 600, ANE 610, ANE 615,

ANE 620, ANE 630, ANE 635, ANE 616,

ANE 640, ANE 621 and ANE 631

Corequisites: ANE 645

Exploration of study designs, measurement tools, and data collection strategies in research and evidence based practice data collection. Logic of statistical models used in the evaluation of research designs and measures. Identification of an evidence based scholarly question pertinent to nurse anesthesia practice.

ANE 655 Aspects of CRNA Practice

Legal aspects of corporate liability, medical malpractice, informed consent, patient rights, privacy, fraud and abuse, plus governmental regulation of health professionals and health facilities. The legislative process, legislative oversight and regulatory agencies are discussed in depth. Code of ethics for CRNAs.

ANE 660 Nurse Anesthesia Clinical I

Prerequisites: ANE 600, ANE 610, ANE 615,

ANE 620, ANE 630, ANE 616, ANE 640, ANE 621,

ANE 631, ANE 645, ANE 650 and ANE 655

Provides supervised clinical practicum experience for the student nurse anesthetist to begin administering anesthesia to patients with minimal co-morbidities or complex anesthesia requirements. The student will engage in the entire perioperative course under the direct supervision of a CRNA or Anesthesiologist.

ANE 661 Nurse Anesthesia Seminar I

(3 quarter units)

Prerequisites: ANE 600, ANE 610, ANE 615, ANE 620, ANE 630, ANE 635, ANE 616, ANE 640, ANE 621, ANE 631, ANE 645, ANE 650 and ANE 655

Explore and review of the principles and applications of nurse anesthesia. Scholarly inquiry into case studies, patient care management, thesis development.

ANE 665 Nurse Anesthesia Clinical II

Prerequisites: ANE 660 and ANE 661

Integration of knowledge, skills, and program objectives to a broader array of patients with increasingly complex comorbidities.

ANE 666 Nurse Anesthesia Seminar II

(3 quarter units)

Prerequisites: ANE 660 and ANE 661

Corequisites: ANE 665

Explore and review of the principles and applications of nurse anesthesia. Scholarly inquiry into case studies, patient care management, thesis development, and intensive review.

ANE 670 Nurse Anesthesia Clinical III

Prerequisites: ANE 665 and ANE 666

Corequisites: ANE 671

Supervised clinical opportunity for intermediate student nurse anesthetists to apply knowledge, advanced skills, and theory to a comprehensive range of patients. Anesthesia delivery to patients with increasing co-morbidities and anesthesia requirements.

ANE 671 Nurse Anesthesia Seminar III

(3 quarter units)

Prerequisites: ANE 665 and ANE 666

Corequisites: ANE 670

Explore and review of more complex principles and applications of nurse anesthesia. Scholarly inquiry into case studies, patient care management, thesis development, and intensive review.

ANE 675 Nurse Anesthesia Clinical IV

Prerequisites: ANE 670 and ANE 671

Corequisites: ANE 676

Supervised clinical opportunity for senior student nurse anesthetists to utilize increased independent decision making and critical thinking in advanced anesthesia delivery. Management of all complexity levels and case assignments throughout the entire perioperative phase. Engagement in pain management.

ANE 676 Nurse Anesthesia Seminar IV

(3 quarter units)

Prerequisites: ANE 670 and ANE 671

Corequisites: ANE 675

Explore and review of complex principles and applications of nurse anesthesia. Scholarly inquiry into case studies, patient care management, thesis development, and intensive review

ANE 680 Nurse Anesthesia Clinical V

Prerequisites: ANE 675 and ANE 676

Corequisites: ANE 681

Supervised clinical practicum with a high level of autonomy and critical thinking. Focusing on the entire spectrum of clinical nurse anesthesia practice, including pain management, outpatient surgery, emergency/trauma, OB, neonatal, and office based practice settings.

ANE 681 Nurse Anesthesia Seminar V

(3 quarter units)

Prerequisites: ANE 675 and ANE 676

Corequisites: ANE 680

Presentation and discussion of case studies related to pathophysiological states and safe anesthesia delivery. Evaluation of current best practice issues in the delivery of anesthesia. Presentation of scholarly inquiry culminating project.

ANH – Health Analytics

ANH 601 Health Management Analytics

Prerequisites: Completed program core classes in ANA, HCA 626, COH 606 and Recognized experience in the healthcare field or HCA 600

Application of health data analytics to the area of clinical workflow including financial forecasting and service line efficiencies. Data integration and analytics with representation through dashboards will support decisions in a healthcare environment.

ANH 604 Clinical Research Analytics

Application of health data analytics to improve health results in clinical care. The focus will be on data integration and analysis from the perspective of patient care, decision support, and quality control for evidence-based solutions.

ANH 607 Health Outcomes Research

Prerequisites: ANH 604

Application of health data analytics to guide decisions about the health of populations and individuals. Population and individual level data integration and analysis will be conducted to provide evidenced-based solutions in clinical trials and assessment of recovery time, patient stays, risk of complications, morbidity, and mortality.

ANH 620 Health Analytics Internship

Prerequisites: ANH 607

Experience in healthcare setting analyzing, implementing and/or evaluating health data for an actionable solution. Minimum of 120 hours of structured work experience with health data in a professional organization under the direct supervision of one or more experienced health data analytic specialists. Course is eligible for In Progress (IP) grade. This is a two month course.

ANH 625 Health Analytics Capstone

Prerequisites: ANH 620

Two-month capstone project focused on a relevant analytic problem in healthcare theory or practice. Planning and completion of either a data-based research project or a scholarly and creative activity related to healthcare. Student project may require Institutional Review Board (IRB) approval. Course is eligible for In Progress (IP) grade.

ARL – Advanced Reading Literacy

ARL 640C Action Res for the Read Spec

Prerequisites: ARL 645, ARL 646, ARL 647A and ARL 647B

Fifth course of the Reading Specialization course sequence. Serves as an introductory educational research course designed to provide knowledge, skills,

and dispositions required for candidates to understand, interpret, and evaluate research completed in MAT 647B. Candidates prepare an Action Research Report and utilize library and computer skills to locate research.

ARL 645 Dev. Fluency in Reading

Research-based analysis of English phonology, morphology and orthography, with attention to teaching students to become proficient readers through recognizing sound-print relationships. Incorporates current approaches to phonemic awareness, explicit phonics instruction, recognition of high-frequency words and spelling patterns for both English speakers and English language learners.

ARL 646 Comprehension Strategies

Provides an investigation of meaning-making at both the local (discourse) and global (general knowledge) levels. Covers research-based models of discourse processing and representation construction. Introduces strategies to promote guided reading, independent reading, and study skills in all content areas, using the concepts of connecting background experience and applying self-monitoring strategies.

ARL 647A Lang Arts Assess and Instruc I

Prerequisites: ARL 645 and ARL 646

Develops the ability to assess the strengths and needs of students in reading, writing, and oracy through multiple measures. Includes classroom-based formal and informal, group and individual assessment. Also emphasizes assessment-based instruction, particularly early intervention strategies using flexible grouping, small groups, and one-on-one tutoring.

ARL 647B Fld St: Lag Art Assess & In II

Prerequisites: ARL 645, ARL 646 and ARL 647A

This field-experience course is the fourth course of the Reading specialization course sequence. It serves to offer the candidate the opportunity to implement research-based theory, assessment, and instructional strategies with a diverse student population. Candidates must complete a field experience requiring assessment and instruction of students, including non-readers and English Language Learners. Candidates work with English Language Learners and struggling readers at early and intermediate levels in one-on-one, small group and whole class settings. The field experience component of this course is a supervised application of theoretical concepts in a practical setting.

ART – Art

ART 100 Introduction to Art History

Prerequisites: ENG 100 and ENG 101

Survey of the main periods in art history, with emphasis on the complex relationship between art and society. Explores the development of Western art from Prehistoric to Contemporary.

ART 200 Visual Arts

Fundamentals of visual arts presented through drawing and other media. Students develop their own creative vision while learning aesthetic values and concepts, as well as how to handle materials. Students supply basic art materials.

ART 250 Self-Reflection via Visual Art

Recommended Preparation: ART 100 and ART 200
Inquiry and self-reflection presented through the visual arts. Students explore their past, present and future aspirations through learning and applying the fundamental strategies and techniques of painting and other visual media. Students investigate self-knowledge through journal writing, a sketch-book practice and visual art assignments. Students supply basic painting art materials.

ART 315 Film as Art

Prerequisites: ENG 100 and ENG 101

Survey of the art of cinema from the silent period to the present; examines film techniques and theories; explores film styles and genres, focusing on elements such as lighting, editing, and cinematography; establishes a basis by which students can make aesthetic judgments.

ART 323 Modern Art

Prerequisites: ENG 100 and ENG 101

An introduction to the major movements, styles and artists from Impressionism to the present. Examines how themes of contemporary art reflect the social, historical and cultural events of the period.

ART 329 World Art

Prerequisites: ENG 100 and ENG 101

This course approaches the fundamentals of visual and applied arts from a global perspective and provides an overview of non-Western art from ancient times to the present. Specific areas of focus are the art of South Asia and the Islamic World, East Asia, Pre-Columbian Central and South America, Native North America, Africa and Oceania. Students learn how to look at, appreciate, and critically think and write about art from the perspectives of a diversity of cultures and historical eras.

ART 400 Expressive and Integrative Art

Prepares students to integrate the arts into daily instruction in grade K-8. Emphasis is on recognition of cultural diversity through activities in the arts. Provides basic knowledge of content areas for planning appropriate cross-curricular activities.

ART 490 Guided Study

(variable units)

Individual study under direction of instructor. Requires prior approval of appropriate academic department.

ASL – American Sign Language

ASL 120 American Sign Language I

An introduction to American Sign Language (ASL). Students will learn basic ASL skills used in a variety of situations. The class is taught using American Sign Language. Voice and written communication are kept to a minimum. Deaf cultural studies are the thematic components throughout the course.

ASL 220 American Sign Language II

Prerequisites: ASL 120

A continuation of American Sign Language I. Students will learn intermediate ASL skills used in a variety of situations. The class is taught using American Sign Language. Voice and written communication are kept to a minimum. Deaf cultural studies are the thematic components throughout the course.

ASL 320 American Sign Language III

Prerequisites: ASL 220

A continuation of American Sign Language II. Students will learn advanced ASL skills used in a variety of situations. The class is taught using American Sign Language. Voice and written communication are kept to a minimum. Deaf cultural studies are the thematic component throughout the course.

ATP – Advanced Teaching Practices

ATP 600 Inspired Educator

Explore research literature on inspired and effective teaching to inform development of personalized teaching growth plan. Select two inquiry questions to explore during the specializations of choice. Create digital portfolio for program. Required first course in program.

ATP 699 Capstone/Portfolio

Prerequisites: Students must complete all major core and specialization courses prior to enrolling in the capstone course.

Provide evidence of increasing depth of knowledge in instruction, assessment, and digital learning skills for research, curriculum design and professional growth by selecting and defending artifacts produced throughout the program. Grading is H, S, U only. Course is eligible for In Progress (IP) grade.

BAN – Business Analytics

BAN 600 Fundamentals of Analytics

This course introduces business analytics models and data in order to be used in marketing, SCM, performance management and financial management. Information Systems in organizations supports professionals scientifically to find valuable patterns from mass amount of transactions from the internal and external data. Using digitized data to derive on methodical decision-making supports the prediction of future growth and competitive advantage. Emphasis will be centered on specific models and methodologies in data collection, normalization and analysis.

BAN 640 Performance MGT & SCM Process

Prerequisites: ANA 625 and BAN 600

Performance Management (PM) and Supply Chain Management (SCM) require metrics and indicators to measure value, weaknesses and opportunities through business intelligence. Using data to set objectives and measure the internal and external performances through analytics has been a proven method to business success. Business analytics provide a proactive approach to identify and solve problems before it takes place. Data improvement, data quality assessment, data cleansing and normalization, methods and process improvements will be discussed.

BAN 645 Prediction in Marketing

Prerequisites: BAN 640

New technologies have opened new arenas in prediction and marketing. Subjects of predictive analytics topics and its role in enterprise marketing will be discussed. The course applies predictive analytic tools to derive the organization's strategic direction. Market and product analysis will be used to illustrate the development process. Results will be drawn from actual predictive analytics applications and interpreted in the context of business impact.

BAN 650 Probabilistic Finance Models

Prerequisites: BAN 645

Financial world faces uncertainty that affects the outcome of sound investments. Leaders are utilizing probabilistic analytic models that alleviate ambiguity on making decision for profitable returns. Theories and practical tools focusing on model building; constructing, processing, and presenting probabilistic information will be discussed. Utilization of analytical software to solve problems on axioms of probability, conditioning and probability trees, random variables and distributions expectation.

BAN 655 Analytical Security & Ethics

Prerequisites: BAN 650

Every step of online transactions should be considered with security in mind. Accessing the organizations' data requires operators to apply the proper security and privacy while the data is stored, transmitted, accessed and when it is worked on. Work with confidential data involves strong ethical practices to be aware of security breaches and how to mitigate threats.

BAN 660A Business Analytics Capstone I

Prerequisites: BAN 655

Students are expected to identify a problem and develop a solution using analytical methods. This project is two parts: document and presentation. Students are required to utilize data and apply the appropriate analytical model. Grading will be H, S, and U only.

BAN 660B Business Analytics Capstone II

Prerequisites: BAN 660A

Students are expected to identify a problem and develop a solution using analytical methods. This project is two parts: document and presentation. Students are required to utilize data and apply the appropriate analytical model. Grading will be H, S, and U only.

BER – Bereavement

BER 600 Intro to Bereavement Studies

Provides an introduction to basic bereavement concepts and theories. This introductory course is the prerequisite for the certificate program. Topics examined include the history of bereavement, normal bereavement responses, disenfranchised losses, and major bereavement theories. Personal experiences with loss will be explored.

BER 604 Dying Patient and the Family

Prerequisites: BER 600

Examines the unique nature of anticipated death and dynamics between the dying patient and the family. The dying process is explored from biological, psychological, social and spiritual perspectives. Health care systems involved with death are also explored. Learners will acquire knowledge to support the dying patient and the family.

BET – Biomedical Engineering Technology

BET 401 Medical Devices I

Prerequisites: EGR 240 or CEE 420 and EGR 324

Introduction to low risk medical devices and instrumentation. Devices such as electronic thermome-

ters, surgical microscopes, ultrasonic nebulizers and sphygmomanometers will be studied. Topics include biosignals acquisition, processing, and filtering; design of devices; embedded design and implementation; and testing and calibration of devices.

BET 401L Medical Devices I Lab

(1.5 quarter units)

Prerequisites: BET 401

Laboratory hands on practical course will support classroom theoretical pedagogy. The accelerated laboratory sessions will introduce fundamental embedded biomedical circuit designs of devices covered in BET 401. Analog, digital and mixed signals, real-time and emulated biosignals for broad biomedical application as practice in clinical environment will be explored. The lab activities include setup, calibration, testing, troubleshooting, data collection and proper analytical report.

BET 402 Medical Devices II

Prerequisites: BET 401 and BET 401L

Advanced course that introduces medium and high risk medical devices and instrumentation. During this course, devices such as ECG, EEG, Endoscopes and ventilators will be examined. Topics include biosignals acquisition, processing, and filtering; design of devices; embedded design and implementation, and testing and calibration of devices.

BET 403 Medical Imaging Technology

Prerequisites: BET 401 and BET 402

Introduction to the basic physics of medical imaging modalities. It will provide a variety of information about the human body, including anatomy, function, blood flow and metabolism. The fundamental modality will include X-ray radiography, Computer Tomography (CT), Ultrasound (US), Magnetic Resonance Imaging (MRI) and Nuclear Spectroscopy along with introduction to the state-of-art in modern medical imaging.

BET 404 Medical Device Compliance

Overview of medical device safety and applicable regulations including broad themes in medical device surveillance. Discussion of various regulatory agencies and how they oversee the various safety and regulatory aspects related to medical devices.

BGS – General Studies

BGS 301 Intro. to General Studies

Focus on the integration of knowledge across various disciplines, essential to a critical and interdisciplinary approach. Emphasis on the interconnectedness of different fields of knowledge central to broad, critical and holistic view of education.

BGS 385 Methods of Research

Prerequisites: BGS 301 and four additional courses from the major.

Study of qualitative and quantitative research designs and methods including observation, interviews, surveys, primary and secondary data analysis and experimentation. Development of the critical ability to understand the ethical solutions to problems faced by contemporary researchers.

BGS 499 Capstone Project

Prerequisites: Completion of other major requirements. Must be taken within last three classes prior to graduation.

Capstone course that focuses on portfolio and completion of capstone project. It is designed to provide students with an opportunity to integrate lessons learned from general studies portfolio-building and the research class. Grading is H, S, or U only. Course is eligible for In Progress (IP) grade.

BIM – Business Information Management

BIM 400 Info Mgmt in Organizations

Overview of Information Systems (IS) infrastructure and its utilization in today's global business environment. The use of technological tools and the role of information systems will be discussed from the organizational strategic, tactical and operational view. Students learn how to choose and utilize information and knowledge to gain competitive advantage in the industry.

BIM 600 Human-Computer Interaction

The theory and practices of Human-Computer Interfaces (HCI) from information systems angle are discussed. Various industry and web HCI designs will be evaluated from the user-centered perspective utilizing information systems. Rapid prototyping and comparative evaluation of design are essential parts of this course. In addition, users' expectation of interface design, interaction and usability components and user-centered HCI evaluation and development will be covered.

BIM 606 Info Mgmt for Leaders

This course focuses on the strategic role of information technology (IT) in today's dynamic organizations. Emphasis is placed on the application of IT strategies to align to the organization's strategic planning, customer analysis, rapid decision-making, and problem solving. Topics will include: (a) harvesting information as organization asset; (b) prioritizing the gaps between where the organization is today and where it needs to be in the future; (c) integrating information into the vision, goals, and mission of organizations; (d) using advanced IT to implement change; and (e) analyzing information to achieve competitive advantage. Technical skills needed in storing, updating, and retrieving information, building, and using Web-based applications and business forecasting will also be covered.

BIM 610 Strategic Decision Systems

An overview of the methodologies and expert system and mind mapping software used by Strategic and Middle Management. The topics include; the mastering of the process of Mind Mapping, which allows executive and strategic managers to project and modify their thoughts to reach effective decision making. Collaborate and support their decision with other stakeholders to maximize the organization's strategic goals and objectives.

BIO – Biology

BIO 100 Survey of Bioscience

Introduction to the scientific method and the basic principles of the life sciences. Examination of cellular, organismal, population, and community biology based on the unifying concept of evolution. This course may not be taken for credit if BIO161 and/or BIO162, or their equivalents, have been completed.

BIO 100A Survey of Bioscience Lab

(1.5 quarter units)

Prerequisites: BIO 100 for non-science majors (GE) or BIO 163 for science majors

Study of the unifying principles of life with emphasis placed on the following topics: molecular biology of the cell and cellular processes, including energy metabolism, membrane transport and cell division; classical genetics; population genetics; and the mechanism of evolution and the evolutionary basis of species classification. This laboratory course will complement the student's knowledge of biology with demonstrations and experiments. Contact hours for this laboratory course (45) are based on a 3:1 ratio, i.e. 3 lab hours = 1 lecture hour equivalent.

BIO 110 Introduction to Human Biology

Fundamental concepts of cellular and human biology, including the chemistry of life, cellular organization, organ systems, human anatomy, and the use of the metric system to calculate biometric measurements.

BIO 161 General Biology 1

Fundamental concepts of biochemistry, cell biology, genetics. Concepts include important organic molecules, cell structure and function, metabolism and enzyme activity, cellular respiration and photosynthesis, DNA structure, meiosis and mitosis, Mendelian genetics. Intended for science majors.

BIO 162 General Biology 2

Prerequisites: BIO 161

Evolution, taxonomy, biodiversity, ecology. Concepts include evolutionary processes, taxonomy and phylogeny of the kingdoms of life, and ecological processes at the levels of the population, community and ecosystem. Intended for science majors.

BIO 163 General Biology 3

Prerequisites: BIO 161 and BIO 162

Morphology and physiology of multicellular organisms, particularly plants and animals. Concepts include plant structure and physiology, and comparative animal morphology and physiology. Intended for science majors.

BIO 169A General Biology Lab

(1.5 quarter units)

Prerequisites: BIO 161 and BIO 162

Laboratory course in general biology intended for science majors. Topics include the application of the scientific method, examination of cellular processes (e.g. respiration, photosynthesis, mitosis, meiosis), Mendelian genetics, operation of basic laboratory equipment, taxonomic classification, and investigations of structure and function of prokaryotes, protists, fungi, plants, and animals.

BIO 201 Human Anatomy & Physiol I

Recommended: Prior completion of: BIO 100, BIO 100A, CHE 101 and CHE 101A or equivalent courses.

Areas of study include cells, tissues, organ systems (integumentary, skeletal, muscular and nervous), and their functional relation to each other. Topics also include the aging process and diseases in these systems, as well as the effects of genetics, diet, lifestyle, and the environment.

BIO 201A Human Anatomy & Physiol Lab I

(1.5 quarter units)

Prerequisites: BIO 201

This laboratory course examines organ systems (skeletal, muscular and nervous). Students conduct cat/fetal pig dissections to identify and learn how skeletal muscles are organized according to body region. Sheep brain is used as a model to study human brain.

BIO 202 Human Anatomy & Physiol II

Recommended: Prior completion of: BIO 201 and BIO 201A, BIO 100 and BIO 100A, CHE 101 and CHE 101A or equivalent courses

Organ systems (endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary and reproductive), and their functional relation to each other. Topics also include the aging process and diseases in these systems, as well as the effects of genetics, diet, lifestyle, and the environment.

BIO 202A Human Anatomy & Physiol Lab II

(1.5 quarter units)

Prerequisites: BIO 202

This laboratory course examines homeostasis in the heart, lungs, liver and kidneys, along with digestive, and urinary systems. Chromosomes, mitosis, meiosis, development and different types of inheritance through the testing of vision, hearing and taste and smell. Cat/fetal pig is used to study the internal organs.

BIO 203 Introductory Microbiology

Recommended: Prior completion of: BIO 201 and BIO 201A, BIO 202 and BIO 202A, BIO 100 and BIO 100A, CHE 101 and CHE 101A or equivalent courses

Biology of pathogenic and nonpathogenic microbes, including bacteria, fungi, protozoans, and viruses. The epidemiology of disease-causing agents is studied, along with the fundamentals of the human immune response.

BIO 203A Introductory Microbiology Lab

(1.5 quarter units)

Prerequisites: BIO 203

This laboratory course introduced students to procedures for handling microbes, methods of identification of microorganisms (microscopic and by diagnostic media), preparation of stained slides and wet mounts, aseptic techniques, isolation of a single colony, preparation of a pure culture, inoculation and interpretation of select diagnostic tests. This two-month course is a combination of lecture and laboratory activities.

BIO 253 Environmental Microbiology

Prerequisites: BIO 100, BIO 100A, CHE 101 and CHE 101A or CHE 120A

The structure, function, and diversity of microbes are explored, including viruses, bacteria, protozoans, algae, and fungi. The growth of microbial cultures, and their control, are studied. Principles of microscopy, identification of microbes, taxonomy, toxicology, and field sampling are covered. Concepts in applied and industrial microbiology are included.

BIO 253A Environmental Microbiology Lab

(1.5 quarter units)

Prerequisites: BIO 100, BIO 100A, CHE 101 and CHE 101A or CHE 120A

Laboratory techniques with regard to sampling, handling, and identifying microbes. Identification of microbes by various methods, including staining. Preparation of cultures, proper transfer and incubation protocols, and aseptic techniques. Selected characteristics of microbes, such as fermentation and culture growth, are studied. Environmental sampling for water, air, and solid matter samples.

BIO 302 Biodiversity

Prerequisites: BIO 100 and BIO 100A or equivalent

Survey of the scope and importance of biodiversity. Examines concepts of biodiversity, with emphasis on the importance of biodiversity to ecosystem functioning and human society. Threats to biodiversity are considered, as well as conservation and preservation solutions.

BIO 305 Genetics

Prerequisites: BIO 161, BIO 162, BIO 163, BIO 169A, CHE 141, CHE 142, CHE 143 and CHE 149A

Principles of genetics and heredity. Topics include DNA replication and repair, gene expression and regulation, inheritance of traits, genetic engineering, relationship of genetics to human health, and application of genetics to understanding the evolution of species.

BIO 310 Evolution

Prerequisites: BIO 161, BIO 162, BIO 163 and BIO 169A

Evolutionary biology. Topics include the history of life, fossil record, causes of microevolution (including natural selection and mutation), macroevolutionary processes (including speciation and extinction), evolutionary genetics and developmental biology ("evo-devo"), phylogeny construction and taxonomy.

BIO 330 Ecology

Prerequisites: BIO 161, BIO 162, BIO 163, BIO 169A, CHE 141, CHE 142, CHE 143 and CHE 149A

A study of the relationship of plants and animals to their environment and to one another. Emphasizes populations, the population-community interface and community structure and interactions within the ecosystem.

BIO 380 Human Biology for Teachers

Prerequisites: BIO 163

Recommended Preparation: BIO 161, BIO 162 and BIO 100A

Human anatomy and physiology for students pursuing careers in education. Concepts include structure and functioning of major human organ systems, such as cardiovascular, immune, respiratory, nervous, sensory, endocrine, digestive, urinary, and reproductive systems.

BIO 385 Biomechanics of Sport

Prerequisites: BIO 100 and BIO 100A

This course looks at the role of external and biomechanical factors in athletic performance. Course content includes the biomechanics of athletic performance, linear and angular kinetics, the role of torque and force in athletic performance, and the risks associated with biomechanical stress in athletics.

BIO 386 Exercise Physiology

Prerequisites: BIO 100 and BIO 100A

Provides a theoretical basis for understanding the body's acute and chronic adaptations to the stresses of exercise. Emphasis is given to systems physiology, the neuromuscular and cardiovascular bases of training responses, vascular physiology, energy production, cardiopulmonary function, and the significance of these effects for health and performance. Emphasis will be placed upon the practical application of exercise physiology principles to coaching, teaching, and other physical training practices.

BIO 406 Cellular Biology

Prerequisites: BIO 161, BIO 162, BIO 163, BIO 169A, CHE 141, CHE 142, CHE 143 and CHE 149A

Corequisites: BIO 406A

Introduction to cellular biology, including fundamentals of cell structure and function, inter- and intracellular communication through signaling and signal transduction, cell growth and energy generation through aerobic respiration and photosynthesis. Examination of cellular events and analysis of specific case studies in cell biology.

BIO 406A Cellular Biology Lab

(1.5 quarter units)

Prerequisites: BIO 161, BIO 162, BIO 163, BIO 169A, CHE 141, CHE 142, CHE 143, CHE 149A

Corequisites: BIO 406

This course emphasizes techniques essential to cellular biology, including cell culturing, Western blotting, ELISA, and DNA, RNA, and protein extractions.

BIO 407 Molecular Biology

Prerequisites: BIO 161, BIO 162, BIO 163, BIO 169A, CHE 141, CHE 142, CHE 143 and CHE 149A

Corequisite: BIO 407A

An introduction to molecular biology focusing on gene structure, organization, regulation and expression. Topics in genetic engineering and genome evolution are covered, as well as DNA replication, recombination, transcription and post-transcriptional mechanisms in both eukaryotic and prokaryotic cells.

BIO 407A Molecular Biology Lab

Prerequisites: BIO 161, BIO 162, BIO 163, BIO 169A, CHE 141, CHE 142, CHE 143 and CHE 149A

Corequisite: BIO 407

This course emphasizes techniques essential to molecular biology including DNA extraction, purification and quantification; polymerase chain reactions; and restriction enzyme digestion.

BIO 411 Biodiversity

Recommended: Prior completion of: BIO 161, BIO 162, BIO 163 and BIO 100A or BIO 100 and BIO 100A or equivalent

Survey of the form and function of diverse life forms on earth. Describes representative members of the various kingdoms within the framework of evolutionary ecology and conservation. Includes current

issues in habitat loss, extinctions, preservation of tropical rain forests and coral reefs, resource values for humans and restoration ecology.

BIO 414 Invertebrate Zoology

Prerequisites: BIO 161, BIO 162, BIO 163, BIO 169A, CHE 141, CHE 142, CHE 143 and CHE 149A

Corequisite: BIO 414A

Comparative study of invertebrates: taxonomy, structure, physiology, reproduction, evolution, and behavior.

BIO 414A Invertebrate Zoology Lab

(1.5 quarter units)

Corequisites: BIO 414

Laboratory complement of invertebrate zoology, involving specimen investigations, demonstrations, and experiments. Contact hours (45.0) are based on a 3:1 ratio; i.e., 3 lab hours = 1 lecture hour equivalent.

BIO 416 Vertebrate Zoology

Prerequisites: BIO 161, BIO 162, BIO 163, BIO 169A, CHE 141, CHE 142, CHE 143 and CHE 149A

Corequisite: BIO 416A

Study of the life of Vertebrates integrating the anatomy, physiology, ecology, evolution and behavioral adaptations that enable them to survive effectively in their natural environment.

BIO 416A Vertebrate Zoology Laboratory

(1.5 quarter units)

Corequisites: BIO 416

Laboratory complement of vertebrate zoology, involving specimen investigations, anatomical examination, and live observations when feasible.

BIO 420 Animal Behavior

Prerequisites: BIO 161, BIO 162, BIO 163 and BIO 100A

Study of animal behavior, integrating genetic, physiological, ecological, and evolutionary perspectives.

BIO 430 Immunology

Prerequisites: BIO 406 and BIO 407

Examination of the structure and function of the immune components, including the complement system, innate and adaptive responses, and immune cell signaling. Analysis of fundamental concepts such as antibodies, antigens, antigen-antibody complexes, allergic reactions, lymphatic and hematopoietic systems, cancer, and autoimmune and immunodeficiency diseases.

BIO 440 Botany

Prerequisites: BIO 161, BIO 162, BIO 163, BIO 169A, CHE 141, CHE 142, CHE 143 and CHE 149A

Plant biology, including structure, function, evolution, taxonomy, and diversity of major groups of plants.

BIO 450 Natural History of California

Prerequisites: BIO 161, BIO 162, BIO 163 and BIO 100A or BIO 100 and BIO 100A

Study of the flora, fauna, and biomes of California. This course includes field trips, with sites selected for each academic center within the University.

BIO 460 Marine Biology

Prerequisites: BIO 161, BIO 162 and BIO 163

Global approach to the science of marine biology. Study of life in the marine environment and the structure and function of various marine ecosystems

such as coral reefs, mangroves, and estuaries. Analysis and evaluation of the human impact on ocean ecology.

BIO 461 Marine Biology Field Studies

Recommended Preparation: BIO 162

Survey of marine habitats for fish species identification and quantification; survey of marine mammal (dolphins and manatees) ecology and behavior; identification of sea turtle species nesting and ecology; assessment of sea grass health and species identification; coral identification and health; ecosystem health and methods of monitoring. Species list composition, biopsying techniques, and basics of biological field work. Taught in a field laboratory in Turneffe Atoll, Belize; requires international travel. Contact instructor for approval and additional requirements.

BIO 470 Bioinformatics

Prerequisites: BIO 161, BIO 162 and BIO 163

Corequisites: BIO 470A

Analysis of biotechnology-related information using software tools to store, manipulate, and extract information from protein and nucleic acid sequence data. Topics include genome annotation, gene and protein prediction, sequence alignment, and analysis of aligned sequences in the description of patterns of protein or species relationships and gene expression.

BIO 470A Bioinformatics Lab

(1.5 quarter units)

Corequisites: BIO 470

Techniques essential to bioinformatics. Topics include practical knowledge of databases, basic commands in Unix and R, sequence alignment and annotation, and gene-expression quantification.

BIO 480 Studies in Field Biology

Field-based study in biology under the individual direction of the faculty. Topics and sites are specifically designed in collaboration with teachers and students. Units can be taken separately or cumulatively; this course can be repeated depending upon the needs of individual students.

BIO 600 Contemporary Issues in Biology

Examination of current topics in biology, including discussion of analysis and interpretation of results and data.

BIO 610 Seminar in Molecular Biology

Prerequisites: BIO 600

Discussion of the structure, function, and synthesis of DNA, RNA, and proteins, and of the roles of macromolecules in the regulation of information in the cell. Students examine research topics at the level of the molecule.

BIO 620 Seminar in Cell Biology

Prerequisites: BIO 610

Discussion of cellular and subcellular organization, structure, and function. Students examine research topics at the level of the cell.

BIO 630 Seminar in Organismal Biology

Prerequisites: BIO 620

Discussion of concepts in organismal biology, including development, gross anatomy, morphology, physiology, behavior, heredity. Students examine research topics at the level of the organismal.

BIO 640 Seminar in Ecology

Prerequisites: BIO 630

Discussion of concepts in ecology, at the levels of the individual, population, community, ecosystem, landscape, and geographical region. Students examine research topics in ecology.

BIO 650 Seminar in Evolution

Prerequisites: BIO 640

Discussion of concepts in evolution, including the origin of features and species in evolutionary time, and the genetic and developmental bases of evolutionary change. Students examine research topics in evolution.

BIO 660 Research Design

Prerequisites: BIO 650

Students develop a proposal for thesis research in biology, incorporating fundamentals of research and experimental design and appropriate statistics. Students must present a thesis proposal to their thesis advisor before the end of the course.

BIO 680 Thesis Formulation

Prerequisites: BIO 660

Students modify their thesis research proposed in BIO 660. Students focus on logistical design, including location of research activities, necessary equipment and hardware, and estimated time and labor. Thesis proposal must be approved for thesis work by the end of the course.

BIO 691 Thesis Research 1

Prerequisites: BIO 680

Initiate thesis research under guidance of thesis advisor. Student conducts research, with regular conferences with course instructor. S/U grades only. Course is eligible for In Progress (IP) grade.

BIO 692 Thesis Research 2

Prerequisites: BIO 691

Continuation of thesis research under guidance of thesis advisor. Student conducts research, with regular conferences with course instructor. S/U grades only. Course is eligible for In Progress (IP) grade.

BIO 693 Thesis Research 3

Prerequisites: BIO 692

Two-month course. Conclusion of thesis research under guidance of thesis advisor. Students submit completed thesis. S/U or "In progress" grade.

BIS 401 Interdisciplinary Practice: In

Prerequisites: BIS 301 and four additional courses from the major

This course is a sequel to the introductory course interdisciplinary studies, BIS 301. It is the second of three course courses in the Bachelor of Arts program. It is a "how-to course" on interdisciplinary inquiry designed to provide students with an opportunity to use digital tools to explore and examine the assumptions and the relevance of connectivity between and among various disciplines on the College of Letters and Sciences. It is anticipated that the students will learn how to examine issues critically and approach problems holistically. They will also learn how to integrate the knowledge acquired in their program of study to date and create a space and a voice to demonstrate the practice of interdisciplinary.

BIS 405 Genetic Anthropology

Prerequisites: BIS 301

Recommended: Prior completion of: MTH 215

This elective is open to non-science majors. This trans-disciplinary course is a comprehensive team science approach to learning the basic concepts of genetic anthropology, human evolution, migration and cultural diversity, genetics and human variation, and epidemiology of disease. It will make use of computer technology. Students will participate in virtual learning environments and be introduced to interdisciplinary case studies. Teams of students will engage in investigative data search and analysis. Patterns of human migration will be examined within the context of cultural diversity, language, and the impact of environment on disease.

BIS 499 Interdisciplinary Studies Proj

This is an eight-week, 4.5 quarter unit capstone course that focuses on portfolio and research methodologies. It is designed to provide students with an opportunity to integrate lessons learned from interdisciplinary portfolio-building and understand the craft of interdisciplinary research. The main course content areas include: 1) Portfolio packaging and interdisciplinary analysis on a topic as a model for students, 2) Internet research, 3) Developing an interdisciplinary research project, 4) Paper editing, 5) Constructing a sound argument, and 6) Clarifying elements across disciplinary boundaries. Grading is H, S, or U only. Course is eligible for In Progress (IP) grade.

BKM – Business Knowledge Management

BKM 400 Business Knowledge Mgmt Strat

In the quest for sustainable global competitive advantage companies have finally come to realize that technology alone is not what sustains knowledge. Knowledge lies in your company's people, processes, and experience. The student will learn the process of conducting knowledge audits, knowledge analysis, and how to fill any knowledge gaps found through exploration and exploitation. The ability to identify tacit and explicit knowledge assets within an organization is related to how to capture knowledge, how to transfer it, how to share it, and how to manage it. BKM 400 provides the student with practical guidance on linking knowledge management to business strategy rather than approaching KM from a technically biased perspective.

BIS – Interdisciplinary Studies

BIS 301 Intro to Interdisc. Studies

This course is designed to develop the mindset of a holistic thinker or inter-disciplinarian and that of a knowledge explorer, a participant observer and citizen leader in a culturally-diverse and interdependent world. The course is organized around instructional units and a number of related modules. It is based on a principle of "information-giving, information-receiving, and information-exchanging." Emphasis is placed on reading, reflection, web resources and enrichment lectures, action research, writing, dialogue, and debate.

BKM 615 Knowledge Audits & Managing Knowledge

This course seeks to explain the purpose of a knowledge audit, the steps involved with identifying, evaluation and rating critical process knowledge, the various audit methods available, how to form a knowledge audit team and how to actually audit and analyze a company's existing knowledge. Furthermore, the course explores ways that knowledge gaps are best bridged and managed, including the use of both explorative and exploitative strategies.

BKM 620 Knowledge Integr, Trans, & Share

An in-depth study of the integration and transfer methods as part of a culture-based process by which adaptive organizational knowledge that lie in peoples heads is exchanged with others. The course provides a comprehensive, thoroughly up-to-date treatment of formal knowledge transfer as a basic process by which documents, data, or other types of resources is captured and stored in formats and media that allows for retrieval by others when needed in a distributed computing environment. Primary emphasis will be on the integration of tacit and explicit knowledge in an enterprise with practical focus on web-enabled multi-tiered client/server distributed computing environments within the confines of a modern Intranet and Extranet.

BKM 630 Knowledge Repos & Integr Methods

An in-depth study of knowledge repositories, integration methods, and systems design in a distributed computing environment. The course provides a comprehensive, thoroughly up-to-date treatment of databases, datamarts, and data warehousing in a web-enabled integrated enterprise environment. Primary emphasis will be on the integration of explicit knowledge in an enterprise and its design, analysis, and implementation. Practical focus will be placed on web-enabled multi-tiered client/server computing and the integration of legacy systems within the confines of a modern Intranet.

BKM 650 Enter Telecom & Global Collaborations

Complex collaboration refers to situations where working together effectively across boundaries is critical for complex projects and problems. Complex collaboration refers to knowledge-intensive business processes that require highly interactive communication, coordination, negotiation, research and/or development. Such projects may cross disciplinary, organizational, national, and/or cultural boundaries. Complex collaboration represents a capability that is essential to effective execution in such situations as new product development, mergers and acquisitions, joint ventures, and supply chain management, as well as large government projects. A number of issues emerge in examining complex collaboration, including: unit of analysis, critical relationships, resource development, virtual teaming, key skills, and improvement processes. BKM 650 provides the student with an understanding of the challenges of managing such situations include ambitious schedules, conflict of cultures and practices, massive amounts of information, multiple languages, and ambiguity of roles and responsibilities.

BKM 670 Knowledge Mgmt Design & Dev

An effective organization today relies on its shared knowledge among its stakeholders for successfully arriving at the goals set in its business strategy. This course will make use of theories, processes, behaviors, and issues that allow knowledge based

organizations to transform themselves in to ones that organize and share knowledge in an effective and efficient manner. The course will involve students in the design and development of a management focused system that will support knowledge management in a selected organizational setting. Students will make use of various management tools including the five-tier knowledge management hierarchy as well as case-based studies that focus on the design and development of knowledge systems.

BKM 680 Proto & Deploy Using Proj Mgt

An in-depth study of iterative process of prototyping and deploying knowledge management system software before, during, and after the knowledge audit and capture phase of the Knowledge Management Development Lifecycle. The course provides a comprehensive, thoroughly up-to-date treatment of the capturing, codifying, and mapping of tacit knowledge in the enterprise; applying the iterative prototyping development process for software development and integration; and the time-based deployment process using modern project management software tools. Practical focus will be placed on the use of Project Management Software to manage the Knowledge Management Development Lifecycle.

BRO – Broadcast Media

BRO 210 History of Television

Prerequisites: ENG 100, ENG 101 and COM 100 or COM 103

Overview of the history, theory and criticism of broadcast television in the United States and abroad. Teaches the creative and technical evolution of television, as well as investigates the social, political and cultural impact of broadcast television on 20th and 21st century society.

BRO 305 Media Storytelling

Prerequisites: ENG 100, ENG 101 and COM 100 or COM 103 or COM 220

Basic theory, terminology, and practice essential to craft narrative formats in broadcast and digital media production. It covers conceptual, analytical and creative writing skills necessary to produce a script, and grasp contemporary narratives on multiple screens.

BRO 340 Studio Production I

Prerequisites: BRO 305

Provides an introduction to television studio production and the roles and responsibilities of the production team staff. Offers hands-on experience in production design, lighting, studio camera operations, audio recording, and directing.

BRO 350 Graphics for Video

Teaches computer-aided manipulation of graphic text and images used in video and theory of graphic design for video screens. Software tools include Illustrator, Photoshop, and AVID to create titles and overlay text, graphics, and images. Learn and use various file formats and compression codecs to integrate graphics and video production.

BRO 430 Field Production II

Prerequisites: BRO 305, MUL 300, MKT402A, BRO 340 and HUB 400

Covers the advanced theory and practice of multi-camera field production. Focuses on the plan-

ning, acquiring, and editing of interview, news, information, and performance formats. Teaches skills necessary to produce remote multi-camera video segments and packages for inclusion in longer programs.

BST – Biostatistics

BST 322 Intro to Biomedical Statistics

An introduction to concepts, procedures and software used in the statistical analysis of data in the health professions.

BUS – Business

BUS 100 Intro to Business

This course is an introduction to the private enterprise system. Topics covered include forms of business organizations, business finance, human resource management, production, entrepreneurship, business ethics, marketing, and the changing business environment.

BUS 480 Capstone: Integrated Bus Policy

Prerequisites: Completion of at least 9 BBA preparation and upper-division core courses

Integrated Business Policy provides students with the opportunity to apply the principal concepts and skills learned in each of their BBA program core courses to real-world business situations. Students' ability to integrate this knowledge and to apply and articulate critical analysis to cases and other assignments are among the key objectives of this course. Students must complete at least 9 BBA preparation and upper-division core courses before starting this capstone course.

BUS 491 Internship Project

Prerequisites: 31.5 quarter units in business or business related courses and a 2.5 GPA

Internship Project is a supervised work experience for those students who have identified an employer offering an internship opportunity. It is designed to provide qualified applicants with practical experience, enable students to assess various career choices, advance in their careers, and apply concepts and ideas in a real-world setting. Normally, 90 hours on-the-job are needed to qualify for 4.5 quarter units. The course is scheduled for each student individually, for two academic months, but can be extended for up to six months. International students are subject to special restrictions and should consult their international student admissions advisor. Grading is H, S, or U only.

BUS 500A Intermediate Algebra (no units)

An introduction to quantitative methods for business graduate students with no previous exposure to the subject, it covers topics including algebraic operations, equations, graphs and functions, exponential and logarithmic functions, and an introduction to linear programming. No credit is awarded.

BUS 500C Macro & Micro Economics (no units)

An introduction to economics for business graduate students with no previous exposure to the subject, it covers topics including microeconomics, macroeconomics, and an introduction to management. No credit is awarded.

BUS 691 Internship Project

Prerequisites: 13.5 quarter units in graduate business course and 3.0 GPA

Internship Project is a supervised work experience for those students who have identified an employer offering an internship opportunity. It is designed to provide qualified applicants with practical experience, enable students to assess various career choices, advance in their careers, and apply concepts and ideas in a real world setting. Normally, 90 hours on-the-job are needed to qualify for 4.5 quarter units. Course is scheduled for each student individually, for two academic months, but can be extended for up to six months. International students are subject to special restrictions and should consult their international student admissions advisor. Grading is H, S, or U only.

CAF – Clinical Affairs

CAF 600 Clinical Research Survey

Recommended: Prior completion of: previous or concurrent work experience and/or employment within the biomedical industry specifically within the Clinical, Quality or Regulatory Affairs functions. This course provides the CAF student with a broad overview of clinical research as applied to the development of biotechnology, pharmaceutical and medical device products. Clinical research will be considered within the corporate, legal, and regulatory environments within which the industry operates. The course will consider key issues concerning the design and execution of successful clinical development programs.

CAF 605 Good Clinical Practice (GCP)

Recommended: Prior completion of: CAF 600 This course is designed to present an introduction to the global regulations governing the conduct of clinical trials and for regulatory approval of a new biologic, medical device, or pharmaceutical product. The student will be introduced to EMA, FDA & ICH regulations and standards, regulatory violations documented in warning letters, clinical roles and responsibilities, as well as the IRB/IEC process, and key study documents and principles of clinical study management.

CAF 615 CAF Data Mgmt & Statistics

Recommended: Prior completion of: CAF 600 This course provides the student with a solid foundation and understanding of how clinical data contributes to the market application process. Beginning with describing the documents required for regulatory approval of products for marketing, the course will discuss the planning process for data collection, processing, management, analysis, and summarization. Overall consideration in the generation of databases and analyses of data will be explored. Key statistical principles and tools will be applied to clinical trial protocols and statistical analysis plans.

CAF 621 CAF Ethics & Pharmacovigilance

Recommended: Prior completion of: CAF 600 This course identifies and describes the background and history for the protection of human subjects in clinical research. It also provides the student with a solid understanding of the ethical principles and practical challenges associated with protecting human subjects in clinical research. Students will identify

and discuss ethics as a discipline, the Declaration of Helsinki, Institutional Review Boards, Informed Consent Forms, Data Management Committees/Data Monitoring Boards, Compliance, and HIPAA.

CAF 635 Clinical Trial Design

Recommended: Prior completion of: CAF 600 This course identifies and discusses the basic concepts describing the design of clinical trials for demonstrating safety and efficacy for biologics, medical devices, or pharmaceutical products. It will identify, describe and discuss the similarities and differences of clinical trials between the various biomedical product segments. Students will identify and understand clinical trial nomenclature, key components of a clinical development plan and various options for the design of clinical trials. The life cycle and timeline for a clinical trial will be identified and understood.

CAF 645 CAF Communications

Recommended: Prior completion of: CAF 600 This course will provide the student with the necessary background for preparing verbal and written communications for the clinical affairs function within a biomedical organization. Beginning with an understanding of the documents required for regulatory approval of products for marketing, the course will identify and discuss the planning process for data collection, processing, management, analysis, and summarization. Overall considerations in generation of clinical trial protocols, regulatory communications, and final clinical reports will be covered.

CAF 650 Clinical Operations Part 1

Recommended: Prior completion of: CAF 600 This course provides the student with an in-depth foundation for all operational aspects in the process of clinical research. The focus will be on developing, executing, and completing a single clinical trial. There will be detailed exploration of all aspects of the responsibilities of investigators and sponsors and the key operational aspects involved in setting up, running, monitoring, and completing a clinical trial. This Part 1 covers all requirements and activities through clinical trial initiation.

CAF 651 Clinical Operations Part 2

Prerequisites: CAF 650 This course provides the student with an in-depth foundation for all operational aspects in the process of clinical research. The focus will be on developing, executing, and completing a single clinical trial. There will be detailed exploration of all aspects of the responsibilities of investigators and sponsors and the key operational aspects involved in setting up, running, monitoring, and completing a clinical trial. This Part 2 covers all requirements and activities from clinical trial start through trial close-out and archiving.

CAF 660 Clinical Trial Project Mgmt

Recommended: Prior completion of: CAF 600 This course provides the student with an in-depth foundation in project management principles and tools for managing clinical trials from initiation through trial close-out and archiving. There will be detailed exploration, identification, and discussion of all aspects of Good Project Management practice (GPM), including developing an understanding of the responsibilities of project leaders, managers,

members, and mentors, team interactions, required documents, study site management involvement, and the project life cycle.

CAF 699A Capstone Thesis Option

Prerequisites: CAF 605, CAF 615, CAF 621, CAF 635, CAF 645, CAF 650, CAF 651 and CAF 660 This course is designed to have the student develop and implement a formal research document (thesis) that integrates all facets of “clinical affairs” including regulations, documentation, clinical evidence, data management, statistical analysis of the data and other principles taught throughout the entire program.

CAF 699B Capstone Project Option

Prerequisites: CAF 605, CAF 615, CAF 621, CAF 635, CAF 645, CAF 650, CAF 651 and CAF 660 This course is designed to have the student develop and implement a formal research document (project) that integrates all facets of “clinical affairs” including regulations, documentation, clinical evidence, data management, statistical analysis of the data and other principles taught throughout the entire program.

CAF 699C Capstone Internship Option

Prerequisites: CAF 605, CAF 615, CAF 621, CAF 635, CAF 645, CAF 650, CAF 651 and CAF 660 This course is designed to have the student actively experience a “Clinical Affairs” working environment according to the NU policies and procedures which govern such internships. The student will integrate all facets of “clinical affairs” including GCP, regulations, documentation, data and project management, statistical analysis and other principles taught throughout the entire CAF program.

CAF 699D Capstone Comprehensive Exam

Prerequisites: CAF 605, CAF 615, CAF 621, CAF 635, CAF 645, CAF 650, CAF 651 and CAF 660 This course is designed to have the student study and prepare for a comprehensive final “Clinical Affairs” degree program examination that integrates all facets of “clinical affairs” including regulations, documentation, clinical evidence, data management, statistical analysis of the data and other principles taught throughout the entire program.

CED – Counselor Education

CED 600 Applied Child/Adol Development

The counseling process, interventions, and strategies will address cultural, ethnic, issues presented in class. The course analyzes and conceptualizes human development themes from the perspective of various learning and personality theorists. Practicum experience is required.

CED 601 Consultation in the Schools

Prerequisites: CED 610 This course introduces School Counseling and Psychologist candidates to collaborative consultation leadership techniques and models, including communication, diplomacy and interpersonal skills necessary toward effective consultation at the individual, group, and systems level.

CED 602 Societal Issues in the Schools

Prerequisites: CED 607

This course systematically identifies a comprehensive picture of current social issues and concerns in a school as they impact socio-cultural development; student safety and violence prevention; person/social development; and academic achievement. Issues include but are not limited to poverty, achievement motivation, dropouts, homelessness, teen pregnancy and parenting, eating disorders, obesity, child abuse, substance abuse, physical and mental abuse, gang violence, bullying, HIV/AIDS, and suicide. Practicum experience is required.

CED 603 Multicultural Counseling

Prerequisites: CED 610

Emphasis is on the building on skills developed in the individual and group counseling course including culture conflict, personal identity, managing gender and racial issues as well as lifestyle concerns; co-opting vs. personal empowerment; effective intervention models when working with ethnic and linguistic minorities including building effective parent involvement programs. Principles of effective cross-cultural counseling including applicable theories, goals, skills and techniques will be reviewed. Case examples, current regulations, and issues in counseling culturally diverse students are explored. Practicum experience is required.

CED 605 Instructional Design

Basic expectations in curriculum and instruction at the elementary/secondary levels and the role of the school counselor in the development of this curriculum, addressing character education and working with at-risk students; (a) the role of the counselor as it relates to the exceptional student, the special education student and inclusiveness, and includes master scheduling considerations; (b) the creation of lesson plans in counseling areas which will be delivered in the elementary/secondary levels; (c) classroom management; and (d) the role of the counselor in Student Study Teams (SST) and Individualized Education Plan (IEP) meetings. Content-specific teaching practices, lesson design, learning environments and assessment of student learning are emphasized to provide access to the curriculum for all students.

CED 606 Development and Evaluation

Prerequisites: CED 607

This course will focus on the designing, developing, implementing, and evaluating of a contemporary school counseling program in accordance with the National Standards. Foundations of school counseling programs are covered, as are results based guidance. Finally, students will learn the leadership skills necessary to implement the program and counseling services to meet the needs of the community they are servicing. Practicum experience is required.

CED 607 School Counseling Orientation

An exploration of the field of school counseling and its suitability as a personal career choice. Emphasis is on an understanding of the multiple roles of school counselors including counseling, cross cultural counseling, coordination, collaboration, crisis intervention, conflict resolution, and advocacy. Field experiences, using interviews and observations will give candidates insight into their future vocation. Emphasis is placed on oral, written communication, and observational skills. Practicum experience is required. Grading is S or U only.

CED 610 Adv Coun Theories & Methods

Prerequisites: CED 600 or PED 667

An examination of the major theories of individual counseling and their application for school counselors and school psychologists. The focus is on building the theoretical knowledge and practical skills required for expert counseling. Issues of social and cultural diversity in the context of helping relationships are addressed. Practicum Experience is required.

CED 611 Group Counseling

Prerequisites: CED 610

Candidates will identify, compare and apply basic knowledge of the roles, functions and dynamics among group leaders and group participants. The course covers group process theory and the research pertaining to group processes. Students participate in and analyze the interaction within a group. Practicum experience is required.

CED 612 Career & Academic Counseling

This course provides a general examination of current career development/ career education literature including theories and major concepts, career education programs and practices, resource materials, academic and career counseling skills, and the use of computerized career information systems. Practicum experience is required.

CED 613 Assessment for Ed Counselors

Prerequisites: CED 607 and Advancement to Candidacy

An overview of the counselor's role in the use and interpretation of individual and group assessment instruments and the implications of assessment results on instructional and support programs in schools. Basic statistical concepts and procedures, diversity issues, ethics as it relates to assessment, RTI assessment and resulting implications, limitations of standardized testing, and alternatives to traditional assessment are studied. Students learn to effectively use and interpret assessment results as a consumer of research and in their capacity as a school counselor, but they will also gain a foundational understanding of basic statistical methods, concepts, and assessment tools.

CED 614 Legal and Ethical Practices

Provides an introduction to professional, ethical, legal, theoretical, and practical aspects of counseling. Students will examine the roles and responsibilities of counselors, professional organizations, and associations. Historical and social context along with emerging professional issues and directions are included. National Standards and ethical guidelines for practice are examined.

CED 616 School Counseling Intern. I

Prerequisites: A record of a passing score on the Basic Skills Requirement (CBEST), completion of all program prerequisites, completion of ten (10) courses, 100 hours of practicum, have permission of faculty advisor and approval of internship site by Placement Specialist.

Students are placed in a school setting ranging from elementary to high school and expected to perform a variety of counseling related activities for a minimum of 600 hours of supervised practice to be scheduled over a period of at least two months. Students must maintain a grade of satisfactory throughout the internship series. Grading is S or U only.

CED 617 School Counseling Intern. II

Prerequisites: A record of a passing score on the Basic Skills Requirement (CBEST), completion of all program prerequisites, completion of ten (10) courses, 100 hours of practicum, have permission of faculty advisor and approval of internship site by Placement Specialist.

Students are placed in a school settings ranging from elementary to high school and expected to perform a variety of counseling related activities for a minimum of 600 hours of supervised practice to be scheduled over a period of at least two months. Students must maintain a grade of satisfactory throughout the internship series. Grading is by H, S, or U only.

CED 618 School Counseling Intern. III

Prerequisites: A record of a passing score on the Basic Skills Requirement (CBEST), completion of all program prerequisites, completion of ten (10) courses, 100 hours of practicum, have permission of faculty advisor and approval of internship site by Placement Specialist.

Students are placed in a school setting ranging from elementary to high school and expected to perform a variety of counseling related activities for a minimum of 600 hours of supervised practice to be scheduled over a period of at least two months. Students must maintain a grade of satisfactory throughout the internship series. Grading is by H, S, or U only.

CED 619 Couns Practicum Comm College

Prerequisites: Completion of all program prerequisites, completion of ten (10) courses, 100 hours of practicum, have permission of faculty advisor and approval of internship site by Placement Specialist.

Students are placed in a variety of school settings and expected to perform a variety of counseling related activities for a minimum of 200 hours of supervised practice to be scheduled over a period of at least two months. Students must maintain a grade of satisfactory throughout the internship series. Grading is by H, S, or U only.

CED 620 Internship Seminar

(3 quarter units)

Prerequisites: Students must have completed ten (10) courses, and must be enrolled in their internship and have permission of the faculty advisor.

Students will review the knowledge, skills, and standards of the graduate program in counseling in final preparation for their employment as professional counselors. Leadership opportunities within the counseling role are identified and developed. Students will prepare for the ETS Praxis examination, complete their program portfolios, and present their school project as part of this course. Grading is by H, S, or U only.

CED 631 School Counseling Practicum

(1.5 quarter units)

Focus on the integration and practical application of counseling skills and conceptual frameworks to create strategies to individually assist students with concerns in the areas of personal, social, educational and career development. This course contributes to the counseling proficiency component of the program and is required of all candidates enrolled in the Educational Counseling program.

CED 637 School Counseling Research

Prerequisites: ILD 625

This course is designed to provide the knowledge and skills required to generate and evaluate research relevant to various areas of professional education. The work of the educator will be emphasized throughout the course as students produce a major research and writing project. Students prepare a research proposal in their area of practice, obtain Institutional Review Board (IRB) approval, conduct the study and prepare an oral and written report. Course includes relevant aspects of professional writing while remaining focused on the practical needs of educators who wish to join the larger professional community in their field of specialty. This class is scheduled for two months one day a week and at the end of that time a grade of "IP" will be posted then the maximum length of time is 10 additional months. Grading is H, S, or U only.

CEE – Computer and Electrical Engineering

CEE 310 Circuit Analysis

Prerequisites: MTH 433

Corequisites: CEE 310L

An overview of basic circuit design and analysis. Introductory topics include: Ohm's law, Kirchhoff's Laws, the mesh-current method, and Thévenin and Norton Equivalent circuits. Students will apply these topics to RL, RC, and RLC circuit analysis. Advanced topics include the understanding and application of operational amplifiers.

CEE 310L Circuit Analysis Lab

(1.5 quarter units)

Corequisites: CEE 310

Centers on experiments covering the theoretical material in CEE310. Students will design, implement and analyze basic circuits. Experiments include: Ohm's law; Kirchhoff's laws; series and parallel resistors; voltage and current dividers; delta-wye configurations; mesh-current and node-voltage analysis; superposition and Thévenin equivalents; inverting and non-inverting amplifier circuits; series RC and RL circuits.

CEE 420 Microelectronics

Prerequisites: CEE 310

Describes the fundamentals of semiconductor devices and microelectronic circuits. Students will explore the terminal characteristics of p-n junction and Zener diodes, diode circuits, and transistors and transistor circuits. Specifically, discussion includes principles of MOSFET and BJT operations, biasing technology, and their application in transistor circuit analysis.

CEE 430 Digital Signal Processing

Prerequisites: CEE 420

Describes all the necessary tools and techniques required to understand and design digital signal processing systems. Topics include: transformations of discrete time signals, the fast Fourier transform, and the z-transform. Advanced topics include: A/D and D/A converters and digital signal filtering.

CEE 440 VLSI Design

Prerequisites: CEE 430

VLSI design introduces students to fabrication and layout techniques necessary to design large scale systems. Specific topics include: CMOS logic,

MOSFET theory, layout design rules including all the factors required for an effective circuit design. Advanced topics include: capacitance requirements, clocking, and power consumption, circuit simulation and performance estimation.

CEE 498 Capstone Design Project I

Prerequisites: Complete all core courses except CEE499 OR Permission of the program lead.

Students apply the knowledge and skills that they gained from Electrical and Computer Engineering courses to solve a real-world engineering problem. Students start work on their project after it is approved by the faculty teaching the course. During this course students complete different phases of project. Students deal with a set of realistic constraints during the design and implementation of the project such as economic, social, political, ethical, and social impacts. Grading is S/U only. Eligible for In Progress (IP) grading.

CEE 499 Capstone Design Project II

Prerequisites: CEE 498

A second course of a two-course sequence in which students continue work on a major design project. With the mentoring of the faculty, this course integrates all the courses in the Electrical and Computer Engineering program. The capstone course also helps students improve their written and oral presentations. Grading is S/U only. Course is eligible for In Progress (IP) grade.

CEN – Construction Engineering

CEN 320 Surveying, Metrics and GIS

Prerequisites: EGR 219

Land and topographic surveying with global position systems and geographic information systems (GIS). Fundamentals of distance, leveling angles, theodolites, transverse surveys and computations. Hands-on with ArcView GIS to understand the basic GIS concepts and applications in land planning.

CEN 323 Structural Analysis

Prerequisites: EGR 220 and EGR 225

Introduction to analysis of wood, steel and concrete structures. Basic structural loads, forces and moments in beams, columns and trussed systems. Internal reactions and method of sections. Stress, shear and deformation in beams and columns. Basic design fundamentals.

CEN 325 Soil Mechanics and Foundation

Prerequisites: CEN 323

The course introduces soil mechanics and foundation engineering to the students; teaches the students how to solve certain fundamental problems related to consolidation, shear strength, and design of shallow and deep foundations; and familiarizes students with relevant terms and soil tests so that they can work effectively with geotechnical engineering specialists. The course features soil basics, including their derivation, identification and classification. The principles of water flow in soils, settlement and heave, and shear strength of soils will be discussed. Consolidation problems, factors of safety for foundations, and foundation settlement prediction will also be covered.

CEN 410 Constr Materials and Methods

Prerequisites: MTH 215

An overview of the basic materials and methods utilized in construction projects. Wood, steel, masonry, glass, and concrete and other material are introduced along with their associated construction systems in foundations, framing, cladding, windows, doors, finishes and roofing.

CEN 413 Plans and Specifications

Prerequisites: EGR 219

Drawing and interpretation of plans, sections, details, symbols, notes and details in architectural, construction and shop drawings. Coordination and reference between drawings. Specification creation incorporating material properties, construction techniques and legal factors. Industry standards from AIA and CSI are presented.

CEN 416 Mech and Electrical Systems

Prerequisites: MTH 215

The impact of M/E systems on the design and construction process including energy considerations. Fundamentals of HVAC, plumbing, fire protection, electrical distribution, lighting, information systems, and vibrations in the building system.

CEN 419 Est., Scheduling and Control

Prerequisites: CEN 410

Introduces the fundamentals of construction management, estimating, scheduling and control. Quantity takeoff estimations for material, time, equipment and overhead are presented. Activity durations, scheduling and project updating for control are covered.

CEN 420 Est., Scheduling & Control II

Prerequisites: CEN 419

This course builds on the fundamentals of construction management, estimating, scheduling and control introduced in CEN 419. Advanced topics concerning quantity takeoff estimations for material, time, equipment, overhead, critical path, and precedence networks for activity durations, scheduling and project updating for control are presented.

CEN 421 Constr, Acct, Finance and Law

Prerequisites: ACC 201

This course applies the principles of business accounting and financial principles and engineering economics to the construction industry. Construction accounting systems, depreciation and financial analysis are introduced. Labor, overhead, and profit management are presented. Cash flow, time value of money, and legal aspects specific to construction industry contracts are introduced.

CEN 422 Field Inspection and Safety

Prerequisites: CEN 410

Integration of safety and productivity into daily field operations through inspection and accountability. Examines accident costs and contributing factors and techniques for risk minimization. Presents the relationship between safety and quality and techniques for site, structure, general and mechanical and electrical system inspections.

CEN 425 Design & Const Process Integra

This course focuses on the detailed processes of construction management and the relevant tools, processes and techniques are involved. Students will be developing skills and knowledge to integrate and

manage the overall construction process including the project proposal and design, cost estimate, contract document drawings and specifications, construction schedule, and project presentation.

CHD – Chemical Dependency

CHD 440 Drugs, Values and Society

An examination of the history of substance use and abuse in the United States. Examines individual and institutional values that underpin chemically dependent behavior as well as socio-cultural factors, including media images, consumer product advertising, myths and stereotypes and subculture/life-style issues. Provides an overview of the social services structure, including outreach, education, prevention and treatment models.

CHD 601 Drugs in American Society

A survey course intended for a general audience with diverse interests in the phenomenon of drug use and abuse. Topics include pharmacology, history, theories of drug abuse, treatment methods, special populations, education and prevention models and ethical, political, social and legal considerations. Open to any graduate students with approval of their school except those who have completed CHD 640.

CHD 640 Treatment of Addictions

This course covers the theories, etiology, assessment, diagnosis, and treatment of addictive and compulsive disorders from the resiliency, recovery, and medical models. This course also addresses the impact of socioeconomic status, ethnicity, other environmental factors and contemporary controversies on the development and treatment of addictive disorders.

CHE – Chemistry

CHE 101 Introductory Chemistry

Recommended Preparation: MTH 204 or MTH 215 or MTH 216A and MTH 216B

Fundamentals of inorganic and organic chemistry, including bonding and basic types of reactions. An introduction to nuclear, biological and environmental chemistry. Basic principles and calculations of chemistry with emphasis in the areas of atomic structure, molecular structure and properties, equilibrium, thermodynamics, oxidation-reduction and kinetics.

CHE 101A Introductory Chemistry Lab

(1.5 quarter units)

Prerequisites: CHE 101 or CHE 141 for science majors

This laboratory course will complement the student's knowledge of chemistry with demonstrations and experiments. Contact hours for this laboratory course (45) are based on a 3:1 ratio, i.e. 3 lab hours = 1 lecture hour equivalent.

CHE 120A Intro to Chemistry Lab for Eng

(1.5 quarter units)

Prerequisites: CHE 101

An online-only laboratory class that introduces engineering students to the fundamentals and procedures of chemistry laboratory. Open only for students in the Master of Science in Environmental Engineering, and is not a substitute for the course CHE 101A.

CHE 141 General Chemistry I

Prerequisites: MTH 215 or equivalent and CHE 101
General chemistry topics important for higher level chemistry and science courses: thermodynamics, reaction kinetics, and quantum mechanics. Successful completion of a college algebra course is required for enrollment in this course.

CHE 142 General Chemistry 2

Prerequisites: CHE 141

Second course of general chemistry, covering: bonding, solutions, chemical kinetics, chemical equilibrium, acids/bases, and thermodynamics.

CHE 143 General Chemistry 3

Prerequisites: CHE 142

Third course of general chemistry, covering: electro, nuclear, organic, bio, and coordination chemistry. Chemistry of metals and non-metals is also covered.

CHE 149A General Chemistry Laboratory

(1.5 quarter units)

Prerequisites: CHE 143

Augments student understanding of important concepts in chemistry through hands-on experiments. Students will become proficient in advanced chemistry laboratory techniques, will learn how to operate modern instruments, will acquire the necessary skills to collect data accurately and to perform error analyses. Contact hours for this laboratory course (45) are based on a 3:1 ratio, i.e. 3 lab hours = 1 lecture hour equivalent.

CHE 150 Introductory Organic Chemistry

Prerequisites: CHE 101 and CHE 101A or CHE 141, CHE 142, CHE 143 and CHE 149A

Introduction to the fundamentals of organic chemistry. This course covers the properties and reactions of hydrocarbons and their functional groups, aromatic compounds, and biological molecules. Special efforts are made in demonstrating the interrelationship between organic chemistry and other areas of science, particularly biological, health, and environmental sciences.

CHE 150A Introductory Organic Chem Lab

(1.5 quarter units)

Prerequisites: CHE 150

This course is designed to introduce students to the practical aspects of organic chemistry. This course covers basic techniques for handling, analyzing, and identifying organic compounds. In addition, students will learn how to synthesize simple and practical small organic molecules.

CHE 350 Organic Chemistry I

Prerequisites: CHE 142

Introduces students to the chemistry of carbon compounds and their properties, structures and reactions. It emphasizes the study of the properties and reactions of aliphatic, halides, alcohols, esters, thiols and sulfides, and aromatic compounds, which in conjunction with selected experiments, gives an understanding of the mechanisms of organic reactions.

CHE 350A Organic Chemistry I Lab

(1.5 quarter units)

Prerequisites: CHE 350

Students will learn how to apply common laboratory techniques to determine the structure and the chemical properties of alkanes, alkenes, alcohols, alkyl ha-

lides, acids and esters. The experiments will be done on a small scale approach or microscale. Contact hours for this laboratory course (45) are based on a 3:1 ratio, i.e. 3 Lab hours= 1 lecture hour equivalent.

CHE 351 Organic Chemistry II

Prerequisites: CHE 350

Study of the properties and reactions of aromatic compounds, aldehydes, ketones, carboxylic acids, amines, and amides. In addition, students are introduced to the use of modern spectroscopic techniques to analyze and predict structures of organic molecules.

CHE 351A Organic Chemistry II Lab

(1.5 quarter units)

Prerequisites: CHE 351

Recommended: Prior completion of: CHE 350A

Students will apply laboratory techniques learned in CHE350A to synthesize, purify and identify organic compounds including alcohols, aldehydes, aromatics, ketones, ethers, esters, amides and amines. The experiments will be done on a small scale approach or microscale. Contact hours for this laboratory course (45) are based on a 3:1 ratio, i.e. 3 Lab hours= 1 lecture hour equivalent.

CHE 360 Biochemistry I

Prerequisites: CHE 350, CHE 350A, CHE 351 and CHE 351A

Study of the structures and functions of important classes of biological molecules: proteins, carbohydrates, nucleic acids, and lipids. A strong and current background in chemistry is required to successfully complete this course.

CHE 361 Biochemistry II

Prerequisites: CHE 360

A continuation of CHE 360. This course concentrates on the principles of cellular regulatory processes and synthesis of biological molecules.

CIH – Complementary and Integrative Health

CIH 600 Foundations of CIH

Explores the foundations of complementary and integrative health and its evolution with traditional conventional medicine. Course orients students to relationship-centered care, integrates conventional and complementary methods of treatment and prevention, and discusses various therapies and modalities to enhance health. Includes policies and regulations influencing and regulating integrative health practices. Communication and leadership aspects of managing integrative care are incorporated.

CIH 604 Healing and the Human Spirit

Examine an integrative approach to health, healing, and spirituality. Complementary and alternative healing practices and opportunities as related to purpose of life and spirituality practices will be discussed. Explore multi-dimensions of spiritual aspects of the human experience, introspection into inner life, connection to nature and the divine realm as related to health, healing and personal well-being.

CIH 608 Ayurvedic Medicine

Examine Ayurvedic medicine as a philosophy and system of medicine that focuses on how optimal health is achieved through a balance within the body, between the body and the environment. The principles of Ayurvedic medicine, role of doshas, causes of disharmonies and diseases, and treatment methods will be addressed. Will explore specific elements of an Ayurvedic lifestyle and the importance of lifestyle regimens.

CIH 610 Evidence Based Practice

Overview of evidence-based research and practices and the relevance to the future of integrative health. Will examine basic methodologies used to generate and test clinical research questions. Review of seminal research endeavors and relevance to integrative health practices. Current challenges in evidence-based research in integrative health will be reviewed.

CIH 620 Health Policies and Issues

Course addresses issues and concerns related to the affordable care act, Section 2706 which allows non-discrimination access to health care. Patient centered advisory councils, liability, access to treatment, dietary regulations are just some of the other topics covered in this course. The political issues of blending CIH in a variety of medical environments is included.

CIH 630 The Energetic Body

This course brings together evidence from a range of disciplines to provide an explanation for the energetic exchanges that take place in all therapies. It addresses a growing interest in the field of mind-body medicine and the role of natural “energy forces” within the body in maintaining normal health and wellbeing. The course explores how these energies or forces may be utilized to assist in healing and the restoration of normal health.

CIH 640 Lifestyle Management

Challenges to establishing and maintaining a positive, healthy lifestyle across the life span will be examined by addressing proper nutrition for wellness and appropriate physical exercise. Assesses the physical and psychological effects of physical activity and movement for maintaining health and well-being. The various types of physical activity and factors of an effective exercise program are introduced. Course examines the use of computer apps and devices as a supplemental aide to improving lifestyle management skills.

CIH 650 Healing Envir & Modalities

Examines the philosophies, elements and health effects of healing environments. The cultural and global context of healing environments and traditions and specific practices will be examined. Other healing modalities such as nature therapy, yoga, qi gong, animal therapy, sound healing, color therapy, music and expressive arts will be explored.

CIH 660 Health Coaching & Consulting

This course provides students with the opportunities to develop health and wellness coaching and consulting skills. Specific coaching will focus on supporting clients in achieving goals using empowerment techniques and gaining experience in a consulting capacity in the area of integrative health and wellness man-

agement. Preparing for health coaching certification will also be discussed.

CIH 670 Integrated Healing Modalities

A series of global healing modalities will be examined throughout this course. One key healing practice includes ayurvedic medicine and the role of doshas, causes of disharmonies and diseases, and treatment methods. Building on these healing traditions is a major section on Chinese medicine which includes acupuncture and the use of herbs. Other practices such as shamanism, Native American medicine will also be a learning element. Mind-Body practices will be reviewed.

CIH 680 Nutritional Medicine

Provides an overview of the various elements of nutrition and the links between diet, lifestyle and health. The roles of nutraceuticals, herbs and supplements on health and wellness will also be explored. Nutrition is emphasized in the context of health maintenance and disease prevention. Modern issues such as environmental toxins, genetically altered foods, and food allergies are discussed. Other topics include organic and local foods, foods for the treatment of specific disharmonies, toxic food substances and additives, pure water, Western biochemistry and nutrition, whole foods cooking, and more.

CIH 685 Mindfulness & Stress Mgt

Examines the impact and effects of stress on individuals and within organizational systems on health and well being. Identifies evidence-based strategies to minimize the consequences of stress. Practical experiences in mindfulness based stress reduction, bio-feedback, compassion cultivation, meditation, and journaling are included.

CIH 690 Business Mgt & Leadership

Gain practical knowledge about starting, managing, operating and leading an integrated healthcare practice. Characteristics of successful leaders, methods of research and creating a realistic business will be explored. Develops communication and leadership skills. Essentials of marketing, financial management, insurance, and legal and operational aspects of managing and growing an integrative health practice will be discussed.

CIH 699 Integrative Health Capstone

Prerequisites: CIH 600, CIH 610, CIH 620, CIH 630, CIH 640, CIH 650, CIH 660, CIH 670, CIH 680, CIH 685 and CIH 690

Two-month project focused on relevant problem in complementary and integrative health theory or practice. Planning and completion of either a data-based research project or a scholarly and creative activity related to integrative health. Grading is S/U only. Course is eligible for In Progress (IP) grade.

CIS - Information Systems**CIS 301 Mgmt Information Systems**

Overview of core concepts related to the emerging interconnections between technology, the organization, and information management.

CIS 310 Technology Project Management

Foundation of project management—project integration, scope, time, cost, quality, human resources, communications, risk, and procurement. The focus

is on the concepts, skills, tools, and techniques involved in information technology project management. Students will develop a project plan using Microsoft Project.

CIS 320 Systems Analysis & Integration

Comprehensive introduction to the planning, analysis, design, and implementation of contemporary information systems. Students will examine the role and responsibility of a System Analyst. Several approaches to system requirements are also covered.

CIS 330 System Development

Introduces the Object-Oriented approach to system development with emphasis on user and computer interface design. Introduction to object-oriented programming, java, and Unified Modeling Language (UML) standard are also covered.

CIS 340 Data Communications

Covers in detail all the critical technical areas in data communications, wide-area networking, local area networking, and protocol design. The focus is on current technology of the data and computer communications field. Emphasis is on both the fundamental principles as well as the critical role of performance in driving protocol and network design.

CIS 350 Database Management Systems

Fundamentals of database systems. An introductory approach to developing database applications; students learn to evaluate a business situation and then build and design a database application. The focus is from systems design to distribution and integration of the system through hands-on experience. Core theories and ideas of database management systems are also covered.

CIS 416 Database Administration

Prerequisites: CIS 340

Designed to give the Oracle database administrator (DBA) a firm foundation in basic administrative tasks. Through instructor-led learning, structured hands-on practices and challenge-level exercise labs, the DBA will gain the necessary knowledge and skills to set up, maintain and troubleshoot an Oracle7 or Oracle8 database.

CIS 420A Information Systems Project I

Prerequisites: CIS 310 and 80 percent of courses in the major, except CIS 420B

A precursor to the final IS/IT product development capstone course. Students research their area of interest and learn how to apply project management tools in the preliminary development process of their final project product. Grading is by H, S, or U only.

CIS 420B Information Systems Project II

Prerequisites: CIS 420A

A capstone hands-on project in the student's area of interest. Students apply skills learned, principles, topics and tools that have been taught throughout the program to develop an IS/IT specific product. Grading is H, S, or U only.

CIS 425 Programming for IT Environment

Introduction to programming concepts in an integrated computing environment. It also examines contemporary programming design techniques including event-oriented approaches. Develop applications

using Microsoft Visual Basic in a graphical user interface (GUI) environment.

CIS 430 Web/EB Design & Development

Focuses on two aspects of website management: technical and business aspects. An introduction to Web languages and technologies is made with some in-depth coverage of HTML and CSS. How to manage people, content, and suppliers is covered in the business focus.

CIS 440 Systems Quality Assurance

Fundamentals of measuring an organization's system quality and ways to improve it. This course also covers the testing process and how to staff and execute a test plan from start to finish.

CIS 450 Information/Systems Assurance

Provides understanding of how to audit information systems, including enterprise systems, fraud and fraud detection. The combination of text and software create a double learning environment in which students will gain an understanding of how these audits take place in the real world.

CIS 460 Human Factor /Ergonomic Design

Introduction to methods that incorporate human capabilities and limitations, environmental factors, human-machine interaction, and other factors into system design. The focus is on the interface between humans, technology, and systems. Human factors and ergonomics in systems analysis, design, and evaluation will also be examined.

CIS 470 Computer Forensics

Introduction of computer forensics in networked systems, provides understanding of technical issues in acquiring computer evidence with emphasis on computer forensic analysis. File systems and current computer forensics tools are also examined.

CIS 480 Health Information Management

Overview of the health information management and health care delivery systems. Coverage includes the patient record, numbering and filing systems, record storage and circulation, indexes, registers, and health data collection.

CIS 601 Information Systems Strategies

Exploration of the merger of Information Systems with legal, ethical, cultural, human resources, business philosophies and organizational structures. Learn the strategic role IS professionals play in the modern work-place environment and the role telecommunications plays in the modern work place, networked environment.

CIS 602 Network Services & Protocols

Prerequisites: CIS 601

Study of the principles and applications of telecommunications. Examination of voice, data, analog and digital transmission in local area and wide area networks will be explored and the related existing and emerging communications protocols. Discover the strategic role telecommunications plays in the modern networked environment.

CIS 604 Management and Security

Prerequisites: CIS 601

Study of organizational management, network infrastructures and information, including information

risk analysis, threats, vulnerabilities and protection methods. Analyze a business enterprises information management security risks and vulnerabilities and prepare a comprehensive security plan for Intranet, Extranet and Internet infrastructures.

CIS 606 End User Information Systems

Prerequisites: CIS 601

Study of the end-user approach to systems analysis, addressing the links between information systems technology and organizational goals. IS design, analysis and implementation, with a focus on shaping information systems to enhance employee performance and carry out business strategies.

CIS 607 Systems Integration

Prerequisites: CIS 601

The study of information systems technology through systems integration and distributed computing, to maximize efficiencies to meet organizational goals. Comprehensive treatment of IS design, analysis and implementation, with a focus on client server computing and the integration of legacy systems with newer applications.

CIS 620A Master's Research Project I

Prerequisites: All core requirements with a GPA of 3.0 approval of lead faculty.

This course is the first part of the master's research project. It focuses on the research and selection of an appropriate topic related to information systems. Students develop the project in a three-to-five member group and utilize skills previously acquired in their respective core curriculum. This is a regular one-month course. Grading is H, S, or U only.

CIS 620B Master's Research Project II

Prerequisites: CIS 620A

Two-month course, meets once a week. A continuation of CIS 620A. Students develop the project in a three-to-five member group. Students complete a detailed analysis and design of the project within the first two weeks of the course. After completing the project, students formally present their final product to a review panel for evaluation and grading. Grading is H, S, or U only.

CJA – Criminal Justice Administration

CJA 229 Introduction to Policing

This course is designed to provide the student with a basic understanding of the role of the peace officer in American society. The course will examine the steps in selecting candidates for the position of police officer, the complexity of the enforcement requirement, the challenges that face peace officers each day, the limitations placed on peace officers by all three branches of government at both the state and federal levels.

CJA 337 The Juvenile Offender

A study of the nature and control of juvenile delinquency. Examines patterns of delinquent behavior, factors of causation, juvenile law and the juvenile justice system. Students also learn policies and procedures in treatment and prevention.

CJA 340 Corrections

An introduction to the field of corrections and the corrections continuum. Topics include contemporary theories of punishment, corrections and rehabilita-

tion, local, state, federal and military confinement facilities and community alternatives to incarceration.

CJA 351 Courts & the Judicial Process

A study of concepts and theories regarding the utilization, organization and management of the judicial process. Critically reviews the issues of fair trial, speedy trial, free press, calendar control, judicial responsibility and new technology. Students analyze the roles of the legal actors, problems of lower, trial and appellate courts and the distribution of judicial powers.

CJA 352 Criminal Law and Procedure

A survey of jurisprudential philosophy and case study of common law and statutory crimes. Discusses historical development, theory, principles and functions of criminal law. Also covers elements of due process, rule of law and the role of the constitution in protecting rights.

CJA 356 Criminal Evidence

A study of the elements of criminal law as applied to various theories of criminal evidence to enhance understanding of the various issues facing prosecutors, criminal justice practitioners and law enforcement agents. This course will explore the application of evidentiary issues and its relationship to investigations and criminal conduct.

CJA 400 Gangs in America

Exposes students to the basic trends of criminal behavior as it relates to gangs in America and the causative and contributory factors of gang behavior. It explores the general personality, intellectual and social perspectives of criminal behavior as it relates to gangs.

CJA 401 Criminal Intelligence

Exposes students to the basic trends of criminal intelligence as it relates terrorism around the world. The focus will be on the domestic and international threats of terrorism and the basic security issues that surround terrorism today. The student will gain an understanding of terrorism and the many factors that support and drive the terrorist movements throughout the world. The students will also analyze the laws and special forces which nations within the international community have created to meet this challenge. This course also presents an overview of computer crimes and the use of the internet to disrupt computer services throughout the world. The student will learn about emerging laws and digital solutions to block the use or spread of digital crimes or terrorism.

CJA 431 Criminology

This course exposes the students to the basic tenets of criminal behavior, the causative and contributory factors of behavior. It explores the general personality, intellectual and social perspectives of criminal behavior.

CJA 434 Survey of Forensic Sciences

An introduction to the forensic sciences. Includes topics such as forensic photography, firearms and tool mark identification, the examination of questioned documents, hair and fiber analysis, serology, instrumental analysis, forensic pathology and odontology and forensic psychology.

CJA 441 Organized & White Collar Crime

This course will expose the students to elite and corporate deviance, the incidence and prevalence of white collar and organized crimes. The course explores the theoretical foundations of all types of occupational crimes, with a comparative, analytical global look at these crimes. It also exposes the students to the forms and causes of these crimes, the legal and law enforcement and societal responses to such crimes.

CJA 443 Curr Issues in Law Enforcement

Using a seminar approach, this course focuses on current specific problems and issues within the law enforcement community. Topics may include police morale, the retention of sworn personnel and future trends in law enforcement.

CJA 446 CJ Management and Leadership

An analysis of the organization and management of criminal justice agencies. Discusses principles of supervision and motivation of personnel, management problems and solutions, decision-making and administration of policies and procedures.

CJA 448 Violence and Society

An exploration of methods, patterns and meanings of individual and collective violence. Focuses on gangs, terrorists and the assaultive individual. Students analyze the causes of violence, attitudes toward violence and methods of controlling violence as well as the impact of gun control.

CJA 453 Ethics and the C J System

In depth exploration of the historical foundations of ethical decision making and how it informs the criminal justice system. Particular attention to the relationship of critical thinking skills and ethical decision making to current issues.

CJA 457 Minorities/Crime/Soc. Justice

A review of the criminological literature and theoretical applications of the law and criminal justice as seen from a racial, gender specific, class and ethnic orientation.

CJA 458 Financial Investigations

Investigates the accounting steps required to effectively pursue financial crimes. Topics include the five standards of proof, different classifications of evidence as well as the intricacies involved in how an investigator might develop the evidence necessary for a forfeiture proceeding.

CJA 459 Crime and the Media

Explore the complex relationship between media and the criminal justice system. Gain understanding of how media influences both public opinion and the criminal justice system.

CJA 460 Principles of Investigation

An introduction to the practices and procedures involved in conducting civil and criminal investigations. Topics include learning about crimes and their elements, modus operandi, major goals of investigations, primary functions and responsibilities of investigating officers/agents and the investigator's relationship with other individuals and agencies involved in an investigation.

CJA 464 Constitutional Law for CJ

A study of the fundamentals of the U.S. Constitution, the rights and protections of the accused; an exploration of the case law and the judicial system, the rights and responsibilities of the police and citizenry

CJA 465 Practicum in Criminal Justice

(variable units)

A practicum designed for students seeking field experience in law enforcement. Students receive academic guidance from criminal justice faculty and supervision at the field placement site. Typically, the practicum requires students to work a minimum of 100-150 hours under supervision. At the completion of the practicum, students are required to write an in-depth research paper about their experiences during their placements with coordination and support from their faculty advisor and field supervisor. Units are arranged and determined based on assignment and number of hours prearranged at the placement site. Grading is S or U only.

CJA 467 Intl. & Domestic Terrorism

Exposes the students to the basics of terrorism and its global impact; terrorism investigation and intervention strategies. It describes the factors to be considered when implementing psychological, social, investigative and legal techniques against terrorism and its related crimes.

CJA 470 Criminal Justice Capstone

Recommended: Prior completion of: all of the prior core courses. CJA 470 Capstone should be the final course in the BSCJA major.

Critical analysis of scenarios from three areas of the criminal justice system--policing, corrections, and courts to demonstrate deep understanding of the complex interplay of media influence, ethics, critical thinking and viable solutions.

CJA 490 Guided Study

(1.5 quarter units)

Individual study under direction of instructor. Requires prior approval of appropriate academic department. Grading is by H, S, or U only.

CJA 600 CJ Theory, Practice & Policy

An overview of criminal justice administration, the history of police administration, organizational systems theory, principles, ideology, and managerial practice that has shaped the criminal justice profession.

CJA 610 Critical Issues in CJ

A seminar course focusing on contemporary issues related to problem-oriented policing (POP) and community-oriented policing (COP). Other topics include morale, motivation, retention, selection, recruitment, standards and training, evidence, arrest, lethal force, victim-witness, police reserves, and the cooptation of citizens in law enforcement by the criminal justice manager.

CJA 620 Legal Issues in CJ

An assessment of legal issues, legal terminology and analysis of court decisions involving criminal justice agencies' exposure to criminal or civil liability involving wrongful death, wrongful termination, police corruption, and discrimination lawsuits.

CJA 622 Professional Ethics in CJ

A study of ethical, legal, professional controversies, personal dilemmas and approaches to solving those conflicts. Using a case study format, students evaluate personal values or biases and the abuse of power and authority. The course also examines police or justice practices involving cases of ethical or police policy violations.

CJA 625 Security Management & Planning

An overview of the history, structure, importance and specific function of security management and administration. Students are exposed to the objectives of security management, security planning, education and training, organizational leadership, risk analysis, communication, legal liability for security managers, asset protection, emergency planning and development of security programs

CJA 627 Comparative CJ Systems

A comparison of the American criminal justice system with other systems around the world. Students will evaluate the systems of law, police, courts and corrections in 30 different countries and examine the diversity that exists in the world legal systems. Also examines and compares American and foreign justice policies.

CJA 650 Advanced Criminological Theory

A seminar course that explores the important criminological theories. The course will evaluate and compare the following theories: Classical, Positivist, Trait, Social Disorganization, Differential Association, Strain, Control, Labeling, Radical Choice, Deterrence, and Feminist theories. The course will analyze each theory and its relevance to crime in 21st century America.

CJA 655 Advanced Research Methods

The course is designed to aid graduate students to improve their writing and research skills and is specific to criminal justice. It includes an overview of the writing mechanics and process, how to properly conduct research, cite sources and guidelines for writing specific types of criminal justice papers.

CJA 660 Drugs, Alcohol & Public Policy

A series of perspectives and reflections of the worlds of drug taking, drug seeking, and public policy. Examines the history and patterns of abuse of the major drugs effecting crime in today's society and analyzes the public policy issues related to the legalization of certain drugs and medical marijuana.

CJA 665 Violence and Victimization

This course examines the causes of criminal victimization and looks at theories associated with violent victimization. It analyzes the offender-victim relationship, and presents ideas on preventing violence, and on responding to criminal victimization.

CJA 690 Research Project Thesis

Prerequisites: CJA 600, CJA 610, CJA 620, CJA 622, CJA 627, CJA 650 and CJA 655

A two-month course required of all MCJ students. Culminates in the research and writing of a substantial original work on a criminal justice pre-approved research project of personal interest involving the critical examination and evaluation of primary sources and appropriate secondary materials with faculty supervision and guidance. Grading is by H, S, or U only. Eligible for In Progress (IP) grade.

CLD – Cross-Cultural Language and Development (CLAD)

CLD 627 Meth. Crosscult. Instr.

An examination of content-area instruction for English language learners. Covers strategies that foster English Language Development (ELD) lesson development, adaptation, and delivery. Also covers Specially Designed Academic Instruction in English (SDAIE) and “instructional scaffolds” as well as “instructional conversations” to support ELD.

CLS – Clinical Lab Studies

CLS 301 Clinical Biochemistry

Recommended: Prior completion of: CHE 142

Explores the physiologic aspect of human metabolism and its role in health and disease. The derivation of energy and nutrients from digestive and absorptive processes, and the synthesis and metabolism of carbohydrates, fats and proteins.

CLS 305 Clinical Immunology

Recommended: Prior completion of: CHE 101, BIO 161 and BIO 203 or equivalent

Explores the immune system structure and function in health and disease. Topics include hypersensitivity, autoimmunity, immunodeficiency, transplant and tumor immunology, flow cytometry and other immunological techniques.

CLS 310 Clinical Virology

Recommended: Prior completion of: CHE 101, BIO 161 and BIO 203 or equivalent

Exploration of viral structure, classification, properties and interaction of viruses with cells, organisms and populations. Viral cultivation, the laboratory diagnosis of viral infections, and prevention and control of infection.

CLS 315 Molecular Diagnostics

Recommended: Prior completion of: BIO 162 and CHE 142

This course provides an overview of the principles of clinical molecular diagnostics, the use of molecular techniques to diagnose disease, quality assurance in the molecular lab and DNA based tissue typing.

CLS 320 Clinical Lab Management

Exploration of financial, personnel-related, operational and marketing issues affecting the clinical laboratory.

CLS 401 Quantitative Analysis

Recommended: Prior completion of: CHE 142

Study of established methods and instrumentation used in chemical analysis including titration, extraction, chromatography, spectroscopy, buffers, electrochemistry and kinetic methods.

CLS 405 Clinical Microbiology

Recommended Preparation: CLS 301, CLS 305 and CLS 315

The Clinical Microbiology course is a comprehensive course which will cover major groups of pathogenic bacteria, fungi, parasites, and Mycobacteria. Students will learn correct safety procedures, differentiate BSL's, disinfection techniques, and BSC

use. Study current trends in antibiotic use and their applications. Additionally, study of human parasitic disease and Mycobacterial disease will be covered.

CLS 410 Clinical Hematology

Recommended Preparation: CLS 301, CLS 315 and CLS 305

The Clinical Hematology course will cover the diagnosis and management of blood cell disorders, anatomy and physiology of hematopoiesis, routine specialized hematology tests, analysis, classification, and monitoring of blood cell abnormalities.

CLS 495 Clinical Lab Science Capstone

Prerequisites: Must have completed all required core classes.

A student initiated project in the field of clinical laboratory science or a closely related subject area which culminates in a scholarly professional written report and an oral presentation. Grading is by H, S, or U only. Course is eligible for an “IP” grade.

CLS – Clinical Lab Studies

(Extended Education)

CLS 6005X Microbiology Didactic Lectures

Prerequisites: CLS 405, Completion of B.S. degree in Biological Science or Clinical Laboratory Science. Within the degree requirements, the student should have previously completed an Introductory Microbiology (with laboratory) and Clinical Microbiology CLS 405.

The Clinical Microbiology Didactic Lectures are designed to reinforce and strengthen the practical in-laboratory trainee experience. Areas in Clinical Microbiology that will be covered are aerobic and anaerobic organisms, parasitology, antibiotic sensitivity testing and analysis of results, yeast, fungi, and Mycobacteriology.

CLS 6010X Urinalysis Didactic Lectures

Recommended: Prior completion of: CLS 301; Trainees would benefit from having previously taken and completed Introduction to Chemistry (with laboratory), Introduction to Biochemistry, Organic Chemistry, Microbiology to include Parasitology.

The Urinalysis Didactic Lectures are designed to reinforce and strengthen the practical in-laboratory trainee experience by providing didactic lecture subjects that cover essential areas in urinalysis such as clinical microscopy, chemical analysis, crystal analysis, and analytical skills.

CLS 6020X Serology Didactic Lectures

Recommended: Prior completion of: CLS 305; Trainees would benefit from having previously taken and completed Introduction to Chemistry, Biochemistry, Organic chemistry, Introduction to Immunology (if available).

Clinical Serology rotation consists of a wide range of laboratory disciplines such as Chemistry, Microbiology, Biochemistry, and Molecular Diagnostics. The objective of the rotation is to provide the student with the basic skills needed to perform a range of diagnostic serological tests independently, accurately, and efficiently. The student will also acquire knowledge of laboratory management and Quality control procedures.

CLS 6030X Chemistry Didactic Lectures

Recommended: Prior completion of: CLS 301; Trainees would benefit from having previously taken and completed Introduction to Chemistry (with laboratory), Introduction to Biochemistry, Organic Chemistry, Analytical Chemistry, and Quantitative Analysis.

Analysis and evaluation of practical laboratory hands-on procedures complement and reinforce the theoretical knowledge the student has acquired. At the conclusion of the series and the practical laboratory rotation, the student will have acquired practical experience in clinical the chemistry sufficient to perform diagnostic chemical tests in an efficient and accurate manner.

CLS 6040X Hematology Didactic Lecture

Recommended: Prior completion of: CLS 410; Completion of B.S. degree in Biological Science or Clinical Laboratory Science. Within the degree requirements, the student should have previously completed an Introductory Hematology course to include laboratory or similar, and the CLS 410 Clinical Hematology.

Clinical Hematology Didactic Lectures for Clinical Laboratory Scientist Trainees presents practical, technical material to compliment and reinforce the Hematology Laboratory training experience. The didactic lecture series is required by Laboratory Field Services as part of the 52 week CLS training program.

CLS 6050X Blood Bank Didactic Lectures

Recommended: Prior completion of: CLS 305; Students would benefit from having taken the Upper Division CLS Biochemistry, CLS Immunology, and lower division Chemistry, Organic Chemistry, Biochemistry, and Anatomy and Physiology.

Transfusion Medicine Didactic lectures reinforce and are a companion to the practical laboratory experience rotation for Transfusion Medicine. The lectures will cover a wide range of practical laboratory procedures focused on Transfusion Medicine subjects. At the finish of the lectures and the laboratory rotation, the student will be able to function independently, accurately, and efficiently in the discipline of Transfusion Medicine techniques.

CLS 6060X Phlebotomy Didactic Lectures

Prerequisites: Must have completed B.S. degree in Clinical Laboratory Science and currently accepted and enrolled in the National University Clinical Laboratory Scientist training programs.

Phlebotomy Didactic lectures cover basic phlebotomy skills and techniques and related knowledge needed for entry level competence in phlebotomy, as a Clinical Laboratory Scientist.

CLS 6070X Lab. Mgmt. Didactic Lectures

Prerequisites: Must have completed B.S. degree in Clinical Laboratory Science and currently accepted and currently enrolled in affiliate National University Clinical Laboratory Scientist 52 week California State licensed training program.

Provides insight and practical application of management techniques, exploration of financial, personnel-related issues, and operational marketing issues affecting the clinical laboratory.

COH 100 Personal Health

Designed to assist individuals to establish health behaviors for optimal physical, emotional, and sexual health and maintain a healthy environment.

COH 150 Healthcare Terminology

Presentation of healthcare service terminology and word forms. Includes language describing health and disease. Emphasizes development of medical vocabulary employing the building of terms for application in understanding and analysis of medical records.

COH 201 Integrative Health

Introduction to the emerging therapies and best supported scientific evidence in complementary and integrative healthcare. Covers systems and therapies including mind, body and spirit, traditional western healing, and ethnomedical systems from around the world. Includes legal and operational issues and explains how and why various therapies work in areas such as acupuncture, energy healing and mind-body therapies. Students will create a personal development plan for integrating learned principles towards lifelong practices for self-care and wellness.

COH 300 The Ecology of Public Health

Prerequisites: COH 100, PSY 100, SOC 100, BIO 203A, COH 310 and COH 320

Consideration of the interrelationships and interdependencies between individuals, families, groups, organizations, communities, and societies and their effects on health status. High level wellness, health, and disease are distinguished. Concepts are developed based on the evolution of public health in civilizations as well as contemporary influences.

COH 310 Culture and Health

Prerequisites: ILR 260

Focus is on the influence of culture on illness, health, and rehabilitation. The relationship that culture plays in the health and wellness of both individuals and the community in which they live will be explored.

COH 315 Introduction to Epidemiology

Prerequisites: BST 322 and ILR 260

Presents concepts and processes of this core public health discipline. Occurrence, distribution, effects, and control of diseases and conditions examined from a broad perspective. Applications of epidemiological methods included.

COH 317 Public Health Nutrition

Prerequisites: ILR 260

Human nutrition is examined in the context of physical and emotional health across the lifespan. The cultural, economic and political context of nutrition in contemporary society is considered. Students develop a personal nutrition plan. Interventions designed to influence better eating habits in communities are examined.

COH 318 Drug Use and Abuse

Prerequisites: ILR 260

Social, psychological, behavioral and physiological impacts of psychoactive drug use and abuse explored. Impacts of specific drugs on health status examined. Educational programs, public policy and treatment of addiction considered.

COH 319 Human Sexuality

Prerequisites: ILR 260

An exploration of the biological, psychological and sociological aspects of human sexuality. Development of a personal sexual philosophy, informed personal choice, awareness, tolerance and respect for sexual diversity. Critical analysis of research, information and public policy regarding sexuality.

COH 320 Chronic & Communicable Disease

Prerequisites: ILR 260

Introduction to concepts of pathological process from a public health viewpoint. Consideration of historical and contemporary disease patterns based on an understanding of pathogenic, behavioral, and environmental dimensions.

COH 321 Health Behavior

Prerequisites: ILR 260

Considers the significant influence that individual and collective behavior exerts on health status. Relationships of behavior and social variables are examined, including natural and built environments, economics, and public policy.

COH 370 Alternative Healthcare

Focus is on providing an understanding of complementary and integrative therapies. The historical context and theoretical basis as well as the most recent scientific research and clinical applications will be explored. The most prevalent complementary therapies in use today will be discussed.

COH 380 HP Program Planning & Eval

Prerequisites: COH 300, COH 315 and HTM 310

Knowledge and skills essential to assessing needs, developing goals and objectives, and planning activities for health promotion programs presented. Developing program plans incorporating evaluation standards included. Program implementation explored.

COH 400 Environmental Health

Prerequisites: COH 380

Focus is on the foundations of environmental science and environmental issues. Global climate change, agriculture, biodiversity, resource management, environmental toxins, waste management, and other topics will be explored.

COH 401 Health Promotion Concepts

Prerequisites: COH 300, COH 315, COH 400 and HTM 310

Designed for entry-level professionals, covers the evolving profession of health promotion. Principles and practice of health promotion included. Essential core knowledge and skills considered. Health promotion's link to other health and human service endeavors reviewed. Challenges to health promotion included.

COH 412 Injury Prevention

Prerequisites: COH 401

Occurrence and distribution of intentional and unintentional injuries in society and in selected population groups considered. Multiple physical, behavioral, social, and other variables contributing to injuries examined. Effective means for anticipating and preventing injuries identified.

COH 415 HP & Stress Management

Traces the biological foundations of the stress response in contemporary society. Associates stressors with factors that may lessen or increase effects. Concept of allostatic load and disease occurrence considered. Specific strategies to manage stress presented.

COH 416 PH & Physical Activity

Prerequisites: COH 401

Challenges to establishing and maintaining a physically active lifestyle in society examined. Physical, psychological, and social benefits of habitual physical activities considered. Public health impacts of sedentary living presented. Interventions to improve physical activity assessed.

COH 420 Health of Vulnerable Groups

Considers population groups from different views: Biological, disease, educational, cultural, social, economic, political, geographic, age, gender, citizenship status, behavioral, and housing. Consideration of factors making certain groups vulnerable to premature and excess morbidity and mortality.

COH 422 Global Health Promotion

Prerequisites: COH 401

Behavioral, environmental, and public policy factors affecting populations. Transportation, emigration, and immigration patterns affect health status. Substantial differences in health status among world's population examined. Course presents a broad understanding of the global aspects of health promotion.

COH 425 Health and Safety

Focus is on health and safety management in the workplace. Emphasis is on how to protect employees, reduce illness and injury on the job, and develop a safety culture. OSHA required training, inspections, and postings and labeling will be explored.

COH 430 HP Strategies & Tactics

Prerequisites: COH 401

Methodologies to implement health promotion programs emphasized. Levels of intervention, from individual to society, are shown. Criteria for selecting methodologies presented.

COH 435 PH Communications & Advocacy

Prerequisites: COH 430

Means for influencing social environments and public policy affecting public well being. Reaching identified target audiences through a variety of strategies examined. Successful communications and advocacy campaigns reviewed.

COH 440 Preparedness & Disaster Mgmt

Prerequisites: COH 401

Introductory study of the public health response to disasters at all levels of county, state and federal government. Emergency planning and management relative to human made and natural disasters will be explored. Students complete risk analysis, manage disaster preparation efforts, identify and analyze potential disasters, provide corrective action, plan, organize and implement contingency and recovery programs.

COH 494A Internship in Health Promotion

Prerequisites: COH 300, COH 315, COH 400, HSC 410 and a minimum completion of 36 quarter units of the Health Promotion core.

Practical application of knowledge and skills required for a health promotion professional in a community agency. Students assigned to agencies according to interests, abilities, and availability of approved internship sites. Two month requirement.

COH 494B Public Health Capstone Project

Prerequisites: COH 494A and Evidence of valid CPR and First Aid certification.

Summative, integrative experience drawing student curricular and related experiences together. Student initiated written project required addressing a significant health promotion challenge. Completed written project may be presented orally.

COH 499 Public Health Field Practicum

Prerequisites: COH 100, COH 300, COH 310, COH 315, COH 317, COH 318, COH 319, COH 320, COH 321, COH 380, COH 400, COH 401, COH 412, COH 416, COH 422, COH 430, COH 435 and COH 440

The public health field practicum is a culminating experience to demonstrate public health competencies through practical application of knowledge and skills. The 8-week (4.5 unit) course has several requirements including official documentation of at least 120 hours of approved public health experience, an electronic portfolio, a capstone paper and a presentation. Documentation of approved hours can begin up to 9 months in advance after participating in orientation and receiving written approval from Lead Faculty (For more information email BSPH-Internship@nu.edu). Students are expected to initiate contact and interview with public health preceptors from currently affiliated agencies or full-time faculty in the Department of Community Health. Students may also request an affiliation agreement for a new agency including a current employer. Students seeking experience from their current employer must demonstrate that duties are separate from current job duties. Students may work with one or more preceptors according to interests, abilities, and availability and may complete approved certifications towards accumulation public health experience. Grading is S/U only. Course is IP eligible.

COH 500 Global Health Experience

Exploration of the healthcare system and public health issues facing global communities. Tour location and experience the healthcare, economic, political, legal, and cultural environment of a host country. Development of thorough knowledge of global public health through combination of pre-departure study, on-site lectures and presentations by host country experts and healthcare leaders, post-tour analysis and reflection.

COH 601 Global Public Health

Prerequisites: HCA 600

Analysis of global public health with emphasis on defining and evaluating preventive efforts to affect the quantitative, biological, economic, social, political, and behavioral determinants of health. Investigation of burden of disease, social justice and equitable health care. Emphasis on reproductive health, population dynamics, complex humanitarian emergencies, globalization and global cooperation.

COH 602 Biostatistics

Prerequisites: HCA 600

An introduction to the use of statistical analysis in public health. Provides an understanding of the basic methods and underlying concepts of statistics that are used in public health decision-making. Among topics explored are descriptive statistics, probability, sampling, hypothesis testing and non-parametric statistics.

COH 603 Public Health Biology

Prerequisites: COH 602

Biological foundations of public health issues including infectious and chronic diseases. Reproduction and development of disease pathogens and transmission, immune responses and constitution of the host. Anatomical, physiological and cellular foundations for understanding chronic diseases. Focuses on methods for the control and prevention of disease.

COH 604 Theories of Health Behavior

Prerequisites: COH 603 or COH 621 or HCA 620

The theoretical basis of individual health behavior. Application of cognitive, psychosocial and environmental theories of health behavior and theories of self-directed and professionally facilitated health behavior change. Emphasis on Behavior Modification, Health Belief Model, Theory of Planned Behavior, Social Cognitive Theory, Stress and Coping, Social Support, and Transtheoretical Model.

COH 605 Public Health Promotion

Prerequisites: COH 604

Exploration of health status and issues in various communities. Application of the national agenda for health promotion and disease prevention in the United States. Emphasis on health disparities by socioeconomic status, ethnicity, gender, age, ability and literacy. Examination of diffusion of health innovations throughout communities.

COH 606 Epidemiology

Prerequisites: COH 602 and COH 605 or COH 616 or HCA 626

The study of determinants and distribution of disease and disability in human populations. Empirical analysis of population data related to morbidity and mortality. Investigation of disease outbreaks, risk factors, health outcomes and causal relationships. Critical evaluation of public health literature and study design.

COH 607 Public Health Program Develop

Prerequisites: COH 606

Development of community-wide interventions to promote health and prevent disease. Systematic design by application of the principles of epidemiology, health behavior and Evidence-Based Public Health. Includes Community-Based Participatory Research and investigation of ethical issues in conducting community-based public health programs.

COH 608 Public Health & the Enviro

Prerequisites: COH 606

Analysis of the health impact of home, workplace, community and global environments. Examines scientific understanding of causes and control of the major environmental health problems. Includes environmental pollutants; physical, chemical, and biological agents of environmental contamination; vectors for dissemination; solid hazardous waste; susceptible populations; biomarkers; and emerging global environmental problems.

COH 609 PH Program Evaluation

Prerequisites: COH 607 or COH 616

Fundamentals of evaluation methods applied to public health interventions. Effective use of measurement tools to evaluate achievement of program goals and objectives. Includes analysis of validity and reliability of measurement instruments. Emphasis on reach, effectiveness, acceptance, implementation and maintenance of community programs. Includes fundamentals of proposal development.

COH 611 Public Health Research Methods

Prerequisites: COH 602

Fundamentals of research methods and statistical analysis of public health data. Includes principles of research investigation, research design, sampling, measurements, and the use of descriptive and inferential statistics for data analysis and hypothesis testing. Focuses on health survey design, sampling methodologies, questionnaire construction and administration, interviewing, and coding procedures.

COH 612 Health Policy and Advocacy

Prerequisites: COH 611

Explores the roles health advocates assume and how individuals working in public health settings might participate in advocacy strategies to affect policy. Focuses on frameworks for conceptualizing and promoting the right to health as well as strategies to give consumers more power in making decisions, defining issues, designing programs, and developing policies.

COH 613 Public Health Informatics

Prerequisites: COH 606 and COH 612

Application of information systems and technology to public health practice and research. Information technologies that support and improve the status of individual and community health. Development, deployment and maintenance of these systems. Effective use of data, information and knowledge tools to build manage, merge, retrieve and analyze public health data.

COH 614 Psychosocial Epidemiology

Prerequisites: COH 606

Analysis of the epidemiological study of mental illness. Investigation of contemporary applications of epidemiology in investigating disease distribution and etiology. Emphasis on the use of epidemiological studies to plan mental health services, design prevention programs and to evaluate the effectiveness of mental health programs.

COH 616 Mental Health Promotion

Analysis of the evidence-based programs designed to prevent mental illness. Investigation of applications of evidence-based public health in planning and evaluating programs to prevent mental disorders. Analysis of existent programs, databases and professional literature. Design of mental health services and evaluation of the effectiveness of proposed mental health programs.

COH 617 PH Aspects of Violence

Prerequisites: COH 604 and COH 609

Intimate partner violence, child neglect and abuse, assault, homicide, war and terrorism are explored from a public health perspective. Focus on risk factor reduction and prevention of deaths, disability and human suffering.

COH 618 Health Promotion Strategies*Prerequisites: COH 605 and COH 609*

Investigation and evaluation of strategies implemented to promote health in communities. Emphasis on community organization, coalition building, curriculum development, communication theory and technology, social marketing, mass media and ecological models. Critical analysis of interventions that implement each strategy through systematic analysis of public health literature.

COH 619 PH Aspects of Human Sexuality*Prerequisites: COH 604, and COH 612*

Exploration of biological, psychological, behavioral and social aspects of health sexuality throughout the lifespan. Community level interventions to promote healthy sexuality.

COH 621 PH Aspects of Drug Addiction

Substance use disorders examined from the public health perspective. Prevention and treatment of substance use disorders to reduce deaths, disability and human suffering in communities.

COH 691 Public Health Internship*Prerequisites: HCA 600, COH 602, COH 604, COH 606, COH 608, COH 611, COH 613 or COH 619 or HCA 670*

Work in public health agency planning, implementing and/or evaluating a health promotion program or programs. Minimum of 120 hours of structured work experience in a healthcare organization under the direct supervision of one or more experienced health promotion specialists. Grading is H, S, U only. Course is eligible for In Progress (IP) grade. This is a two month course.

COH 692 Public Health Capstone*Prerequisites: COH 691*

Two-month capstone project focused on a relevant problem in public health theory or practice. Planning and completion of either a data-based research project or a scholarly and creative activity related to public health. Student project may require Institutional Review Board (IRB) approval. Course is eligible for In Progress (IP) grade.

COM – Communications**COM 100 Intro to Mass Communication**

Survey course that many students take to fulfill a general education requirement. It is also a prerequisite for further in-depth studies in the field of communication. The course examines the cultural, linguistic and institutional factors that shape even the most everyday talk or exchange of information. It also looks at the major mass media industries, including books and newspapers, TV and radio, film, advertising, and the Internet. Through readings and projects, the course introduces students to the history and evolution of the media as well as rhetorical analysis and theories used to study the media.

COM 101 Intro. to Oral Communication*Prerequisites: ENG 100 and ENG 101*

Introduction to fundamentals of oral communication. Focus on theories of the communication process. Emphasis on listening, non-verbal communication and audience analysis, in different contexts.

COM 103 Public Speaking

This class is an introduction to the principles and application of speaking effectively to diverse audiences in a variety of settings. Focus is on topic selection, organization, analysis of research, and delivery, with special attention on learning effective delivery skills.

COM 120 Intro to Interpersonal Comm

An introduction to the principals and application behind effective interpersonal communication. Students will study various styles of interpersonal communication, apply different techniques, and evaluate their effectiveness. Important components of interpersonal communication that include listening, conflict management, and developing and maintaining relationships, will be addressed in the personal and professional setting.

COM 230 Social Media Studies

Facebook, Twitter, social networks and other Web 2.0 applications now account for the majority of time people spend on the Internet. Blogs, videoblogs, podcasts, online video, wikis, social recommendation sites, geotagging, virtual reality and mobile environments, and live collaboration are just some of the newest and most powerful topics students will learn and use.

COM 300 Interpersonal Communication*Prerequisites: ENG 101*

Examines the theory and research behind interpersonal communication. Explores communication processes in dyads, small groups, and teams, and in organizational settings. Teaches skills to improve students' communication competence in both personal and professional environments. The course also covers self-awareness, self-disclosure, relational development, and conflict resolution.

COM 303 Digital Literacy 2.0*Prerequisites: ENG 100 and ENG 101*

A multidisciplinary course about knowledge management in the 21st Century: tools, acquisition, evaluation, synthesis, formatting, presentation, and sharing. Essential digital skills to participate in the collaborative learning, work, and social environments of Web 2.0.

COM 305 Intercultural Communication*Prerequisites: ENG 101*

Looks at communication across cultures and considers how culture influences communication. Focuses on the dynamics of cross-cultural face-to-face interaction, conflict styles across cultures, societal influences on ethnocentrism and racism, cultural value orientations, non-verbal dimensions of communication, language interaction, stereotypes, relationship development, and cultural adaptation.

COM 310 Communication Theory*Prerequisites: ENG 101*

Provides a broad survey of the theoretical approaches employed in the study of communication. Focuses on theories relevant to many levels of interaction from interpersonal to mass and mediated communication. Also explores how and why theories are developed and how they can be evaluated.

COM 315 Communication Research Methods*Prerequisites: ENG 101*

Introduces students to quantitative and qualitative communication research methods to enable them to become competent evaluators, designers, and authors of research. Teaches the fundamental principles of communication research, providing learners with the knowledge base and experience to answer questions in the practice of professional communication.

COM 324 Critical Thinking and Ethics*Prerequisites: ENG 101*

Examines critical thinking and ethics, and their application to academic, personal, and professional situations. Covers systems of logical reasoning, critical analysis, and evaluation of message content, including supporting evidence, and logical fallacies. Discusses the morality and ramifications of decision-making in media industries.

COM 334 Persuasion*Prerequisites: ENG 101*

Introduces learners to the principles, functions, and practices of social influence. Examines how to influence others' attitudes, beliefs, opinions, values, and behaviors through communication. Explores scientifically established principles of persuasion that are used in contemporary media.

COM 344 Organizational Communication*Prerequisites: ENG 101*

Provides for the study and application of current theories and research on communication within and among organizations. Includes the study of the influence of management styles on organizational communication. Discussion of communication structure, functions, contexts in organizations, and communication ethics in organizations.

COM 354 Professional Presentations*Prerequisites: ENG 101*

Explores professional speaking and presentations. Identifies and provides practice of theory and skills used in advanced speaking. Teaches creation and integration of text, graphics, audio, and video into presentations. Offers hands-on experience applying theory and methods to create professional presentations.

COM 360 Representation in the Media*Prerequisites: ENG 100 and ENG 101*

An exploration of the ways in which popular media represents our diverse and dynamic culture. The course focuses particularly on images and narratives of race and gender on television, in the movies and in popular culture. It also examines the cultural forces that influence how such representations are produced and perceived, their political and behavioral consequences, and various methods for analyzing and critiquing popular media.

COM 365 Integrated Marketing Comm*Prerequisites: ENG 101, COM 402 and MKT 302A or COM 315*

IMC allows organizations to plan and implement unified communication campaigns using traditional and new media. They can use these multiple media platforms to reach multiple audiences and publics, leveraging their assets to develop more efficient and effective efforts. Through case analysis, students learn how leading organizations use the principles of IMC. Hands-on projects give learners the experience and confidence they need in the workplace.

COM 385 Interactive Storytelling

Prerequisites: ENG 101

Introduces the evolution of storytelling, from oral delivery to written and interactive texts, and transmedia publication. Examines the effects of this evolution on storytellers and participants. Offers hands-on creation of online identities and texts.

COM 394 Strategic Writing

Prerequisites: ENG 101

Teaches strategic writing and presentation for traditional and new media platforms. Provides students practice in creating content that meets organizational objectives, and in applying communication theory and persuasion techniques. Learners develop content for advertising, PR, and corporate communications.

COM 400 Mediated Messaging

Prerequisites: COM 385 and COM 394

Course examines 21st-century mediated communication systems and technology. Theory and methods used in creating, shaping, encoding, and transmitting mediated messages for personal and professional communications are examined. Software and skills for encoding mediated messages into text, graphics, audio, and video are learned and practiced.

COM 402 Communication Technologies

Prerequisites: ENG 101

Examines communication technologies and their effects on society. Looks at the history of such systems: how they emerged, diffused, and evolved. Covers current systems, with an emphasis on how the Internet and other new platforms are changing media, education, business, and politics around the world.

COM 404 Media Management

Prerequisites: COM 400

In-depth study of topics in media management, including managing media enterprises and units, business practices, content marketing and distribution, and technologies such as content and media asset management systems, as well as distribution and delivery networks. Students learn analytical techniques necessary to weigh business strategies and technology choices in bringing a variety of types of media content products to market.

COM 441 Communication Strategies

Prerequisites: COM 334

Synthesizes principles and strategies used to develop PR and integrated advertising messages used in the planning and implementation of communication campaigns. Focuses on analyzing markets, clients, products, and audiences and on creative copywriting and art direction. Provides training in how to develop campaign plans in traditional and digital media.

COM 442 Communication Campaigns

Prerequisites: COM 441

Create and integrate campaign materials and media assets for a complete public relations or advertising campaign to be delivered across multiple media platforms. Materials produced include print, graphic, video, and other digital assets. Provides hands-on experience presenting a creative plan to a potential client.

COM 443 Interactive & Mobile Campaigns

Prerequisites: COM 442

Apply and integrate new tools and techniques to design, create, and implement interactive communication programs and campaigns. Focuses on delivery through Social Media, location-based messaging, and personal mobile devices. Offers hands-on experience producing multimedia and mobile content.

COM 490 Independent Study

(variable units)

Prerequisites: Approval of Instructor and Department Chair.

Individual study under direction of instructor. Requires prior approval of appropriate academic department.

COM 499 Communication Program Capstone

Prerequisites: Completion of 13 core and advanced core courses.

Students assemble and create materials necessary to produce an ePortfolio that demonstrates their research, analysis, strategic thinking, content production, and campaign evaluation skills. The ePortfolio demonstrates the student's experience and capabilities. It will be an asset in the job search and in career advancement. Grading is S or U only.

COM 600 Comm in Global Environment

Explores theory and practice of interpersonal communication in the workplace, focusing on the ability to communicate with others in professional interactions. Covers the development of interpersonal and professional relationships between people with different characteristics and backgrounds to provide learners with tools for encoding and decoding verbal, nonverbal, and mediated messages.

COM 610 Integrated Marketing Comm

Covers IMC process for creating and fostering relationships with customers and public through strategically controlling or influencing messages sent to and exchanged with these groups. Course teaches effective integration of an organization's marketing communication initiatives. Through case analysis, students learn how IMC has become critical to marketing efforts.

COM 615 Research Methods

Presents fundamentals of research underlying communication campaigns and programs. Covers qualitative and quantitative methodologies, secondary research, internal market intelligence, and data analysis. Offers practical experience with techniques to identify and reach audiences and publics and to track results of campaigns. Teaches research strategies to develop communications that fulfill organizational goals.

COM 620 Crisis Communications

Provides learners with principles and procedures for handling multiple stakeholders and publics under crisis conditions. Offers training to deal with media in less-than-optimal situations, when they may be faced with indifference or even hostility. Looks at case studies of strategies and tactics of organizations that have dealt with crises.

COM 625 Campaign & Program Management

Provides learners with knowledge to manage communication campaigns by covering theories and processes of campaign development and implemen-

ation. Covers best practices project management techniques, communication audits, budgets, and resource allocation. Offers hands-on experience creating, writing, and presenting communication campaign implementation plans.

COM 630 Campaign & Program Evaluation

Prerequisites: COM 610 and COM 615

Course covers communication campaign evaluation, before during and after the campaign period. Focuses on systematic qualitative, quantitative, and observational methods appropriate to guide campaign planning, make mid-course corrections to messages and media mix and to assess post-campaign effectiveness.

COM 640 Persuasion

Exploration of theories of persuasion that guide the preparation of messages intended to influence others. Focuses on use of persuasion techniques to develop decisions about creative and production implementation. Uses case studies to analyze persuasive messages in contemporary media and to compare techniques used in alternative media platforms.

COM 650 Legal and Ethical Issues

Provides students with a clear understanding of the legal environment for public communications and the ethical considerations that must be taken into account. Examines international regulation of copyright and intellectual property protection and legal and regulatory provisions in the U.S. Teaches skills in assessing ethical risk and following ethical guidelines.

COM 660 Capstone Project

Presentation of skills the learner has acquired in the program. Their research, analysis, strategic thinking, message shaping, and evaluation skills will all come together in the final project: The preparation of a digital, web-based e-portfolio that will be an asset in the search for an appropriate post-graduation position. Grading is by H, S, or U only.

CSC – Computer Science

CSC 200 Orientation to Comp. Science

An introductory survey course covering current developments and future prospects in the field of computing. Coverage begins with the fundamentals of computer architecture and progresses to software and software development processes. Topics included are operating systems, networking, programming languages, software engineering, database systems, and ethical issues in computing.

CSC 208 Calculus for Comp. Science I

Prerequisites: MTH 215

(Cross-listed and equivalent to MTH 220) Focus on differential and integral calculus with applications. Topics include limits and continuity, derivatives, standard rules of differentiation including chain rule, exponential and logarithmic forms, curve sketching, definition of anti-derivative; integration rules including substitution and by parts, coverage of Fundamental Theorem of Calculus and a brief exposure to numeric integration. Students may not receive credit for both CSC 208 and MTH 220.

CSC 209 Calculus for Comp. Science II*Prerequisites: CSC 208*

Continuation of Calculus I with emphasis on understanding of concepts and developing problem solving techniques and strategies. Topics include integration of trigonometric functions, functions of several variables, convergence of series and sequences. Applications in the areas of series approximation, continuous probability distributions, random variables, and modeling are discussed and examined.

CSC 220 Applied Probability & Stats.*Prerequisites: MTH 215*

Introduction to the theory and applications of probability and statistics. Topics include fundamental concepts of probability, conditional probability, random variables, common distributions, and statistical inference (estimation, hypothesis testing, and regression). The emphasis is on developing problem solving skills and applying key results to computing and engineering problems such as algorithm analysis, queuing, and simulation.

CSC 242 Intro to Programming Concepts*Prerequisites: MTH 215*

Introduction to modern programming design techniques using C++. A study of basic programming constructs, techniques and fundamental control structures. Emphasis is on Object Oriented and modular programming. Coverage includes data types, functions, arrays and pointers. The course examines problem analysis, decomposition and modern programming paradigms and methodologies.

CSC 252 Programming in C++*Prerequisites: CSC 242*

Fundamentals of Object-Oriented Programming in C++ including class definition and object instantiation, inheritance and polymorphism. Detailed coverage of exception handling, operator overloading, I/O and file streams, templates, and the Standard Template Library (STL). Exposure to Data Structures and basic algorithms for sorting and searching.

CSC 262 Programming in JAVA*Prerequisites: MTH 215*

The course introduces the Java programming language and its features. Topics include introduction to object oriented programming, basic control structures, java graphics and GUI objects, multimedia components, exposure to event driven programming, arrays and strings in java. Coverage includes encapsulation, inheritance, and polymorphism.

CSC 300 Object Oriented Design*Prerequisites: CSC 252*

Covers the key concepts and methodologies required for object-oriented design, evaluation and development with focus on practical techniques such as use-case, CRC analysis, and patterns. The Unified Modeling Language (UML) is presented in detail. Special emphasis is given to the use of object patterns in developing software systems.

CSC 310 Linear Algebra and Matrix Comp*Prerequisites: CSC 300*

The course includes the study of vectors in the plane and space, systems of linear equations, matrices, determinants, vectors, vector spaces, linear transformations, inner products, eigenvalues and eigenvectors. The course will approach the study of linear algebra through computer based exercises. Technology will

be an integral part of this course. Students will also develop experience applying abstract concepts to concrete problems drawn from engineering and computer Science

CSC 331 Discrete Structures and Logic*Prerequisites: CSC 252 and CSC 310*

(Cross-listed and equivalent to MTH 325) A theoretical foundation for computer science. Introduction to topics such as sets, propositional logic, Boolean algebra, counting techniques, recursive equations and solution techniques, graph algorithms with application to trees. Introduction to mathematical proofs. Students may not receive credit for both CSC 331 and MTH 325.

CSC 335 Data Structures and Algorithms*Prerequisites: CSC 300 and CSC 331*

An overview of data structure concepts, arrays, stack, queues, trees, and graphs. Discussion of various implementations of these data objects, programming styles, and run-time representations. Course also examines algorithms for sorting, searching and some graph algorithms. Algorithm analysis and efficient code design is discussed.

CSC 338 Algorithm Design*Prerequisites: CSC 335*

This course presents an introduction to the techniques for designing efficient computer algorithms, proving their correctness, and analyzing their running time complexity. General topics include asymptotic behavior, solving summations and recurrences, algorithm design techniques such as divide-and-conquer, dynamic programming, and greedy algorithms applied to sorting, searching and graphs. The course includes an introduction to the theory of parallel and distributed algorithms

CSC 340 Digital Logic Design*Prerequisites: CSC 208 or EGR 220**Corequisites: CSC 340L*

Foundation in design and analysis of the operation of digital gates. Design and implementation of combinational and sequential logic circuits. Concepts of Boolean algebra, Karnaugh maps, flip-flops, registers, and counters along with various logic families and comparison of their behavior and characteristics.

CSC 340L Digital Logic Design Lab

(1.5 quarter units)

Corequisites: CSC 340

A study of basic digital logic circuit design and implementation. Circuit schematic development and computer modeling and simulation of digital systems. Experiments explore designs with combinational and sequential logic. Students work through design activities, which include testing, troubleshooting and documentation.

CSC 342 Computer Architecture*Prerequisites: CSC 340 and CSC 340L*

An examination of advanced hardware design, analysis, and low level programming with emphasis on the structure of the machine. In addition, the machine cycles and instructions, pipelining, addressing modes, and architecture concepts are covered. Includes assembly language programming and program control structure.

CSC 350 Computer Ethics

Analysis of the values, ethics and ideologies in computing and their applications to current issues in computer industry within the contemporary sociocultural setting. Focuses on ethical decision-making in computing matters. Students develop an ethical outlook on a wide variety of workplace issues in computing through case study, debate and readings.

CSC 400 OS Theory and Design*Prerequisites: CSC 335*

An introduction to operating system concepts including implementation, processes, deadlocks, communication, multi-processing, multilevel memory management, file systems, protection, resource allocation, and scheduling.

CSC 421 Compiler Design*Prerequisites: CSC 335*

An introduction to the theory of programming language processors focusing on lexical analysis, syntax analysis, and compile-time mechanics, including code generation and optimization, execution of interpretive representations, and management of data structures.

CSC 422 Database Design*Prerequisites: CSC 300*

A survey of principles, structure, analysis, and techniques of database design and implementation. Topics include physical and logical design, normalization, database models, security, integrity and queries.

CSC 430 Programming Languages*Prerequisites: CSC 300*

A comparative study of programming languages. Syntax, semantics and pragmatics are considered. Language features that support software engineering are emphasized. Recent trends in programming language design and type theories are studied.

CSC 436 Comp. Communication Networks*Prerequisites: CSC 335 or CSC 340 and CSC 340L*

An in-depth study of fundamental concepts in the design and implementation of computer communication networks. Coverage of core problems such as framing, error recovery, multiple-access, flow control, congestion control, routing and end-to-end reliability. Topics include basics of switched communication networks, packet switch architecture, TCP/IP networking, routing algorithms, Quality-of-Service networks, and wireless communications. Mathematical tools are applied in quantitative modeling and analysis of networks.

CSC 440 Advanced Programming in Java*Prerequisites: CSC 262 or CIS 303*

A treatment of advanced programming techniques in Java using abstraction, encapsulation and inheritance. Development of applets and applications using client server technology, multithreading, event-driven programming techniques, and multimedia.

CSC 445 Wireless Appl. Development*Prerequisites: CSC 242 or CSC 262 or CIS 303*

Current wireless technologies and communication protocols. Coverage includes the current and emerging mobile applications, wireless and mobile infrastructure, devices, middleware, and network access issues. Examines the impact of wireless applications on individuals and organizations. Students will study

the current tools, and techniques employed in development of mobile software solutions.

CSC 450 Artificial Intelligence

Prerequisites: CSC 335

An introduction to problem solving using modern artificial intelligence techniques. Examines the role of heuristics in problem solving. Concepts such as agents, production systems, and natural language communication are studied. Experimental artificial intelligence systems are developed.

CSC 451 AI Programming

Prerequisites: CSC 335

A study of artificial intelligence programming techniques. The role of heuristic programming in pattern matching and search problems is examined. Introduction to intelligent agents, and decision game trees. Implementation strategies for computing systems underlying the concepts such as, production systems, heuristic search and natural language communication are examined.

CSC 452 Human Computer Interactions

Prerequisites: CSC 300 or CSC 440

Methods facilitating effective human-computer interaction. Procedures and environments fundamental to the development of a successful user interface are examined. Design philosophy, guiding principles, and technologies for constructing and sustaining interactive systems that optimize user production are appraised. Discussion of multidisciplinary dynamics of HCI, current and projected developments in HCI research.

CSC 454 Computer Graphics

Prerequisites: EGR 220 and CSC 335

A study of the fundamental mathematical, algorithmic and representational issues in computer graphics, with emphasis on 3 dimensional graphics. Examination of topics including the graphics process, projective geometry, homogeneous coordinates, projective transformations, line-drawing, surface modeling and object modeling using spatial sampling and parametric functions, approaches to rendering, texture synthesis and mapping, and polyhedral representations.

CSC 455 Game Programming

Prerequisites: CSC 454

A study of tools and techniques for design and implementation of interactive games. The course will emphasize programming aspects, including event loops and execution threads, rendering and animation in 3D, terrain/background representation, polygonal models, texturing, and collision detection.

CSC 456 Advanced Game Programming

Prerequisites: CSC 455

An advanced study of formal models and design principles of interactive games. The course will emphasize algorithms, models, programming techniques, including event loops and execution threads, rendering and animation in 3D, terrain/background representation, polygonal models, texturing, and collision detection.

CSC 480A Computer Science Project I

Prerequisites: Completion of core courses.

A study of the software development life cycle. Emphasizes logical organization of system and communicating design through documentation suitable for generating a concrete implementation. Students con-

struct an original project with practical applications applying software engineering concepts. This project includes program specifications, test plans, and user documentation. Grading is by H, S, or U only.

CSC 480B Computer Science Project II

Prerequisites: CSC 480A

A continuation of the student project. Student teams complete the internal specification and test plan. The project is coded, modules-tested, system tested and all documentation is completed. Grading is by H, S, or U only.

CSC 606 Modern Operating Systems

A study of relation between architectures, system software and application software. Topics include process, thread, and memory management issues, multiprogramming, timesharing, multithreading, multiprocessing, inter-process communication, synchronization, virtual machines, client-server systems, distributed systems, real time systems, resource allocation, shared resources, input output, file systems, computer security and related problems. Scope and limitations of current Operating Systems are considered.

CSC 607 Security in Computing

This course examines the use of security vulnerabilities and threats in computer programs, operating systems, networks, and databases. The use of cryptography and other countermeasures to provide confidentiality, integrity, and availability is then evaluated in depth, from the perspectives of both technical effectiveness and ethics of users and developers.

CSC 610 Mathematical Foundations

A study of mathematical models of computation and theoretical foundations of computer science. Proof techniques, automata theory, Chomsky hierarchy, decidability and computational complexity are emphasized.

CSC 615 Advanced Programming

Review of structured, object oriented and event driven programming and data and procedural abstractions. Complex program development with advanced multi-threading and multiprocessing for parallel computing in multiple environments.

CSC 668 Topics in Computing

Each time this course is offered, it addresses a topic in computer science that is not covered as a regular course. The topic is covered at an advanced level that is appropriate for any student who has successfully completed the prerequisite courses. Possible topics include grid computing, semantic web, intelligent systems and knowledge abstraction.

CSC 670 User Interface Engineering

A study of techniques in design and implementation of user interfaces. Emphasis will be on effective human computer interaction strategies that meet human cognitive capabilities and organizational practices and processes.

CSC 686 Computer Science Project I

Prerequisites: Completion of all MSCS core courses or permission of the instructor.

A study of the software development practices. Emphasizes logical organization of system and communicating design through documentation suitable for

generating a concrete implementation. Students construct an original project with practical applications utilizing software engineering concepts. This project includes requirements engineering, design, test plans and user documentation. Grading is by H, S, or U only.

CSC 687 Computer Science Project II

Prerequisites: CSC 686

This course, meets once a week. A continuation of the student project. Student teams complete the project in this phase. The project is coded, module-tested, system-tested and all documentation is completed. Grading is by H, S, or U only.

CYB – Cybersecurity

CYB 200 Introduction to Cybersecurity

An introductory survey course that explores the fundamental concepts of cybersecurity. Coverage includes the concepts of confidentiality, integrity, and availability, cybersecurity policy, and the ethical and legal aspects of cybersecurity.

CYB 211 Operating System Fundamentals

Prerequisites: CYB 200

An introduction to the basic architecture and functions of an operating system. Computer hardware and software integration will be explored. Basic design and functionality of the Windows and Linux operating systems will be explored. In addition, core aspects of securing operating systems are covered.

CYB 212 Introduction to Networking

Prerequisites: CYB 200

This course provides an introduction to basic network concepts including local area networks, wireless networks, and wide area networks. Network security concepts are also introduced. Students will explore secure router configurations.

CYB 213 Data Fundamentals for Cybersec

Prerequisites: CYB 200

The principles of data security are introduced. Students will learn how to protect data in transit and at rest. The technical aspects of implementing encryption, authentication, and access control to protect data will be covered along with the development and implementation of associated policy. Basic database security concepts and guidelines will be covered.

CYB 214 Quant Tools for Cybersec Pro

Prerequisites: CYB 213

This course provides an introduction to the concepts of probability, statistics, and discrete mathematics that are used by a cybersecurity professional. The application of basic statistics and statistics for cybersecurity will be covered. Basic cryptographic tools and protocols are introduced.

CYB 215 Fund of Virt and Cloud Comp

Prerequisites: CYB 211 and CYB 212

This course introduces the fundamental concepts of cloud computing and virtualization. The core cloud deployment and service models will be covered. A comparison of public and private cloud deployments will be conducted. The concepts of devops and continuous integration will be introduced.

CYB 216 Programming for Cybersecurity

Prerequisites: CYB 215

This course introduces the fundamental concepts of programming for cybersecurity professionals. A survey of program tools will be conducted. The use of PowerShell, scripting, and python to implement system security will be covered in this class.

CYB 320 Tech Writing/Proj Mgmt for CYB

Provides instruction and practice on the writing skills needed to create clear and concise technical documents. Students will understand how to explain technical topics to non-technical leadership. The Project planning and management concepts will be introduced.

CYB 331 Secure Linux System Admin

Prerequisites: CYB 216

This course covers the secure administration of Linux based systems. Students will learn how to implement and assess standards based security measures on the Linux operating systems. Automating the implementation and assessment of security measures will be a core component of the class. Legal and ethical aspects of system administration will also be covered.

CYB 332 Secure Windows Administration

This course covers the secure administration of Windows based Desktop and server systems. Students will learn how to implement and assess standards based security measures on Windows based operating systems. Automating the implementation and assessment of security measures will be a core component of the class. Legal and ethical aspects of system administration will also be covered.

CYB 333 Security Automation

Prerequisites: CYB 331 and CYB 332

This course builds on CYB 216 and covers advanced topics in security automation. Students will learn how to manage security related code in a software repository. Students will write integrated scripts to implement and assess system security. Use of devops automation tools to securely manage infrastructure will also be covered.

CYB 340 Sys Sec Arch for Cybersec

Prerequisites: CYB 333

An explanation of the development and design of system architectures that meet cybersecurity requirements. Students will examine methods to translate technology and environmental conditions (e.g., law and regulation) into system and security design.

CYB 341 Cyber Team Competition

(1.5 quarter units)

Recommended: Prior completion of: CYB 216 This course requires the permission of the Program Lead Faculty for the BS Cyb Program.

Credit for student participation in cyber competitions like the National Cyber League and the National Collegiate Cyber Defense Competition.

CYB 420 Sec Audit and Assessments

Recommended: Prior completion of: CYB 340 At least 13.5 units of the first core sequence must be completed before this course.

An examination of the various tools and frameworks to conduct a system/network security audit or assessment. Various IT audit frameworks, government and non-government, will be covered. Legal and ethical aspects of IT auditing and assessment will be covered.

CYB 441 Cyber Team Competition

(1.5 quarter units)

Prerequisites: CYB 420 And consent of the Program Lead Faculty

Credit for student participation in cyber competitions like the National Cyber League and the National Collegiate Cyber Defense Competition.

CYB 450 Cyber Threat Intelligence

Prerequisites: CYB 340

An exploration of the tools and techniques to collect and analyze cyber threat information. The class will cover the collection and analysis of log data, threat intelligence data, and Indicators of Compromise to detect malicious activity.

CYB 451 Incident Handling/Response

Prerequisites: CYB 340

An examination of the tools and methods for incident response. Topics include preparation data collection, incident analysis preserving data, and recovery. The legal and ethical aspects of incident response will also be covered.

CYB 452 Intro to Ethical Hacking

Prerequisites: CYB 340

This course examines common ethical hacking methods along with hands-on application of security tools to test network and systems security. The planning and execution of a penetration test will be covered. The legal and ethical aspects of penetration testing will be discussed.

CYB 453 Network Defense

A detailed examination on the concepts of network defense and the various tools to protect and monitor a network. Students will learn how to implement an Intrusion Detection System, conduct network monitoring traffic analysis, and honeypots. Development of associated policy will also be covered.

CYB 454 Cybersec Planning and Policy

Prerequisites: CYB 340

A detailed examination on the development of organizational cybersecurity policy that meet an organization's compliance requirements and business goals. The creation of a cost benefit analysis when developing policy and system requirements.

CYB 460 Operating System Security

Prerequisites: CYB 420 and completion of all core CYB classes before starting the concentration, CYB 450, CYB 451, CYB 452, CYB 453 and CYB 454

An advanced examination of securing Windows and Linux operating systems. Detecting and preventing operating system attack will also be covered. The course will focus on the use of security automation tools to secure and monitor multiple operating systems.

CYB 461 Wireless and Mobile Security

Prerequisites: CYB 460

An advanced examination of wireless and mobile security. Students will learn how to secure a wireless network against a common baseline. Planning and implementation of the secure deployment of mobile device in an enterprise will be covered. An examination of wireless attack methods and mobile malware will be conducted.

CYB 462 Cloud and Virtualization Sec

Prerequisites: CYB 460

An advanced examination of cloud and virtualization security concepts. Students will learn common hypervisor security tools and techniques. Security issues related to the different cloud service models will be covered. Hypervisor threats and attacks will be examined. Students will secure images in a public cloud environment.

CYB 463 Advanced Network Defense

Prerequisites: CYB 460

Students will learn advanced techniques for network defense including the use of intrusion detection systems, intrusion prevention systems, firewalls, and virtual private networks. Design and integration of different network defense tools will also be covered.

CYB 470 Intro to Digital Forensics

Prerequisites: CYB 420 and completion of all core CYB classes before starting the concentration, CYB 450, CYB 451, CYB 452, CYB 453 and CYB 454

Introduction of computer forensic principles. The class explores the concepts of admissibility of electronic evidence, preparing for e-evidence collection, and conducting a digital forensic examination of computers. Legal and ethical requirements of a digital investigator are also covered.

CYB 471 Operating Systems Forensics

Prerequisites: CYB 470

This course provides an overview for collecting digital evidence from a Windows, Linux, and Mac operating systems. Operating specific tools and techniques for collecting file information, log information, data artifacts, web history and computer memory are explored.

CYB 472 Network Forensics

Prerequisites: CYB 470

In this class, students learn the tools and techniques to collect and analyze network data to support a digital investigation. Students will gain practical experience by analyzing network traffic captures. Legal and ethical requirements of a network forensics investigation are also covered. Correlation of data from other sources will also be examined.

CYB 473 Mobile Device Forensics

Prerequisites: CYB 470

Students will learn how to collect and analyze digital evidence from mobile devices. The tools and techniques that are unique for mobile device forensics like acquisition, physical isolation, sim cards, and file system recovery will be covered. Extraction of geolocation data and other cellular data will also be explored.

CYB 499A Cybersecurity Project I

Prerequisites: Completion of Computer network defense concentration (CYB 460, CYB 461, CYB 462, CYB 463) or completion of Digital Forensics Concentration (CYB 470, CYB 471, CYB 472, CYB 473)

A capstone project focused on applying the knowledge and concepts learned through this program. Students will work as an individual or in a team to complete a practical or research related cybersecurity project. Grading is H, S, U only.

CYB 499B Cybersecurity Project II

Prerequisites: CYB 499A

This course is a continuation of CYB 499A and continues the application of knowledge in the selected topic. Grading is H, S, U only.

CYB 499C Cybersecurity Project III

Prerequisites: CYB 499B

This course is a continuation of CYB 499B and continues the application of knowledge in the selected topic. Students will present their findings to a panel of academic and business professionals. Grading is H, S, U only.

CYB 600 Cyber Security Technology

Examines the environment to be secured, and defines the attributes of that environment. Includes securing the environment, security technologies in the environment, security threats and security responses.

CYB 601 Cyber Sec. Toolkit Utilization

Prerequisites: CYB 600

Designed to introduce technical tools and begin to use them in hands-on exercises in both onsite and online instruction. This will facilitate students to complete future assignments and develop projects in teams. Technical tools used will include Microsoft and VMware virtual machines of Windows and Open Source operating systems, certificate authorities, SSL/TLS and browser certificates, web and database servers, programming frameworks, and network/packet analysis and sniffing strategies.

CYB 602 Threat Modeling & Intel

Prerequisites: CYB 601

Analysis and evaluation of threat modeling and cyber threat intelligence to reduce risk and enhance organizational Cybersecurity posture. Development and use of threat models to identify threats to systems and applications. Methods for collecting and utilizing threat intelligence to identify organizational threats are also covered.

CYB 603 Cyber Security Ethical Issues

Prerequisites: CYB 602

Examines information technology issues including hardware reliability and network security. Ethics are introduced with a focus on professional ethics. Topics include intellectual property, plagiarism, privacy and work and wealth.

CYB 604 Wireless and Mobile Security

Prerequisites: CYB 603

Concepts covered include a comprehensive wireless and mobile security overview including the design, planning, installation, and maintenance of wireless network security infrastructures. Emphasis is placed on information warfare countermeasures relative to government, military, terrorist and rogue, and private enterprise demographics

CYB 605 Information Assurance Part I

Prerequisites: CYB 604

Information assurance for the enterprise is a coordinated, ongoing solution that merges all required procedures and controls involved in protecting and securing information. IA framework and security policies, logical security, and ethics, codes of conduct, laws and regulations are highlighted.

CYB 606 Net Defense & Cloud Security

Prerequisites: CYB 604

Analysis and evaluation network security monitoring and cloud security. Methods for implementing network security monitoring. Security implications of virtualization and cloud computing technologies. Methods for implementing and enhancing network and cloud security.

CYB 608 Ethical Hacking

Prerequisites: CYB 606

This practicum focuses on the legal and regulatory requirements, ethical issues, basic methodology and technical tools used for ethical hacking and penetration tests. Students learn to establish a pre-test agreement with the enterprise, discover and exploit vulnerabilities, participate as a member of a pen test team and prepare a penetration test report.

CYB 611 Cyber Sec. Mgmt & Cryptography

Prerequisites: CYB 606

Security management including risk assessment; controls and safeguard; planning. Encryption standards and algorithms are examined. Secure communications and identity management are also probed. Windows and Linux environments are included.

CYB 612 Disaster Rec./Bus. Continuity

Prerequisites: CYB 608

In-depth focus on the development of an enterprise disaster recovery and business continuity plan that includes assessing impact and risks, prioritizing systems and functions for recovery, identifying data storage and recovery sites; specifying plans, procedures and relationships; creating a test process for the plan; and continued assessment of needs, threats and solutions.

CYB 613 Information Assurance

Prerequisites: CYB 608

The functions and processes required to achieve physical and logical control over the entire security infrastructure are analyzed from an IA organizational and life cycle perspective. Personnel security, network and physical security, business continuity and cryptology are highlighted.

CYB 616 Certification & Accreditation

Prerequisites: CYB 613

This course gives in-depth focus for Information Assurance from an INFOSEC, US defense/military, perspective. Information systems security from an INFOSEC perspective focuses on protection of information systems against unauthorized access to or modification of information, whether in storage, processing or transit, and against the denial of service to authorized users, including those measures necessary to detect, document, and counter such threats. Emphasis is upon defining the IA priorities, baseline and current snapshot posture for an organization; and establish and manage an IA defense in-depth strategy.

CYB 632 Info Sys Vulnerab & Attacks

Prerequisites: CYB 608

Students will apply principles of penetration testing to identify and exploit vulnerabilities in network facing information systems and make recommendations for mitigation. This course uses tools such as the Metasploit Framework that is a free, open source penetration testing solution developed by the open source community.

CYB 633 Red Teaming

Prerequisites: CYB 632

Red Teaming, or Alternative Analysis, is the practice of viewing a problem from an adversarial or competitor's perspective. The objective of Red Teams is to enhance decision making, practices of secured system protection applicable by establishing countermeasures of defense. A contributing outcome of this course to the entire MS CSIA program is to help students employ actively open-minded/problem solving, unbiased thinking to CSIA.

CYB 634 Red vs. Blue Team Exercise

Prerequisites: CYB 633

Students will analyze and perform Red vs. Blue Team objective-based cyber operations as an active approach to establish a defensive posture improvement. The basic idea of Red vs. Blue team countermeasures is simple - war gaming. A virtual enterprise computer infrastructure is established and the Red Team will attack the infrastructure, whereas, the opposing Blue Team will defend against the attack. This level of risk management has been actively deployed in both government and industry. This exercise prepares the student for the final team project in MS CSIA course CYB699.

CYB 699 Cyber Policy Project

Prerequisites: CYB 606 and completion of one specialization area

A Master's Project dealing with a student's area of concentration on Cyber Security and Information Assurance policy is presented to a review panel for evaluation and approval. In-depth focus on security policy definition, regulations and framework including asset classification, control, personnel security, physical, environmental, communications, operations management, access control, systems development and maintenance, disaster recovery and business continuity policies and procedures. Specific regulatory emphasis is placed on defense, financial, healthcare, critical infrastructure, educational and small business sectors.

CYB 699A Cyber Security Project I

Prerequisites: CYB 608 and completion of one specialization area.

A Master's level project dealing with a student's area of specialization in the Cyber Security and Information Assurance program. The students will create an original project with practical applications using cybersecurity policy, regulatory, and testing frameworks. The project will integrate the concepts of cyber security and information assurance taught throughout the program. Project management techniques and collaboration will be emphasized along with the ethical and legal aspects of the project. Grading is H, S, or U only.

CYB 699B Cyber Security Project II

Prerequisites: CYB 699A

Master's level project dealing with a student's area of specialization in the Cyber Security and Information Assurance program. The students will create an original project with practical applications using cybersecurity policy, regulatory, and testing frameworks. Project management techniques and collaboration will be emphasized along with the ethical and legal aspects of the project. Grading is H, S, or U only.

CYB 699C Cyber Security Project III

Prerequisites: CYB 699B

Master's level project dealing with a student's area of specialization in the Cyber Security and Information Assurance program. The students will create an original project with practical applications using cybersecurity policy, regulatory, and testing frameworks. Project management techniques and collaboration will be emphasized along with the ethical and legal aspects of the project. Project results will be presented to a panel for review. Grading is by H, S, or U only.

DAT – Database

DAT 604 Database Design and Impl.

Introduction to Database. DBMS Architecture. High Level Conceptual Data Models: ERI, Relational, ER to Relational Mapping. Operations and Relational Constraints Violations. Database Design Theory and Methodology: Functional Dependencies and Normal Forms. SQL *Plus environment and commands: Relational Algebra Operations, Creation and Modification of relations, Data Management and Retrieval using Multiple Tables.

DAT 605 Web and Cloud Computing

Prerequisites: DAT 604 or approval of lead faculty.

A survey of the technologies required for software development of current applications, such as internet and client/server with a focus on database applications and software systems that solve a particular real-world problem. Examine application design and external, conceptual and internal levels of databases. Design and develop front-end application using GUI/API, server-side and client-side programming, and multi-threading for modern relational databases in the client/server environment.

DAT 615 Advanced Database Programming

This course teaches the skills for implementing and maintaining databases using Structured Query Language (SQL), including Data Design Language and Data Manipulation Language. Topics include creating databases using Transact-SQL and Data Transformation Services (DTS) to manipulate data; programming business logic using stored procedures, triggers, user-defined functions, and views.

DAT 625 Database Management Systems

Prerequisites: DAT 604 or approval of lead faculty.

This course concentrates on the study of the internals of database management systems. Topics include: principles and theories of physical storage management, Storage and File Structure. Indexing and Hashing, query processing and optimization, index structures for relational databases, transaction processing, ACID properties, concurrency control, database backup and recovery.

DAT 635 Database Installation & Config

Prerequisites: DAT 615 or approval of lead faculty.

Identify system requirements, Use Optimal Flexible Architecture. Install Database with the Universal Installer. Identify and configure commonly used environment variables. Explain the database and instance architecture. Use the management framework. Configuring, tuning and performance optimization. Identify common database interfaces.

DAT 645 DB Management & Security

Prerequisites: DAT 635 or approval of lead faculty.

This course also teaches theory and application for providing effective administration and security in database management systems. The skills for managing database users and roles, database maintenance plans, security policies and procedures, documentation, the principal of least privilege, manage user accounts, implement standard password security features and audit database activity.

DEN – Design Engineering

DEN 308 Computer Aided Engineering I

Prerequisite: EGR 219

Introduction to simulation modeling and analysis, model development, intermediate and detailed modeling, modeling issues and techniques.

DEN 411 Computer Aided Engineering II

Prerequisites: EGR 219

Introduction to the computer aided design package SolidWorks for mechanical design applications, modeling and analysis.

DEN 417 Computer Aided Engineering IV

Prerequisites: EGR 219

Introduction to the industry-standard engineering language provided by MATLAB latest versions for computation, analysis, and visualization, with emphasis on engineering graphics applications.

DEN 420 Computer Aided Engineering V

Prerequisites: EGR 219

Advanced topics on three-dimensional parametric modeling tools, features and functions of SolidWorks with emphasis on mechanical design solutions, standards, simulation and techniques.

DEN 422 Materials and Manufacturing

Prerequisites: EGR 225

An introduction to the thermal, bonding, usage and machining characteristics of materials and manufacturing processes used in the production industry. The course introduces the basic concepts of manufacturing and emphasizes quantitative analysis of manufacturing processes and the relationships between material properties and the variables of manufacturing processes.

DEN 423 Human Factors in Engineering

Prerequisites: MTH 215

Consideration of human characteristics in the requirements for design of the systems, products and devices. Human-centered design with focus on human abilities, limitations and interface.

DEN 426 Reliability Engineering

Prerequisites: MTH 215

An introduction to reliability engineering with emphasis on practical applications and the mathematical concepts. Cover mechanical, electronic and software failure mechanisms, design and testing.

DEN 429 Product Design Optimization

Prerequisites: MTH 215

This course focuses on analytical and empirical tools that allow designers and manufacturing engineers to predict the manufacturing and assembly cost estimates for optimized design.

DEN 432 Concurrent Design Engineering

Prerequisites: MTH 210 or CSC 220

An introduction to the concepts, methodologies and practices of the concurrent engineering design environment for effective and efficient integration of products, systems and manufacturing processes.

DEN 435 Design & Analysis of Experiments

Introduction to the concepts of making the design and analysis of engineering experiments more effective and efficient. Coverage includes advanced techniques to analyze experimental results, Taguchi's robust design strategy, combination designs, and Qualitek-4 software for automatic experiment design and analysis.

DHH – Deaf and Hard-of-Hearing

DHH 632 Charac of D/HH Learners

An overview of the etiologies and cultural differences related to hearing loss and the learner characteristics that impact the unique needs of deaf and hard-of-hearing learners including language and cognitive development, social growth and academic development. Comparison of service delivery models and interventions, including cochlear implants, for students ages birth through 22 will be made.

DHH 634 Assess & Inst D/HH Birth-5yrs

Candidates will develop the collaboration skills to enable participation in a multi-disciplinary educational team that provides appropriate assessment in the language, listening, cognitive and social skills of deaf and hard of hearing students and develops an appropriate intervention and education program for students ages birth through 5.

DHH 636 Language Develop Methods D/HH

Candidates will develop the knowledge and ability to apply a wide variety of instructional techniques to develop age-appropriate language and cognitive skills for students who are deaf or hard of hearing. Candidates are expected to demonstrate skill in both visual (signed) and/or auditory (spoken) communication in the implementation of these techniques.

DHH 638 Literacy Develop D/HH

Candidates will learn a wide variety of strategies to develop the literacy skills of deaf and hard of hearing learners, including skills in reading and writing English. Candidates will develop and implement lesson plans that reflect grade level State Standards for all areas of Language Arts.

DHH 640 Inst D/HH with Special Needs

Candidates will describe the characteristics of deaf and hard of hearing learners who exhibit additional disabilities such as cognitive impairment, specific learning disability, visual impairment, emotional disturbance, autism spectrum disorder and those with significant behavior disorders. Candidates will develop lesson plans and instructional strategies that include specialized adaptations and modifications to meet the needs of these learners.

DHH 682A Student Teaching

Corequisites: SPD 688A

Twelve weeks or 60 days of full-day supervised teaching with Deaf and Hard of Hearing students. Candidates are supervised by a teacher with a clear Deaf and Hard of Hearing credential and by Univer-

sity Supervisor with at least three years of pre-K to 12 classroom experience. The course is graded satisfactory (S) or unsatisfactory (U).

DHH 682B Student Teaching

Corequisites: SPD 688B

Twelve weeks or 60 days of full-day supervised teaching with Deaf and Hard of Hearing students. Candidates are supervised by a teacher with a clear Deaf and Hard of Hearing credential and by University Supervisor with at least three years of pre-K to 12 classroom experience. The course is graded satisfactory (S) or unsatisfactory (U).

DHH 688A Clinical Practice Seminar

(2.25 quarter units)

Corequisites: DHH 682A or DHH 682B or DHH 692

Focus on three CTC Teaching Domains. Create or revise artifacts reflecting knowledge and skills in each of those Domains to be uploaded into their Professional Portfolio. The Professional Portfolio must be completed and approved by the instructor in order to successfully pass this course. Grading is S/U only. Eligible for In Progress (IP) grading.

DHH 688B Clinical Practice Seminar

(2.25 quarter units)

Corequisites: DHH 682B or DHH 692

Focus on three CTC Teaching Domains. Create or revise artifacts reflecting knowledge and skills in each of those Domains to be uploaded into their Professional Portfolio. The Professional Portfolio must be completed and approved by the instructor in order to successfully pass this course. Grading is S/U only. Eligible for In Progress (IP) grading.

DHH 692A Internship DHH

Prerequisites: SPD 608, SPD 614, TED 621B,

Candidates must be admitted to the University internship program.

The National University Special Education Internship for Deaf and Hard of Hearing population is designed as an alternative route for the preparation of Education Specialist candidates. Candidates selected for an internship serve as teachers of record in education of the deaf classrooms/programs, earn full-time salaries and receive benefits. Interns receive support and supervision, from the university program and the school site, for a minimum of 4 months while completing required coursework for authorization to teach students who are Deaf or Hard of Hearing. Does not grant graduate units towards graduate degree. The course is graded satisfactory (S) or unsatisfactory (U).

DHH 692B Internship DHH

Prerequisites: DHH 692A

The National University Special Education Internship for Deaf and Hard of Hearing population is designed as an alternative route for the preparation of Education Specialist candidates. Candidates selected for an internship serve as teachers of record in education of the deaf classrooms/programs, earn full-time salaries and receive benefits. Interns receive support and supervision, from the university program and the school site, for a minimum of 4 months while completing required coursework for authorization to teach students who are Deaf or Hard of Hearing. Does not grant graduate units towards graduate degree. The course is graded satisfactory (S) or unsatisfactory (U).

DHH 692C Internship Support DHH

(2.25 quarter units)

Prerequisites: DHH 692B

The purpose of this course is to provide ongoing support for intern candidates who have not completed the Preliminary Education Specialist Credential Program. Interns who have passed the two initial internship clinical practice courses in Deaf and Hard of Hearing (DHH 692A and DHH 692B), but have remaining credential requirements to complete, must register for DHH 692C Internship Support DHH which provides continuous, targeted support for their internship as required by the Commission on Teacher Credentialing (CTC). This 2 month (2.25 unit) course will be repeated by individual interns until they have successfully completed all of the credential requirements for the Preliminary Education Specialist Credential with Authorization in Deaf and Hard of Hearing (DHH). All internship clinical practice courses are designed to address CTC standards and requirements for recommendation for the Education Specialist Preliminary Credential. Does not grant graduate units towards graduate degree. This course can be repeated up to 8 times.

ECE – Early Childhood Education

ECE 210 Child, Family, School and Comm

Focus on the influence of family, school and community on development and education of the young child. Special emphasis on the role of nutrition, positive home and school environments and community resources.

ECE 301 Early Childhood Teaching

Focus on teaching as a profession. Emphasis on California Early Childhood Preliminary Multiple Subject Teaching Credential requirements, California standards of the teaching profession (CSTP), teacher expectations (TPE) and performance (TPA), and procedure for creating an ePortfolio. This two (2) month course must be taken prior to enrolling in any ECE/TED program course.

ECE 312 Infant and Toddler Care

Focus is on infants and toddlers in group care settings. Emphasis is on close, caring relationships in the cultural context of the child and family, understanding developmental milestones, the identification of special needs, and current issues of health, safety and nutrition.

ECE 330 Early Cognition

Prerequisites: ECE 201, ECE 210, HED 220 and ECE 211

Inquiry into the nature and tasks of early cognition including social, cultural and biological foundations. Attention paid to current research implications for learning theory, individual differences and classroom instruction.

ECE 410 Early Language and Literacy

Prerequisites: ECE 330

Focus on acquisition and developmental aspects of language related to emergent literacy skills. Emphasis on current research regarding language experiences that contributes to literacy acquisitions, including assessment and instruction.

ECE 415 Designing Emergent Curriculum

Prerequisites: ECE 330

Focus on essential elements of curriculum design including writing of goals, learning outcomes, developmentally appropriate activities, assessment measures and integration of the arts. Alignment with national and state standards stressed.

ECE 420 Nature, Numbers and Technology

Prerequisites: ECE 330

Focus on identification, design and delivery of developmentally age appropriate experiences that encourage active math, science and technology inquiry. Inquiry related to emerging notions of mathematical and scientific processes is basis for activities along with the inclusion of technology as a strategy.

ECE 430 Play as Pedagogy

Prerequisites: ECE 330

Focus on play as the primary learning modality for young children. Theoretical basis for play as a means of teaching, role in learning and as a means of assessment emphasized.

ECE 435 Music, Movement, Drama, Dance

Focus on enriching and enhancing young children's learning through the creative arts. Emphasis on integrating creative experiences within core subjects to create developmentally appropriate experiences.

ECE 440 Observing, Assessing & Plannin

Prerequisites: ECE 330 and ECE 415

Focus on acquiring and enhancing skills in the selection, administration, scoring, interpretation, reporting of screening assessment instruments. Emphasis on designing and implementing curricula based on assessment results.

ECE 443 Children with Special Needs

Prerequisites: ECE 330

Exploration of variations in child development and identification of specific disabilities in young children. Inclusive early childhood programs, specific strategies for adaptation and accommodation of the core curriculum to meet the social, emotional, and academic needs of children who are at-risk or have special needs are examined.

ECE 445 Strategies: Guiding Behaviors

Prerequisites: ECE 330, ECE 415 and ECE 430

Focus on observation, identification, description, and assessment of challenging behaviors. Designing and implementing effective teaching and learning strategies to successfully guide these behaviors within a social and cultural context.

ECE 446 Literature and Young Children

A survey of literature for young children in preschool through first grade. Emphasis on effective read aloud and story telling strategies for the developing language and listening skills, for developing concepts of print and vocabulary and for fostering a love of reading and early literacy skills.

ECE 450 Academic Seminar/Field Experie

Prerequisites: Satisfactory completion of all core courses with an average grade of "C" (2.0) or better in the core.

Participation in a collaborative field/academic experience to reflect and actively practice material covered in core classes. Field experience must be in

approved setting and arranged by student. Grading is S or U only.

ECE 451 Observation and Assessment

Prerequisites: ECE 312

Focus on authentic informal and formal assessments for infants and toddlers, and the use of case study to develop observation skills leading to the promotion of responsive environments.

ECE 452 Partnering With Families

Prerequisites: ECE 312

Focus on acquiring knowledge through current research and developmental theories to plan responsive environments for infants and toddlers that strengthen family-school partnerships. Will explore through case studies optimum communication techniques for building and maintaining positive relationships with family members.

ECE 453 Developing Appropriate Curricula

Prerequisites: ECE 312

Focus on infant and toddler development and the role of the adult in supporting optimal outcomes through routines, curriculum planning, and implementation. Candidates will examine the primary components of quality care and education.

ECE 454 Creative Aesthetics

Prerequisites: ECE 312

Focus on understanding the value of providing opportunities for infants and toddlers to engage in sensory art exploration as well as experimentation with culturally diverse music and dance. Emphasis is on creating experiences indoors and outdoors focusing on the aesthetic process of experiencing various rhythms, tones, textures and color.

ECE 460 Program Administration

Focus on administration of early childhood programs. Emphasis on working with boards, staff, parents and volunteers. Highlights include hiring, assessing, and supervising staff and volunteers. Attention to designing staff and volunteer professional development programs.

ECE 461 Leadership and Supervision

Emphasis on theories, principles and practical methods of leadership and supervision applicable to early childhood settings. Demonstrations of instructional, operational and organizational leadership. Focus on components of human resources related to staff recruitment, development and evaluation.

ECE 462 Financial Mgmt & Resources

Focus on financial policies and management of resources in early education settings. Emphasis on accounting fundamentals of preparing, recording and monitoring funds.

ECE 464 Ethical and Legal Issues

Prerequisites: HED 220

Focus on local, state and federal statutes and regulations in early education settings. Emphasis on ethical codes of conduct, including analysis of legal and ethical dilemmas and practice.

ECE 465 Crisis Trauma and Abuse

Emphasis on definition, factors, theories, and characteristics associated with abuse and family violence.

Topics include examination and analysis of crisis, trauma and disaster preparedness, community response, legal rights, prevention and intervention strategies.

ECE 466 Planning Physical Environments

Guidelines on planning, designing and organizing physical learning environments for young children. Understanding, comparing, integrating theoretical frameworks on indoor and outdoor environments.

ECE 490 Guided Study (variable units)

An individual study course under the direction of a specified instructor. Requires prior approval of ECE lead faculty.

ECE 650 The Early Childhood Teacher

Examines the critical role of the early childhood teacher. Opportunities to reflect upon beliefs, analyze current role, recognize strengths and develop a plan to move forward that strengthens and supports their professional growth. Addresses NAEYC/NCATE Advanced Standard 5: Growing as a professional.

ECE 651 Current Issues in ECE

Focuses on current issues on early childhood. Particular attention paid to the transition to Kindergarten. Multiple perspectives considered. Addresses NAEYC/NCATE Advanced Standard 1: Promoting Child Development and Learning, Standard 2: Building Family and Community Relationships, Standard 4: Teaching and Learning and Standard 5: Growing as a professional.

ECE 652 Cognition and the Young Child

Deepen understanding of the capabilities of young children thinking skills. Focus is on current research. Opportunities to examine learning research in light of current educational reform efforts and develop practical application. Addresses NCATE/NAEYC Advanced Standard 1: Promoting child development and learning and Standard 5: Growing as a professional.

ECE 653 Best ECE Teaching Practices

Focus on research based effective teaching strategies for young children. Examines opportunities for integrating curriculum across content areas. Close attention paid to balancing standards and Developmentally Appropriate Practice (DAP). Addresses NCATE/NAEYC Advanced Standard 4, Teaching and Learning, Sub standards 4B, 4c and 4d.

ECO – Economics

ECO 100 Intro to Economics

Overview of basic macroeconomic and micro-economic principles to help students understand how individuals, firms, and government make economic choices. The course discusses the concepts of equilibrium, national income accounting, inflation, unemployment, business cycle, monetary and fiscal policies, the industrial organization, international trade and international finance.

ECO 203 Principles of Microeconomics

In this course, students will study the price system, market structures, and consumer theory. Topics covered include supply and demand, price controls, pub-

lic policy, the theory of the firm, cost and revenue concepts, forms of competition, elasticity, and efficient resource allocation, among others.

ECO 204 Principles of Macroeconomics

This course provides an examination of aggregate economic activity. It includes a study of aggregate supply and demand, the monetary and banking systems, aggregate economic accounting, inflation, unemployment, the business cycle, macroeconomic policy, and economic progress and stability, among other things.

ECO 301 Intermediate Microeconomics

Prerequisites: ECO 203 and ECO 204

Building on the principles of microeconomics, this course covers the market and the equilibrium including the budget constraint, revealed preference and inter-temporal choice; the industrial organization and profit maximization; game theory; welfare economics; information technology and asymmetric information.

ECO 302 Intermediate Macroeconomics

Prerequisites: ECO 204

Building on the principles of macroeconomics, this course prepares students to analyze macroeconomic issues of the current time. Emphasis is placed on the measurement of income, prices and employment; monetary and fiscal policy; financial market; the public sector; international trade and international finance; and the current global issues.

ECO 303 Data Analysis

Prerequisites: ECO 203 and ECO 204

This course prepares students for analysis of economic data found in secondary sources such as the World Bank, The International Monetary Fund (IMF), Organization of European Community for Development (OECD), and various U.S. government sources. Emphasis is placed on learning the basic tools of mathematical and statistical analysis with a goal to applying those tools to analyzing data for meaningful conclusion.

ECO 304 Economic Growth

Prerequisites: ECO 203 and ECO 204

This course deals with theories and explanations of economic growth from the positive economics point of view. The framework of analysis derives from factor accumulation and productivity including physical and human capital and population, measurement of productivity, role of technology, efficiency, the open economy, distribution of income, and other factors such as culture, geography and natural resources.

ECO 305 Business Economics

Prerequisites: ECO 203 and ECO 204

Building on the fundamental principles of macro- and microeconomics, this course addresses issues concerning markets and prices, fiscal and monetary policies, human resource issues, forecasting techniques used by businesses, and business decision making for profit maximization.

ECO 401 Market Process Economics I

This course provides a basic understanding of market process economics. Students will learn about the nature and importance of economics, capitalism, wealth and its role in human life, natural resources and the environment, the division of labor and production,

the dependence of the division of labor on capitalism, the price system and economic coordination, price controls, socialism, the institutions of private property, economic inequality, economic competition, and monopoly and the freedom of competition.

ECO 402 Market Process Economics II

This course is a continuation of ECO 401 and is designed to provide students further understanding of market process economics. Students will learn about the concept of productive activity, the productive role of businessmen and capitalists, money and spending, productionism and unemployment, the productivity theory of wages, alternative approaches to aggregate economic accounting, the role of saving in spending, Keynesian economics, and inflation.

ECO 410 Seminar on Capitalism

Prerequisites: ECO 203 and ECO 204

This course provides a basic understanding of capitalism and market process economics. Students will learn about the nature and importance of capitalism, wealth and its role in human life, natural resources and the environment, the division of labor and production, the price system and economic coordination and price controls. Additionally, students will also be able to compare and contrast other economic systems.

ECO 415 Labor Economics

Prerequisites: ECO 203 and ECO 204

Students will engage in a detailed study of the labor market. Students will learn about the relation of the labor market to other markets. Students will study the demand for and supply of labor, the causes of unemployment, labor market discrimination, what influences the productivity of labor, the effects of labor unions, and the determinants of wages, among other topics.

ECO 420 International Economics

Prerequisites: ECO 203 and ECO 204

Students will apply what they have learned in previous economics courses to analyze the global economic environment. They will learn and apply the law of comparative advantage to understand how all people can gain from international trade. Trade agreements, such as GATT and NAFTA, will be discussed and analyzed. Students will learn about the currency markets and the different types of monetary systems.

ECO 430 Economics and Philosophy

Students will learn about the relationship between philosophy and economics. They will study the philosophical foundations of market process economics, as well as other economic ideas. They will learn about the link between ethics and economics, as well as about the important role businesses play in the economy. Students will study topics such as why businessmen should be honest, the nature of antitrust laws, the virtue of integrity, the nature of government and rights, among others.

ECO 447 Money and Banking

Prerequisites: ECO 203 and ECO 204

Students will study the U.S. monetary and financial systems. They will learn about the important role these systems play in facilitating the production of wealth in the economy. This class covers the principles of money; the Federal Reserve System; the determinants of interest rates, bond prices, and stock

prices; the different types of financial institutions; monetary theory; and monetary policy.

ECO 490 Guided Study (variable units)

This is individual study under direction of the instructor. It requires prior approval of appropriate academic department.

ECO 602 Global Context of Business

State-of-the-art view of the macroeconomic and political contexts in which domestic and international businesses operate. It includes macroeconomic metrics and analysis of business cycles and policies; global trade and world financial and monetary systems; institutional analysis of government-firm relationships and sustainable development, the environment and social responsibility.

ECO 607 Eco. for Managerial Decisions

Recommended: Prior completion of: BUS 500A

In this course, students study the price system, market structure, and consumer theory as they apply to managers in a variety of decision-making environments. This course covers the use of mathematical and economic decision-making tools for determining optimal levels of output, resource usage, and capacity planning.

ECO 630 Global Economic Geography

Prerequisites: ECO 607

A survey of the global economy, this course examines how organizations identify and inventory resources in terms of manpower (demographics), industrial organization and development, sources of raw materials, and the current means of connectivity (e.g., language, as well as telecommunication and transportation infrastructures). It includes exposure to various sources of global economic information, such as the "Country and Industry Report," U.S. government reports, online computer information, and various private sources such as banks and credit card bureaus. Students compile reports that focus on country, region, and industry analysis of opportunity and prospects.

ECO 631 Global Trade Policy & Procedure

Prerequisites: ECO 607

An examination of the development and current status of U.S. and foreign trade policies and procedures, this course focuses on GATT, NAFTA, European Integration, and other emerging regional trading blocs. It examines the impact of trade and foreign operations caused by national and regional antitrust laws. It surveys the procedures necessary for government approval of importing and exporting, including the legal options available to facilitate and overcome difficulties and disputes in foreign trade.

ECO 635 Economics for Executive Mgrs

This course provides the executive with the tools necessary for decision-making in a variety of environments. Topics include elasticity, market structure, marginal analysis, monetary theory, the business cycle, exchange rates, international trade, among others. Emphasis will be on the applications of economic theory to strategic decision-making.

EDA – Educational Administration

EDA 200 Schools of the World

An examination of globalization's impact on P-12 school by viewing a variety of P-12 schooling models from across the world. Compare and contrast with U.S.'s system of local control of funding and governance, and roles states and federal government play. Accountability, student assessment of learning, governance, funding, culture, and religion are also considered in this examination.

EDA 600 Applications in Leadership

Supervised application of theoretical concepts in practical settings. Candidates complete a portfolio of administrative activities demonstrating competency in areas identified in the California Professional Standards for Educational Leaders as sanctioned by the Commission on Teacher Credentialing for awarding of the preliminary administrative services credential. A triad consisting of the University Supervisor, the Site Mentor/Administrator, and the candidate, develops a plan at the onset of the class. This plan ensures that the activities in which the candidate is engaged are aligned in a sequence so that they coincide with the theory learned in the courses the candidate will take. As the candidate has courses scheduled in advance, the triad has advance notice of the course learning outcomes and can plan accordingly. The plan stresses day-to-day administrative functions as well as policy analysis and implementation. This course is the first course in the program and will be taken concurrently with all other program required courses. This course takes 7-12 months to complete. It must be completed within 12 months of being scheduled. This course must be completed in residence. Students approved for the intern program must remain in EDA 600 for 12 months per CTC requirements.

EDA 601 Orientation and Advisory

(1.5 quarter units)

Builds a broad understanding of the Educational Administration program and its requirements, facilitates a permanent advisory relationship between faculty and students, and examines the role of the professional administrator and opportunities for advancement in the field. Must be the student's first class (may be taken concurrently with another course). Grading is by S or U only.

EDA 610 Induction Seminar

Candidates will develop an induction plan for the two years of the induction program. Candidates will identify professional growth opportunities including non-university professional development. Candidates will be assigned a coach in the district who will provide coaching support throughout the two year program. Critical issues that will be addressed are getting to know your district's policies and procedures, developing and assessing a school culture, instructional supervision, and building community relationships. Course is S/U grading basis only. This course is four months in length.

EDA 611 Pro Development Seminar I

Prerequisites: EDA 610

Candidates will review and modify induction plan as needed. Critical issues that will be addressed are budget management and development, leadership in a crisis situation, instructional leadership, and working with diverse communities. Course is S/U grading basis only. This course is four months in length.

EDA 612 Pro Development Seminar II*Prerequisites: EDA 611*

Candidates will review and modify induction plan as needed. Critical issues that will be addressed are building and sustaining a vision and mission, operation management, internal and external communications, implementation of a technology plan, and budget management. Course is S/U grading basis only. This course is four months in length.

EDA 613 Assessment Seminar*Prerequisites: EDA 612*

This is the capstone course in the Professional Administrative Services Credential Program. Candidates will be engaged in assessing their induction plan and providing evidence that they have completed the plan successfully. Critical issues will be addressed in this class are media relations, advocating in the political context for students, and career planning. Course is S/U grading basis only. This course is four months in length.

EDA 617 Philosophy and Leadership

Foundational course for the Master's program. Connecting Plato, Aristotle, John Dewey and other philosophers to schools today as well as relating leadership scholars such as James MacGregor Burns, Peter Senge, and Thomas Sergiovanni to the continuum of thought in developing educational leadership studies.

EDA 620C Degree Field Experience*Prerequisites: Students must have completed at least 3 of the following courses: EDA 674N, EDA 675N, EDA 670N, EDA 676N, EDA 671N and EDA 672N*

Supervised application of theoretical concepts in practical settings. Candidates complete a portfolio of administrative activities demonstrating competency in those areas of school administration, educational or non-profit administration and leadership they intend to pursue. Course does not meet the requirements for the California Preliminary Administrative Services Credential. Candidates for the credential must take EDA 620B. Grading is by S or U only. Course is eligible for an "IP" grade.

EDA 620I Intern Field Experience*Prerequisites: May only be taken by students approved for the internship program.*

Internship practicum for Administrative Services Credential program. Practicum/field work of day-to-day administrative functions, policy analysis and implementation, collaboratively supervised by National University and the candidate's school district of employment for candidates holding an administrative position while completing course work. Grading is by S or U only. Course is eligible for an "IP" grade. Interns must remain in the course for 1 year.

EDA 625 Technology and Data Analysis

Administrative perspective on using instructional technology. Methods of using technology to improve administrative functions, including generating and analyzing instructional data, using data to improve instruction, and analyzing legal and ethical issues surrounding educational technology.

EDA 628 Summative Leadership Seminar

Organizational development, mobilization of human and fiscal resources, restructuring, building a school environment that embraces diversity. Administrative tasks in schools and school districts. Schools as po-

litical systems focusing on the improvement of instruction. Knowledge drawn from other preliminary administrative services credential courses and from direct, practical experience.

EDA 631 Shared Vision of Learning

Facilitating the development, articulation, implementation, and stewardship of a vision of teaching and learning supported by the school community. For candidates in Santa Clara County Office/NU joint program only.

EDA 632 Teaching and Learning Culture

Advocating, nurturing, and sustaining a school culture supporting instruction, student learning, and staff professional development using state standards and accepted accountability systems. For candidates in Santa Clara County Office/NU joint program only.

EDA 633 Mgmt for Teaching/Learn

Managing operations and resources to ensure a safe, efficient, and effective learning environment that enhances student achievement. For candidates in Santa Clara County Office/NU joint program only.

EDA 634 Diverse Families/Communities

Examining and evaluating attitudes toward race, culture, ethnicity, sexual orientation, and individuals with disabilities. Learning how to work effectively with diverse families, caregivers, and community members. For candidates in Santa Clara County Office/NU joint program only.

EDA 635 Personal Ethics for Leadership

Practicing and modeling a personal code of ethics, including protecting the rights and confidentiality of students, staff, families in a leadership capacity that includes shared decision-making, problem solving, and conflict management. For candidates in Santa Clara County Office/NU joint program only.

EDA 636 Political and Social Influence

Examining political, societal, economic, legal, and cultural influences on schools. Providing team leadership for effective communication with key school-community decision-makers. For candidates in Santa Clara County Office/NU joint program only.

EDA 637 Action Research*Prerequisites: ILD 625*

Provides the knowledge, skills, and protocols to generate and evaluate research relevant to various areas of professional education. Students produce a major action research and writing project focused on the practical needs of educators who wish to join the larger professional community in their field of specialty. This class is scheduled for three months one day a week and at the end of that time a grade of "IP" will be posted then the maximum length of time is 10 additional months. Class size is 10. Grading is H, S, or U only. Course is eligible for In Progress (IP) grade.

EDA 640 Introduction to H.E. Admin.

Overview of the basic aspects of higher education including issues, policies, operations, financial management, strategic planning, enrollment, student services, and regional accreditation. A brief examination of the history and functions of colleges and universities in the United States and the world as well as an

introduction to educational philosophy, curriculum and instruction provide the candidate a foundation of understanding of the role of the academe in today's society.

EDA 641 Leading and Managing Change

This course examines theory and practice regarding resistance to and acceptance of change initiatives, including the impact on organizational culture. Learn to initiate and implement change in organizations through problem-solving experiences and exercises.

EDA 642 Policy & Accountability

This course familiarizes students with assessment, policy-making, and accountability in higher education. Practical and theoretical approaches are explored. Power influences will be identified and examine, both inside and outside institutions including university hierarchy, state, and federal entities. Student learning and assessment's impact on the present and future of higher education will be explored, including the roles of state and regional accreditors.

EDA 643 Community Development in HE

This course is an examination of the literature on theories related to interaction with the cultures found within a higher education community and the community in which the institution sits. Strategies for effective communication with various entities within the organization such as students, faculty, staff, and administration are gained, as well as engaging with the external community - local, state and regional.

EDA 644 Higher Education Law/Politics

This course examines the legal aspects of higher education, sources of law and authority presented; impact on, interaction with, and implications of the administration of higher education are discussed. The course provides an overview of the legal issues that arise in public and private college and universities and the policy implications of those issues. Pertinent federal and California statutes and case law will inform students of the legal rights and responsibilities of higher education students, faculty, and the administration.

EDA 645 Managing Finances & Operations

This course provides a survey of how higher educational institutions are funded: private, non-profit/private, and public. Trends in higher education finance will be examined. Students will engage in case studies of institutions in financial crises and examine solutions to these crises.

EDA 646 Strategic Planning & Analysis

This course will examine the processes of institution-wide planning that examines internal and external variables. An analysis of all relevant data provides a crucial element in these processes. Data include those pertaining to student learning and learning assessment.

EDA 647 Curriculum & Instruction in HE*Prerequisites: EDA 640*

This course examines trends in curriculum and "andragogy" as they apply to higher education programs. This examination includes an in-depth analysis of modes of delivery such as online, onsite, and hybrid methods.

EDA 648 Student Svcs & Enrollment Mgt

Overview of Student Services and Enrollment Management in Higher Education institutions. Practical advice and theoretical frameworks to inform planning and problem solving are explored. Professional practice is summarized in the areas of students, human resources, interpersonal dynamics, skills and competencies, and services offered.

EDA 649 Higher Education Research

This is an introductory educational research course designed to provide knowledge, skills, and dispositions required for students to develop a thesis proposal for the MS Higher Education Administration program. The course requires that students utilize a high level of library skills and computer technology to locate relevant research and literature. The course is scheduled for two months and is an online course with synchronous communication - Class Live Pro -- sessions. Grading is by S or U only.

EDA 650 Ethics and School Leadership

Introduces connection between leadership and ethics. Study of traditional ethical frameworks as presented by early Greek writers, past and present philosophers and theologians, non-believers, and leadership scholars. Consideration of long-range implications of leadership activities through case study analysis.

EDA 652 Visionary Leadership

An examination of the importance of a shared vision to shape the culture and improve the climate of a school that serves a diverse population of students. Ethics and philosophy of leadership are used as lenses through which to better understand the interplay of the school's internal and external stakeholders as it pertains to creating and managing the vision.

EDA 653 Curriculum Leadership

An instructional leader's perspective on instructional theory, curriculum development, and assessment. Analysis of student academic content and curriculum standards, research-based instructional and assessment practices. Application of data to inform continuous school improvement. Evaluate and support professional development framed around collaboration and the principles of adult learning.

EDA 654 Instructional Leadership

This course provides a theoretical and practical framework for effective instructional leadership in the area of supervision and evaluation of instruction. It will examine the role of the instructional leader in the context of stewardship of all resources to promote effective instructional leadership practices. Methodologies are presented for engaging in the practice of supervision of instruction, pedagogical assessment, program quality, and standards-based instruction. The instructional leader will be encouraged to emphasize maintaining and increasing teaching effectiveness through providing research based and relevant professional development opportunities.

EDA 655 School Improvement Leadership

School Improvement Leadership Identification and analysis of human, fiscal and material resources available and how these resources might be aligned to improve student achievement. Development of a collaborative, data-based school plan that addresses the needs of all learners. Analysis of an instructional leader's role in using strategies that address cultur-

ally responsive teaching, social and mental health needs and improved student learning for all students, including English learners and students with special needs.

EDA 656 Professional Growth Leadership

This course examines the theories, principles, and concepts related to leadership, administration, and management as well as student learning assessment models. Focus is directed toward understanding how to apply the leadership theories and assessment models in education settings involving faculty, staff, students, parents and the community. Emphasis is placed on professional and personal development and modeling of professional growth activities to faculty and staff in educational environments.

EDA 657 Org/Systems Leadership

This course provides candidates an introduction to public school budget and finance practices, emphasizing site level finance. This course provides an exploration of federal, state and local laws, policies, and regulations regarding revenue sources, district and school budgeting, and financial management procedures. Candidates will be provided an introduction to public school budgeting and accounting procedures as well as investigate current issues in public school finance. Candidates will understand organizational and systems leadership as well as techniques and skills to address conflict-management, problem-solving, and dealing with unintended consequences of decisions. Candidates will learn the importance of using the school vision/mission and annual goals, based on student performance and other school-wide data, for setting budget priorities so resources allocated in appropriate and focused areas of the school need. Candidates will learn to understand the importance of school administrators practicing ethical behaviors related to decisions they make.

EDA 658 Community Leadership

This is an introductory course in educational law and ethics which examines education law, codes, and regulations and their school level applications. The focus is on areas of school law most likely to be used by beginning school administrators. Students are expected to complete all assigned readings. Because this course is part of a sequence leading toward a recommendation for the preliminary administrative services credential, it is understood that an honor system prevails and that all class work will be completed solely by the student.

EDA 663 Community Leadership

Prerequisites: ISL 661, LED 604, ISL 662, EDA 674N, EDA 675N, EDA 671N, ISL 660, LED 605 and EDA 680

Explores community leadership, outreach and partnerships through the lens of diversity and pluralism (of students, school personnel, the community, and society). Cultural competence is essential in working with diversity in present-day school environments. The course examines nonprofit models and community organizing that succeeds in supporting and enhancing schools and their surrounding communities.

EDA 670N Introduction to Leadership

The theories, principles, and concepts related to leadership, administration, and management applied to education. Application and implications of theory for the instructional leader and education-related manager. Nevada only.

EDA 671N School Law and Policy

Introductory course in educational law and ethics. Examination of education law, codes, case law, and regulations and their school level applications. Focus on areas of school law likely to be used by beginning school administrators. Nevada only.

EDA 672N School Resource Management

Introduction to public school finance policies and practices, emphasizing site level finance. Exploration of federal, state, and local revenue sources, district and school budgeting, and financial management procedures. Introduction to public school budgeting and accounting procedures. Direction by practicing school administrators when investigating issues in public school finance. Nevada only.

EDA 673N Field Experience

Supervised application of theoretical concepts in practical settings. Candidates complete a portfolio of administrative activities demonstrating competency in areas identified. Stresses day-to-day administrative functions as well as policy analysis and implementation. This course may be taken concurrently with another class or scheduled in an open month. This course takes 3-12 months to complete. It must be completed within 12 months of being scheduled. This course must be completed in residence. Grading is S/U only Course is eligible for an "IP" grade. Nevada only.

EDA 674N Instructional Leadership

Theoretical and practical exploration of curriculum, instruction and accountability. The course will explore issues that have the potential to influence the planning, implementation and evaluation of curriculum and learning. Nevada, only.

EDA 675N Supervision of Instruction

This course provides a theoretical and practical framework for supervising and evaluating instruction while modeling a personal code of ethics and developing professional leadership capacity. A variety of theoretical perspectives and skills for engaging in the practice of supervision of instruction, curriculum assessment, program quality, and standards-based instruction are presented. Emphasis is on instructional leadership that models personal and professional ethics, integrity, justice, and fairness, while expecting the same behaviors from others. Candidates focus on demonstrating skills in decision-making, problem solving, change management, planning, conflict management, and evaluation. Nevada only.

EDA 676N Community & Diversity

Analysis of social and political forces impacting human resources leadership and school-community relations. Internal and external components of operation of personnel and school management functions. Needs of diverse communities cultural Pluralism, personnel issues, and personnel and community relationships related to state and federal laws and local policies. Collective bargaining's impact on human resources and community relationships. Nevada, only.

EDA 677N Ethics & Philosophy of Leaders

This course examines ethical school leadership through the lens of educational and leadership philosophies. Candidates will create a working philosophy that will guide their practice. Nevada only.

EDA 680 Charter School Leadership

Leadership skills necessary to establish and sustain a charter school; understanding the role the community in the charter school environment, the application process, and preparing to open and operate a charter school. Role that a Charter School leader plays in the daily operation and his/her relationship to the educational community. How to analyze and present data, and demonstrate strategies for developing and planning staff and community development.

EDA 684 Resource Mgt in Charter School

Overview of resource management in a charter school. Resources that will be discussed are time, personnel, facilities, and financial. How to plan for the best use of the resources available. Content learned in EDA 618, 619, and 626 will be expanded in this course and applied to charter schools.

EDA 690 Guided Study

(variable units)

Individual study under direction of instructor. Requires prior approval of appropriate academic department.

EDA 694 Thesis

Prerequisites: EDA 649. Students must have written permission of lead faculty to enroll in the course.

This course is a supervised experience culminating in the completion of a thesis. Focuses on an educational administration research topic. Employs more advanced research methodologies than EDA 637 (Action Research) and is recommended for those considering future doctoral work. The student prepares a research proposal, obtains Institutional Review Board (IRB) approval, conducts the study and prepares the written thesis. This class is scheduled for 2 months, meets once a week and at the end of that time a grade of "IP" will be posted then the maximum length of time is 10 additional months. Grading is by H, S, or U only.

EDA 695 Educational Project

An opportunity for students to gain practical experience in designing, implementing and evaluating programs in an area of interest pertinent to their professional development as school administrators.

EDT – Educational and Instructional Technology

EDT 600A Technology Foundations

Exploration of four theoretical constructs: learning theory, project design and management, assessment and evaluation, and the integration and application of digital tools. As a foundational course for EDT, students conduct scholarly research and develop technical skills while constructing and contributing in an online learning community.

EDT 601 Instructional Design

Prerequisites: EDT 600A

Overview and application of the instructional design (ID) process. Topics include learning theories and how they relate to ID, design of needs assessment, analysis of subject matter content, development of effective learning objectives, design of instructional strategies, online collaboration, integration of online delivery systems, and assessment and evaluation strategies.

EDT 605 Education Theory & Technology

This course provides a comprehensive view of curricular issues facing teachers and instructors as the role of technology stimulates change in teaching methodology within the classroom instructional setting. Topics focus on cognition and learning and using technology to support constructivist learning, building technology-supported learning communities, student-directed research projects, and using collaborative communication tools both among students and between students and their mentors.

EDT 607 Media Based Learning Objects

Prerequisites: EDT 600A, EDT 601 and EDT 605

Learners experience exploration and creation of media-based learning objects for onsite and online courses. Pedagogical foundations in digital media authoring tools invite learners to research, plan, create, and evaluate reusable learning objects in classroom curriculum. Special focus is given to creating shared content libraries and rich media for educational products.

EDT 608 Technology in the Classroom

Comprehensive overview of technology use in an educational environment. Includes hands-on practice of word processing, presentations, spreadsheet, and database management. Topics include: introduction to Internet, integrating technology into teaching and learning, technology management, and strategies for integration of technology into the curriculum. Complies with the requirements for a California Teaching Credential.

EDT 609 Developing Online Courseware

Prerequisites: EDT 600A, EDT 601, EDT 605 and EDT 607

Learners explore and employ a wide range of online technologies to design and deliver course content for distance education. Working directly with learner management systems, learners map the path from learning and instructional theory, instructional design, and technological implementation to solid curriculum development, content creation, and engaging course facilitation.

EDT 610 Teaching Online

This comprehensive course covers principles and strategies for conducting online lessons in a variety of online teaching environments including hybrid courses, with a primary focus on how teaching strategies have evolved in order to fit the new medium of online learning. Students survey theories and applications of online learning and teaching. Special focus is given on the use of the Internet for implementing distance education systems for adult learners. The course covers hands-on tools such as web page design authoring tools and videoconferencing technology. Career paths in the arena of online teaching will also be investigated.

EDT 612 Meaningful Learning w/ Tech.

Focus on integrating technology and constructing meaningful learning in P-16 classrooms and the workplace. Students apply traditional learning theories to technology-based methods and techniques, use technology as a communication tool, and design lesson-based web projects. Contemporary issues involving the Internet, research skills, and information literacy skills will also be addressed. Students must have a familiarity with Word Processing, Spreadsheet, Desktop Publishing, and Internet Search skill. Students must have a familiarity with Word Processing, Spreadsheet, Desktop Publishing, and Internet Search skills.

EDT 613 Simulations & Virtual Reality

Recommended: Prior completion of: EDT 600A, EDT 601, EDT 605, EDT 607 and EDT 609

Simulations & Virtual Reality explores the role of multi-user virtual environments and simulations (MUVES) in education. Using Second Life, students will identify and use the pedagogical methods, virtual tools and content resources for creating and teaching in a virtual reality.

EDT 631 Media and Instruction

Prerequisites: EDT 600A

Comprehensive overview of visual learning techniques, skills, methods, and theories to support and to enhance learning. Application of various digital media including video, audio, and graphics for communicating and for creating digital assets in an educational or in a training context.

EDT 632 Technology and Leadership

Prerequisites: EDT 600A, EDT 601, EDT 605, EDT 607, EDT 609, EDT 631 and completion of all core requirements.

Information technology issues, networking, and the convergence of media (telecommunications, voice, video, and data) will be contextualized through the lens of educational leadership. Future technology leaders will address current issues such as network security, digital ethics, budgets, and the total cost of ownership as it pertains to hardware and software.

EDT 660 Multimedia & Interactive Tech.

An overview of the use of multimedia and interactive technologies in the educational environment, focusing on design and production of multimedia products. Students will develop media literacy via exposure to web-based conferencing, art programs, PowerPoint, Dreamweaver, image scanning and editing, as well as video and sound digitization.

EDT 671 Curriculum for Online Learning

Prerequisites: EDT 605, EDT 610 and EDT 660

A comprehensive course on how to design curriculum that will be implemented in an online teaching environment. Students use an online course management and authoring system to design a course for use in K-16, public or private.

EDT 693 Instructional Eval. & Devl.

Prerequisites: EDT 600A, EDT 601, EDT 605, EDT 607, EDT 609, EDT 613, EDT 631 and EDT 632

An exploration and application of alternative theories and strategies for evaluating the effectiveness of instructional programs. Applies usability framework, instruments, approaches to student outcomes and assessment, and continuous quality improvement strategies as they apply to the design and improvement of instructional systems. Capstone prospectus developed. Course is eligible for an "IP" grade.

EDT 695 Capstone Project

Prerequisites: EDT 693

EDT 695 is the final class in the MS in Educational and Instructional Technology program. Under the supervision of a faculty member, students complete a Capstone Project and accompanying report. This course is two months long. Students meet weekly via voice/web with a faculty supervisor. Grading is by H, S, or U only. Course is eligible for an "IP" grade.

EDX – Educational Technology (Extended Education)

EDX 6001X Computer Tech in Classroom

Comprehensive overview of computer technology in the educational environment. Course addresses computer terminology, the Internet, and impact of the use of different computer modalities. Includes' learning theories and hands-on practice. Satisfies the CTC technology requirement for a professional clear Ryan credential and the preliminary SB 2042 credential.

EEC – Electrical Engineering and Communications

EEC 501 Application Software Dev.

Recommended Preparation: Baccalaureate degree in electrical engineering, computer engineering, or related field from a regionally accredited university. This course prepares students to design, develop and implement application software applied to engineering systems. Topics include: principles of computing, problem analysis, and techniques of complex problem solving.

EEC 502 Electronic Circuits & Systems

Recommended Preparation: Baccalaureate degree in electrical engineering, computer engineering, or related field from a regionally accredited university. This course covers the essential topics of electrical engineering involved in circuit design and analysis including electronic devices, operational amplifiers, responses in frequency and time-domain, feedback theory, oscillators, filters, and transmitter and receiver circuits.

EEC 605 Adv Engr Problem Solving

Prerequisites: EEC 501 and EEC 502

The course uses computing tools required to solve problems in complex engineering systems. Students will be expected to use these tools to solve various engineering problems across the electrical engineering discipline.

EEC 610 Advanced Engineering Math

Prerequisites: EEC 605

The course applies advanced mathematical tools to solve electrical engineering problems. Mathematical tools include vector analysis, matrices, different coordinate systems, multivariate differential equations, Laplace transforms, Fourier analysis, and Dirac delta functions.

EEC 615 Digital Signal Processing

Prerequisites: EEC 610

This course applies digital communication principles to the analysis and design of signal processing systems. Students will learn signal filtering using mathematical models of continuous-time and discrete-time signals and linear systems. Matlab software will be used to analyze and simulate a variety of communication systems.

EEC 620 Network Systems & Security

Prerequisites: EEC 615

The course analyzes modern network systems and data transfer methods through high speed networks for both wire-connected and wireless systems. The course evaluates ethics, security, and privacy issues

involved in voice and data communications systems. The fundamentals of ensuring confidentiality, integrity, availability, and non-reputability will be studied. Students will also analyze various types of identification, authentication, encryption, and decryption protocols.

EEC 625 Engr Economics & Ecosystems

This course will teach students how to evaluate the impact of continually advancing technologies on the communications market and the global economy. Different business models employed by the various industry segments will be studied to gain insight into the interplay between business models and advances in technology. Finally, the course will analyze the impact of global competitive pressures and both national and international regulatory bodies on technology choices.

EEC 651 Electromagnetic Theory, Appl

Prerequisites: EEC 620

This course introduces the characteristics of electromagnetic waves, wave propagation methods, electric dipole, oscillation, radiation and applications in modern wireless communications. Student will study different wave propagation methods including reflection, refraction, diffraction, scattering, antenna design, signal transmission and reception.

EEC 653 Wireless Principles & Systems

Prerequisites: EEC 651

This course covers major topics in wireless communication systems, including analysis of wireless communication system infrastructures, the cellular concept, and system design fundamentals. The course will study the impact of wireless system capacity due to radio propagation environment and interference conditions. Review of multiple access techniques for wireless communications and wireless networking practices will also be covered.

EEC 655 Wireless Mod Theories & Coding

Prerequisites: EEC 653

This course describes various coding and modulation theories and techniques used in communication systems. Students will study different modulation formats and their effects on communication channels, effects on channel capacity, and impacts on system design.

EEC 657 Wireless Standards & Protocol

Prerequisites: EEC 653

Review of wireless digital communication architectures, multiple access standards, and wireless Local Area Network standards. Other wireless standards used in real life applications such as Zigbee, Bluetooth, Near Field Communications, Radio Frequency Identification Tags will also be evaluated.

EEC 659 Wireless Sensor Networks

Prerequisites: EEC 653

This course covers important aspects of sensor network communication systems including architecture, management, and policy-awareness service composition. A wide range of wireless sensor networks will be analyzed. The latest research topics related to the management and applications of wireless sensor networks will be investigated.

EEC 661 Advanced Computer Architecture

Prerequisites: EEC 620

Students will study current and future high level computer designs and their architectures, associated with compiler technology and operating system functionality. Topics include performance measurement, parallel and concurrent implementations, overall efficiency, system latency, and resource utilization. Students will compare different architectures using simulation tools.

EEC 663 System Modeling & Simulation

Prerequisites: EEC 620

This course covers modeling and simulation principles as applied to engineering systems. Students learn to use simulation to model complex engineering systems. Models will be developed for both continuous and discrete systems. Examples include modeling and analysis of manufacturing systems, computer-communication networks, and logistic systems.

EEC 665 Real-Time Systems

Prerequisites: EEC 661

This course focuses on abstract models of algorithms and their applications to real-time operating systems and the resource management and quality of service issues that arise, and construct sample applications on representative platforms. As part of the course students will complete a series of real-time simulations. The course is designed to prepare students to understand the theoretical background and some of the practical applications in the field of real-time systems.

EEC 667 Digital Image Processing

Prerequisites: EEC 663

In this course students will learn digital image processing techniques including representation, sampling and quantization, image acquisition, imaging geometry, image transforms, image enhancement, image smoothing and sharpening, and image restoration. More advanced topics include degradation models, image filtering, color image processing, and image segmentation.

EEC 669 Info Storage & Retrieval

Prerequisites: EEC 661

This course analyzes modern storage and management systems. Topics include storing, managing, and protecting digital information in classic, virtualized, and cloud storage environments. Additional topics include local and remote replication.

EEC 690 Master's Research Project I

Prerequisites: EEC 659 or EEC 669

This is the first course of the Master's Research project, which focuses on the selection of an appropriate topic on one area of electrical engineering research or on an application in the specialization field. Student project teams will research the chosen topic and complete a project proposal. Grading is by H, S, or U only. Course is eligible for an "IP" grade.

EEC 695 Master's Research Project II

Prerequisites: EEC 690

This is a continuation of EEC690 and a two-month course that meets with the instructor once a week. Students complete their projects including all required documentation and formally present their final product to a review panel for evaluation. Grading is H, S, or U only. Course is In Progress (IP) grade eligible.

EES – Earth & Environmental Science

EES 103 Fundamentals of Geology

Introduction to the major geological processes which create and transform materials and landforms throughout the planet. Geotectonic processes, geomorphology, unifying themes such as plate tectonics, sea form spreading and athenosphere convection cells; and degradation-aggradation processes.

EES 103A Fundamentals of Geology Lab

(1.5 quarter units)

Prerequisites: EES 103

This laboratory course will complement the student's knowledge of geology with demonstrations and experiments. Contact hours for this laboratory course (45) are based on a 3:1 ratio, i.e. 3 lab hours = 1 lecture hour equivalent.

EES 301 Earth & Planetary Sciences

Covers the geological make-ups and processes that resulted in the present Earth topography. It also examines energy reserves, pollution, ecology, and mineral resources.

EES 322 Oceanography

Examination of the interactions between oceanographic, geological and astronomical processes on the physical and living components of the world's oceans. Includes interactions between the ocean and the atmosphere and how these interactions affect currents, weather and biological activity.

EES 335 Environmental Science

A study of man's relationship to the environment and the effects on it. Examines plant and animal community structure, renewable and nonrenewable resources and environmental degradation with emphasis on what is needed for a sustainable society.

EGR – Engineering

EGR 219 Intro to Graphics and Auto CAD

Prerequisites: MTH 215

Introduction to the latest version of Auto CAD software for two- and three-dimensional modeling, engineering graphics and technical drawings.

EGR 220 Engineering Mathematics

Prerequisites: MTH 215

An examination of the major mathematical tools for engineers and scientists.

EGR 225 Statics & Strength of Material

Prerequisites: EGR 220

Introduction to the key topics in strength of materials with focus on applications, problem solving and design of structural members, mechanical devices, and engineering systems.

EGR 230 Electrical Circuits & Systems

Prerequisites: MTH 215

A study of fundamentals of direct and alternating current, basic circuit theory, three-phase circuits, transformers, electrical generators, and motors.

EGR 240 Electronic Circuits

Prerequisites: EGR 230

Corequisites: EGR 240L

Analysis and design of analog electronic circuits which are used in communications, computers and instrumentation. Provide fundamentals and analysis of non-linear, active components such as diodes, transistors (both bipolar and MOSFET), OP-AMP, rectifiers, amplifiers etc. Use modern simulation tools such as PSpice for the design, analyses, and performance evaluations of electronic circuits.

EGR 240L Electronic Circuits Lab

(1.5 quarter units)

Prerequisites: EGR 240

This course offers lab experiments for students to implement, test, analyze, simulate and design electronic circuits such as rectifiers, amplifiers etc. using modern simulation and design tools.

EGR 310 Engineering Economics

Prerequisites: MTH 215

Economic Analysis for decision making with emphasis on rate of return, net present value, benefit-cost and multi-objective evaluation methods. Cost estimation and alternative analysis.

EGR 316 Legal Aspects of Engineering

Course focuses on basic principles and new developments in the legal aspects of architectural, engineering and construction processes. Coverage includes contractor licensing, professional design services, liability, intellectual property, and competitive bidding.

EGR 320 Scientific Problem Solving

Prerequisites: CSC 208 or EGR 220

The scientific approach to problem solving through analysis and design are presented using modern computer science and engineering examples. Critical thinking and communication skills will be used to interpret and present results from real-world case studies where computers were used to solve scientific problems.

EGR 320L Scientific Problem Solving-LAB

(1.5 quarter units)

Prerequisites: EGR 320

Using hands-on computer tools, the scientific approach to problem solving through analysis and design is applied in this laboratory course. Results from these hands-on activities will be interpreted and presented both on an individual basis and in a team environment. Critical thinking and communication skills will be used to interpret and present results of scientific investigations.

EGR 324 Linear Systems and Signals

Prerequisites: CSC 208 or MTH 220 and EGR 230 or CEE 310

Introduction to fundamental concepts, analysis and applications of continuous-time and discrete-time signals and linear systems. Course contents include time-domain and frequency-domain characterization of signals and systems, Fourier Series and Fourier Transform, basic sampling and filtering concepts, the Laplace Transform, and the Z Transform etc. The course will be supplemented with MATLAB based exercises.

EGR 324L Linear Systems and Signals Lab

(1.5 quarter units)

Corequisites: EGR 324

This lab course provides a collection of hands-on experiments for supporting the lectures of EGR324. The MATLAB, LABVIEW and NI equipment based experiments are designed to enable students to understand the theory behind signals and systems as well as validate the theory with real-world examples. The lab will cover time-domain and frequency-domain characterization of signals and systems, transforms, filtering and sampling.

EGR 340 Embedded Systems

Prerequisites: CSC 208 and CSC 252 or CSC 262

Exploration of design and interfacing of microcontroller based embedded systems. It covers various aspects of 8051 C and assembly language programming and interfacing. The course examines the architecture of the 8051 microcontroller along with a study of the I/O ports, addressing modes, interrupt routines, timings and the serial data communication in 8051.

EGR 340L Embedded Systems Lab

(1.5 quarter units)

Corequisites: EGR 340

This lab course provides a collection of experiments for supporting the lectures. The labs are designed to familiarize students with various aspects of hardware and software for microcontroller applications such as interfacing with various devices, programming I/O ports and interrupts and working with sensors.

EGR 440 Project Management Fundamental

This course focuses on project management concepts and definitions, network scheduling techniques, strategic planning, risk management, cost control, and project implementation.

EGR 486A Construction Senior Project I

Prerequisites: Completion of 10 core courses in construction program.

A team capstone project that demonstrates a synthesis of learning accumulated in the construction program. This is the first part of a three-part sequence. Students will form teams and begin research leading to a senior project proposal.

EGR 486B Construction Senior Project II

Prerequisites: EGR 486A

A team capstone project that demonstrates a synthesis of learning accumulated in the construction program. This is the second part of a three-part sequence. Students begin to implement the project that was proposed in EGR 486A.

EGR 486C Construction Senior Project III

Prerequisites: EGR 486B

A team capstone project that demonstrates a synthesis of learning accumulated in the construction program. This is the third part of a three-part sequence. Students finalize the project that was proposed in EGR 486A and EGR 486B.

EGR 496A Senior Capstone Project I

Prerequisites: EGR 440 and satisfactory completion of courses as specified by Lead faculty

A culminating capstone experience involving a substantive project that demonstrates a synthesis of learning accumulated in program studies. This is the

first course in a two course sequence. Students will be working in teams and doing research leading to preliminary development of the final project product.

EGR 496B Senior Capstone Project II

Prerequisites: EGR 496A

A continuation of EGR 496A. In this second part of the Engineering Senior Project, students continue the project; prepare an interim project paper and present project results and plans.

ENG – English

ENG 013 Strategies for Writing

This course provides the tools and practice students need to write successful college-level essays. It emphasizes the development of clear and logical writing through a focus on the basics of sentences, paragraphs, and essays. (This course is considered developmental in nature and does not award collegiate credit). Grading is by S or U only.

ENG 100 Effective College English I

(3 quarter units)

Prerequisites: Satisfactory performance on Accuplacer

The first of a two-course sequence designed to provide incoming students with the expository and argumentative writing and critical thinking skills required for college course work. Emphasizing essay-length compositions, the course covers critical reading and analysis, thesis formation and essay organization and basic research and revision techniques.

ENG 101 Effective College English II

(3 quarter units)

Prerequisites: ENG 100

The second of a two-course sequence designed to provide incoming students with expository and argumentative writing skills.

ENG 201 Fiction Writing I

Prerequisites: ENG 101

An introductory course in writing short fiction. Students will focus on the basic elements of fiction writing and write their own original work. Students will also analyze published work and discuss each other's writing in a traditional workshop format. Designed to give students a basis for future creative work.

ENG 202 Poetry Writing I

Prerequisites: ENG 101

An introductory level poetry workshop. Students will compose their own original poems and study the basics of the craft of poetry along with a general historical overview of the history of poetry and its developments. This course is designed to give students a basis for future personal creative work.

ENG 203 Screenwriting I

Prerequisites: ENG 101

An introduction to the writing of feature-length screenplays. Students will learn the elements, formatting, and conventions of successful screenplays, and will learn to produce complete plots and scenes. This course is designed to give students a basis for future personal creative work.

ENG 240 Advanced Composition

Prerequisites: ENG 100 and ENG 101

An advanced course in expository and argumentative writing that continues the work of Effective College English. While ENG 100 and ENG 101 focus on essay formulation and research, Advanced Composition emphasizes textual analysis. Students continue to practice the construction of arguments based on analytical reasoning, critical thinking and research skills.

ENG 300 English Practicum & Portfolio

Students observe, study, and discuss a range of activities and experiences common in English/Language Arts classrooms in public middle and secondary schools, and review the requirements of the Single Subject Matter Preparation program portfolio. Requires 31.5 hour observation in public schools. Grading is by H, S, or U only.

ENG 301 Fiction Writing II

Prerequisites: ENG 201

An intermediate course in writing fiction. Students will build on principles learned in ENG201, focusing on developing compelling and original fiction. Students will also discuss the importance of revision, and engage in thorough critiques of each other's original work.

ENG 302 Poetry Writing II

Prerequisites: ENG 202

An intermediate workshop in poetry. Students will compose their own original poems and continue the study of the craft of poetry, focusing on the modern tradition.

ENG 303 Screenwriting II

Prerequisites: ENG 203

Building on the skills learned in ENG 203, students will refine their critical ability to analyze and evaluate screenplays, and their visual storytelling skills, in order to produce an effective first act of a full-length screenplay.

ENG 310 English Grammar

Prerequisites: ENG 101

Analysis of Modern English structure using the methods of traditional grammar. Topics studied: parts of speech, grammatical functions, phrase, clause, and sentence types, and nominal and verbal categories. Nature and usefulness of prescriptive rules of grammar. How to teach traditional grammar as presented in the secondary English curriculum. Instruction will encourage students to demonstrate critical understanding of traditional grammar, of contemporary syntactic analysis, and of the strengths and weaknesses of those systems in secondary education.

ENG 334A Technical Writing

Prerequisites: ENG 100 and ENG 101 (Only Business, Engineering and Nursing majors may fulfill the requirement by taking ENG 334A)

A workshop to help students whose careers will involve communicating technical information clearly. Students are encouraged to practice on professional models in their own disciplines while learning those attributes common to all effective technical writing.

ENG 350 Fundamentals of Linguistics

Prerequisites: ENG 100, and ENG 101

An introduction to contemporary linguistics. Covers the phonology, morphology and syntax of the English language with an emphasis on language acquisition as related to the developmental stages of childhood. The course is especially designed for students intending to teach elementary school students.

ENG 352 Origins of English

Prerequisites: ENG 100 and ENG 101

Examines the origins of language both within a person and within culture. Covers language acquisition and the history of the English language through its own developmental stages, including the evolution of standard American English and its major dialect communities.

ENG 375 Nature Writing

Prerequisites: ENG 100 and ENG 101

An advanced course for students interested in using writing as a means of exploring the natural world. This course surveys nature writing in its various forms (essays, articles, poetry, journals, etc.) as well as effective nature writing strategies. This course is designed to give students a basis for future personal creative work.

ENG 401 Fiction Workshop

Prerequisites: ENG 301

An advanced course in writing fiction. Students will analyze sophisticated principles of fiction writing, evaluating different strategies for successful fiction, including non-traditional approaches. Students will write and revise advanced level original work, and provide rigorous feedback for their peers in a workshop setting.

ENG 402 Poetry Workshop

Prerequisites: ENG 302

In a workshop setting, students will build on the skills learned in ENG 202 and 302 to produce a significant collection of original poems.

ENG 403 Screenwriting Workshop

Prerequisites: ENG 303

In a workshop setting, students will build on the skills learned in ENG 203 and 303 to draft and revise an effective full-length screenplay.

ENG 490 Guided Study (variable units)

Individual study under direction of instructor. Requires prior approval of appropriate academic department.

ENG 600 Seminar in Literary Theory

Historical and current issues in literary criticism and theory with particular attention to developments of the last fifty years. Emphasizes both reading and writing literary criticism in order to develop vocabulary and skills necessary to participate in scholarly literary debate.

ENG 610 Multicultural Literature

Examines core concepts of race, ethnicity, culture, and multiculturalism from the standpoint of recent developments in American literary canon formation. Students will synthesize current multicultural literary theories with a corpus of significant literary texts.

ENG 620A Literary Period or Movement I

Advanced, historically oriented study of a literary period, such as English Medieval, Romantic, or Victorian literature, or a movement, such as The Beat Generation. Variable topic selected by the instructor. (May not duplicate content of ENG 620B.)

ENG 620B Literary Period or Movement II

Advanced, historically oriented study of a literary period, such as American Romanticism, or of a movement such as American Modernism, the Harlem Renaissance, or the Lost Generation. Variable topic selected by the instructor. (May not duplicate content of ENG 620A.)

ENG 640 Seminar in Poetry

Advanced study of the history and practice of poetry. Close reading of a major poet or school of poetry, poetic forms and theories.

ENG 655 Composition Pedagogy

Prepares students for the practical and theoretical challenges of teaching English composition and other writing courses. Topics include process theory, cognitive studies, language and diversity, genre studies, and best practices.

ENG 656 History of Rhetoric

Focuses on the teachings of the major figures of ancient rhetoric, such as the sophists, Plato, Aristotle, Cicero, and Quintilian. Students will study the classical texts that form the basis of modern rhetoric studies. The course also surveys major shifts through Medieval, Renaissance, and Enlightenment rhetoric.

ENG 657 Modern Rhetoric

Introduces students to the contemporary study of rhetoric. The course covers major figures such as Kenneth Burke, Lloyd Bitzer, and Stephen Toulmin. The course introduces a wide range of academic interests in contemporary rhetoric; in particular, students will practice reading texts rhetorically through major theories of rhetoric.

ENG 659 Rhetoric, Aesthetics & Logic

This course is an examination of rhetoric, poetics, and aesthetics as the bases of the principal theoretical foundations of the field whose focus is the study of writing.

ENG 660 Seminar in Literary Hypermedia

History and current practice of literary hypermedia. Through reading primary stand-alone and Web-based hypermedia installations, the course examines hypermedia as a specific literary genre.

ENG 663 Capstone Project in Rhet Crit

Prerequisites: ENG 656, ENG 657, ENG 655, ENG 668 or ENG 680A Pictures that Speak

Writing the Master's thesis or capstone project. Taken as the last course in the M.A. English with Specialization in Rhetoric program. Exceptions may be made if within two courses of program completion, with approval of the lead faculty. Students study published models of rhetorical criticism spanning a wide variety of critical objects. They hone critical tools that they in turn apply to a substantial, original project. Working closely with the capstone instructor and peers, students take this project from inception to final form: a work of professional-quality rhetorical

criticism. Grading basis is S/U only. Course is eligible for In Progress (IP) grade.

ENG 665 Film Theory

An overview of film theory designed to give students the critical tools necessary to describe and evaluate various aspects of cinema art. This course introduces concepts from a variety of approaches, including deconstruction, existentialism, Marxism, phenomenology, and psychoanalysis.

ENG 666 Film History: The Silents

A survey of films produced before the advent of recorded sound, this course focuses on the early national cinemas of France, Germany, the Soviet Union and the United States; attention is directed to concepts of visual narratology, montage and the conventions of acting, set design, lighting and movement.

ENG 667 Film History: American Film

This course offers an in-depth study of the development of cinema in the United States that takes a broad overview of American film making. Topics include film genre and the relationship of film to art, politics, religion and society. Additionally, the course considers Hollywood's treatment of ethnic groups, women, and systems of class structure.

ENG 668 Film Genre Studies

Film Genre Studies is a content-variable course that may be repeated for credit. Each iteration of the course focuses on a specific genre of film in an international- or American-historical context, including the Western, the Epic, the Biblical Epic, Film Noir, the Crime Story, Science-Fiction Adventure, Agit-prop, or other film genres. This is an intensive study of the conventions, artists, and styles associated with specific genres and the historical circumstances in which the genre appeared.

ENG 669 World Film

World Film is a content-variable course that may be repeated for credit. Each iteration of this course is a study of the film tradition of a specific nation or group of nations other than the United States. Students in this course will engage in an intensive study of the elements of filmmaking and theory, as well as the contrasting visual styles of directors, artists, and themes prominent in the particular tradition or traditions surveyed. Trans-cultural and transcendental film categories, universals values, and the fundamental principles of film art are also important topics of discussion.

ENG 670 Comparative Literary Studies

Analysis of literary texts across national and linguistic as well as temporal, cultural, and disciplinary lines.

ENG 680A Seminar in a Theme I

Study of a literary motif or theme over time and/or across cultures. Variable topic chosen by instructor. Examples of themes are: the gothic, utopia/distopia, vampires, the road, and gender in literature.

ENG 680B Seminar in a Theme II

Study of a literary motif or theme over time and/or across cultures. Variable topic chosen by instructor. Examples of themes are: the dark gothic, meta-fiction, the home, and war in literature.

ENG 685 Great Directors: American

This seminar in great American directors is a content-variable course that may be repeated for credit. Each iteration of this course is a comprehensive study of the artistic achievements of an American director. Students will engage in detailed interpretations and analyses of the techniques and concepts employed by a particular director, paying special attention to literary works as they relate to the filmmaking efforts of the director studied.

ENG 686 Great Directors: International

This seminar in great international directors is a content-variable course that may be repeated for credit. Each iteration of this course is a comprehensive study of the canon of work of a specific director, excluding American directors. Students will engage in detailed interpretations and analyses of the techniques and concepts employed by a particular international director, paying special attention to literary works as they relate to the filmmaking efforts of the director studied.

ENG 689 Intro to Grad English Studies

Introduces students to graduate level research practices and methodologies in English Studies. Students gain the grounding and skills required to research and write scholarly articles for peer reviewed journals in the field of English Studies.

ENG 690A Major Author Seminar I

A critical study of the work of a single author, such as Jane Austen, Walt Whitman, Charles Dickens, William Faulkner, Jack London. Special attention given to biography, culture, and literary context.

ENG 690B Major Author Seminar II

A critical study of the work of a single author, such as Shakespeare, George Eliot, Garcia Lorca, Ernest Hemingway, James Baldwin. Special attention given to biography, culture, and literary context.

ENG 698 Film Studies Capstone Course

Prerequisites: A total of seven core courses and two elective courses as described in the Degree Requirements for the Program must be completed before enrolling in the Capstone course.

Degree candidates will select one of their written projects from a course in the M.A. in Film Studies Program to revise and expand as their capstone project. The duration of this course is two months. Grading is Satisfactory (S) or Unsatisfactory (U). In Progress (IP) may be assigned.

ENG 699 English Capstone Course

Writing the Master's thesis or capstone project. Taken as the last course in the M.A. English program. Exceptions may be made if within two courses of program completion, with approval of the lead faculty. Grading is by S or U only. Course is eligible for an "IP" grade.

ENM – Engineering Management**ENM 600 Engineering Mgmt Concepts**

Designed to equip the students with all skills and management related topics covered in a graduate course in engineering management including portable management skills, management concepts,

quality, product development, human resource management, communication, critical path networks and management of supply system and inventory control.

ENM 601 Project Management Principles

Focus on fundamentals of engineering project management and tools, in particular, Microsoft Project and provides guidelines for what project managers need to have in order to succeed. Introduction to project negotiation, project manager selection and project auditing and terminating.

ENM 602 Risk, Contracts, and Legal Iss

Focus on risks, contracts and legal issues related to project management. Covers materials on theories of risk management, cost estimation, pricing competitive bids, risk allocation, and incentive contract design, evaluation of threats and opportunities, and portfolio management.

ENM 603 Operation Management

Prerequisites: ENM 600

Examination of design and management of internal capacity as it applies to all organizations. It addresses how all operations and behavior components fit together and how to identify and resolve the right problem. Topics covered include, problem identification and resolution, process design, applications of technology and knowledge management.

ENM 604 Quality Management

Overview on theories of total quality management required for a successful organization. In addition, key Global Trends, Costs of Poor Quality, and Ethical Dilemmas will be discussed. The concepts related to Six Sigma, Benchmarking, SPC, quality tools, and ISO 9000-2000 will be discussed.

ENM 607A Capstone Course I

Prerequisites: All core classes in program.

Focus on the application of application of engineering processes learned through this program. Working in teams or as individuals under the guidance of their assigned faculty advisor, students select a research topic, and gather data. The duration of this course is one month. This is the first part of two course series that each student has to complete sequentially. Grading is H, S, or U only.

ENM 607B Capstone Course II

Prerequisites: ENM 607A

Continuation of ENM 607A project course. Specific focus is on the analysis of the data collected including problem solutions. Students present their research in both written and oral form to the client organization, if applicable, and to other students and faculty. The duration is two months. This is the second part of two course series that each student has to complete sequentially. Failure to complete this second course successfully require students to repeat ENM 607A and ENM 607B again. Grading is H, S, or U only. Course is eligible for In Progress (IP) grade.

ETL – e-Teaching and Learning

ETL 680 Introduction to e-Teaching

Traces the evolution of online learning to its current state. Course content includes the legal, ethical and behavioral issues as well as the professional stan-

dards required for the delivery of exemplary online instruction.

ETL 682 Active Teaching and Learning

Explores the characteristics of the effective online teacher, the distinguishing features of online learners, and how these two elements converge in the design and development of active, student-centered lessons, courses, and multiple assessments in the online learning environment.

ETL 684 Differentiated Online Instruct

Examines the strategies required for adapting instruction and assessment to the individual needs of diverse learners in a wide spectrum of educational environments. Course content focuses on the application of current effective online practices for increasing the instructors' competency in responding appropriately to students' diverse learning needs.

ETL 686 Designing Instr Materials

Prerequisites: ETL 680, ETL 682 and ETL 684

Design and develop effective instructional materials for use in online courses. Create a community who collaboratively produce engaging interactive online products.

EXC – Special Education

EXC 603 Typical/Atypical Dev Spec Need

Prerequisites: Permission of lead faculty

Overview of typical and atypical development from birth to five including major theories, principles, concepts, and current research and practice dealing with the impact of delays, disabilities or chronic health impairments of the young child.

EXC 621 Intro Students w/Autism Spect

This course includes history, terms, law, rights of parents, and issues regarding service and programs. Students will develop understanding of successful teaching environment for students with ASD.

EXC 622 Assess & Behavioral App in Aut

Course focuses on empirical bases for assessment and treatment. Overview of ABA approach with-in overall treatment paradigm for autism. Includes schools, agencies and professionals in discussion.

EXC 623 Intervention/Instr. w/Aut.

Provides student with relevant strategies for younger (emphasis on communication) and older students (emphasis on inclusion & Life Skills). Interventions are taught according to success in environment.

EXC 624 Autism Collab w/Parents & Fam.

Strategies to build supportive relationships with families. Develops knowledge and skills for sensitive communication. Helps to assist families in managing short and long term issues.

EXC 639 Childhood and Adolescence

This course prepares teachers, service providers and community mental health professionals to apply developmental theories and research to the understanding of social learning and behavior challenges of children and adolescents. The course focuses on the developmental process and addresses differenc-

es between normal development and developmental differences from early childhood/preschool through adolescence and young adulthood.

EXC 657 Comm. Resources & Transition

A comprehensive course designed to equip educators with the ability to plan and implement successful transitional life experiences for students with disabilities. Emphasis on collaboration with other educational and community agencies involved in the transition process.

EXC 658 Adv. Spc. Mild/Moderate

An advanced course in skills needed for effective collaboration, curriculum design and modification and assessment processes for students with mild/moderate disabilities.

EXC 659 Adv. Spc. Moderate/Severe

Advanced methods to ensure that candidates are instructional leaders. Effective communication skills and transdisciplinary relationships with families, caregivers and paraprofessionals stressed.

FFL – Foundations for Learning

FFL 100 Foundation to Academic Success

Helps students meet college expectations and achieve their academic goals through readings and intensive writing assignments. Introduces students to the information, skills, and attitudes necessary for college success and lifelong learning and development. Focuses on strategies for academic success and lifelong learning, including time management, research and study skills, effective test taking, and participating in a scholarly community.

FIN – Finance

FIN 310 Business Finance

Prerequisites: ACC 201

This course is a survey of the basic principles and concepts used in the financial management of a business enterprise addressed from both theoretical and practical standpoints. Topics include money and capital markets, financial management of working capital, capital budgeting and fixed asset management, cost of capital, and short-term and long-term financing by means of debt and equity capital.

FIN 440 Financial Institutions

Prerequisites: FIN 310

An examination of the nature and role of financial institutions in the economy, topics include money markets and capital markets, the Federal Reserve System and monetary policy, the commercial banking system, thrift institutions, insurance companies, pension funds, investment companies, and other major financial institutions.

FIN 442 Investments

Prerequisites: FIN 310 and FIN 440

A survey of principles and practices in the field of investments, the course covers the valuation of corporate securities of multinational and domestic corporations, portfolio theory, and the measurement of portfolio performance. Emphasizes the role of return

and risk in valuing stocks, bonds, options, and in constructing portfolios.

FIN 443 Working Capital Management

Prerequisites: FIN 310

A course emphasizing the management of current assets and current liabilities, it covers planning a firm's overall level of liquidity, stressing cash management and credit policies. Also discussed are selected topics such as bank relations, factoring, and secured inventory financing.

FIN 444 Risk Management & Insurance

Prerequisites: FIN 310

An analysis of the risk management problems in the business enterprise, the course emphasizes methodology for risk analysis, insurance principles and practices, techniques for risk and loss control, insurance underwriting, and rating. It also includes product liability, property damage, and bodily injury in business situations.

FIN 446 International Financial Mgmt

Prerequisites: FIN 310

An examination of the international aspects of corporate finance and investing, the course covers balance of payments, foreign exchange with emphasis on exchange rate determination, exchange risk, hedging, and interest arbitrage, international money and capital markets, international financing, and international banking.

FIN 447 Financial Planning

Prerequisites: FIN 310 and FIN 442

The course is an overview of the broad spectrum of financial planning, including activities such as producing a comprehensive plan to meet the client's needs and goals for sound financial management, gathering of client information, analyzing client objectives, and using communication skills essential to obtaining quantitative and qualitative client data. It also acquaints students with the importance of retirement and estate planning and tax management.

FIN 448 Seminar in Finance

Prerequisites: FIN 310, FIN 440, FIN 442, FIN 443 and FIN 446

This is a capstone course for students specializing in the area of finance. It exposes students to a wide range of finance related topics, including issues affecting the current financial environment of business firms. The course integrates material from previous courses taken in the finance concentration and introduces the topics of capital budgeting and the process of obtaining long-term funds.

FIN 449 Analysis of Financial Statements

Prerequisites: FIN 310

An examination of U.S. accounting principles, the course emphasizes the analysis and interpretation of financial statements for management and investment purposes. Students evaluate financial statements of actual publicly traded firms. Course material is applicable to credit policy, investment analysis, and other operating and financial policy decisions.

FIN 450 Bank Management

Prerequisites: FIN 310

Financial decision making, organization and structure of banks and their industry are examined. Topics covered include managing financial assets, deposit acqui-

sition, capital management, bank lending policies and procedures and the investment function in the bank. International banking service is also covered.

FIN 451 Real Estate Finance

Prerequisites: FIN 310

Forms of ownership and investment in real estate are examined. In particular, the course includes discussion of markets and methods of financing real property. The impacts of federal taxation on financing residential and commercial real estates are also discussed. Real estate finance topics are covered both from the perspective of borrowers and lenders.

FIN 453 Finance and Banking

Prerequisites: FIN 310

Overview the banking system, and the role of money and interest rates in the economy. Topics include: today's financial and monetary controversies, role of banking system in the economy; banking regulations; financial instruments and their purposes; asset pricing, the determination and behavior of interest rates; the monetary base and the money supply framework; the role of the Federal Reserve system in the determination of money supply, interest rates, and economic goals; the effect of money and credit on output, employment, and inflation.

FIN 454 Capital Structure & Financing

Prerequisites: FIN 310

Overview the factors that affect capital structure decisions. Topics include: risk and return, corporate strategy, capital structure choices, economics, regulatory, and industry effect on capital structure, raising capital and financial distress and bankruptcy.

FIN 455 Valuation of a Corporation

Prerequisites: FIN 310

Valuation is designed to explain the theories of valuing a corporation. Topics include: foundations of value, core valuation techniques, how to create value, estimating continuing value, valuing multinational companies, and cross-border and emerging markets valuation.

FIN 456 Financial Project (Capstone)

Prerequisites: FIN 310, FIN 440, FIN 442, FIN 443, FIN 444, FIN 446, FIN 447, FIN 449, FIN 453, FIN 454 and FIN 455

This capstone course exposes students to a wide range of finance related topics, including issues affecting the current financial environment of business firms. The course integrates material from previous courses and covers topics such as corporate finance, short and long-term investment, risk management, financial domestics and international markets and institutions and other related subjects. The subject matters will be covered through series of cases or research projects.

FIN 501 Finance Fundamentals

(3 quarter units)

Prerequisites: ACC 501 or ACC 201

This course is an introduction to finance for students with knowledge of accounting fundamentals but with no previous exposure to the subject of finance. Topics in this two-week course include security markets, time value of money, short-term and long-term financing, and working capital management. Grading is S or U only.

FIN 600 Finance for Non-Financial Mgrs

This course examines the financial and accounting reports that aid managers in making business decisions. In doing so, this course covers issues such as long- and short-term budgeting, key financial statements, the role of the outside auditor, reporting financial information, and valuation of assets and equities.

FIN 609A Seminar in Financial Management

Prerequisites: FIN 310 or FIN 501

A study of corporate financial management, through case studies and/or term projects, this course covers issues such as sources of long-term financing, cost of capital, capital budgeting, dividend policy, mergers and acquisitions, bankruptcy and reorganization, the globalization of finance, ethical standards, information technology, and financial strategy.

FIN 610 Topics in Financial Management

Prerequisites: FIN 609A

This course extends and expands the materials covered in FIN609A. The topics covered in this course include strategic financing decisions such as capital structure and dividend policy decisions; tactical financing decisions such as initial public offerings, financial restructuring, and lease financing; short-term financial management such as cash, inventory, and receivables management; and special topics such as risk management, bankruptcy, reorganization and liquidation, corporate mergers, and multinational financial management.

FIN 630 Financial Institutions

Prerequisites: FIN 609A

This course is an examination of the financial policies and practices of commercial banks, savings and loan associations, pension funds, insurance companies, and other major financial management institutions. It discusses sources and uses of funds, their cost and return, and government regulation of the financial sector.

FIN 631 Security Analysis & Portfolio

Prerequisites: FIN 609A

This course is an analysis leading to the appraisal and pricing of securities. It discusses the income generating ability of securities, forecasts of trends in the stock and bond markets, fundamental and technical analysis, application of Modern Portfolio Theory (MPT), analysis of active and passive investment strategies, and measurement of portfolio performance.

FIN 632 Managing Financial Resources

Prerequisites: FIN 609A

An instruction on how to deploy available capital resources to gain maximum advantage, students study capital budgeting policies and procedures, formulation of growth and diversification policies, appraisal of income and risk, and establishment of decision-making guidelines.

FIN 633 Financing Capital Requirements

Prerequisites: FIN 609A

A discussion of how to establish capital structure policies and determine the best methods for raising required capital, the course covers formulation of debt, dividend and equity policies, selection of appropriate financing vehicle, and selection of capital market

FIN 635 International Finance

Prerequisites: FIN 609A

An examination of the international aspects of corporate finance and investing, this course covers the international balance of payments and foreign exchange. It emphasizes exchange rate determination, exchange risk, hedging, and interest arbitrage, international money and capital markets, international financing, and international portfolio management.

FIN 641 Adv. Security Analysis & Port.

Prerequisites: FIN 609A and FIN 631

An in-depth look at several of the advanced topics surveyed in FIN 631, this course includes bond portfolio management strategies, bond betas and their portfolio impact, option valuation models and hedging, practical use of portfolio insurance and hedging, problems with model-dependent hedging, and the use of futures contracts and their objectives. It covers problems faced by corporate and professional investment managers in their effort to hedge portfolio risks and improve portfolio returns.

FIN 650 Global Financing for Trade

An examination of the basic financial problems facing an internationally oriented company, this course includes the structure and operations of the international financial system, foreign exchange rates, foreign exchange risks and their management, international sources of funds, international cash management, and basic instruments of international financial transactions (e.g., letters of credit, foreign currency contracts, foreign currency accounts, and banking facilities). Note: Students specializing in financial management may not take this course.

FIN 651 Commercial Bank Management

This course is a detailed analysis of the functional areas of banking including the management of deposits, cash, loans, and other asset accounts. Current problem areas in banking such as liquidity, capital adequacy, and problem loans are explored, as well as bank investment accounts and their relationship to profitability and liquidity.

FIN 652 Real Estate Finance

Prerequisites: FIN 609A

This course presents Real Estate Finance and Investment issues from a portfolio perspective. It provides a complete analysis of real estate partnerships, secondary mortgage markets, adjustable rate mortgages. It also includes the applied topics of corporate real estate, including lease versus own analysis, sale and leaseback decisions, and the role of real estate in corporate restructuring.

FIN 653 Fin. Engineering & Derivatives

This course provides an introduction to futures and options markets and outlines the different ways in which they can be used. It covers futures and forward contracts, pricing of forward and futures, hedging techniques, swaps, options markets, trading strategies, option pricing models, volatility smiles, and a detailed treatment of hedge parameters such as delta, gamma, and vega. Also discussed is portfolio insurance, value-at-risk measure, multi-step binomial trees to value American options, interest rate options, and other exotic options.

FIN 654 Cases in Financial Studies

Reflecting the fact the Finance has gone through dramatic changes in the last 20 years, this case study course will expose students to the revolutionary transformation in markets and organization we have seen in the financial industry milieu.

FIN 655 Finance Research Project

Prerequisites: FIN 609A and minimum of 36 quarter units of core courses

Students, under the guidance of their assigned faculty advisor, clarify topics, identify sources from which data will be gathered, and complete and present their research in written form. Grading is H, S, or U only. Course is eligible for an In Progress (IP) grade.

FIN 670 Finance & Accounting for EXECs

This course covers major topics in finance and accounting, with emphasis on current theory and concepts rather than on procedure. Topics include financial statement interpretation and analysis, internal control structure, operating and capital budgeting, capital structure theory, and issues in finance and accounting for U.S. companies with foreign operations

FIN 671 Credit Management

Prerequisites: FIN 609A

This course is an analysis of credit policy leading to the development of strategic and higher level technical skills appropriate for credit managers. The course will also analyze specific topics like the role of credit in the economy, credit management functions, retail credit, types of consumer credit, regulation of consumer credit, the consumer credit investigation, decision making in credit operation, responsibilities of the credit manager, international trade credit and collection policies and practices.

FIN 673 Valuation of a Corporation

Prerequisites: FIN 609A

Valuation is designed to explain the theories of valuing a corporation. Topics include: foundations of value, core valuation techniques, how to create value, estimating continuing value, valuing multinational companies, and cross-border and emerging markets valuation.

FIN 674 Managing Financial Institution

Prerequisites: FIN 609A

This course presents an overview of Financial System, Financial Markets, and Commercial Banking in the 1990s to the 21st century in the US and global setting. It covers asset and liability management problems for depository institutions including management issues, and performance analysis of nondepository entities. In addition, emphasis is placed on interest rates and interest rate risk management. International Bond Markets and new Issue Procedures in the Bond Market, digital money, and alternative electronic payment systems will also be discussed.

FIN 675 World Economy, Trade & Finance

Prerequisites: FIN 609A

This course emphasizes microeconomic concepts related to managerial decision-making. Students will learn to analyze the global business environment of industrialized and developing countries, and to think strategically, using micro and macroeconomics principles. Markets, consumers, producers, trade, distribution, welfare, tariffs, non-tariffs barriers, and monetary and macroeconomics issues of development and transitions will be discussed.

FIN 676 International Banking

Prerequisites: FIN 609A

This course examines both the theory and the practice of international banking. It covers the creation of credit and credit rationing; internationalization of banking, the risks and benefits from financial innovation, central banking, bank regulation, deposit protection, capital adequacy and free banking, and selective institutional aspects of international banking. It also reviews the principle of Islamic Banking.

FIN 677 Financial Derivatives

Prerequisites: FIN 609A

This course presents and analyzes derivatives, such as forwards, futures, swaps, and options. It compares major types of derivatives, shows how they are used to achieve various hedging and speculating objectives, introduces a framework for pricing derivatives, and studies several applications of derivative-pricing techniques outside derivative markets. Topics also include traditional and exotic derivatives, market risk, credit issuer risk, stressed correlation materials, fat tails, and case studies in corporate finance.

FIN 690 Guided Study

(variable units)

Prerequisites: FIN 609A

This course is individual study under direction of the instructor. It requires prior approval of appropriate academic department.

FLM – Film Arts

FLM 205 Film History II

An exploration of cinematic history that begins with the first films that included sound (“talkies”) and ends with contemporary cinema. Topics include the inclusion of sound, film as propaganda, technical advancements (CGI, 3D, aspect ratio, color, and colorization), blockbusters, and the rise of independent film.

FLM 300 Film Foundations

Recommended Preparation: COM 101

Explores the requirements, expectations, roles, and mindsets necessary for professional crew and talent collaborations. Emphasizes asset management, teamwork, and communication skills through hands-on visual storytelling projects. Students are introduced to the project archival strategies and capstone expectations will be predicted. The value of pitching, preproduction and externalizing intangibles is reinforced. Students products include movie reviews and short animatics.

FLM 305 Narrative Film History

Prerequisites: FLM 300

Analysis of film history through the lens of choices, this course examines the evolving language of film, pioneers of cinema, and narrative genre. The technical, creative, and cultural aspects of film and filmmaking are explored from film's inception through the rise of television.

FLM 310 Sound Editing

Prerequisites: FLM 300

Introduces students to the logistics and professional techniques utilized in digital audio recording and sound editing. It includes exploration of sound department roles, hardware selection and placement, audio mixing, recording dialog, ambient sound, en-

vironmental effects, sound asset management and, integration of assets during postproduction. Students products include edited audio clips.

FLM 320 Screenplay Writing I

Prerequisites: FLM 300

Introduces students to the basics of screenwriting format and structure with an emphasis on conveying emotional impact. Students will pitch and write a short subject script and generate a basic shot list. Students products include short scripts.

FLM 325 Video Editing

Prerequisites: FLM 310

Begins with an overview of the basics of timeline editing before exploring the concepts of linear and nonlinear styles. Students review the fundamentals of digital media management and the imaging used in both digital photography and digital video. Best practices for setup, workspace, media capture, transmedia, and shot coverage are reviewed. Postproduction workflow is explored. Students products include edited short content.

FLM 330 Producing

Prerequisites: FLM 300

Explores entertainment business and culture, discussing industry norms and practices. Emphasis is placed on comprehension of transmedia marketing, resource management, and interpersonal skills. Discussions cover the responsibilities of a producer or production company for the production and distribution of digital media projects. Includes scheduling and budgeting considerations. Students products include a production budget.

FLM 340 Directing I

Prerequisites: FLM 330

Covers the application of directorial concepts used in the production of fiction and nonfiction media content. This course includes defining directorial vision, communicating with actors and crew, managing expectations, and defining the director's role in preproduction/post-production activities. Students will discuss and execute previsualization techniques. Students products include a potentially episodic short clip.

FLM 355 Post-production I

Prerequisites: FLM 325

Covers application of editorial principles used in editing nonfiction and fictional media. Course content includes montage, continuity, and parallel editing, rhythm and pacing, non-linear digital media management, transmedia considerations, and exporting content to a variety of distribution platforms. Students edit a short film.

FLM 370 Screenplay Writing II

Builds upon the foundations of Screenplay Writing I to include a deeper understanding of narrative structure and a focus on character and dialog, and their application to a narrative Web series. Assignments include scene-writing exercises, character bios and story outlines. Students pitch and generate preproduction assets for a Web series. Students products include a short script.

FLM 380 Directing II Cinematography

Prerequisites: FLM 340

Builds on the concepts and skills established in FLM 340 by exploring directing through the lens of the cinematographer and the art director. Students study the roles of the art department, production design, set design, and art design. Principles of dynamic contrast, color, lighting, and camera angles that complement the narrative are also covered. Students products include a potentially episodic short clip.

FLM 405 Narrative Film Contemporary

Prerequisites: FLM 305

Analysis of contemporary narrative media through the lens of creating emotional impact, this course examines the evolving language of film, pioneers of cinema, and narrative genre. The technical, creative, and cultural aspects of film and filmmaking are explored from rise of television through present day. Students products include written critique.

FLM 420 Screenplay Writing III

Prerequisites: FLM 370

Students build upon foundational work of previous screenwriting classes and write the first draft script of either a short film or three episodes of a Web series in preparation for possible capstone inclusion. Students pitch and generate pre-production assets for their chosen project subject to instructor approval. Students products include a short script.

FLM 440 Directing III

Prerequisites: FLM 380

Builds on the concepts and skills established in FLM 380 by analyzing the role of the director in light of their leadership responsibilities. This course looks at the director as supervisor, counselor, and manager of talent and crew. Director as outward facing spokesperson of a project are examined in light of their benefits and consequences. Students analyze case studies and role play the director's responsibilities. Students products include a potentially episodic short clip.

FLM 450 Script Reading and Coverage

An overview of the reader's role in the entertainment business. Students will generate synopses and evaluations of screenplays in a professional coverage format.

FLM 455 Post-production II

Prerequisites: FLM 355

Builds on the skills emphasized in Post Production I (See FLM 355) and applies them to student-generated footage. Students edit together sample demo reel as rehearsal for Capstone I and II. Students edit a short film.

FLM 460 Crowdsourced Production Team

Prerequisites: FLM 405, FLM 420, FLM 440 and FLM 455

This distance-work-group course serves as the hub of a crowdsourced production team comprised of students from remote locations assuming diverse and distinct crew roles. A single short film will be pitched, shot, edited, and presented as a class. Crew may be enlisted from outside the course subject to instructor approval.

FLM 470 Internship / Elective

Students wishing to work in a media-based internship can get credit by enrolling in this course. Internship approval by the program lead must be acquired prior to enrollment.

FLM 480 Capstone I

Prerequisites: All courses required in the student's advanced area of study must be completed prior to taking Capstone I.

In this two-month course students pitch their capstone goals before completing preproduction, production or outline phases of portfolio projects for Capstone II. These projects should be based on their professional career goals in the media content creation disciplines. Working closely with an instructor, students revise existing or produce new works while reflecting on their experience in the program. Students choosing to emphasize writing may elect to create a show bible for a Web series during Capstone I and II. Students products include a rough capstone portfolio.

FLM 490 Capstone II

Prerequisites: FLM 480

In this two-month course students polish a portfolio of work based on their professional career goals in the media content creation disciplines. Emphasis is placed on professional assets such as web presence, networking and interviewing skills. Final capstone portfolios should be suitable for submission to a potential employer for entry-level employment positions or above. The course concludes with recorded final student presentations and mock interviews. Students products include a polished portfolio.

FNP – Family Nurse Practitioner

FNP 680 Diversity Issues in APN

Provides a knowledge base for applying, analyzing and evaluating the culturally competent provision of patient-centered care. Diversity in the global health-care delivery systems is addressed. Allows the graduate nursing students to explore various models and theories which guide the development of culturally competent nursing practice.

FNP 683A Primary Care of Adult and Aged

Corequisites: FNP 683B

Development of clinical decision-making skills. Focus is the delivery of comprehensive health care, including health promotion, health maintenance, and the diagnosis and treatment of common acute and chronic illnesses. Assigned readings, lectures, class discussion, and case studies are used as well as supervised practicum in multicultural practice settings. FNP 683A and FNP 683B must be taken concurrently and both completed satisfactorily to progress.

FNP 683B Care of Adult & Aged Practicum

Corequisites: FNP 683A

Application of theoretical knowledge in supervised clinical settings in the practice of caring for the adult and aged. The role of the family nurse practitioner in health promotion and disease prevention is emphasized. FNP 683A and FNP 683B must be taken concurrently and both completed satisfactorily to progress.

FNP 684A Primary Care-Women & Children

Corequisites: FNP 684B

Focus on methods of health promotion/disease prevention, and assessment and management of common health problems in infants, toddlers, school age children, adolescents, and women from menarche through to the climacteric. FNP 684A and FNP 684B

must be taken concurrently and both completed satisfactorily to progress.

FNP 684B Women and Children Practicum

Corequisites: FNP 684A

Application of theoretical knowledge in supervised clinical settings in the practice of caring for women and children. The role of the Family Nurse Practitioner in health promotion and disease prevention is emphasized. FNP 684A and FNP 684B must be taken concurrently and both completed satisfactorily to progress.

FNP 685A FNP Residency

Corequisites: FNP 685B

Prepare students to perform the advanced practice roles of manager, clinician, educator, researcher and consultant in the provision of primary care services across the lifespan to under-served populations. FNP 685A and FNP 685B must be taken concurrently and both completed satisfactorily to progress.

FNP 685B FNP Residency Practicum

Corequisites: FNP 685A

Concentrated residency experience in which the student will critically and accurately assess, plan intervene and evaluate nursing experiences related to the care of individuals, aggregates, and nursing systems. FNP 685A and FNP 685B must be taken concurrently and both completed satisfactorily to progress.

FNP 689 FNP Capstone

Students demonstrate integration of knowledge from the core, core clinical, and clinical coursework in the MSN-FNP Program. The compilation and interpretation of information from previous courses is demonstrated in a scholarly paper and successfully passing an exam which mirrors the national board certification examination for Family Nurse Practitioners.

FSC – Forensic Sciences

FSC 620 Advanced Criminalistics

This class surveys physical evidence with an introduction to the operation of a forensic science laboratory and an overview of many of the analytical tools used in the criminalistics laboratory. Principles of chain of custody; and role of forensic scientist as expert witness.

FSC 621 Digital Evidence

This course will provide broad perspective on theory, technique and practice of digital evidence investigation. Different types of digital related crime, including fraud, stalking, identity theft, and internet related crimes. Chain of custody and current legal issues on digital evidence.

FSC 622 Law and Criminal Procedure

This course is an examination of the foundation for understanding Constitutional laws. The course will cover various sections of the Constitution and how law enforcement officials may obtain evidence, and conduct a search and seizure.

FSC 623 Fingerprint Analysis

Introduction to basic principles and techniques of fingerprints as applied to crime scenes, forensic ev-

idence, identification, and court presentation. Methods of recognition, proper collection of known and latent fingerprints, processing, classification and comparison. Courtroom presentations will be discussed.

FSC 630 Forensic Pathology I

Forensic terminology, anatomy, and physiology of the human body with emphasis on the understanding of the underlying pathology of sudden, unexpected deaths encountered in forensics, Sudden Infant Death Syndrome (SIDS), methods personal identification and different types of injuries with their characteristic features and mechanisms of death.

FSC 631 Major Case Investigation

A study of investigative techniques that are utilized in felony crimes of violence and crimes against property, including homicide, rape, arson, assault and battery, robbery, burglary and grand theft. Examines the completion of such cases from initial crime scene through investigation and adjunction.

FSC 632 Trace Evidence

The principles and methods of the macroscopic examinations and the microscopic, chemical, and instrumental analysis of trace and patterned evidence. Hair, fibers, glass, soil, paint, GSR, arson, explosives, fingerprint, and other patterned evidence will be covered in this class. The principles of chain of custody will be studied.

FSC 633 Advanced Forensic Toxicology

A comprehensive study of general principles and fundamentals of forensic toxicology, poisons, action, toxicity, and samples required for toxicological analysis with methods of collection, preservation and analysis. Details of the methods employed for analysis, such as color test, microdiffusion, Chromatography, mass spectrometry, GC-MS, radioimmunoassay (RIA).

FSC 634 Forensic Serology and DNA

Forensic identification, analysis, and comparison of the biological evidentiary samples. Electrophoresis, DNA extraction and purification procedures. Polymerase chain reaction (PCR), and methods of genetics and DNA analysis and detection. Casework training and students will get hands-on experience.

FSC 635 Forensic Anthropology

The study of the application of the methods and techniques of skeletal remains identification and physical anthropology to medicolegal problems. This course presents the protocol of forensic anthropology when analyzing human remains. Assessment of human or non-human; time since death and cause of death.

FSC 642 Forensic Pathology II

Prerequisites: FSC 630

The scientific techniques used in Medicolegal investigations of regional injuries and death, firearm injuries transportation injuries, physical injuries, trauma and disease, child abuse, sexual assaults, diagnosis of rape, pregnancy, abortion and delivery. Infanticide, asphyxial and drug deaths. Forensic medical evidence and records for the court.

FSC 643 Forensic Psychology

An examination of the nomenclature of mental disorders, diminished capacity, and insanity defenses, involuntary commitment, mental competency to stand trial, mentally disordered sex offenders, psychological and psychiatric testing and assessment of criminal offenders.

FSC 647 Crime Scene Investigation

A comprehensive study of the techniques and procedures used for approaching and protecting the crime scene, survey and documentation, detailed search of the scene, initial evidence collection and packaging, processing the scene for latent prints and maintaining the chain-of-custody. The legal and scientific principles of crime scene searches and seizures.

FSC 648 Forensic Photography

This principles and techniques of film and digital photography as applied to crime scenes, forensic evidence, identification, and court presentation. Emphasis is on single lens reflex film or digital camera operation with various types of lighting. Legal aspects of forensic photography and courtroom presentations.

FSC 651 Topics in Forensic Sciences

A project-based course where students work under close faculty guidance and supervision on particular topics of interest. Grading is by H, S, or U only.

FSC 654 Criminal Profiling

This course is designed to help students acquire skills and knowledge in criminal investigation analysis. Introduces students to the various techniques used by criminologists and behavioral scientists to profile individuals that typically commit violent crimes. Includes study of victimology and crime scene analysis.

FSC 661 Internship in Forensic Science

(1.5 quarter units)

An internship for students looking for field experience in the law enforcement field. Students receive academic guidance from forensic science faculty and supervision at the field placement site. The internship requires students to work a minimum of 300 hours under faculty and field supervision. Students must write an in-depth research paper on their experiences during the placement. This paper is coordinated and supported by the students, faculty advisor and field supervisor. Units are arranged and determined based on assignment and the number of hours at the placement site. Grading is H, S, or U only.

FSC 662 Supervised Research Project

Prerequisites: Satisfactory completion of 8 FSC core courses.

Students select a viable topic in forensic science to research. Students meet with their instructor once a week for two months. Students will also be able to get guidance from the forensic lead faculty and other forensic staff throughout the entire process of the research. Grading is H, S, or U only. Course is eligible for In Progress (IP) grade.

FSC 690 Guided Study

(1.5 quarter units)

Individual study under direction of the instructor. Requires prior approval of appropriate academic department. Grading is H, S, or U only.

FYA – First-Yr Sem: Arts & Human

FYA 101 First-Yr Sem: Arts & Human

Prerequisites: ENG 100 and ENG 101

Part of a four-course seminar series for first-year students that focuses on critical thinking, writing, and a topic of contemporary interest. This seminar examines the thematic topic from the perspective of Arts and Humanities and is coordinated with other courses in the series from the Social Sciences, Psychology, and Mathematics and Natural Sciences.

FYM – First-Yr Sem: Math & Sci

FYM 104 First-Yr Sem: Math & Sci

Prerequisites: ENG 100 and ENG 101

Part of a four-course seminar series for first-year students that focuses on critical thinking, writing, and a topic of contemporary interest. This seminar examines the thematic topic from the perspective of Mathematics and Natural Sciences and is coordinated with other courses in the series from the Arts and Humanities, Social Sciences, and Psychology.

FYP – First-Yr Sem: Psychology

FYP 103 First-Yr Sem: Psychology

Prerequisites: ENG 100 and ENG 101

Part of a four-course seminar series for first-year students that focuses on critical thinking, writing, and a topic of contemporary interest. This seminar examines the thematic topic from the perspective of Psychology and is coordinated with other courses in the series from the Arts and Humanities, Social Sciences, and Mathematics and Natural Sciences.

FYS – First-Yr Sem: Social Sciences

FYS 102 First-Yr Sem: Social Sciences

Prerequisites: ENG 100 and ENG 101

Part of a four-course seminar series for first-year students that focuses on critical thinking, writing, and a topic of contemporary interest. This seminar examines the thematic topic from the perspective of Social Sciences and is coordinated with other courses in the series from the Arts and Humanities, Psychology, and Mathematics and Natural Sciences.

GER - Gerontology

GER 310 Healthy Aging

Focuses on the historical and cross-cultural, physiological, psychological, sociological, economic and political aspects of aging. Retirement patterns, living environments, chronic disease and the role of health care professionals will be explored.

GLS – Global Studies

GLS 150 Global Issues and Trends

Cultivate students' understanding of "the global" as a complex web of local events and their sense of themselves as "global citizens", whose everyday decisions

are inextricably linked to larger social, political, and economic forces and structures. Investigate global issues to enable students to develop competencies that enhance their abilities to make informed decisions throughout their lives about how their actions and/or inactions fit into the broader global context.

GLS 310 Global Communications

Prerequisites: ENG 240

Investigate variables that enable and inhibit clear global communications. Such global variables are due to differences in culture as well as differences in infrastructure. Students learn to communicate clearly with multiple audiences as they analyze the technological, social, political and economic forces impacting communications in the digital age.

GLS 330 Film in a Global Context

Prerequisites: ENG 240

Examines how international cinema represents various aspects of societies and cultures outside the U.S. Representative films of Asia, Africa, Europe, Latin America, Australia and Oceania, and Canada may be studied.

GLS 410 Gender and Global Society

Prerequisites: ENG 240

Examines how people experience genders and sexuality in global society. Explores how gender and sexuality relate to other categories of social identity and difference including race and social class. Analyzes media representations of gender roles and stereotypes.

GLS 420 Ecological Revolutions

Prerequisites: ENG 240

Examines the relationships between humans and the natural environment over the last 500 years. Topics include conceptions of nature, the use of resources in different societies, the consequences of various forms of economic organization (particularly capitalism) on the environment, and the impact of technological change on the world's ecology.

GLS 430 The Global Economy

Prerequisites: ENG 240

Examines changes associated with globalization since World War II, including changes in technology, urbanization, finance, markets, lending, the internationalization of production, the organization of work, and power relations among nations and world cultures. Investigates both theories of and popular responses to the new global economy.

GLS 440 Study Abroad

Prerequisites: HIS 320

Students travel to a foreign country with roughly a third of the class devoted to study prior to travel, a third to directed travel and study in the chosen country, and a third to analyzing experiences abroad.

GLS 499 Seminar and Portfolio Project

(Capstone course. To be taken as the final course in the major.) Students complete a final portfolio including one original research paper, another essay integrating central concerns of the program, and several papers representing students' best coursework. The portfolio is posted on a website of the student's design. Ideally taken as final course in the major. Grading is S or U only.

GMB – Global Master of Business Administration

GMB 601S Estadísticas para Negocios

Es un examen de la complejidad creciente de los negocios en la resolución de problemas que enfrentan en la actualidad los gerentes y ejecutivos. El curso cubre la importancia que los aspectos estadísticos y presupuestal tienen en el proceso de toma de decisiones en los negocios, así como los principios y pasos a seguir en la planeación e investigación dentro de la organización. Dentro del contexto de este curso, los estudiantes proponen el estudio de una situación existente en una organización, e identifican un asesor académico con conocimiento del tema en cuestión

GMB 602S Administración Estratégica

Prerequisites: Curso que culmina la parte académica para los estudiantes del MBA. A fin de inscribirse en GMB 602S, los estudiantes deben haber completado al menos 30 unidades cuatrimestrales de los cursos requeridos del MBA, exceptuando el GMB 696S.

Es un estudio a fondo de las funciones gerenciales en la adaptación de las organizaciones al ambiente global. El curso enfatiza las características del entorno que hacen crítica la administración estratégica en el éxito de las organizaciones, incluyendo la evaluación de las fortalezas y debilidades organizacionales, la identificación de oportunidades y amenazas, la optimización de respuesta a eventos no planeados, y el análisis estratégico en entornos turbulentos. Analiza también los entornos socio-culturales, políticos, económicos, éticos, tecnológicos y de regulación que tienen impacto en los negocios de un entorno multicultural. El curso pone especial énfasis en el impacto del Tratado de libre comercio con Norteamérica (TLC) y el GATT (hoy OMC) en la administración estratégica de las empresas. Explora las oportunidades globales de negocio que surgen de las nuevas tecnologías, tanto para pequeñas como para grandes empresas.

GMB 620S Negocios Electrónicos

Es una introducción y panorama general de las transacciones de negocios a través de Internet, desde una perspectiva gerencial. El curso sirve como base del programa de Negocios Electrónicos y plantea estrategias para negocios cibernéticos, Mercadotecnia Electrónica, leyes prevalecientes en cibernética, Mercadotecnia por Internet, Infraestructura cibernética y seguridad, aplicaciones de negocios vía Internet, así como modelos relevantes de negocios vía Internet.

GMB 631S Mercadotecnia Global

Un estudio de planificación y organización estratégicas para la mercadotecnia internacional al investigar los mercados globales, realizar mercadotecnia de productos de consumo, productos industriales y servicios en el mercado mundial. Investiga el esfuerzo de publicidad y promoción internacionales, la venta personal y la administración de personal, la fijación de precios, el sistema de distribución, la mecánica y logística del comercio de exportación, los requerimientos financieros para la mercadotecnia internacional y la coordinación y control de las operaciones globales. También trata acerca del efecto de los convenios comerciales sobre los negocios internacionales.

GMB 672S Administración del Riesgo Glob

Este curso presenta teorías de la administración de riesgos para negocios internacionales así como situaciones que permitirán al estudiante aplicar estos conceptos e integrarlos a sus experiencias profesionales, y las de sus compañeros de clase. Al desarrollar planes de acción alternativos, se anima al estudiante a que analice una amplia gama de posibles riesgos relacionados, y que evalúe las repercusiones a corto y largo plazo de las posibles decisiones en la administración de riesgos.

GMB 673S Alianzas Estratégicas Globales

Este curso utiliza teorías económicas y estratégicas para analizar el comportamiento competitivo de las organizaciones. Se pretende que el estudiante sea capaz de evaluar las decisiones estratégicas tomadas por las organizaciones en el ambiente competitivo dinámico del comercio internacional. El curso examina los impactos que las decisiones comerciales tienen en la supervivencia y rentabilidad de una organización. El ambiente competitivo se analiza en términos de factores culturales, económicos, sociales, político-legales y tecnológicos.

GMB 674S Estrategias Competitivas Globa

Utiliza las teorías estratégicas y económicas para analizar el comportamiento competitivo de las organizaciones. Capacita al estudiante en la valoración de las opciones estratégicas implementadas por las organizaciones en el entorno dinámico y competitivo de los negocios globales. El curso examina también el impacto de las opciones de negocios en la supervivencia y rentabilidad de una organización, mediante la toma de decisiones utilizando programas de simulación o equivalentes. El entorno competitivo es analizado en función de los factores culturales, económicos, sociales, legales, políticos y tecnológicos.

GMB 682S Contabilidad Gerencial

El enfoque de este curso es el contenido, análisis e interpretación de la información financiera y contable utilizada por ejecutivos en la toma de decisiones estratégicas necesarias, para lograr las metas de la organización. El curso incluye también temas de contabilidad internacional y el impacto ético de los mismos.

GMB 683S Administración Financiera Glob

Este curso es una introducción al marco conceptual dentro del cual se analizan las decisiones financieras más importantes de las corporaciones multinacionales. Incluye la Balanza de pagos internacional, la determinación del tipo de cambio, el riesgo cambiario, las coberturas cambiarias y el arbitraje de intereses, los mercados internacionales y la administración de la cartera internacional.

GMB 689S Liderazgo y Negociaciones

El curso examina la naturaleza y proceso del liderazgo, así como el desarrollo de estrategias de negociación en el ambiente ejecutivo. Investiga las teorías de liderazgo, negociaciones, regateo y solución de conflictos. Enfatiza el estudio de casos y la solución de problemas utilizando modelos éticos de negocios.

GMB 696S Proyecto MBA

Prerequisites: haber completado todos los cursos fundamentales

Trabajando en equipos o en forma individual, y bajo la tutela de un asesor académico, los estudiantes clarifican los temas de investigación e identifican las

fuentes y recursos necesarios para recopilar datos e información, a fin de preparar su proyecto final de grado. Posteriormente, los estudiantes recopilan datos, desarrollan y presentan su investigación en forma escrita a la organización-cliente (cuando aplique), y al instructor para ser evaluada.

ENGLISH DESCRIPTIONS

GMB 689S Leadership and Negotiations

This course examines the nature and process of leadership and developing negotiation strategies in executive environments. It surveys theories of leadership, negotiations, bargaining and conflict resolution. The course emphasizes case studies and problem solving employing ethical business models.

GMB 620S Electronic Business

Introduction and overview of Internet enabled business transactions from a managerial perspective. The course serves as foundation for the E-Business program and addresses E-Business strategies, Cyber-law, Internet marketing, Internet infrastructure and security, E-Business applications and highly relevant emerging Internet business models.

GMB 601S Statistics for Business

An examination of the increasing complexity of business problem-solving confronting today's managers, this course covers the role statistics and forecasting play in the business decision-making process, as well as the principles and steps involved in planning and conducting business research. Within the context of this course, students propose to study a situation that exists within an organizational setting and identify a faculty research advisor with knowledge in the focus area.

GMB 631S Global Marketing

A study of strategic planning and organizing for international marketing, researching global markets, marketing consumer products, industrial products, and services in the world market, the course explores the international advertising and promotion effort, personal selling and personnel management, pricing, distribution systems, export trade mechanics and logistics, financial requirements for international marketing, and coordinating and controlling global operations. It also discusses the effect of trade agreements on international business.

GMB 673S Global Strategic Alliances

This course examines new market opportunities, competitive threats and diffusion of business models associated with international business. Students develop the ability to evaluate the strategic use of alliances within broad competitive strategies. The formation of strategic alliances as a tool among multinational and international organizations is discussed in order to maximize the efficient and effective allocation of resources in pursuit of competitive advantage.

GMB 682S Managerial Accounting

The focus of this course is on the content, analysis, and interpretation of the financial and managerial accounting information used by managers in making the strategic decisions necessary to achieve organizational goals. The course also includes international accounting issues and the ethical impacts of such issues.

GMB 672S Global Risk Management

This course presents theories of risk management in international business and situations that will allow students to apply these concepts and integrate them with their own experiences and those of classmates. In developing alternative potential action plans, the student is encouraged to analyze a wide range of risk related situations and to evaluate short-term and long-term ramifications of decisions in risk management.

GMB 683S Global Financial Management

This course introduces students to the conceptual framework within which the key financial decisions of multinational corporations can be analyzed. It covers the international balance of payments, foreign exchange rate determination, exchange risk, hedging, and interest arbitrage, international money and capital markets, international financing, and international portfolio management.

GMB 674S Global Competitive Strategies

This course uses economic and strategy theories to analyze the competitive behavior of organizations. It is intended to enable the student to assess the strategic choices made by organizations in the dynamic competitive environment of international business. The course examines the impacts that business choices have on the survival and profitability of an organization. The competitive environment is analyzed in terms of cultural, economic, societal, political-legal, and technological factors.

GMB 602S Strategic Decision-Making

Prerequisite: A capstone course for MBA students

To enroll in GMB 602S, MBA students must first complete at least 30 quarter units of the BA program requirements, other than GMB 696S

An in-depth study of general management functions as organizations adapt to the global environment, this course emphasizes environmental characteristics that make strategic management critical to organizational success, including assessment of organizational strengths and weaknesses, identification of opportunities and threats, optimum response to unanticipated events, and strategic analysis in turbulent environments. It also analyzes the sociocultural, political, economic, ethical, technological, and regulatory environments that have an impact on businesses in multicultural settings. The course places special focus on the impact of NAFTA and WTO upon the strategic management of business enterprises. Explores global business opportunities provided through new technologies for both small firms and large corporations.

GMB 696S MBA Project

Prerequisites: Must have completed all core classes

Working in teams or as individuals under the guidance of their assigned faculty advisor, students clarify research topics and identify sources from which data is gathered in preparation for the project. Students then gather data and present their research in written form to the client organization, if applicable, and to the instructor. Grading is by H, S, or U only. This course is two months in length.

HCA 400 Foundations of HC Leadership

Recommended Preparation: Completion of all Coursework in Preparation for the Major

Foundational introduction to the healthcare management profession. Examination of the theories, principles, and styles related to leadership, administration, and management as applied to healthcare organizations. Focuses on evolving trends in management, management and leadership theories, and skills in planning, organizing, decision-making, staffing, leading, communicating and motivating health care personnel.

HCA 401 Intro to HA HR Management

Recommended: Prior completion of: all Coursework in Preparation for the Major

Concepts of human resources in healthcare organizations, such as training, motivation and direction. Elements of employee selection, compensation, financial incentives, work standards, and leadership principles in healthcare organization considered.

HCA 402 Intro to HA QA Management

Prerequisites: Completion of all Coursework in Preparation for the Major.

Introduction to continuous quality improvement in healthcare. Includes evaluation and risk management methods. Introduces outcome measurement and case management fundamentals. Introduces team development, analytical statistics, and process knowledge themes.

HCA 403 Intro to Health Economics

Recommended: Prior completion of: All Coursework in Preparation for the Major.

Introduction to the application of economics to decisions regarding the amount, organization, and distribution of healthcare services. Examine the structure, organization, activities, functions, and problems of healthcare from an economic perspective. Emphasis on management problems and policy issues in healthcare with regard to allocation of scarce resources.

HCA 405 Basic HA Budgeting & Finance

Recommended: Prior completion of: all Coursework in Preparation for the Major.

Fundamentals of healthcare financial management and budgeting, including financial organization of healthcare services, sources of operating revenues, management of working capital, and allocation, control, and analysis of resources.

HCA 407 Intro to HC Planning and Eval

Recommended Preparation: Completion of all courses in Preparation for the Major

Recommended: Prior completion of: HSC 410, HCA 402, HCA 403 and HCA 405

Development of planning strategies in healthcare organizations. Examination of planning methods from needs assessment through program design. Emphasis on strategic planning strategies.

HCA 409 Intro to HC Marketing

Recommended Preparation: Completion of all courses in Preparation for the Major

Recommended: Prior completion of: HCA 407

Introduction to contemporary marketing theory, strategies, and implementation processes in healthcare organizations. Focus on identification of market

opportunity, communication, planning and promotion, pricing decision-making, and development of distribution channels and service designs. Emphasis on community and not-for-profit marketing concepts.

HCA 425 Healthcare Politics & Policy

Recommended: Prior completion of: all Coursework in Preparation for the Major.

Consideration of healthcare policy and politics. Consideration of the role of federal, state and local government healthcare public policy impact on health services.

HCA 450 Global Health Systems

Recommended: Prior completion of: all Coursework in Preparation for the Major.

Examination of factors that impact global health systems; analysis of health care delivery systems and influential governmental, economic, social and political forces. Consideration of healthcare resource development and allocation.

HCA 494A Healthcare Internship

Prerequisites: HSC 300, HSC 310, HTM 310,

HCA 400, HCA 401, HCA 402, HCA 403, HSC 430, HCA 405, HCA 407, HCA 409, HCA 425, HCA 450 and ODV 420

Practical application of the knowledge and skills required for a healthcare administration professional in a healthcare agency. Students will be assigned to agencies according to their interests and the availability of an approved internship site. Two month requirement. Grading is by S/U only. Course is eligible for In Progress (IP) grade.

HCA 600 U.S. Healthcare System

US healthcare system overview, including terminology, components of healthcare delivery systems, financing, personnel, regulation, delivery and consumers. Consideration of the effects of public policy on services.

HCA 605 Evidenced Based Healthcare

This course is designed to give the student a fundamental understanding of evidence based healthcare and its impact on clinical trials. Emphasis will be placed on qualitative and quantitative measurements of evidence including cohort studies, healthcare technologies, outcome measurements randomized and non randomized studies, data sets and trial outcomes.

HCA 610 Health Policy

Prerequisites: HCA 600

Focuses on the development of public policy concerning medical care and public health and the relationship between public decisions and the market place. Using contemporary policy issues as case studies, examines the role science, ideology, culture, and history play in influencing the structure of and changes to a nation's health system.

HCA 620 Health Organization Management

Prerequisites: COH 602

Healthcare organization theories and structure, including analyses of managerial functions, relationships, and operations for service delivery. Development of effective service delivery systems. Appreciation of external influences including community, financial institutions, socioeconomic environment, and regulatory agencies. Examination of professional roles, responsibilities, and accountabil-

ity. Understanding of organizational mission, goals, objectives and priorities.

HCA 622 Quality Appraisal & Evaluation

Prerequisites: HCA 600, HCA 610, HCA 620 and COH 606

Theoretical and practical frameworks to facilitate the continuous improvement of quality in healthcare organizations. Includes data collection, data planning and evaluation. Introduces multiple approaches, including strategy and outcome measurement. Team development, analytical statistics, and process knowledge are central themes, along with culture transformation.

HCA 624 Healthcare Planning & Marketin

Prerequisites: COH 611

Strategic planning for healthcare organizations based on the analyses of secondary quantitative and qualitative data about technological, social, political, regulatory, and competitive aspects of the healthcare market. Marketing principles and tools for the development of a healthcare organization marketing plan.

HCA 626 Healthcare Information Systems

Prerequisites: HCA 620

Effective data and information technology utilization to improve performance in healthcare organizations: including information systems, databases and analytical tools to structure, analyze and present information; legal and ethical issues affecting management of healthcare information.

HCA 628 HA Human Resources Management

Prerequisites: HCA 622

Study of healthcare organization, training, motivation and direction of employees while maintaining high level productivity and morale. Includes selection, compensation, financial incentives, work standards, and leadership principles in healthcare organization.

HCA 630 Healthcare Law & Ethics

Legal, regulatory, and ethical dimensions of healthcare examined. Development and application of laws and regulations analyzed. Interpretation of uses of policy, law, and regulation changes and needs. Analysis of statutes and court decisions affecting healthcare. Ethical dimensions of healthcare organizations, their personnel and professionals considered.

HCA 650 Medical Practice Management

Management and operational theory and practice for contemporary medical group administration, with emphasis on managed care delivery systems.

HCA 660 Health Economics

Application of healthcare economics to decisions regarding the amount, organization, and distribution of healthcare services. Examine the structure, organization, activities, functions, and problems of healthcare from an economic perspective. Emphasis on management problems and policy issues in healthcare with regard to allocation of scarce resources.

HCA 663 Healthcare Accounting/Finance

Prerequisites: HCA 628

Application of healthcare accounting and finance theories to decisions in healthcare environments. Emphasis on management problems and policy issues regarding allocation of resources, payments systems, capital investments and budgeting.

HCA 670 Healthcare Leadership

Prerequisites: HCA 624

Concepts of leadership related to current healthcare organizations. Communications - including public relations - team building, negotiation, and conflict resolution considered. Strategic aspects such as vision, viewpoint, and mission included. Managing uncertainty emphasized.

HCA 691 Healthcare Internship

Prerequisites: HCA 600, COH 602, HCA 610, HCA 620, HCA 622, COH 606, HCA 624, HCA 626, HCA 628, HCA 630, HCA 660, HCA 663, COH 611, HCA 670 and permission by instructor

Minimum of 120 hours of structured work experience in a healthcare organization under the direct supervision of one or more experienced healthcare managers. Grading is by S or U only. Course is eligible for an "IP" grade.

HCA 692 Healthcare Capstone

Prerequisites: HCA 691 or permission by instructor.

Two-month capstone project focused on a relevant problem in healthcare administration theory or practice. Planning and completion of either a data-based research project or a scholarly and creative activity related to healthcare administration.

HED – Health Education

HED 110 First Aid and CPR

Focus is on how to recognize and act in an emergency. Strategies to maintain life until professional help arrives will be included. The 2005 national guidelines for breathing and cardiac emergency including CPR, choking and using an automated external defibrillator (AED) will be discussed. A National Safety Council completion card for CPR and First Aid will be available at successful completion of the course.

HED 212 Nutrition and Fitness

Focus is on how nutrition relates to health. The function of nutrients including micro nutrients will be discussed. Provides a basic understanding of nutrition and fitness as it relates to health promotion and health education.

HED 308 Mental and Emotional Health

Recommended: Prior completion of: COH 318

Exploration of emotional well being and mental health issues including stress, anxiety, depression, grief, self-abuse/ suicide, eating disorders, anger and oppositional defiance disorders. Resiliency, health choices, and lifestyle factors effecting overall health and well-being along with identification, intervention, and referral strategies will be examined.

HED 311 Health Literacy

Examine health literacy crisis in the United States and around the world, the issues and challenges of low health literacy, and populations at risk for low literacy. Address effective strategies to meet the challenges of low health literacy and of cultural and linguistically diverse populations.

HED 351 Coordinated School Health

Prerequisites: COH 100

Recommended: Prior completion of: COH 321

Focus on the components of a coordinated school health program and the relationship between school-

based health and community health programs. Components and effectiveness of exemplary programs: roles of parents, schools, the school nurse, and the community; and evidence-based strategies to improve children's health will be explored.

HED 414 Violence & Bullying Prevention

Focus on the nature, extent, causes and consequences, and remedies to forms of school violence, bullying, harassment, and cyber-intimidation. Discuss the personal, social, and legal ramifications and requirements for providing a safe, inclusive school environment. Explore preventative strategies and conflict-resolution techniques educators can utilize when issues occur.

HEDX – Health Education (Extended Education)

HEDX 2301X Intro Health Ed: K-12

An introductory study of a coordinated school health program. Health problems and issues are addressed at developmentally appropriate grade levels (K-12) using the Health Framework for California Public Schools in the following areas: mental and emotional health, personal health, consumer and community health, injury prevention and safety, alcohol, tobacco and other drugs, nutrition, environmental health, family living, individual growth and development and communicable and chronic diseases. The legal responsibilities of teachers related to student health and safety will be explored. Effective communication with parents and site-based and community resources to meet the individual needs of students, research-based school health programs, life skills and positive behaviors, needs of special populations, and evaluation of health web sites will be discussed.

The course meets the state requirement for all teachers to have taken a general health education course.

HIS – History

HIS 220A United States History I

Prerequisites: ENG 100 and ENG 101

Survey of American history from pre-colonial times through Reconstruction. Explores economic, political, social and cultural factors that shaped the origins of the nation, including the Revolution, the Constitution and the Civil War. Special attention is paid to issues of race, class, gender and ethnicity. Includes study of the Constitution.

HIS 220B United States History II

Prerequisites: ENG 100 and ENG 101

Survey of American history from Reconstruction to the present. Explores economic, political, social, and cultural factors that shaped the development of the nation, including industrialization, America's emergence as a world power and the challenges of the late 20th century. Pays special attention to issues of race, class, gender and ethnicity.

HIS 233 World Civilizations I

Prerequisites: ENG 100 and ENG 101

Discusses how distinctive cultures, economies and societies of the world developed from prehistoric times to the European conquest of the Americas (ca. 1500 C.E.). Explores issues of gender, class, personal

identity, war, religion, urban life, and ecology pertaining to the history of civilizations in Asia, Africa, the Americas, and Europe.

HIS 234 World Civilizations II

Prerequisites: ENG 100 and ENG 101

Discusses how the cultures, economies, and societies of the world developed since 1500 C.E. Explores issues of class and class conflict, personal and cultural identity, race, work, industrial development, colonialism, ecology, and political and economic life pertaining to the history of civilizations in Asia, Africa, the Americas, and Europe.

HIS 300 Roots of Western Civilization

Prerequisites: ENG 100 and ENG 101

Explores social, material, cultural, and intellectual bases of European civilization and relates them to major Afro-Eurasian civilizations. Examines hunting-gathering and early agricultural societies; ancient Mesopotamia, Egypt, and Judea; classical Greece and Rome; rise of Christianity; nomadic invasions of Europe; Byzantine and Islamic influences; and Europe's medieval synthesis.

HIS 320 Culture of Global Capitalism

Prerequisites: ENG 100 and ENG 101

Places contemporary cultural, economic and technological issues in a global and historical perspective. Examines the ways that capitalism, culture, and technology have interacted over the past 500 years to shape the places, peoples and societies that have come into existence in the modern world.

HIS 325 Modern World Migration

Prerequisites: ENG 100 and ENG 101

Human migration is the story of individual lives enmeshed in larger historical issues of identity, culture, work, social institutions and various forms of coercion. Explores how work and migration have intersected in the last 500 years to shape the world in which we live today.

HIS 339 The Middle East, 600-1600 C.E.

Prerequisites: ENG 100 and ENG 101

Examines the Middle East from before the rise of Islam to the Muslim conquest of Constantinople. Includes the life style of the desert nomad, Muhammad and founding of the Islamic state, its expansion through the Middle East and beyond, and the various non-Arab dynasties and empires that took over.

HIS 341 History Through Theater

Prerequisites: ENG 100 and ENG 101

Explores history through the complex medium of theater. Focuses on a variety of dramatic and theatrical techniques, including readers' theater, role-playing debates, improvisation and formal dramatizations. Studies historical literature into performance. Studies various plays in order to gain a broader understanding of key historical issues in diverse cultures.

HIS 342 History of Modern Middle East

Prerequisites: ENG 100 and ENG 101

Investigates roots of present-day events in Modern Middle East since 1600 CE. Surveys history of the region, pre-modern empires, European colonization, and renaissance of Middle East culture in the 18th and 19th century, movement toward independent states, and emergence of Pan-Arabism and Islamist ideologies of the 20th century.

HIS 345 Latin American Studies*Prerequisites: ENG 100 and ENG 101*

Introduction to Latin American history and culture focusing on diversity of Latin American societies and their multicultural heritage. Topics include colonialism and indigenous societies, growth of plantation and mining economies, enslavement of Africans, struggle for independence, distribution of political power, recurrence of popular rebellion, and artistic and cultural life.

HIS 346 Chinese History and Culture I*Prerequisites: ENG 100 and ENG 101*

A historical overview of Chinese civilization from its Neolithic origins to the founding of the Ming Dynasty. The foundations of Chinese civilization and the core of Chinese culture will be elucidated through a focus on key aspects of governance, economy, foreign relations, literature and the arts, and their development during this period.

HIS 348 Asian Studies*Prerequisites: ENG 100 and ENG 101*

Overview of contemporary Asian history and culture focusing on the diversity of Asian societies. Includes distribution of political power, ideological and structural stratification between East and West, impact of "Orientalism" in global context, impact of imperialism, effects of sexual and religious stratification, and discussion of political and religious differences.

HIS 349 African Studies*Prerequisites: ENG 100 and ENG 101*

Survey of major themes, issues, and personalities in African history since 1500. Topics include: kingdoms and empires, population movements, spread of Islam, slave trade era, abolition of slave trade, European imperialism, impact of colonialism, religious and cultural movements, nationalism and pan-Africanism, ethnicity and identity in modern Africa.

HIS 355 Chinese History and Culture II*Prerequisites: ENG 100 and ENG 101*

An overview from the Ming Dynasty to the founding of the People's Republic of China in 1949. These six centuries witnessed challenges that radically altered the nation. We will examine key components of this process and its influence on Chinese society, economy, culture, politics and foreign relations.

HIS 360 American Colonial Experience*Prerequisites: ENG 100, ENG 101 and HIS 220A*

Examines the various peoples and the economic, environmental, cultural, and political forces that shaped American development from the period before Europeans settled through the American Revolution. It evaluates key ecological changes after 1500 and the shaping of North American colonial society by mercantilism, merchant capitalism, and the slave trade.

HIS 361 Making and Sundering of Union*Prerequisites: ENG 100, ENG 101 and HIS 220A*

Examines development of American society from the early national period through the Civil War (1783-1865), including framing of Constitution, westward expansion, economic development, slavery, sectional conflict, as well as an evaluation of the social, political, and military problems faced by the contending sides in the Civil War.

HIS 362 U.S. Between Wars, 1865-1917*Prerequisites: ENG 100, ENG 101 and HIS 220B*

Examines transformation of America and expansion of American influence after the Civil War through World War I. Includes reconstruction; demographic and economic expansion; industrialization and its consequences for labor and social relations; mass immigration; growth of American imperialism; socialist, populist, and progressive movements; and World War I and Wilsonianism.

HIS 363 U.S. Since World War I*Prerequisites: ENG 100, ENG 101 and HIS 220B*

Examines social, economic, cultural, and political contours of modern America from 1920 to the present, including Great Depression, social dimensions of World War II, affluence and anxieties of 1950s, political and social movements of 1960s, and challenges of structuring a new global political economy in the 1970s and after.

HIS 370 History of the American S/W*Prerequisites: ENG 100 and ENG 101*

Examines what has attracted people to the Southwest over the last thousand years and how people have changed and enriched the region through diverse cultural, social and economic contributions. Places race relations, immigration, environmental concerns, resource use, cultural beliefs, gender roles, public order and working life into historical perspective.

HIS 375 Nevada History, Gov't and Cons*Prerequisites: ENG 100 and ENG 101*

Through an historical and literary approach, this course examines the history of the state of Nevada from the Native peoples to the present. Includes a component on Nevada Constitution required for graduation from all Nevada colleges and universities.

HIS 400 Historical Theories & Methods*Prerequisites: ENG 240*

Investigates the important methodologies and theories of history that buttress contemporary historical scholarship. Includes introduction to historiography; examines transformation of the historical profession over last 150 years and philosophical foundations of historical practice today; explores writings of historian, their historical assumptions, and theoretical framework of their interpretations.

HIS 410 California History*Prerequisites: ENG 100 and ENG 101*

Through an historical and literary approach, this course examines the interaction of the hopes and dreams of the peoples of California from the arrival of the first peoples to the post-World War II boom. May involve work in oral history.

HIS 420 The Civil War*Prerequisites: ENG 100 and ENG 101*

An examination of the dynamic convergence of economic, geopolitical and racial factors that contributed to the most explosive conflict in U.S. history. Focuses on the consequences of the war for subsequent American historical development.

HIS 431 The Ancient World*Prerequisites: ENG 100, ENG 101 and HIS 233*

Examines ancient world history from 10,000 B.C.E. to 500 B.C.E., including Neolithic revolution; rise of settled agriculture; complex societies and organized

states in North Africa, Southwest Asia, South and East Asia, Mesoamerica, and South America; rise and decline of great powers in those areas; formation of Aegean civilization in Greece.

HIS 432 The Classical World*Prerequisites: ENG 100, ENG 101 and HIS 233*

Examines religious, political and philosophical innovations of classical period (500 B.C.E. to 500 C.E.) in Mediterranean region, China, and India; rise and fall of Greek, Roman, Han, Mauryan and Gupta empires; rise of important regional states like Meroë, Angkor, Teotihuacán, and Maya city-states in Mesoamerica.

HIS 433 The Post-Classical World*Prerequisites: ENG 100, ENG 101 and HIS 233*

Examines expansion and collapse of Byzantium; nomadic invasions of Europe and development of feudalism; rise of militant Christianity; diffusion of militant Islam; spread of Indian classical culture; Chinese reunification, commercial revolution, and cultural revival; Japanese feudalism; development of African states; civilizations of Mesoamerica; settlement of Polynesians throughout Pacific.

HIS 434 Modern World, 1500 to Present*Prerequisites: ENG 100, ENG 101 and HIS 234*

Examines colonial expansion of Europe; Islamic empires of Asia; regional powers in Eurasia; revolutions in the Atlantic world; the Industrial Revolution; the new imperialism; revolutions in Eurasia and Latin America after 1900; global wars and their consequences; national liberation and decolonization; the Cold War; post-Cold War realignments.

HIS 490 Guided Study

(variable units)

Individual study under direction of instructor. Requires prior approval of appropriate academic department.

HIS 499 Capstone Research Project*Prerequisites: ENG 240 or equivalent, HIS 400 and completion of 31.5 quarter units of core courses in the major*

This seminar is the capstone course for the history major. The objective of the capstone course is to produce a paper that is exemplified by extensive research, critical thought, and intellectual engagement. The project should excite students and deepen their historical understanding. As a "senior project," it will combine primary sources with secondary interpretations in an original and interesting way.

HIS 600 Seminar in History and Theory

Critical examination of the major methodological and philosophical foundations of modern historical research and writing.

HIS 618A Seminar in Modern Europe I*Prerequisites: HIS 600*

Focused examination of primary and secondary sources as well as advanced research in the current scholarly literature on early-modern European history (ca. 1500-1789). Areas may include, but are not limited to, political, economic, intellectual, cultural, social, environmental and diplomatic history.

HIS 618B Seminar in Modern Europe II

Prerequisites: HIS 600

Focused examination of primary and secondary sources as well as advanced research in the current scholarly literature in modern European history since the French Revolution of 1789. Areas may include, but are not limited to, political, economic, intellectual, cultural, social, environmental and diplomatic history.

HIS 620A Seminar in US History I

Prerequisites: HIS 600

Focused examination of primary and secondary sources as well as advanced research in the current scholarly literature on American history through the Civil War. Areas may include, but are not limited to, political, economic, intellectual, cultural, social, and diplomatic history.

HIS 620B Seminar in US History II

Prerequisites: HIS 600

Focused examination of primary and secondary sources as well as advanced research in the current scholarly literature on U.S. history since the Civil War. Areas may include, but are not limited to, political, economic, intellectual, cultural, social, and diplomatic history.

HIS 630 Seminar in World History

Prerequisites: HIS 600

Critical examination of major themes and topics as well as advanced research in the current scholarly literature in the field of world history. Emphasizes the reconceptualization needed to research and write world history. Subject areas may include, but are not limited to, political, economic, intellectual, cultural, social, and environmental history.

HIS 640 Seminar in Comparative History

Prerequisites: HIS 600

Critical examination of major themes and topics as well as advanced research in the current scholarly literature in the field of comparative history. Highlights the interdisciplinary nature of comparative history. Subject areas may include, but are not limited to, political, economic, intellectual, cultural, social, and environmental history.

HIS 645A Special Topics in History I

Prerequisites: HIS 600

Advanced research in the current scholarly literature on a special topic in history. Variable topic chosen by the instructor. Possible topics include the history of work, imperialism, migration, gender, war, technology, family, or religion. (May not duplicate content of HIS 645B, HIS 649A or HIS 649B).

HIS 645B Special Topics in History II

Prerequisites: HIS 600

Advanced research in the current scholarly literature on a special topic in history. Variable topic chosen by the instructor. Possible topics include the history of work, imperialism, migration, gender, war, technology, family, or religion. (May not duplicate content of HIS 645A, HIS 649A or HIS 649B).

HIS 649A Seminar in a Period/Movement I

Prerequisites: HIS 600

Advanced research in the current scholarly literature on a period or movement in history. Variable topic chosen by the instructor. Possible topics: Renais-

sance, antebellum U.S., Age of Empires, Nazi Germany, civil rights, labor, environmental or national liberation movements. (May not duplicate content of HIS 645A, HIS 645B or HIS 649B).

HIS 649B Seminar in a Period/Movement I

Prerequisites: HIS 600

Advanced research in the current scholarly literature on a period or movement in history. Variable topic chosen by the instructor. Possible topics: Renaissance, antebellum U.S., Age of Empires, Nazi Germany, civil rights, labor, environmental or national liberation movements. (May not duplicate content of HIS 645A, HIS 645B or HIS 649A).

HIS 658 Seminar in Modern China

Prerequisites: HIS 600

Focused examination of primary and secondary sources as well as advanced research in the current scholarly literature on Chinese history since the establishment of the Qing dynasty (ca. 1615 C.E.). Areas may include, but are not limited to, political, military, economic, intellectual, cultural, social, environmental and diplomatic history.

HIS 668 Seminar in Modern Middle East

Prerequisites: HIS 600

Focused examination of primary and secondary sources as well as advanced research in the current scholarly literature on Middle Eastern history since ca. 1450 C.E. Areas may include, but are not limited to, political, economic, intellectual, cultural, social, environmental and diplomatic history.

HIS 678 Seminar in Modern Africa

Prerequisites: HIS 600

Focused examination of primary and secondary sources as well as advanced research in the current scholarly debates on African history since ca. 1600. Areas may include, but are not limited to, political, economic, intellectual, cultural, social, environmental and diplomatic history.

HIS 688 Seminar in Latin America

Focused examination of primary and secondary sources as well as advanced research in the current scholarly literature on Latin American history since ca. 1500. Areas may include, but are not limited to, political, economic, intellectual, cultural, social, environmental and diplomatic history.

HIS 692 Methods and Sources

Prerequisites: HIS 600

Assessment and implementation of effective primary-source research strategies. Also includes assessment and implementation of methodologies for interpreting a wide variety of primary sources critically and professionally. Grading is H, S, or U only.

HIS 695 Directed Research Methods

Prerequisites: HIS 600, HIS 618A or HIS 618B, HIS 620A or HIS 620B and HIS 630

Directed research on a historical topic chosen by the student in consultation with the instructor and the student's thesis project advisor. Involves successful completion of a research prospectus (proposal).

HIS 696 History and Applied Media

Prerequisites: HIS 600 and HIS 695

Directed application of new media technologies to a historical topic chosen by the student in consultation

with the instructor and the student's thesis project advisor. Involves successful completion of a historical digital storytelling prospectus (proposal).

HIS 697 Guided Thesis/Project Research

Prerequisites: HIS 600, HIS 692 and HIS 695

Instructor-guided advanced research on students' specific Thesis or Multimedia Project topics. May be repeated. Grading is by H, S or U only.

HIS 698 Media/Technology Project

Prerequisites: HIS 695, HIS 696, Select four courses from the following: HIS 618A or HIS 618B, HIS 620A or HIS 620B, HIS 630, HIS 640, HIS 645A, HIS 645B, HIS 649A, HIS 649B, HIS 658, HIS 668, HIS 678, HIS 688

Two-month-long course. Required of all non-thesis history M.A. students as their last course. Culminates in the creation of a substantial, original multimedia website on a historical topic of personal interest involving the critical evaluation of primary sources and relevant secondary materials and interpretations and the writing of a well-developed commentary. Grading is on a H, S, or U basis only. Course if IP grade eligible.

HIS 699 Thesis

Prerequisites: HIS 695 Select four courses from the following: HIS 618A or HIS 618B, HIS 620A or HIS 620B, HIS 640, HIS 645A, HIS 645B, HIS 649A, HIS 649B, HIS 658, HIS 668, HIS 678, HIS 688

Two-month long course. Required of all thesis history M.A. students as last course in program. Culminates in the research and writing of a substantial, original work on a historical topic of personal interest involving the critical examination and evaluation of primary sources as well as appropriate secondary materials and interpretations. At the end of the course, the student is issued an IP (In Progress) grade until a completed thesis is evaluated by the course instructor and the faculty advisor. Grading is H, S, or U only.

HRM – Human Resources Management

HRM 200 Intro to Basic Human Resources

Introductory overview of basic human resource management activities. Various functions of human resource management are explored including planning, staffing, training, compensation, motivation, employee development, benefits, performance evaluation, discipline, health and safety issues, employer-employee relationships, and compliance with employment laws.

HRM 210 Staffing and Development

Prerequisites: HRM 200

Exploration of the basic aspects of the human resource planning process, including recruitment, selection, retention, and development of employees. Special attention is given to the strategic direction of an organization in assessing its human resource needs.

HRM 220 Compensating Employees

Prerequisites: HRM 200

Overview of the fundamentals of wage and salary programs. Benefit programs and related employee incentive programs are explored. Linking performance to monetary and non-monetary rewards will be reviewed. Utilizing HR technology to increase

efficiency in pay and benefits administration, as well as aligning HR with organizational activities will be highlighted.

HRM 230 Legal Aspects of Basic HRM

Prerequisites: HRM 200

Introduction to the wide spectrum of legal concerns that human resource managers face in the workplace. Emphasis on employment discrimination laws as they relate to the employer-employee relationship. EEO methods of liability prevention are examined. Integrated into the course are aspects of ethical considerations for HR managers.

HRM 409B Survey in HRM & OD

The course provides an overview of human resources management and organizational development activities including employment, interviewing, career systems, compensation, benefits, training, organizational change, performance evaluation, discipline and employee assistance, labor relations, affirmative action and equal employment opportunity considerations, and health and safety.

HRM 432 Recruit, Selection, Promo, Ret

This course is designed to explore all aspects of reviewing the strategic direction of an organization and how it relates to assessing and filling jobs, from initial hiring through subsequent placement, promotion, and retention. It will include techniques for determining staffing needs, recruiting, screening, assigning, evaluating, assessing, and promoting. An exploration of options for employee development and retention in changing economy is provided. Also reviewed are special concerns regarding regulations, employee attitudes, and union representation.

HRM 433 Pay & Benefit Admin, & HR Tech

This course reviews the fundamentals of wage and salary programs, including the development of job descriptions, performing job evaluations, conducting salary surveys, adjusting pay structures, considering area differentials, and relating pay to performance. Benefit programs and related employee incentive and service programs are also covered. Ways to link performance to both monetary and non-monetary rewards will be reviewed, including profit sharing, bonus plans, stock options, awards and special rewards for managerial personnel. Legislative restraints and tax treatments are discussed and behavioral theories are highlighted as they apply in this area. The incorporation of technology as it relates to Human Resource Management Systems that increases efficiency in pay, benefits administration, and aligning HR with organizational activities are also covered. The synthesis of pay, benefits administration and HR technology integrates the selection, development and administration of practical programs and systems for attracting, motivating, and retaining human resources.

HRM 439 Legal, Reg, & Labor Relation C

An introduction to the wide spectrum of legal and regulatory concerns that human resources managers face in the workplace (EEO laws, affirmative action, compliance requirements, prevention of employment-related liability). The course ties in the development, aims, structure and function of labor and employer organizations, examines the relationship of labor and management, and bargaining and resolution of employer-employee issues.

HRM 630 Legal, Ethical & Safety Issues

A comprehensive analysis of the laws and regulations, both federal and state, that impact human resources management. The course emphasizes equal employment opportunity affirmative action, health and safety, privacy of information and methods of liability prevention in employment matters. Integrated into the course are aspects of ethical considerations as related to Human Resources Management, including employer use of power, organizational business practices, and safety concerns.

HRM 633A Seminar in Employee Relations,

The course provides students with both the day-to-day realm of common and complex issues related to human behavior in the workplace as it relates to employee relations, and an examination of relationships among unions, workers, management and the government. The course assesses legal restraints (i.e., negotiation, contract administration, decertification) and preparations and techniques for dealing with negotiations, strikes, and lock outs, as well as grievance handling and arbitration.

HRM 637 Workforce Plan, Dev & Outsource

A comparison and evaluation of planning, organizing, directing and monitoring of human resources planning processes, including recruiting, selecting, placing and integrating individuals within organizations. A key aspect of the course is the selection process (testing and assessment of skills and traits that influence work performance), employee orientation and integration (employee development and career planning), and aspects of performance management. The course also covers current trends in employee outsourcing.

HRM 660 Theory & Practice of HRM

A comprehensive management/practitioner-level overview and appraisal of current practices, trends, and applied theory in the era of strategic alignment between employees, jobs, systems, technology, policies, procedures, training, and organizational development. Students will evaluate and analyze theory as it relates to practical application in the workplace.

HRM 667 Compensation & Benefits

This course provides an overview of the latest technology as it applies to the human resources function and its impact of human resource management administration and organizational development. The course also integrates and assesses fundamental aspects of wage, salary, benefit administration, and employee rewards and incentives as they are becoming increasingly supported by automated systems.

HRM 669 Research Seminar

This course is focused on developing a student's research skills in preparation for the HRM670 Capstone Thesis Project. Students will be guided through research of peer-reviewed journal articles and research methodologies as they relate to the field of Human Resource Management and Organizational Development. Faculty will guide students through written review of research and current practices in preparation for the HRM670 Capstone Thesis Project.

HRM 670 Project/Thesis

Prerequisites: HRM 669 and Must complete at least 7 core courses.

The project course consists of a Master's Thesis Project in the area of HRM or ODV. Students work under

the guidance of an assigned faculty member. Students clarify research topics and identify data sources in preparation for the project. Students gather data and present their research in both written and oral form to faculty and classmates. This course lasts two months and encompasses integrating critical components and learning experience into a deliverable that meets academic guidelines for program completion and may be applicable to the workplace to build a student's portfolio. Grading is H, S, or U only. Course is eligible for an In Progress (IP) grade.

HSC – Health Science

HSC 300 Legal/Ethical Issues & Hlth Pr

Focuses on legal and ethical concepts, principles of ethics and law and use in resolving ethical conflicts and dilemmas in health care. Scope of practice, informed consent, employee and patient rights and responsibilities, patient abuse, and the influence of finance and corporate culture will be explored. Sample cases will be analyzed.

HSC 310 Issues & Trends in Healthcare

A history of the U.S. health care delivery system will be explored to understand the current issues and trends. The changing roles of the components of the system as well as technical, economic, political, and social forces effecting change will be discussed. Inpatient, outpatient, and long term care will be explored.

HSC 330 Health Education & Promotion

Focuses on health education, health promotion and clinical preventive services. Strategies for counseling and education, health education theories and practices, and development of learner-centered instructional strategies will be explored. The cost-effectiveness of clinical preventive services will be discussed.

HSC 400 Mgmt for Health Professionals

Focuses on planning, organizing, decision-making, staffing, leading or directing, communication and motivating health care personnel. Evolving trends in management, classic management theories, budget preparation and justification, training design and labor union contracts are explored.

HSC 410 Informatics for Health Profs

Focuses on the role of informatics in contemporary health care. Wireless and mobile computing, maintaining data integrity, information security and confidentiality and HIPAA, telehealth, and electronic health records (EHR) will be explored.

HSC 420 Healthcare Research

Focuses on reading and conducting research in health and human performance. Research approaches and procedures will be explored. Examples of various research methods and techniques will be discussed. A research proposal will be developed.

HSC 430 Case and Outcomes Management

Focuses on case and outcomes management application to clinical practice. The case management and outcomes management processes, barriers, utilization review, legal and financial aspects of each and evidence-based healthcare will be explored.

HSC 440 Allied Health Capstone Project

Prerequisites: Completion of the major requirements
This two-month capstone project undertaken by allied health students when they have completed the core courses in the program provides an opportunity for the student to complete the outcomes management project proposal developed in HSC 430. Results will be reported orally and in written form. Students will also design and participate in a collaborative service learning experience in a community, ambulatory, home or health care setting. Students will complete the portfolio of their work from core courses and revise as needed to create an impressive final portfolio that can be used. Grading is H, S, or U only.

HSE – Homeland Security and Emergency Management

HSE 401 Domestic Security Management

A survey course reviewing the history, current practices, and trends in the management of domestic disaster operations. The course discusses the responsibilities different levels of government (federal, state, and local) and agencies have with respect to domestic disasters and their relationships with the private sector.

HSE 420 Information Security

A survey of one of the fastest growing international crime problems. Cyber-terrorism has been quick to emerge as an enormous threat to national security and economy. This course exposes the students to the domestic, local, national and international effects of cyber-terrorism. It provides information on the categorizations of computer criminals based on the purposes and spheres of their activities

HSE 430 Border-Transportation Security

A study of the substantial vulnerability of the nation's land borders, ports, inland waterways and airports to underwater and aviation related attack. This course educates students regarding operations underwater and at airports and enhances the knowledge necessary to identify, prevent, respond to, and recover from major catastrophes at our nation's borders and ports.

HSE 440 Crisis Management

A study of incident assessment and methods that determine to what degree a crisis is unfolding and then develop a strategy to manage the consequences of the crisis. This course provides students with the knowledge of how local, state, and federal agencies come together and interact in different crisis scenarios.

HSE 444 Disaster Management

This course discusses the management areas of policy, planning, coordination, response, response management, and recovery during emergencies and/or disasters; focusing on defining and analyzing the role of managers in critical situations of an unusual or severe nature resulting in injury, loss of life and/or severe property damage.

HSE 470 Legal Issues of Security

A study of criminal and civil liability issues concerning government and private entities while preventing acts of terrorism, or during the recovery process after a critical incident. Exposes students to new congressional laws that apply specifically to homeland and

domestic security. Delves into the protection of individual rights explaining the legal background and methods to avoid the pitfalls of liability. Covers legal issues in First, Fourth, Fifth and Eighth Amendments, and how the U.S. Constitution can be applicable to both government and private entities and the responsibilities of each.

HSE 475 Interviewing and Interrogation

Provides students with proven techniques which apply to both accusatory and non-accusatory interviews. Students develop skills in preparing for the interview and interrogation with emphasis on planning and strategies. Provides a basic format and fundamentals of specialized interviewing and interrogation methods for those who have little or no experience in this phase of an investigation. Studies one of the most specialized and difficult phases of law enforcement or security investigation-interrogation.

HSE 490 Supervised Senior Project

Prerequisites: Students must have fulfilled all General Education, Core Courses, and Elective Course requirements prior to beginning this course.

For the supervised senior project, a two month course is undertaken by students upon completion of all core courses in the program. Students select a committee and a viable topic related to domestic security to research, and present the completed project to the committee, other faculty, and peers in an open forum. Grading is H, S, or U only. Course is eligible for In Progress (IP) grade.

HSE 606 Managing Information Security

Introduces computer security issues in traditional computer systems to distributed networks and the Internet. Covers cryptography; program and operating system security; administration; legal; privacy; and ethical issues.

HSE 611 Emergency/Disaster Response

Provides the student an overview of the most important aspects of emergency management and disaster response. The course discusses best practices of the all-hazards approach to responding to manmade and natural disasters.

HSE 613 Policies of Homeland Security

Introduces the student to legal, policy, and ethics issues inherent in the security of the United States. Laws and policies affecting this area have been in place for years; however, the events of 9/11 introduced a flood of Acts, regulations, and directives that play a critical role in supporting evolving policy. Conflicts between Federal and State law make for a volatile and challenging study.

HSE 614 Infrastructure Protection

This course introduces the student to Critical Infrastructure and the necessary security for its protection. Critical Infrastructure is systems and assets, whether physical or virtual, so vital that the capacity or destruction of such may have a debilitating impact on the security of the nation and across any level of government or jurisdiction.

HSE 615 Fundamentals of Recovery

This course addresses the concepts, operational procedures, and authorities involved in recovering from major disasters. Federal, State, and local government roles and responsibilities in major disaster

recover work will be covered, as well as government coordination and the solution of problems frequently arising in recovery operations. Preliminary damage assessment, disaster recovery centers, and special needs of victims and disaster workers are discussed.

HSE 620 Global Lessons in Security

Examination of overseas homeland security practices in the areas of terrorist threats, emergency response, critical infrastructure, radicalization, border and transportation security.

HSE 625 Domestic Terrorism

Examines the current issues in domestic terrorism. Topics include anti-Americanism, religious fundamentalism, nuclear proliferation, cyber terrorism, global jihad, port security, torture and detainees.

HSE 630 Immigration Issues in Security

This course examines the impact of immigration policy on homeland security issues. Topics covered include the history of immigration and customs services; the impact of immigration policy and border security; the developments in immigration policy since 9/11; the impact of immigration policy on homegrown radicalization; and the ethical concerns of homeland security issues with respect to immigration policy.

HSE 635 Communication and Security

This course provides an examination of terrorism and homeland security from a communication perspective. It explores how terrorism is essentially a message. Through case studies and speeches, it explores how terrorists and governments communicate messages through actions and discourse. The course also discusses how political media, the mass media and global media outlets support communicating messages.

HSE 640 Leading Complex Environments

This course explores the challenges of leading in complex organizational and system environments that are part of homeland security and emergency management responses. The course demonstrates the complexities of leading by building on collaboration. It emphasizes the role of building support and collaboration to maximize strengths of an organization or system in preparing for and responding to natural and manmade disasters.

HSE 690A Capstone Course

Prerequisites: Completion of at least six core courses of the program. HSE 690A Students must complete HSE 690A before starting HSE 690B

This course focuses on applying the knowledge and processes learned through this program. Working in a team or as an individual under the guidance of the instructor, students select a research topic, and gather data. The duration of the course is one month. Grading is H, S or U only.

HSE 690B Capstone Course

Prerequisites: HSE 690A, Completion of at least six core courses of the program

This course is a continuation of the HSE 610A project course and continues the application of knowledge learned to select a research topic, gather data and defend conclusions. Grading is H, S, or U only.

HTM – Healthcare Information Technology

HTM 310 Health Informatics

Innovative and best practice technology applications to support human health by individuals, professionals, care delivery organizations, and communities. Internet-based health resources, smart phone/mHealth applications, telehealth, and health-related social networks. Systems, standards, and policies to connect people and technologies securely across healthcare ecosystems.

HTM 460 Health IT Virtual Simulation

Prerequisites: HSC 410

Laboratory-based course where administrative and clinical health information systems and technologies are introduced and practiced. Students will gain experience with simulated health information systems or real systems with simulated data.

HTM 520 Health Information Exchange

Health data standards, sources, representation, terminologies, vocabularies and ontologies to support interoperability of information within and between health care organizations. Health information security practices, privacy, confidentiality, and management of patient rights. Clinical data and process modeling for medical decision making. Policy development and documentation for exchange of health information.

HTM 552 EHR Meaningful Use

Introduces electronic health record (EHR) and communication systems including the application of Meaningful Use criteria to optimize quality and effectiveness of patient care and improve care coordination. Explore care delivery innovations across multiple care settings and specialties using a patient-centric model.

HTM 605 Healthcare Info Technologies

This course is designed to give the student a fundamental knowledge of evolving healthcare informatics and wireless healthcare delivery. Emphasis will be placed on the synergy between information systems and medical services with a focus on the improvement of medical standards and reduction of healthcare cost. Students will receive a comprehensive view of new and evolving e health and the rapid changes in healthcare delivery models due to the rapid improvement in healthcare information delivery. Informatics, e health and wireless response to the growing healthcare disease and delivery market will be explored.

HTM 660 System Management and Planning

Healthcare information technology lifecycle management and strategic planning; organization and management of informatics support staff and other healthcare professionals to optimize the value from health information technology implementation.

HTM 680 Health Informatics Case Study

Prerequisites: HTM 520, HTM 552 and HTM 660

Health informatics case study requiring analysis and synthesis of complex human, financial, and technical resources for the strategic use of information technology in a healthcare organization. Students study best practice case studies and make recommendations considering organizational dynamics and technical

and market knowledge in a simulated healthcare environment.

HTM 692 Health Informatics Capstone

Prerequisites: HTM 680

Two-month capstone project focused on a relevant problem in health informatics theory or practice. Planning and completion of either a data-based research project or other scholarship or creative activity. Grading is by H, S, or U only. Course is eligible for an "IP" grade.

HUB – Human Behavior

HUB 301 Behavioral Science

Prerequisites: ENG 100, ENG 101 and PSY 100

A study of the application of human behavior and behavioral science principles to the practice of management.

HUB 400 Group Structure & Dynamics

Prerequisites: ENG 100, ENG 101 and PSY 100

An analysis of behavior, perspectives and practices as applied to group dynamics. Focus on approaches and skills in group dynamics as they relate to performance and enhancement of cooperative/collaborative effectiveness. Uses practice through role-playing of effective techniques in dealing with a variety of cooperative/collaborative situations.

HUB 401 Conflict Resolution

Prerequisites: ENG 100, ENG 101 and PSY 100

A focus on the process of negotiation and conflict resolution. Gives special attention to conflict within and between persons in organizations and industry. Emphasizes application of techniques to conflict resolution situations via role-playing.

HUB 410 Psychology for Managers

Prerequisites: ENG 100, ENG 101 and PSY 100

A survey of psychological concepts applied to organizational settings. Emphasizes motivation, communication, leadership, and personal development.

HUB 420 Human Communication

Prerequisites: ENG 100, ENG 101 and PSY 100

A study of the theoretical and practical aspects of interpersonal and group communication.

HUB 440 Organizational Development

Prerequisites: ENG 100, ENG 101 and PSY 100

A study of human relations and its relationship to organizational effectiveness through planned change and technological development.

HUB 441 Research Design and Analysis

Prerequisites: ENG 100, ENG 101, MTH 210 and PSY 100

An evaluation of research in psychology and the behavioral sciences. Includes work on research methods and design, and the application and interpretation of basic statistics.

HUB 490 Guided Study

(variable units)

Individual study under the direction of an instructor. Requires prior approval of appropriate academic department.

HUB 500 Cross-Cultural Dynamics

Prerequisites: ENG 100, ENG 101 and PSY 100

A curriculum-wide elective that studies the psycho-socio-cultural aspects of human differences and the enhancement of interpersonal/ intercultural communication skills. Increases the knowledge and understanding of differences in people and perspectives, enhances learning and performance in multicultural environments and fosters interactive diversity as a socio-cultural imperative and behavioral norm.

HUB 601A Organizational Behavior

An in-depth study of various types of organizational structures, both formal and informal, with special emphasis on behavior of people within those structures.

HUB 601B Communication for Managers

An analysis of interpersonal communications as related to organizational effectiveness. Covers the practical application of communication theory to work-related situations.

HUB 601D Creative Leadership

A study of the qualities of leadership required today and in the future. Emphasizes historical as well as contemporary leaders

HUB 639 Issues in Sexuality

An examination of the personal, interpersonal and social dimensions of human sexuality. Covers topics such as anatomy and physiology of human sexuality, contemporary American sexual behavior, sexual myths, sex-role socialization, sexual dysfunctions and sexual-social issues.

HUB 641 Stages of Adult Development

An examination of the adult stages of human biological, psychological and social development. Discusses classical as well as contemporary theories.

HUB 642 Theories of Behavior Change

A survey of social psychological theories of behavior change and resistance to change.

HUB 646 Personal and Pro. Ethics

A study of normative judgments as applied to contemporary human problems such as the uses of power, business practices and the right to live and to die. Examines varied ethical systems using a case study format

HUB 648 Personal Growth & Comm.

An examination of the meaning and importance of personal growth and human communication in human life and relationships. Development of critical communication skills, self-awareness and self-understanding to enhance personal and professional relationships. Presents a variety of models and methodologies in the exploration of physical, mental, emotional, social and spiritual growth.

HUB 650 Behavioral Research

Behavioral research is a way to examine and understand individual and social behavior through measurement and interpretation. This course investigates the theoretical principles that underlie behavioral research and the application of current research tech-

niques. The course forms the foundation for practical application of behavioral science and continued study in the human behavior and is essential to completing the capstone course in the program (Integrative Project in Human Behavior, HUB 680).

HUB 660 Assessment in Organizations

Prerequisites: HUB 650

As study of the organizational assessments of human attributes (abilities, personality and vocational interests) and their role in behavioral determinants in school, work and interpersonal settings. Methodological issues encountered in the assessment of psychological traits (construct validity) and the developmental etiology will be covered. The course reviews the literature in organizational assessment, career development and personnel psychology applied to work. Topics include job analysis, performance appraisal, testing and assessment, employee selection, equal opportunity guidelines, development and evaluation of training programs.

HUB 670 Research Applications

Prerequisites: HUB 650

The application of research methods and statistical techniques to a variety of research problems. The student will use these methods and techniques to address hypothetical and real research issues. The student will have developed a research proposal for the capstone project in HUB650 (a prerequisite for the course) and will apply the material learned in this course to further develop and refine the proposal.

HUB 680 Integrative Project

Prerequisites: HUB 650 and HUB 670

The capstone project is an empirical study that integrates theoretical and applied concepts and results in a 20-30 page paper (APA style). The student will be required to develop a project proposal during HUB 650 and HUB 670 that can then be completed during the capstone course. This course may not be taken as an independent study.

HUB 690 Guided Study

(1.5 quarter units)

An individual study under direction of the instructor. Requires prior approval of appropriate academic department. Grading is by H, S, or U only.

HUM – Humanities

HUM 490 Guided Study

(variable units)

Individual study under direction of instructor. Requires prior approval of appropriate academic department.

HUM 501 Global Civic Culture

Prerequisites: ENG 100 and ENG 101

Covers the relationship between knowledge and the interdependence of people and focuses on citizenship, change and the challenges of migration/immigration patterns, cultural shifts and transnational positioning in our global economy. Provides a framework for global citizenship, community-building, economic development, social responsibility and service.

IBU – International Business

IBU 540 International Experience

Tour foreign location and experience the business, economic, political, legal, and cultural environment of a host country. Development of thorough knowledge of foreign business environment through combination of pre-departure study, on-site lectures and presentations by host country experts and business executives, post-tour analysis and reflection.

IBU 606 Global Business

An analysis of the global economic, political, and cultural factors affecting international business, this course provides an overview of international trade and investment theory, the pros and cons of protectionism, the global financial environment, and the role of the multinational corporation. It analyzes international sourcing, marketing, and strategic management for global business.

IBU 637 Comparative Int'l Management

This course studies the impact of country-specific cultural, economic and legal factors on the theory and practice of managing multinational corporations. Case studies focusing on North American, Latin American, European and Asian settings are used to illustrate the feasibility of adapting and combining different national management styles in the operations of domestic and multinational corporations.

IBU 641 Topics in Int'l Business

A seminar-style course covering trends and new areas of interest in international business with a focus on country and regional business environments. Examples of topics covered are: Assessing and analyzing international markets based on cultural, country risk, taxation, government intervention and other factors that facilitate or hinder doing business in specific locations; business ethics in international environments; economic integration in Europe and South America, etc. Students with an international background are encouraged to share their knowledge of specific national business environments.

IBU 643 Global Strategy

Based on a review of main theories and current trends, this course examines strategic alternatives and choices available to multinational companies in world markets. Emphasis is placed upon applied strategic analysis based on case studies involving multinational companies and settings.

IBU 645 Intl Entrepreneurship Project

Examine the cross-border operations of multinational companies focusing on country assessment and market entry, market research, segmentation, marketing mix adaptation, outsourcing and global Corporate Social Responsibility. Also includes the role of exchange rates, the mechanics and institutional structure of global trade and payments, as well as the role of social media in global operations. Students will prepare an applied international business project

IHC – Integrative Health Coaching

IHC 600 Intro to Complementary Healing

Introduction to complementary and healing practices and opportunities to explore these practices. The

cultural context of healing traditions and specific practices such as Chinese medicine, energy healing, mind-body healing, healing environments, spirituality and healing, naturopathy, homeopathy, manual therapies, and integrative nutrition will be examined.

IHC 610 Self as Coach

Provides students with an opportunity for self exploration and related self work leading to personal growth and development. Students will examine their core beliefs, personal style, roles, defensive strategies, projections, etc. This exploration will enhance their coaching presence in their role as a health coach.

IHC 615 Fundamentals of Health Coaching

Coaching fundamentals, including: coaching models, relationships, contexts, principles and practices. Students will demonstrate learning through reading of primary texts, virtual discussions of ideas presented in readings and related websites, and application of material via written work. Students will related past experiences to their future role as health coach.

IHC 620 The Coaching Relationship

Focus on health coaching as a transformational journey. Emphasis on understanding change from a transformative learning and adult development perspective. Topics include: theoretical perspectives on the change process, decision making, co-creating a plan of action, uncovering blocks, handling resistance, establishing a plan for accountability, developing holistic interventions for optimal health.

IHC 630 Advanced Health Coaching Seminar

Opportunity to explore advanced topics in health coaching. Students will demonstrate learning through assignments including: reading of primary texts, virtual discussions and application of learned material via written work. Students will acquire a depth of knowledge and understanding of ways to serve their clients as health coach.

IHC 632 Practicum in Health Coaching

Preparation to operate as competent professional health coaches. Students develop their coaching competencies by completing a minimum of 50 hours of coaching in a healthcare environment. Supervision by the course instructor, who has knowledge of and experience in coaching best practices.

IHC 635 Multiple Intelligences in Heal

Provides student with a clear understanding of and appreciation for emotional social intelligence. Students will craft an individual emotional competency development plan. They will leave the course with a depth of knowledge concerning emotional and social intelligence and the ways in which they can develop these competencies in themselves and in their coaching clients.

IHC 640 Independent Study

Opportunity to focus on a health coaching topic of interest. Students propose an area for study with faculty guidance and determine a topic. The outcome is a project focused research paper which results in the development of a coaching application, tool or training method.

IHM – Integrative Health Management

IHM 600 Integrative Stress Management

Examination of an integrative approach to stress, types of stressors, physiology of stress, stress and disease and theoretical models of disease. Stress emotions of anger and fear, journaling, expressive art therapy, humor therapy will be explored. Discussion of diaphragmatic breathing, meditation, hatha yoga, imagery, visualization and music therapy. Massage therapy, Tai Chi, and progressive muscular relation will be explored.

IHM 605 Healing Environments

Our environments not only express who we are but also impact how we feel. They support our body, mind, and spirit. This course examines the definition, history of, and barriers to creating healing environments, describes elements of healing environments, discusses philosophies of healing spaces, natural elements utilized to create them, explores elements of healing relationships, and the importance of education and knowledge.

IHM 615 Nutrition and Fitness

Leading a healthy, balanced life is dependent on many variables. Two important variables include a nutritious diet and daily physical activity. There are many elements to consider when developing a nutritious diet and creating a lifestyle in which movement and activity are integral to our day. Understanding these elements helps us make informed choices about how we nourish our body, mind, and spirit.

IHM 625 Energy Medicine

Examination of an integrative approach to energy medicine to balance the mind, body, and spirit. Energy testing, the meridians, chakras, aura, electrics, Celtic weave, and the basic grid will be explored. A discussion of five rhythms, triple warmer, radiant circuits and strategies for health and wellness, nature of pain, energy techniques to relieve pain, creating an electromagnetic environment that supports health, maintaining optimum health will be explored.

IHM 630 Spirituality, Health & Healing

This course will examine an integrative approach to spirituality, health, and healing. The characteristics of spirituality, spirituality and the care provider and spiritual rituals will be explored. Next, there will be a discussion of providing spiritual care, spiritual assessment, therapeutic interventions, and healing environments. Lastly, the spiritual dimension in end-of-life care, and spiritual considerations of children and the aging individual will be explored.

IHM 632 Chinese Medicine

This course will examine an integrative approach to Chinese medicine, provide an understanding of the history, fundamental concepts and theories as well as its philosophical and cultural basis. Diagnosis in Chinese medicine, acupuncture and Tui Na (therapeutic bodywork), will be explored. Traditional Chinese pharmacotherapy and Chinese dietetics will be described. Lastly, qi gong, tai ji quan, and areas for future research will be explored.

IHM 635 Ayurveda

Ayurvedic medicine is an ancient healing system that is between 3,500 and 5,000 years old. Translated as the “science of life” Ayurveda believes that ev-

erything has specific elemental qualities as well as a specific constitution based on the relationship between three vital energies or doshas. This course will examine Ayurveda, including its origins, the role of doshas, the disease process, the importance of lifestyle regimens, and treatments of disease.

IHM 640 Legal and Ethical Issues

Legal and ethical issues related to the provision of complementary and alternative care are complex and evolving. Examination of biomedicine, regulation of medicine, scope of practice, and credentialing processes. Exploration of malpractice, liability, informed consent, and making referrals. Review of the disciplinary process, legal authority in medicine, and issues related to healing. Discussion of access to treatment, third-party reimbursement, and dietary supplement regulation.

ILD – Instructional Leadership

ILD 603 Curr Align & Eval for School A

School administrator’s perspective of instructional theory, curriculum development and methods for aligning course content to articulated goals and evaluation procedures. Student understanding of course content will be developed through class discussions, curriculum projects, presentations and reflective analysis.

ILD 610 Introductory Health Ed: K-12

Coordinated school health programs, health problems and issues are addressed at developmentally appropriate grade levels (K-12) using the Health Framework for California Public Schools content areas and California Health Standards. Legal responsibilities of teachers related to student health and safety, effective communication with parents and site-based and community resources, research-based school health programs, life skills and positive behaviors, needs of special populations, and evaluation of health web sites will be discussed.

ILD 620 Coordinated School Health Prog

An advanced health education course focusing on coordinated school health, comprehensive school health programs, and how to plan, implement, coordinate, and evaluate a health education curriculum within a comprehensive school health system. A comprehensive school health system includes health and physical education, health services, nutrition services, psychological and counseling services, a safe and healthy environment, and health promotion for staff, parents, and community. Meets the CTC requirements for advanced health education for the professional clear credential.

ILD 625 Educational Research

An introductory educational research course designed to provide knowledge, skills, and dispositions required for students to understand and demonstrate knowledge of quantitative, qualitative and action research. Emphasis is on the knowledge and skills required of a competent consumer and producer of educational research. The course requires that students utilize a high level of library skills and computer technology to locate relevant research and literature. (Scheduled for two months and meets once a week.)

ILR – Information Literacy

ILR 260 Information Literacy

Prerequisites: ENG 100 and ENG 101

A cross-disciplinary course that teaches effective report and research paper writing through the use of key computer technologies. Topics include library and Internet research; information organization, evaluation, and synthesis; MLA and APA style formats; and the use of document-production, spreadsheet, image-editing, and presentation software.

ITM – Information Technology Management

ITM 200 Computer Hardware & Software

This course provides an in-depth look at the hardware components of a computer, with the focus on proper installation, security, and administration. Students learn to identify, install, and configure various computer components, as well as basic computer and configuration concepts. This course also provides students with an understanding of proper maintenance and support of various hardware components. In addition, students learn how hardware, applications, and operating systems work together. Network, mobile, and printer terminology, concepts, troubleshooting, and security fundamentals are also covered.

ITM 205 Office Productivity Software

This course provides a functional understanding of current office productivity applications for word processing, spreadsheets, presentations, and client-side databases. Hands-on activities are provided to develop critical thinking, analysis, problem solving, and information and resource management skills.

ITM 230 Computer Network Overview

This course emphasizes network and security concepts, standards, and implementation. It provides students with an understanding of network and security management and emerging network technologies. Topics include network standards, network security, standards layers, common protocols, 802.3, 802.11, and Wi-Fi standards, TCP/IP architecture, and networked applications.

ITM 320 Information Technology Managem

An integrated perspective on how to manage, plan and integrate information technology resources. Provides an overview of the concepts of managing information technologies and covers the topics of information technologies planning, information forecasting and information processing. Project management concepts and processes are also reviewed and applied to specific information technology initiatives and tasks related to (1) Desktop technology, processing and administration, (2) network information technology, processing and administration and (3) database systems technology, processing and administration.

ITM 325 IT Project Management

Prerequisites: ITM 320

The focus will be on skills, tools, and ethics as they relate to Information Technology (IT) projects, programs, and portfolio management. Examines project management concepts dealing with integration, scope, time, cost, quality, human resource, communication, risk, procurement, and stakeholder management.

ITM 340 IT Clients Using MS Windows

This course provides a solid framework of the concepts and implementation of a client-side operating system. Topics include understanding the client processing of information to support organizational decision-making and strategic planning, the client-server architecture, and the clients role when connected to database systems and network systems that are required to meet and support real-world projects and IT initiatives. Hands-on labs are included.

ITM 345 IT Servers Using Linux

This course provides a solid framework of the concepts, installation, and configuration of a server Operating System (OS). Topics include an understanding of desktop environments used in a server environment, methods of exploring and understanding the OS, and demonstrating system administration tasks and how they are used to provide support for multiple users. This course also describes issues related to security and shows how to automate tasks through shell scripting.

ITM 420 Local Area Network Management

Network management principles, practices, and technologies for managing networks, systems, applications, and services. This course builds on ITM230 local area network (LAN) basics and reviews the current industry standard computer network technologies. Topics include the network communication process, network hardware and media, protocols and standards, and IP addressing.

ITM 430 Wide Area Network Management

Prerequisites: ITM 420

This course builds on ITM230 Wide Area Network (WAN) basics, focusing on installing, configuring, implementing, and managing a wide area network. Network reference models and standards will be examined, as well as configuring network hardware device settings for optimal performance. Security policies are discussed in relation to data security, as well as physical network security. Additional topics include cloud computing models and services, network operation systems, and troubleshooting and supporting networks.

ITM 434 Wireless LAN Administration

Fundamental concepts of wireless network administration. The focus is on 802.11 standard wireless solutions including: fundamentals of 802.11 WLANs; radio frequency fundamentals; antennas; RF math and system operating margin; RF power output regulations; wireless LAN operation; 802.11 analyses and troubleshooting; and site surveying. This course provides the basic preparation for the Certified Wireless Network Administration (CWNA) exam.

ITM 435 Wireless LAN Security

Prerequisites: ITM 434

Fundamental concepts of wireless network security. The focus is on 802.11 standard wireless solutions including: learning how to defend against the latest hacking techniques, implement the latest wireless LAN security solutions, and understand the impact of new solutions. This course provides the basic preparation for the Certified Wireless Security Professional (CWSP) exam.

ITM 438 Role of Programming in IT

Familiarizes students to programming concepts and constructs, with an emphasis on how they are used in IT environments. Programming languages will be reviewed for their ability to support IT infrastructures. Evaluate programming techniques for client-side, server-side, database, and web applications.

ITM 440 Database Concepts & Data Model

An introduction to the concepts of data modeling and relational databases. Covers the methodologies for building a logical model, techniques for organizing and designing relational databases and practical approaches to transform logical models to a stable relational database. Introduces fundamental database and application development concepts and techniques. Given database design and application requirements, students design, construct and test a personal computer database and associated application components.

ITM 450 DB Processing & Administration

Prerequisites: ITM 440

This course will provide students with the knowledge and skills necessary to install configure and administer Database Management Systems. Topics included in this course are conceptual understanding of data storage architecture, creation and management of files, groups, databases, tables, queries, locking options, indexes and data views.

ITM 470 Information Security Management

This course covers the management aspects of information security on computer systems and networks. Information is becoming a valuable asset and security is vital in maintaining its confidentiality, integrity, and availability. This course explores aspects of securing a network such as identifying threats, vulnerabilities, and assets that aid in planning, risk analysis, and implementation of security policies. Other topics include security management practices, security models and architectures, and business continuity, disaster recovery, and incident response planning. In addition, legal, ethical, and professional issues are analyzed. This course, together with ITM 475, may help students prepare for the Certified Information Systems Security Professional (CISSP) exam.

ITM 475 Information Security Technology

Prerequisites: ITM 470

This course covers the technical aspects of information security for computer systems and networks. Various topics of information security will provide students with an understanding of the tools and technologies used to design secure information systems and networks. With the understanding of what security is, this course discusses access control mechanisms, methods of attack, and secure protocols. It includes how to secure telecommunications networks and the Internet. Cryptography is discussed in regards to privacy and secrecy. There is an emphasis on physical security followed by application and system development security. In addition, there will be a discussion of vulnerability assessments and penetration testing and an examination of digital forensics. This course, together with ITM 470, may help students prepare for the Certified Information Systems Security Professional (CISSP) exam.

ITM 490A Info Technology Project I

Prerequisites: ITM 325 and 10 of the core ITM courses must be successfully completed. Must be taken consecutively with ITM490B.

A capstone project that is applicable to information technology management. Students work on an original and significant project that integrates concepts, principles, and tools that are taught throughout the program. ITM 490A, ITM 490B, and ITM 490C need to be taken consecutively. Grading is H, S, or U only.

ITM 490B Info Technology Project II

Prerequisites: ITM 490A, Must be taken consecutively with ITM 490A.

A capstone project that is applicable to information technology management. Students work on an original and significant project that integrates concepts, principles, and tools that are taught throughout the program. ITM 490A, ITM 490B, and ITM 490C need to be taken consecutively. Grading is H, S, or U only.

ITM 490C Info Technology Project III

Prerequisites: ITM 490B, Must be taken consecutively with ITM 490B

A capstone project that is applicable to information technology management. Students work on an original and significant project that integrates concepts, principles, and tools that are taught throughout the program. ITM 490A, ITM 490B, and ITM 490C need to be taken consecutively. Grading is H, S, or U only.

ITM 605 Advanced IT Project Mgmt

This course covers the processes and tools involved in managing an IT project. It provides an overview of the activities carried out in each of the phases of an IT project and describes key project management tools. This course describes how IT projects differ from other project types and points to the benefits of applying project management principles to IT projects. There is an emphasis on managing risks and issues in IT projects, including identifying, documenting, analyzing, and developing appropriate and effective responses. This course also covers the planning and managing of project communications. Legal and ethical issues are also discussed.

ITM 650 Network Infrastructure Mgmt

This course is designed to provide classroom and laboratory experience in current and emerging networking technology. This course introduces the architecture, structure, functions, components, and models of the Internet and other computer networks. It uses the OSI and TCP layered models to examine the nature and roles of protocols and services at the application, transport, network, data link, and physical layers. Lab assignments use a "model Internet" to allow students to analyze real data without affecting an actual production network. Packet Tracer (PT) activities help students analyze protocol and network operation and build small networks in a simulated environment. At the end of the course, students build LAN topologies by applying principles of cabling; performing configurations of network devices, including routers and switches; and implementing IP addressing schemes.

JJS – Juvenile Justice

JJS 601 Field Experience & Orientation

(1.5 quarter units)

By observation and interview the student will get an understanding of the roles of the teacher in an incarceration facility, mental health facility, alternative education setting or a non-public school. They will examine the differences and similarities between the missions and goals of interacting and coordinating agencies.

JJS 602 Creating Alliances in Alt. Ed

Prerequisites: JJS 601

Students will examine the Individuals with Disabilities and Education Act and how it relates to students who are incarcerated or out of the regular education program. Students will also develop a network amongst various coordinating agencies involved with students in out of school placements. Students will learn how to predict delinquent youth behavior and interventions that might mitigate the problem.

JJS 603 Role of Profess in Alt Ed

Prerequisites: JJS 601

In this course candidates will examine relevant educational and mental health practices that can be utilized by professionals in alternative ed settings looking for practical methods in working with difficult students.

JJS 604 Mgmt. of Behaviors

Prerequisites: JJS 601

This course will prepare professionals in the juvenile justice system and alternative school placements to work with students with behavior problems in a variety of settings, including public schools, alternative schools, residential treatment centers and incarcerated youth confined by the juvenile justice system.

JJS 605 Prof Ethics in Juv Justice Sys

Prerequisites: JJS 601

This course will prepare professionals in the juvenile justice system to examine the ethical problems associated with working in the area of special education within a juvenile justice system, or in a variety of settings, including public schools, alternative schools, residential treatment centers and incarcerated youth confined by the juvenile justice system.

JJS 606 Delinquency & Gang Impact

Prerequisites: JJS 601

In this course students will examine accurate analysis of gangs in America in its social context and investigate the effectiveness of current interventions.

JJS 625 Advanced Research Methods

Student will enhance their writing and research skills focusing in the area of juvenile justice. Students will clarify research topics and identify data sources in preparation for the project. Students then gather data and present their research in both written and oral form to faculty and classmates.

JJS 690 Capstone Project

Recommended: Prior completion of: All 7 other core JJS classes.

A two-month course required for all JJS candidates. Culminates the research and writing of a substantial original work on a juvenile justice pre-approved project of personal interest involving critical examination

and evaluation of primary and secondary sources with faculty supervision and guidance. All projects must include a lens towards exceptional populations. Grading is by H, S, or U only. Course is eligible for In Progress grade.

JRN – Journalism

JRN 200 History of Journalism

Provides insight into Western history through the lens of journalism theory and practice. For journalism majors and non-majors, this course makes key connections between world events and the role of a free press. Students interested in world history, governance, and political science will find particular value in exploring the connections between democracy and the media.

JRN 301 News Writing and Editing

Prerequisites: ENG 100 and ENG 101

Provides an introduction to copy editing and includes the roles and responsibilities of a copy editor, which go beyond being able to spot grammatical and spelling errors in copy. Students learn how a copy editor approaches a piece, and how to edit that piece for clarity, sense, and organization, as well as for spelling, grammar, style, legal concerns, and fairness. Students will edit copy and write headlines and captions, while learning the basics of layout and design.

JRN 302 New Journalism Technology

Prerequisites: ENG 100 and ENG 101

An overview of current journalism technology that is updated with each running of the course. Through hands-on practice, students become skilled in a variety of cutting-edge applications and Web-based and mobile tools.

JRN 303 Global Journalism

Prerequisites: ENG 100 and ENG 101

This project-based course exposes students to journalism norms, traditions, history, and practice around the globe. It provides students with real-world experience reporting on and in various cultures. Also surveys international journalism ethics and law.

JRN 306 Mobile Reporting

Prerequisites: ENG 100 and ENG 101

Provides instruction on and experience in reporting breaking and spot news on and for mobile devices. Through emphasis on grassroots and community reporting, students learn the unique demands of journalism via mobile device. They practice writing, shooting photos and video, and capturing audio optimized for mobile media. They also learn to use and create mobile apps for news and entertainment. Students must have access to a mobile device, such as a tablet computer or smartphone.

JRN 309 Documentary Techniques

Prerequisites: ENG 100 and ENG 101

Explores the history and context of documentary storytelling while demonstrating the use of new tools to report nonfiction narratives. Students receive hands-on instruction and practice in creating multimedia stories by capturing nonfiction elements using current multimedia technology.

JRN 311 Editing Multimedia

Prerequisites: JRN 306

Provides students with guidance and experience in curating, editing, and producing text, audio, video, and interactive media. Students gain expertise combining multimedia story elements from various sources across platforms.

JRN 326 Enterprise Reporting

Prerequisites: JRN 306

Provides instruction and practice in enterprise reporting—seeking, finding, and telling the uncovered and hidden stories often buried deep within communities that have limited influence or voice. Emphasis on reporting in diverse and underserved communities to reveal underreported and unreported stories and angles. Students develop proficiency in uncovering potential stories as well as strategies for providing ongoing coverage of issues relevant to these communities.

JRN 330 Investigative Reporting

Prerequisites: JRN 200 and JRN 301

Investigative reporting extends beyond partisan claims and counter claims to offer verifiable facts that can be found in court documents, state or company reports. Such news stories require collecting enough evidence to allow an editorial judgment to be made about whether what people say is, in fact, true. Students learn how to select an appropriate investigative topic, narrow the focus of a story from a broad subject to a suitable topic, and conduct the shoe-leather reporting that is needed to discover a story's shape and weight. Students formulate questions, determine who they will need to interview, conduct the reporting, then write an in-depth piece in several drafts that illuminates the chosen subject.

JRN 350 Youth and the News

Young people are playing a major role in the reinvention of news during the digital age as consumers of media and as producers of their own content. This course investigates the value of fostering youth journalism, the adolescent as news reporter, and a potentially active participant in his or her own development as a citizen in a democratic society.

JRN 355 Writing at the Margins

Prerequisites: JRN 330 and JRN 335

This course examines the social welfare beat, covering the segment of American society that relies on the government and private charities for basic survival. This beat is often challenging for reporters because of privacy considerations and fear of social stigma that can make authorities reluctant to allow interviews or access to the places where the poor live. Students focus on intractable social dilemmas such as welfare reform, homelessness, child abuse and neglect, drug dependency, and mental illness. Students plan and orchestrate projects on issues that they wish to learn more about or delve into the charitable agencies that seek to bring assistance and attention to disenfranchised groups.

JRN 360 Journalism on Screen

Prerequisites: ENG 100 and ENG 101

A study of how films portray journalists in popular culture, historically, and continuing to the present. Students view, analyze, and discuss the role of journalists in a variety of films that dramatically depict the journalist as hero or villain, raise important First Amendment issues, and show how corporate pressures impact journalists, the media, and the public.

JRN 421 Journalism Law and Ethics

Prerequisites: ENG 100 and ENG 101

Focuses closely on the legal and ethical aspects of journalism and the ways professional journalists exercise the rights of the press and free expression guaranteed them by the First Amendment to the U.S. Constitution. Provides students with both a theoretical understanding of the legal and ethical issues in journalism and practical knowledge of how to apply that understanding in the conduct of their professional work gathering and disseminating information. Students also learn to manage the responsibilities that such rights entail and to respond to limits on those rights.

JRN 422 Long-form Nonfiction

Prerequisites: ENG 100 and ENG 101

Provides an overview of literary nonfiction and creative nonfiction. Students gain experience writing long-form nonfiction narratives using the literary and creative techniques of fiction and new journalism.

JRN 430 Reporting for TV News

Prerequisites: JRN 300, JRN 310, JRN 320, JRN 321 and JRN 335

This course focuses on what it takes to successfully write and assemble reporter packages for broadcast news programs. The course includes shooting video for the package, deciding which video pieces to use and conducting interviews to get information and effective sound bites for the report. In addition to writing and reporting techniques, students will learn how to perform for TV news, including the manner of dress, speech and other factors that relate to trust, believability, and likeability.

JRN 431 Writing the TV News Script

Prerequisites: JRN 430

This advanced course in broadcast journalism builds on skills developed in JRN 430 (Reporting for TV News). Students learn to distinguish between writing for print journalism and for broadcast. This course covers writing scripts that distinguish between the short, clear prose for print as opposed to writing for radio with its emphasis on spoken words, or TV, which requires weaving together words and visuals.

JRN 492 Journalism Business Skills

Provides learners with the skills needed to successfully manage a freelance or consulting business building or maintaining websites, online content or blogs. Course content includes creation of business plans, promotion of services, marketing, budgeting, billing, and filing taxes.

JRN 495 Capstone Project in Journalism

Prerequisites: JRN 310, JRN 330, JRN 335, JRN 340 or JRN 430, JRN 431 and JRN 315

In this capstone course, students have a choice of producing a capstone project or engaging in an internship in the community where they live. Students in both cases must apply the knowledge and skills gained in other journalism courses to perform the following types of activities: Write news stories; Produce news packages; Shoot videos for news or public affairs programs; Conduct interviews; Conduct research on current affairs or breaking news developments; Collect audio recordings for news or public affairs programs; Generate story ideas concepts for a newsroom; Participate in news meetings with editors, staff writers and/or producers. All students must

work with the program lead faculty in advance of the course to identify their area of interest. Students who elect the capstone project work with their capstone advisor to construct a long-form feature, investigatory news article (2,000 word minimum) suitable for a newsmagazine or online serial publication. Video or radio projects may also be proposed. Students who choose the internship must work for no less than one month as apprentice journalists in a journalistic environment such as a newspaper, broadcast or web-based newsroom or multimedia facility. All students must produce a capstone portfolio consisting of their best work from this and previous courses and a reflective essay on the internship or project. Grading is by H, S, or U only.

JRN 502 Essential Digital Competencies

(1.5 quarter units)

Guides students through online tutorials and DVD training in four technical areas of journalism: 1) digital video editing, 2) audio recording and editing, 3) interactive content creation on the Web and 4) image/photo editing. Students complete online tutorials or DVD training in each area in which they lack basic proficiency. Students must take tutorials or training unless they can demonstrate proficiency in one or more of the areas before the second week of class begins. Work demonstrating a student's proficiency must be received and approved by the instructor during the first week of course work to fulfill the "test-out" option. Grading is by S or U only.

JRN 600 The New News

Transforms a journalist into a multimedia powerhouse who can produce news, features and associated products for a variety of audiences. Students gain familiarity with the demands of each medium, create news stories for print, audio, video and online media platforms, and learn to move fluidly from one medium to another.

JRN 605 Advanced Non-Fiction Writing

Provides guided practice in short- and long-form feature writing for print and online media, as well as critical experience in composing feature scripts for radio, television, podcasts, slideshows and Web video.

JRN 610 Backpack Digital Audio & Video

Prerequisites: JRN 502

Provides a thorough knowledge of video use in journalistic communication without a TV station's truck, studio or edit bay. It teaches students to work as video journalists and communicate video news stories using a small digital camera and a laptop computer.

JRN 615 International Reporting

Examines what international reporting has become and what lies ahead. It explains theories of international politics and how they relate to different types of reporting, while offering students practical advice on how to function as a foreign correspondent in the new hyper-technological universe.

JRN 620 Online Publishing

Provides students guided practice in every stage of the print, broadcast and online production processes, with emphasis on the convergent and increasingly grassroots generalist.

JRN 630 Professional Editing

Provides students guided practice in every stage of editing from the top edit, to the line edit, to proof-reading. It offers ample opportunities for practice working in print, broadcast and online media.

JRN 640 Emerging News Business Models

Examines the changing nature of the journalism business, covering the evolution of different business models, from monopoly newspapers to the current financial anarchy of the digital world. It analyzes changing social models for the distribution of information, and weighs how news is increasingly being transmuted into data.

JRN 645 Marketing the News

The course explores the mechanisms of how newscasters achieve confidence and integrity in the public eye; the way stories are presented as "unbiased, impartial, honest, and fair"; and what factors contribute to this implied relationship between newscaster and audience.

JRN 650 Computer-Assisted Research

Provides skills necessary for journalists to accomplish more sophisticated, analytical work involving database management, GIS mapping, statistical analysis and the development of Web applications. Computer-assisted reporting (CAR) is an emergent branch of investigative and watchdog journalism. CAR allows journalists to utilize various computer tools for improved news reporting.

JRN 655 Communication Law

Examines the constitutional, philosophical and legal bases of free speech and what it means in daily life. The course considers the debate over words that threaten people in power, and how the powerful have tried to control the press.

JRN 656 Ethics in the New Media World

Investigates the moral decision-making processes behind journalistic choices, and the principles on which these decisions are based. It examines not only what a journalist has a right to do but what is right to do. Students consider cases of ethical breaches, and discuss how to uphold sound standards during reporting.

JRN 660 Investigative Methods

Takes students past the foundational skills of beat reporting to the more challenging field of specialty reporting, in which a journalist becomes an expert in a particular area and builds a body of work around it. Offers an overview of the most common types of specialties in journalism today.

JRN 670 Producing Enterprise Projects

Defines and explores the concept of enterprise, a core component of journalism. News stories cover crimes, meetings and other one-time events, but enterprise reporters and editors do the bigger-picture work of identifying trends, connecting the dots, investigating inconsistencies, analyzing personalities and asking the important questions.

JRN 680 Capstone Project

Reinforces the knowledge and skills gained in other courses by working in real-world media outlets. Students work with the program lead faculty in advance of the course to identify their area of interest and develop a proposal for either a journalism internship or a project. Grading is by H, S, or U only.

LAD – Language and Academic Development

LAD 632 Speech & Language Development

Focus on phonology, morphology, syntax, semantics and pragmatics in the context of typical and atypical language development across disabilities. Candidates will differentiate between language differences, language delays, language disabilities, and language disorders; identify the major milestones of language development in infancy, toddlerhood, preschool age, school age and across the lifespan. Candidates will describe the neuroanatomy and neuro-physiology of language and compare and contrast several theories of language development.

LAD 633 Academic Language Assessment

Candidates administer and interpret a variety of individual assessments for students with language and academic development disabilities for the purposes of developing and implementing academic instruction and applying instructional models and strategies that are effective across ages and environments. They will interpret and communicate the results of non-biased and non-standardized teaching and instructional procedures that are standards based and appropriate to the diverse needs of individual students.

LAD 634 Curriculum and Instruction

Candidates identify and utilize methods and materials for developing fluent readers in students across ages and environments. They use evidence-based curricula and instruction methods that meet the diverse needs of students with language and communication disabilities in order to enable these individuals to access the core curriculum across an array of activities and service delivery models such as multi-sensory and direct instruction, small group, and individualized instruction.

LAD 635 Intensive Lang. Intervention

Candidates assess verbal and non-verbal communication abilities and needs, employ effective intervention techniques, that actively engage students in the classroom and social activities appropriate to the age level of the students and in a variety of educational environments. They will create social and pragmatically appropriate support partnerships with parents/families/teachers/employers, to facilitate each student's ability to participate in a variety of social interactions and develop social relationships.

LAD 682A Student Teaching I

Six weeks/30 days of full-day supervised teaching within an appropriate setting established to serve students with special needs in language and academic development. Candidates are supervised by an appropriate professional educator at the site and from the University with a Mild/Moderate (or equivalent) credential and who have experience in the areas of language and literacy development. The course is graded satisfactory (S) or unsatisfactory (U).

LAD 682B Student Teaching II

Six weeks/30 days of full-day supervised teaching within an appropriate setting established to serve students with special needs in language and academic development. Candidates are supervised by an appropriate professional educator at the site and from the University with a Mild/Moderate (or equivalent) credential and who have experience in the areas of

language and literacy development. The course is graded satisfactory (S) or unsatisfactory (U).

LAD 692A Internship LAD

Prerequisites: SPD 608, SPD 614 and TED 621B, Candidates must be admitted to university internship program.

The National University Special Education Internship for Language and Academic Development preliminary credential is designed as an alternative route for the preparation of Education Specialist candidates. Candidates selected for an internship serve as teachers of record in settings serving students with language and academic development needs, earn full-time salaries and receive benefits. Interns receive support and supervision, from the university program and the school site, for a minimum of 4 months for each clinical practice course (LAD 692A and LAD 692B Internship) while completing required coursework for authorization to teach students with language and academic development needs. LAD 692A and LAD 692B do not grant graduate units towards a graduate degree. The courses are graded satisfactory (S) or unsatisfactory (U).

LAD 692B Internship LAD

Prerequisites: SPD 608, SPD 614 and TED 621B, and Candidates must be admitted to university internship program.

The National University Special Education Internship for Language and Academic Development preliminary credential is designed as an alternative route for the preparation of Education Specialist candidates. Candidates selected for an internship serve as teachers of record in settings serving students with language and academic development needs, earn full-time salaries and receive benefits. Interns receive support and supervision, from the university program and the school site, for a minimum of 4 months for each clinical practice course (LAD 692A and LAD 692B Internship) while completing required coursework for authorization to teach students with language and academic development needs. LAD 692A and LAD 692B do not grant graduate units towards a graduate degree. The courses are graded satisfactory (S) or unsatisfactory (U).

LAD 692C Internship Support LAD

(2.25 quarter units)

Prerequisites: LAD 692B

The purpose of this course is to provide ongoing support for intern candidates who have not completed the Preliminary Education Specialist Credential Program. Interns who have passed the two initial internship clinical practice courses in Language and Academic Development (LAD 692A and LAD 692B), but have remaining credential requirements to complete, must register for LAD 692C Internship Support LAD which provides continuous, targeted support for their internship as required by the Commission on Teacher Credentialing (CTC). This 2 month (2.25 unit) course will be repeated by individual interns until they have successfully completed all of the credential requirements for the Preliminary Education Specialist Credential with Authorization in Language and Academic Development (LAD). All internship clinical practice courses are designed to address CTC standards and requirements for recommendation for the Education Specialist Preliminary Credential. Does not grant graduate units towards graduate degree. This course can be repeated up to 8 times.

LAW – Law

LAW 200 Intro to Law & Legal Writing

A lower division introductory course exploring the practical application of Civil Law and the various area of practice. The student will learn rudimentary legal research and be introduced to the form of legal writing referred to as "IRAC."

LAW 304 Legal Aspects of Business I

A survey of contracts, sales, agencies, personal property, commercial paper and associated topics. Emphasizes prevention of litigation and liability arising from business operations.

LAW 305 Legal Aspects of Business II

Prerequisites: LAW 304

A sequential course to LAW 304. A survey of business organizations (partnerships, corporations, government regulations), property (real property and leasing, estates, community property), business torts, business crimes and associated topics. Emphasizes prevention of litigation and liability arising from business operations.

LAW 310 Litigation

A broad-based overview of the various stages of the civil/criminal litigation process. Covers the complete litigation process starting from the initial filing of the criminal information and/or civil complaint, progressing through the client interview, motion and trial phase. Explores the process of court pleading and discovery, including interrogations, depositions and the voir dire process. Also covers heavy strategies and the role of the law office assistant. Students must demonstrate their legal knowledge and understanding of the material through the drafting of a civil complaint, accompanying forms, summons and depositions.

LAW 400 Current Legal Issues

This course will review contemporary issues including minority rights, abortion, free speech and criminal justice with a special emphasis on the affect these issues have on the business community

LAW 402 The Art of Negotiation

A workshop course for pre-legal and pre-professional students to develop the verbal and analytical skills needed to be effective negotiators in the practice of law and business. Examines general negotiating principles and uses practical student exercises.

LAW 405 Analytical Reasoning

The development of analytical reasoning through identification of critical issues in the legal, business and political environments, by analyzing historical and contemporary events, followed by the application of established rules of law, ethical standards and social models in developing oral and written arguments for and against specific positions.

LAW 408 Legal Writing Research and Ora

This class is devoted to learning the written and oral skills necessary for presentation of legal issues. Students will prepare and argue an appellate case in moot court format. Each student will prepare an appellate brief for one side of a case dealing with a controversial current legal issue. In team format students will then argue the issue presented before a panel of

judges. To prepare for oral argument students will visit and discuss presentations made before the Trial Courts and the California Court of Appeal.

LAW 410 Intro to Law & Legal Analysis

An introduction to case brief writing and legal problem analysis. The classroom discussions employ the Socratic method used in law school classes.

LAW 420 Advocacy

A capstone course that requires students to participate in a mock trial. Students write trial briefs, create pre-trial discovery strategies, give oral arguments and examine witnesses in a simulated civil case.

LAW 430 Constitutional Law

A survey of the historic development of Constitutional Law in the United States. The student will learn the philosophical foundations of the Constitution and review how the political climate shaped landmark decisions throughout the history of the United States.

LAW 440 Comparative International Law

A survey of international law in (1) the civil environment including trade agreements and contracts, and alternative dispute resolution and (2) criminal law, including investigation and prosecution of human rights violation and the remedies for such violations.

LAW 445 Administrative Law for Business

An advanced survey of administrative law and procedure and manner in which the various state and federal agencies are a part of the integral workings of business operations, including, but not limited to, the areas of environmental operations, employee relations, consumer good regulations, occupational safety.

LAW 455 Public Contracting

A survey of public contract law and the differences from commercial contract law; including clear record keeping for audits, overseeing activities of sub-contractors, and the impact for violation and breach of contract.

LAW 460 Law School Portfolio Project

A preparatory course for the undergraduate student who is preparing to apply for admission to law school. The course will involve learning strategies and practice for those preparing to take the Law School Admissions Test. Additionally, students will prepare their dossier and personal statement for law school applications. Grading is by S or U only.

LAW 470 Pre-Law Senior Project

Prerequisites: LAW 310, LAW 400 and LAW 408

This course represents a culmination of the skills learned in previous research and writing courses. It consists of the preparation of a research document equivalent in form and content to an appellate brief. In the case of those students who have received an internship, this course will be assigned and the student graded on the writings produced during the internship, whether legal memorandum and/or briefs.

LED – Leadership

LED 400 Introduction to Leadership

Examination of core issues in the practice of leadership. Identification of differing theories and styles of collaborative, integrative organizational leadership

and comparison to authoritarian or management by edit within the organizational context.

LED 410 Leading Diverse Groups & Teams

Examination of the application of leadership theory to groups that are diverse in gender, ethnicity, education, and functional expertise. The role of the leader in establishing effective collaboration among members; the decision making process and power will also be examined.

LED 420 Adaptive Leadership in Change

Analysis of constant and continuous change in modern organizational environments. This class will provide students with the skills needed to recognize the potential impacts of change on their organizations, and to lead their organizations through the change process effectively. Students will develop skills in assessing organizational culture and learn to create the learning organization of the future.

LED 430 Conflict/Negotiation for Ldrs

Effective conflict resolution, bargaining and negotiation are addressed in this course as methods for improving the organizational effectiveness in the long term. A special focus will be placed upon creation of win-win solutions to real life organizational situations. Conflict will be examined as both a necessary and challenging workplace phenomena.

LED 440 Ldrship Overview of Org. Func.

Introduction to strategies for leadership to enhance the integration of functions into the overall mission and vision of the organization. Assessing the relationships between organizational structure and the impact on the culture and norms of the organization will be analyzed.

LED 450 Advanced Group Dynamic Theory

Prerequisites: LED 400 and LED 410

Advanced topics in understanding groups and team formation, hidden agenda items of team members and strategies to navigate difficult behavior or challenging groups. Experiential learning of group dynamics, examining multiple phenomena and the impact of leadership will be explored.

LED 460 Ethics and Decision Making

Examination of the many components that influence decision-making by leaders, including cultural relativism, legal responsibilities, prescriptive approaches and universal principles. The potential impact of decisions on the organization and transparency in the decision making process, ethical frameworks and hypothetical situations will be reviewed.

LED 470 Classic Studies of Leadership

The historical context of classic leadership studies will be examined including emotional intelligence, trait theories, personality studies and the emergence of leadership theory. Students will explore the research on leadership that has impacted the development of leadership studies and the understanding of power, authority and influence. This course will aid in preparing students for LED 480 and LED 490.

LED 480 Research for Leaders

Prerequisites: LED 410 and LED 420

This course should be taken toward the completion of the BSOL course work, as it allows the student to develop strategies in identifying and interpreting

quality research. The study of leadership involves both qualitative and quantitative research which informs effective leadership in an ever-changing and global business environment.

LED 490 Leadership Capstone Project

Prerequisites: Completion of six of the preceding courses

The capstone course is designed to be the culminating work for the Bachelor's degree in Organizational Leadership. Under the guidance of the instructor, students will design a project to demonstrate their mastery of leadership theories, approaches and frameworks. Students will include scholarly research, attention to ethical frameworks, and critical analysis in their project. A professional presentation of 10-15 minutes of the student's project is required. Grading is H, S, or U only.

LED 601 Ethics and Classic Theories

Introduction to the classic theories, frameworks and ethics of leadership practice. Students identify and assess their own leadership philosophy, then analyze the relationship between it and selected theories of leadership. Students evaluate ethical decision making processes and assess the potential impact of leadership strategies on organizations.

LED 602 Developing Groups and Teams

The formation and development of groups through effective leadership is the focus of this course. Team communication styles and roles within teams are examined. Strategies that foster creativity in groups are discussed. The impact of technology on teams and communication styles is evaluated. Students learn experientially about groups and teams and the impact of diverse ethical perspectives by participating in group activities and observing leadership in small groups.

LED 603 Leadership in the 21st Century

Examination of emerging forms of leadership, influence and power, chaos and collaboration. The course will analyze multiple organizations within the private and public sectors, and will draw upon diverse perspectives, ethical considerations and applied approaches. Participate in experiential approaches to learning leadership skills which may include the classroom as a temporary organization to be examined in real time.

LED 604 Leading Change and Adaptation

Course topics will focus on the dynamics of change, organizational redesign, and the essential skills necessary for leaders to initiate corporate and organizational transformations. Resistance and acceptance of change initiatives, including the impact of organizational culture will be examined. Students will strengthen their leadership skills and strategies in order to initiate and implement change through problem-solving experiences across a broad range of organizational contexts.

LED 605 Conflict and Power Dynamics

Integration of the knowledge, skills, and abilities required to design, conduct, and evaluate effective conflict resolution and negotiation practices. Course topics include interpersonal and intra-group conflict resolution; persuasion, problem solving techniques and decision-making in conflict resolution; overcoming bias, anger, and retaliation. Students will develop leadership and dialogue skills used to navigate con-

flict situations, and begin to detect conflicts as potential clues of organizational challenges.

LED 610 Analysis and Decision Making

Identify quality information, data and research that inform decision making and strategy. Students will gain skills in interpreting data and develop critical thinking around key issues. In order to aid in analysis, explore statistical models and emerging data trends. Topics will include data analytics, overview of statistical models, data collection methods and critical interpretation of information.

LED 615 Consulting and Assessments

Students gain both knowledge and skills to consult to organizations on leadership issues and development, whether within the infrastructure or to an external client base. Through the use of assessment instruments, students gain both understanding of self as well as expertise in administering tools with clients. Assessments for leadership also include personality, team performance and conflict styles. In order to work effectively with clients, skills for facilitating and training will be included.

LED 620 World View & Adult Development

Adult development is intrinsic to the development of holistic leaders therefore students will gain knowledge of adult development concepts and theories. Identification of one's world view or ontology is interwoven with one's development in leadership therefore students will work to identify their world view and connect it with their development as a leader. Students will also gain knowledge of emerging models of leadership and integral approaches by linking their world view to their practice of leadership.

LED 650 Teaching Leadership

Prerequisites: LED 602, LED 603, LED 605 and LED 620

Students that are interested in teaching adults about leadership or intend on working in public or corporate leadership development will work with a leadership studies faculty member in an apprentice or mentoring framework. Students will gain understanding of adult learning theory, experiential teaching methodology including case-in-point, here-and-now, group dynamics and Socratic dialogue.

LED 680 Leadership Research

Prerequisites: LED 601 and LED 602

This course prepares students to conduct in-depth research in their area of interest synthesizing knowledge, and theory of leadership. Students will learn to judge scholarly, peer-reviewed work as unique from wisdom literature found in many popular leadership books. Two research papers will be written in the course with a focus on preparation for the thesis/capstone project. APA format (current edition) will be required, and students will gain skills in internet searches. In addition, students will give a presentation of approximately ten minutes on one of their research paper topics in professional attire and utilizing the appropriate technology.

LED 690 Capstone Project

Prerequisites: 5 LED courses

Working in teams or as individuals under the guidance of their assigned faculty advisor, students clarify research topics and identify scholarly sources from which data is gathered in preparation for the

project. Students then gather data and present their research in both written and oral form to the client organization, if applicable, and to other students and faculty. Students may choose to prepare a project as described in the Leadership Project Handbook. Grading is H, S, or U only.

LED 699 Guided Study

(variable units)

This is an individual study under the direction of the instructor. This course requires prior approval of program lead faculty.

LIT - Literature

LIT 100 Introduction to Literature

Prerequisites: ENG 100 and ENG 101

An overview of the main genres of literature, including fiction, poetry and drama. Examines literary language and different approaches to literary criticism designed to increase student confidence when responding to literature.

LIT 310 Chinese Lit in Translation

Prerequisites: LIT 100

This course is a survey of prominent modern authors from China in English translation. A selection of poems, short stories, novels, and plays will be considered. Attention will be given to social, intellectual, and political contexts out of which these works have arisen.

LIT 311 British Literature I

Prerequisites: ENG 240 and LIT 100

A survey of important British authors and literary trends from Chaucer through the middle of the 18th century.

LIT 312 British Literature II

Prerequisites: ENG 240 and LIT 100

A survey of important British authors and literary trends from the late 18th century through the modern era, with a focus on Romantic, Victorian and Modernist writers and texts. Some attention will also be paid to colonial and post-colonial writing in English.

LIT 315 Arabic Lit in Translation

Prerequisites: LIT 100

A survey of prominent authors from the Arabic speaking world in English translation. A selection of poems, short stories, novels, and plays will be treated. Attention will be given to social, intellectual, and political context out of which these works have arisen.

LIT 321 American Literature I

Prerequisites: ENG 240 and LIT 100

A survey of important American authors and literary trends through the late 19th century. Texts will be situated in relation to cultural, philosophical, social and historical contexts, e.g., Puritanism and its legacies, varieties of American Romanticism, debates over slavery and gender roles, formation of national identities.

LIT 322 American Literature II

Prerequisites: ENG 240 and LIT 100

A survey of important American authors and literary trends from the late 19th century through the present.

Texts will be situated in relation to cultural, philosophical, social and historical contexts. Particular attention will be paid to the modernist canon and to works by women and authors of color that respond to American literary heritage and social conditions.

LIT 338 Shakespeare

Prerequisites: ENG 240 and LIT 100

An examination of major works of William Shakespeare.

LIT 345 Mythology

Prerequisites: ENG 240 and LIT 100

An examination of mythology. This course recognizes that myth-making is a creative activity central to all cultures, including our own society. Students analyze and compare mythological narratives from a variety of cultures.

LIT 360 Literary Theory

Prerequisites: ENG 240 and LIT 100

A survey of major classical and contemporary arguments about the nature of literature, literary expression, and literary experience.

LIT 361 Lit. of the Ancient World

Prerequisites: LIT 100

An examination of literary works of two or more cultures from the beginnings of recorded literature until 100 C.E. All works will be read in English translation.

LIT 365 Contemporary Literary Theory

Prerequisites: ENG 240 and LIT 100

A survey of important contemporary literary theories and their application to literary analysis and criticism.

LIT 401 Contemporary Fiction

Prerequisites: ENG 240 and LIT 100

An upper-level seminar in contemporary fiction. Students will discuss and analyze major genres and movements in contemporary fiction, focusing on American fiction. Students will situate contemporary fiction in current political, cultural, historical and philosophical trends to better understand the relationship between fiction and the contemporary world.

LIT 402 Contemporary Poetry

Prerequisites: ENG 240 and LIT 100

A survey of important authors, movements, trends, and critical stances in contemporary poetry, with an emphasis on American poetry.

LIT 410 African American Literature

Prerequisites: LIT 100 and ENG 240

Examination of important representative works by U.S. African-American writers and theoretical approaches relevant to studying that literature. Emphases may vary in different sections.

LIT 420 U.S. Latino Literature

Prerequisites: LIT 100 and ENG 240

Examination of important representative works by U.S. Latino writers and theoretical approaches relevant to studying that literature. Emphases may vary in different sections.

LIT 430 Children's Literature

Prerequisites: ENG 240 and LIT 100

Provides students with a foundation for teaching children to read and learn through reading. Students learn to identify the stages in reading development, select appropriate literary texts for diverse learners at each stage, analyze children's literary texts, and assess the literacy and language development of young learners.

LIT 443 World of the Short Story

Prerequisites: ENG 240 and LIT 100

A look at short stories. The reading list includes varieties of form and style in short fiction drawn from world literature and focuses on contemporary writing.

LIT 446 Studies in Poetry

Prerequisites: ENG 240 and LIT 100

Focused study of a particular theme, genre, period, or author.

LIT 450 Studies in the Novel

Prerequisites: ENG 240 and LIT 100

Focused study of a particular theme, genre, period, or author.

LIT 456 Studies in Drama

Prerequisites: ENG 240 and LIT 100

An examination of the conventions and varieties of dramatic texts and performance, focusing on drama of the 20th century. Includes discussion of both Western and non-Western traditions.

LIT 460 Gender and Literature

Prerequisites: ENG 240 and LIT 100

A study of the representations of gender in literature to better understand changing literary aesthetics. Discusses assumptions about the ways gender permeates language and discourse.

LIT 463 20th Century World Literature

Prerequisites: ENG 240 and LIT 100

This course will address 20th century literary works from diverse cultures and literary traditions. The assigned readings in this course will be outside the North American literary tradition.

LIT 480 Literature of the Americas

Prerequisites: ENG 240 and LIT 100

This course will provide students with a hemispheric perspective to the study of the literatures of the Americas. The readings will come from a variety of prominent 20th century U.S. and Latin American literary texts. All works will be read in English translation.

LIT 490 Guided Study

(variable units)

Prerequisites: ENG 240, LIT 100 and Completion of at least one upper division LIT course with a grade of C or better.

Individual instruction on a literary topic under direction of instructor. May be repeated once with different subject matter. Requires prior approval of appropriate academic department.

LIT 498 English Capstone Course

Prerequisites: Satisfactory completion of 8 upper-division LIT courses

This course is designed as the culmination of the English B. A. program. Students will bring the skills in

literary study, analysis, research and writing learned in the program to bear on an original work of literary scholarship. Students will also be given the opportunity to revisit and revise several papers written in previous classes in the major. This course is an eight-week Practicum. Grading is H, S, or U only.

LTL – Language Teaching and Learning

LTL 504B Teach Methods: Sec Schs

Second language instructional approaches (Communicative, Content-Based, Situated Learning) and methodologies (ELD, SDAIE) and use of instructional materials in secondary and middle schools. Examination of the most effective age-appropriate strategies, techniques, resources, and technology applications for all students, especially English Language Learners.

LTL 524S Lang Teach & Assess: Spanish

Serves as a foundation for critically examining and implementing effective practices, assessments, and resources for teaching listening, speaking, reading, and writing in Spanish. Focuses on developing and implementing authentic approaches to teaching culture that integrate trends in history, politics, traditions, social relationships, and value systems.

LTL 600 Found of Lang Teach & Learn

Synthesize and apply the foundations of education: history, philosophy, legal aspects, ethics, and sociology of language teaching and learning with an emphasis placed on the major cultures represented in the state of California. Utilize the knowledge, paradigms and perspectives to deal effectively with the challenges and opportunities of diversity in language teaching and learning.

LTL 602 Linguistics & Lang Learn

Focuses on the components of language and theories of first and second language acquisition. Compares and contrasts the processes and outcomes of first and second language acquisition. Includes classroom implications of first and second language acquisition.

LTL 604A Teach Methods: Elem Schs

Examination of specific second language instructional approaches (Communicative, Content-Based, Situated Learning) and methodologies (ELD, SDAIE) and use of instructional materials in elementary schools. Demonstration and integration of the most effective age-appropriate strategies, techniques, resources, and technology applications for all students, especially English Language Learners.

LTL 606A S-B Assessment: Elem Schs

Examines and applies the theory of assessment and specific approaches and techniques of standards-based assessment and use of materials including tests for Single Subject Teaching Credential (CAHSEE, SHSP, PSAT and vocational assessment), in order to implement the most effective assessments in their teaching practices for all students, especially English Language Learners, in elementary schools based on age-appropriate tools.

LTL 606B S-B Assessment: Sec Schs

Examines and applies the theory of assessment and specific approaches and techniques of standards-based assessment and use of materials including

tests for Single Subject Teaching Credential (CAHSEE, SHSP, PSAT and vocational assessment), in order to implement the most effective assessments in their teaching practices for all students, especially English Language Learners, in middle and secondary schools based on age-appropriate tools.

LTL 608 Culturally Responsive Inst

Examines culturally responsive and inclusive instruction through historical, sociological and psychological perspectives. Emphasizes the development of successful family and community involvement. Includes an overview of multicultural and multilingual curricula and inclusive approaches to teaching.

LTL 612S Culture: Experiences in U.S.

Examines Latino historical and cultural information about 1) geographic and demographic features of countries of origin and immigration and migration patterns within the United States; 2) Latino historical eras, movements, and developments; 3) United States and countries of origin socio-political and socio-cultural features, and 4) diversity within countries of origin and in the United States.

LTL 614S Bilingual Methods & Material

Foundations of bilingual education, bilingualism and bi-literacy. Implications of school, home and community collaboration as well as language and literacy instruction and assessment. Applications of language teaching styles, materials, assessment and the use of technology in bilingual education settings. Strategies and methodologies to teach Spanish language in the classroom and application of higher order thinking.

LTL 616S Language & Comm: Spanish

Literal comprehension, inferential, interpretive and critical analysis of the following forms of communication: written expression, and oral communication. Students will demonstrate proficiency in reading, writing, listening and speaking Spanish for a variety of purposes in authentic contexts.

LTL 618S Program Design & Advocacy

Philosophical, theoretical, and research bases for second language programs and bilingual education, including the theoretical foundations, practices, limitations, and effects of the subtractive and additive perspective of secondary language, bilingual and dual language education. Literacy learning, native and simultaneous literacy development in the context of various approaches to program management, governance and school and community advocacy.

LTL 620S Contrastive Analysis: Sp & Eng

Examines and applies the linguistic and cultural structures and functions of Spanish and English, and provides a contrastive analysis and comparison of the two languages. Candidates will analyze the evolution of Spanish and English, as well as language variations and levels of language.

LTL 622S Cultural Texts & Traditions

Literary and cultural history and traditions of Spain and Latin America. Examination of historical, social, and political influences on Spanish and Latin American literary movements and cultures. Comparison of Spanish and Latin American cultural traditions, perspectives, products, and practices.

LTL 690 Applied Research

Knowledge, skills and dispositions required to locate, evaluate and generate research on language teaching and learning. Construction of an Applied Research Project that includes 1) the preparation of a written document ready for publication that reports findings from an applied research and 2) the preparation of a presentation that situates the research project's findings within the field of research on language teaching and learning and within the practices of professional educators.

MAT – Master of Arts in Teaching**MAT 620 Multidimensional Education**

Examination of the interconnection between geography, politics, history, and economic development in major regions of the world within a global context assessing the impact of these factors on education with specific emphasis on the U.S. educational system.

MAT 621 Impact of Culture & Language

Prerequisites: MAT 620

Students will develop an understanding of the ways in which cultural, religious and linguistic factors affect countries' choices of educational systems and educational priorities. The main focus of the course is the impact of these factors on education within global, regional and national contexts. Students will compare the impact of these factors on education in selected world regions with their influence on the U.S. educational system and some of the issues they face in classrooms.

MAT 622 Comparative Ed Systems

Prerequisites: MAT 621

Examination of national and regional educational systems, approaches and theories, identify global trends, and theorize on a prospective system of education for the 21st century US school. They will develop a comparative perspective of international educational ideas, traditions and systems and their relationships with U.S. education. Course investigates structure and organization of national educational systems, societal attitudes towards education, teacher preparation, instructional methodologies, student behaviors, collaboration with family and community.

MAT 623 Transformative Ed Practices

Prerequisites: MAT 622

Evaluation of current national and international developments in education and future challenges. They will investigate global trends in education based on the analysis of factors affecting educational systems in individual nations and groups of countries, and synthesize them to develop a research-based, consistent and systemic understanding of 21st century education. This study will help formulate the most advanced, innovative and effective approaches for transforming US schools in view of future challenges. This course will have two options, one to travel overseas to a selected country to study education first hand, and the other to conduct research in the student's area through interviewing international students and faculty about their educational systems. This course will conclude with the project demonstrating an application of innovative global education ideas in the student's school.

MAT 635 Contemporary Issues/Challenges

Provides advanced study in mathematics education with emphasis on contemporary issues and challenges confronting K-12 mathematics education at the K-12 levels. Focus on applying the mathematics principles and standards to improve curriculum, teaching and learning, assessment, technology usage and equity.

MAT 636 Teaching Algebra/Number Theory

Prerequisites: MAT 635

Provides K-9 advanced study in teaching and learning algebra and number theory content. Presents effective strategies and models of instruction to improve pedagogy and assessment in mathematics classrooms.

MAT 637 Teaching Geometry/Measurement

Prerequisites: MAT 635 and MAT 636

Provides K-9 advanced study in teaching and learning geometry and measurement content. Presents effective strategies and models of instruction to improve pedagogy and assessment in mathematics classrooms.

MAT 638 Teaching Probability/Stats

Prerequisites: MAT 635, MAT 636 and MAT 637

Provides K-9 advanced study in teaching and learning probability and statistics content. Presents effective strategies and models of instruction to improve pedagogy and assessment in mathematics classrooms.

MAT 651 Assessing Educational Leaders

This is the foundation course for the Teacher Leadership Specialization and involves a self-assessment and the creation of a personal learning plan. Upon completion of the course, candidates will develop a clear sense of their strengths and challenges as educational leaders. In addition to developing a plan for their own professional learning, participating candidates will all learn the skills for assessing and developing other educational leaders within their organization.

MAT 652 Leadership Accountability

This course focuses on the role of the leader in educational accountability and contains an exploration of the "antecedents of excellence" which are measurable activities in teaching, curriculum, leadership, parent involvement, extracurricular activities, and other factors that are the antecedents of student achievement. Candidates learn to create accountability systems for their personal and professional responsibilities going beyond the consideration of test scores as the sole vehicle for educational accountability.

MAT 653 Motivational Leadership

This course focuses on the current state of teacher leadership, emerging proposals for reframing teacher leadership, and examines emotion intelligence research and its impact on morale and motivation of staff within organizations. Through completion of a triangulation assessment, and the creation of a personal action plan to improve emotional intelligence, candidates will better understand their organization and develop a clear sense of their own strengths and challenges as leaders.

MAT 654 Seminar in Social Issues

This course examines the issues of Poverty, Race and Class in terms of demographics, instructional, and structural influences associated with variations in student achievement. A thorough review of historical and emerging research around these issues will be examined within the lens of standards, accountability, and leadership policies.

MAT 655 Leadership Impact Seminar

This course requires candidates to apply their accumulated knowledge to a specific professional challenge addressing student equity and achievement. This is an individualized course involving the reading of one required textbook and one additional text of the candidate's choice on the topic of leadership or organizational effectiveness. An important component of this course is connecting leadership theory with practical application.

MAT 670 Theory Best Practice Teaching

Covers theories and research on Best Practices in education. Best Practice research on effective schools emphasizes: classroom instructional practices, classroom management, school organization and planning, strategies for linguistically and culturally diverse students to access the core curriculum, instructional leadership, teaching environment, teaching strategies, peer assistance, peer review process and parent and community support.

MAT 671 Appl Best Practice Strat in CI

Upon completion of this course, participants will possess the knowledge, skills and abilities identified in the California Standards for the Teaching Profession. The emphasis is on developing a repertoire of Best Practice Teaching Strategies that can be applied to classroom instruction and assessment of diverse learners.

MAT 674 Differentiated Instruction

Participants in this course learn how to increase student achievement by improving the match between the learner's unique characteristics and various curriculum components; how differentiation involves changes in the depth or breadth of student learning; and how differentiation is enhanced through the use of appropriate classroom management, pre-testing, flexible small groups, tiered assignments, target teaching, and the availability of appropriate resources.

MAT 675 21st Century Multimedia & Tech

Students in this course will learn how to integrate, differentiate, align and individualize instruction using technology and multimedia technologies.

MCW – Creative Writing**MCW 600 Pedagogy of Creative Writing**

Examines the practical and theoretical models of teaching and learning creative writing with particular attention to the developments of the last twenty years. An introduction to and overview of contemporary theories, practices, texts, professional organizations and web sites will be the primary focus of this course.

MCW 610 Textual Strategies

Introduction to the craft of writing focusing on: narrative and alternative structures; developing language and style; and the importance of active reading in enhancing one's own craft. In addition to reading and writing exercises, students produce a creative work which reflects their mastery of these tenets.

MCW 630 Seminar in Fiction

Students write and critique each other's work in a workshop-style format. Through presentation and critique of published and student-generated work, students will advance their understanding of the genres' many forms and styles, strengthen their own writing, and broaden their understanding of literature and various modes of literary writing.

MCW 630A Advanced Workshop in Fiction

Prerequisites: MCW 630

Intensive writing workshop in which students work closely with an established writer to further their development as creative writers and critical thinkers. Students will read classic and contemporary works of fiction, submit original manuscripts for peer and faculty review, and critique the manuscripts of peers.

MCW 630B Adv Workshop in Fiction

Prerequisites: MCW 630

Intensive writing workshop in which students work closely with an established writer to further their development as creative writers and critical thinkers. Students will read classic and contemporary works of fiction, submit original manuscripts for peer and faculty review, and critique the manuscripts of peers.

MCW 635 Writing for Young Adults

Two-month advanced writing workshop for students interested in writing for younger audiences. Students will write original works for young adult audiences and survey the history of young adult literature with an emphasis on learning the craft of writing for young adult audiences.

MCW 640A Advanced Workshop in Poetry

Prerequisites: MCW 645

Intensive workshop on the practice of poetry that includes reading a selection of contemporary poems, doing exercises to generate original poems, critiquing each other's writing in a workshop setting, and creating a portfolio of original poetry.

MCW 640B Advanced Workshop in Poetry

Prerequisites: MCW 645

Intensive workshop on the practice of poetry that includes reading a selection of contemporary poems, doing exercises to generate original poems, critiquing each other's writing in a workshop setting, and creating a portfolio of original poetry.

MCW 645 Seminar in Poetry

A poetry workshop where students will learn the craft of poetry by writing their own original work and offering feedback to their peers. Students will be introduced to contemporary poetry through readings and discussions of poems from a poet's point of view.

MCW 650 Seminar in Creative Nonfiction

Students write and critique each other's original work in a workshop-style format. Through presentation and critique of published and student-generated work, students will advance their understanding of

the genre's many forms, including memoir, autobiography, nature writing, literary journalism, and the personal essay, while strengthening their own writing.

MCW 650A Adv Workshop in Lit Nonfiction

Prerequisites: MCW 650

This intensive writing workshop will explore the artist's quest for truth and address the question: how do we as writers in a post-modern age where memory, image and testimony are all suspect, know what we know? This course includes reading a selection of classic and contemporary literary nonfiction with selections from memoir, personal essay, travel writing, and literary journalism. Students will submit original manuscripts, critique the manuscripts of peers, and will submit revised work for peer and faculty review. (May not duplicate content of MCW 650B)

MCW 650B Adv Workshop in Lit Nonfiction

Prerequisites: MCW 650

Intensive writing workshop that includes reading a selection of classic and contemporary literary nonfiction, with selections from memoir, personal essay, travel writing, and literary journalism. Students will submit original manuscripts, critiquing the manuscripts of peers, and will submit revised work for peer and faculty review.

MCW 660 Thesis I (Practicum)

Prerequisites: Requires completion of MFA CW portfolio all core, specialized study and elective courses

Students are required to work one-on-one with a faculty mentor in their particular field to develop their thesis proposal and an initial first draft of a full-length, publishable manuscript. Grading is by S or U only. Course is eligible for an "IP" grade.

MCW 670 Thesis II (Revision)

Prerequisites: MCW 660

Capstone course, each student will submit a body of original work of publishable quality, appropriate length to the chosen genre, along with a preface in which the writer discusses her/his evolution as an artist and the evolution of the work. Grading is by H, S, or U only. Course is eligible for an "IP" grade.

MCW 680A Adv Workshop in Screenwriting

Prerequisites: MCW 685

Intensive writing workshop designed for students to use professional screenwriting techniques in the creation of their own original screenplay. Readings of both classic and contemporary films reinforce students' knowledge of three-act structure and cinematic storytelling. Peer review and instructor feedback provide writers a mode of creative support.

MCW 680B Adv Workshop in Screenwriting

Prerequisites: MCW 685 and MCW 680A

Intensive writing workshop designed for students to use professional screenwriting techniques in the creation of their own original screenplay. Readings of both classic and contemporary films reinforce students' knowledge of three-act structure and cinematic storytelling. Peer review and instructor feedback provide writers a mode of creative.

MCW 685 Basics of Screenwriting

Introduction to the craft of screenwriting, particularly in regards to the principles of narrative and storytelling, traditional three-act structure, character,

and dialogue. Through intensive reading and writing exercises, along with workshop critiques, students produce a finished treatment and the beginning of a feature-length screenplay.

MDC – Digital Cinema

MDC 650 Film Producing

Prerequisites: MDC 651 and MDC 652

This seminar covers the process of producing a film from a draft screenplay through distribution. Working in collaborative groups students will develop a project timeline, distribution plan, preliminary budget, legal and technical specifications and a look book suitable for pitching the film for investors. Includes independent research, case studies and the use of film production management software.

MDC 651 Digital Cinematography

Prerequisites: MDC 661

Corequisites: MDC 651P

This workshop focuses on digital cinematography and the aesthetic aspects of cinematic practice. Students evaluate core concepts of cinematography: composition, lighting, camera movement, lens selection and the technical limitations and advantages of digital cinematography. Taken concurrently with MDC 651P "studio practicum," students apply cinematic techniques using digital still and video cameras to shoot projects with live subjects.

MDC 651P Cinematography Practicum

(2.25 quarter units)

Corequisites: MDC 651

In this independent "studio practicum" taken concurrently with MDC 651, students apply cinematic techniques and theory shooting practical assignments with digital still and video cameras and live subjects. Practical assignments will receive individual and peer critiques. Grading is S or U only.

MDC 652 Digital Editing

Corequisites: MDC 652P

This workshop covers the history, theory and practice of motion picture editing and post-production workflow. Students evaluate and apply editing techniques and theory using digital still and video cameras based on practical assignments developed by the instructor. Practical assignments will receive individual and peer critiques.

MDC 652P Editing Practicum

(2.25 quarter units)

Corequisites: MDC 652

Recommended Preparation: MUL 365 Digital editing competencies may also be achieved by taking Lynda.com or equivalent training courses in at least one non-linear editing program: Adobe Premiere, AVID Media Composer or Final Cut Pro. Contact the program lead faculty for more information.

In this independent "studio practicum" taken concurrently with MDC 652, students apply professional editing theory and techniques using non-linear editing systems on practical assignments developed by the instructor. Practical assignments will receive individual and peer group critiques. Students must have an intermediate working knowledge of a digital editing system like Adobe Premiere, AVID or Final Cut Pro.

MDC 653 Film Directing

Prerequisites: MDC 651, MDC 660 and MDC 662

Focusing on the theory and practice of directing films, the course covers the director's responsibility for developing the vision and objectives of a production. Students analyze and break down scripts and evaluate aesthetic choices necessary for effective dramatic and visual storytelling.

MDC 660 Narrative Structure in Film

This seminar examines the characteristics of cinematic storytelling found in popular genre and independent films, including the conventional three-act structure and variations on those structural elements.

MDC 661 Cinematic Design

This seminar covers the application of visual aesthetic theory in the design of contemporary cinema and visual communication. Topics include the physiological and psychological basis of visual design such as perception of light and color, and the use of compositional elements and principles of cinematic design to construct meaning in film.

MDC 662 Sound Design

Prerequisites: MDC 652

Covers the role of sound in contemporary filmmaking, including the development of sound design as a part of contemporary cinema and essential aspects of field production audio recoding, post-production workflow, studio mixing, audio effects, ADR, music and media asset management.

MDC 663 Cinematic Storytelling

Covers the cinematic concepts developed by filmmakers over the last 100 years to engage the audience emotionally and to convey meaning about a subject. Students engage in "close readings" of films to develop an understanding of essential concepts to convey dramatic intentions: axes of movement, composition, lighting, manipulation of time, and motion, editing techniques, production and sound design and the use of setting. Provides students with a foundation in critical thinking, research, analysis and deconstruction of movies.

MDC 664 Short Film Colloquium

Students engage in "close readings" of short films to develop an understanding of the short film as a dramatic narrative form. Explores short film narratives in live action, animation, commercials and documentary genre. Provides students with a critical approach to research, analysis and deconstruction of short films and how to adapt story ideas into the short film format.

MDC 664P Short Film Practicum

(2.25 quarter units)

Prerequisites: MDC 664

Students work independently to write and produce an original short film. Covers the development process of a short script and applies cinematic concepts covered in the first year courses: MDC 660, 663, 664, 652, 662 and 661. Development drafts and revisions are submitted for peer and instructor critique. Running time must be less than ten minutes in length including titles. May be taken concurrently with other MDC courses. Course must be completed before thesis year. Upon completion of a first short film, the course may be taken a second time as an elective credit, but must be complete prior to MDC 693, Thesis Production. Grading is S or U only.

MDC 670 Producing Documentaries

Prerequisites: MDC 650 and MDC 683

Course covers approaches to documentary filmmaking including development and production requirements unique to documentary production as well as the aesthetic and stylistic considerations. Students engage in analysis of documentary films from an historical perspective and independent research to develop their own approach to a documentary subject suitable for distribution. Course must be completed prior to taking MDC 692 for students making a short documentary thesis film.

MDC 670P Documentary Practicum

(2.25 quarter units)

Prerequisites: MDC 670, MDC 651P, and MDC 688

Students develop approaches to documentary subjects by planning and producing several short films in a variety of documentary styles. Practicum assignments receive individual and peer group critiques.

MDC 683 Production Management

Prerequisites: MDC 650, MDC 651, MDC 652, MDC 662 and MDC 653

Corequisites: MDC 683P, MDC 688 and MDC 689

Working collaboratively as director, director of photography, assistant director, or production manager, students develop a film production from pre-production through production and post-production. Includes script breakdowns for budget, schedule, casting, location, cinematography and production design, on-set procedures, and post-production work-flow.

MDC 683P Production Practicum

(2.25 quarter units)

Prerequisites: MDC 683

Corequisites: MDC 688

The studio practicum taken during the Digital Cinema MFA production residency. Taken concurrently with MDC 688 and 689, students apply industry practices to develop and execute a professional production plan. Covers production meetings, practical demonstrations, on set performance in a department leadership role, response to Executive Producer editorial notes, meeting postproduction distribution requirements and delivering a production wrap book. Practical assignments receive individual and peer-group critiques.

MDC 688 Production

Prerequisites: MDC 651 and MDC 653

Corequisites: MDC 683

Collaborative production of short film projects using professional equipment. Includes masters production workshops and production of a short film in an authentic production environment. Must be taken on site at a National University campus and concurrently with MDC 683P. See the program catalog description for residency information. A materials fee for production expenses applies.

MDC 689 Digital Cinema Post-Production

Prerequisites: MDC 650 and MDC 652

Corequisites: MDC 683

Students work collaboratively editing digital cinema projects shot during MDC 688 using professional editing and audio post-production systems. Must be taken onsite at a National University campus. Must be taken concurrently with MDC 683P, unless approved by lead faculty. See the program catalog description for residency information. (A materials fee applies.)

MDC 691 Thesis Production

Prerequisite: all other MDC core courses

The MFA in Digital Cinema Thesis consists of a short subject digital motion picture, a written component that demonstrates the student's ability to communicate coherently, critically, and creatively and a selected professional digital reel/ portfolio. The written components of the thesis include a project proposal, treatment/synopsis, shooting script, budget and production documentation, a critical analysis of the project and research on relevant genre influences, and a personal evaluation of the candidate's portfolio work and evolution as a filmmaker. Initially, MFA candidates work with their thesis advisor to develop a thesis proposal. Once a proposal is accepted, a grade of IP is assigned. Milestones established in the proposal include a shooting script or documentary shooting treatment, preproduction planning, production and post-production phases. A rough cut of the project must be submitted to the committee on DVD as specified by the thesis advisor for committee comment prior to completion of the project. Candidates have one-year from the awarding of the IP grade to submit a thesis. The completed thesis consists of the digital motion picture short, written thesis and digital portfolio on DVD in formats specified by the thesis advisor. The thesis committee evaluates the short subject motion picture project, written thesis and digital portfolio to determine whether the student has mastered the requirements for the MFA in Digital Cinema. Grading is by H, S, or U only. Course is eligible for an "IP" grade.

MDC 692 Thesis Development

Prerequisites: Satisfactory completion of all MDC core requirements.

MFA candidates work independently with a thesis advisor to develop a story and proposal for a digital cinema short suitable for funding through grants or other sources. This is a 16-week course. For unsatisfactory graded proposal, the course must be repeated. Grading is by H, S, or U only.

MDC 693 Thesis Production

(2.25 quarter units)

Prerequisites: MDC 692

MFA Candidates work independently in consultation with the thesis production advisor during the pre-production and production phases. Production deliverables include a production plan, final budget and schedule, production documentation and dailies. This is a two-month course. Grading is H, S, or U only. Unsatisfactory graded course must be repeated.

MDC 694 Thesis Postproduction

(2.25 quarter units)

Prerequisites: MDC 693

Development of a digital asset management plan, post-production workflow and schedule and an editing script or outline and editing the thesis short subject film independently under the guidance of a post-production advisor. Includes submission of multiple cuts of the film based on advisor and thesis committee critiques. This is a three-month course. Grading is S or U only. The course must be repeated for an unsatisfactory grade.

MDC 695 Thesis Qualification

(2.25 quarter units)

Prerequisites: MDC 694

Final review and critique of a completed thesis film and written thesis. The candidate is allowed a maxi-

mum of three reviews to meet the qualification standard for the MFA. This is a two-month course. Grading is H, S, or U only. The course must be repeated for an unqualified project.

MGT – Management

MGT 309C Prin. of Mgmt & Organizations

This course is a survey of the theories, techniques, and concepts of management in organizations and the role of the manager in a technologically-oriented society.

MGT 400 Ethics in Law, Business & Mgmt

This course is an exploration of values and ethics in American business utilizing debate and written exercises. It also considers ethical issues arising in the global business environment.

MGT 422 Team Bldg, Interpers Dynamics

An overview of the issues of quality applied to human resources management, topics include the delegation of authority and empowerment, work groups, team building, and employee involvement, reward/recognition programs and employee morale, and the importance of written and oral communication skill in the delegation, sharing, and execution of work. Students gain a clearer understanding of the ways the workplace is changing to improve productivity and profitability.

MGT 430 Survey of Global Business

Prerequisites: ECO 203 and ECO 204

A study of the accelerating internationalization of all business, this course introduces upper-division undergraduate students to all facets of international business within three broad subject areas: (1) the economic framework of international business, (2) the operating frameworks of multinational corporations, and (3) a framework for global strategic management. It uses case studies to illustrate concepts and methods.

MGT 442 Strategic Business Management

A study of the application of strategic management principles to the developing, organizing, financing, and operating of a business enterprise, this course integrates and applies skills and knowledge gained in other business courses, especially those in management, marketing, accounting, and finance. To enroll in MGT 442, students must first complete all "Preparation for the Degree" courses and at least four of the courses listed as upper-division BBA requirements.

MGT 451 Production & Ops Management I

A survey of the fundamental concepts of production and operations management, the course covers the use of quantitative methods and computer applications for forecasting, resource allocation, decision theory, capacity planning, project management, inventory management, and quality assurance.

MGT 481 Foundations of Entrepreneurship

A study of entrepreneurship with particular reference to creating and starting a new venture. Emphasis on historical development of entrepreneurship, risk taking and entrepreneurship, innovation and marketing the plan, financial plan, organizational plan, going public, and legal issues for the entrepreneur.

MGT 482 Small Business Management

An in-depth study of small to mid-sized companies with a view to preparing students for leadership roles. Emphasis on building and managing companies from the start-up phase to their growth and efficient operation. Problem solving strategies of managerial, legal and ethical issues and dilemmas particularly relevant to small business.

MGT 483 E-Business

Creating, integrating and maintaining successful e-business through a business plan. Emphasis on origin and growth of e-business, security concerns of e-business, entrepreneurial aspects of business-to-business e-commerce, e-tailing and supply chain management. Students are encouraged to develop business plans through their own website.

MGT 484 Family Business Management

Planning and operation of an established family business for maximization of profit. Emphasis on succession to next generation, evaluating then existing business plans, marketing strategies, conflict resolution, estate planning, legal and financial aspects.

MGT 490 Guided Study

(variable units)

This course is individual study under direction of instructor. It requires prior approval of appropriate academic department.

MGT 601M Principles of Management

Examination of management theory and provide opportunities for application of these ideas in real world situations. This examination focuses on the managerial functions of Assessing, Planning, Organizing, and Controlling. Both traditional and cutting-edge approaches are introduced and applied. Specific attention is paid throughout the course to the ethical implications of managerial action and inaction.

MGT 603 Business Operations Management

This course presents a customer-oriented view of operations within an organization. Guided by the organization's strategic plan, operations deliver the products and services to the customers. This course explores how this delivery is accomplished with efficiency and effectiveness. Components of the course include issues of quality, physical design, and systems management.

MGT 604 Project and Program Management

This course provides a foundation of theory and practice for managing the successful use of project or program approaches to complete work in organizations. Students explore a wide-variety of projects and programs. Specific topics include the definition and application of these approaches, development of work plans, and measurement and evaluation of results.

MGT 605 Organization Mgmt & Leadership

This course distinguishes the fundamental practices of sound management functions to the understanding of effective leadership. Organizations need both leadership and management understanding to function effectively in creating the learning organization. Students will learn to analyze and create plans for strategic management, and apply leadership concepts and approaches.

MGT 606 Service Management

This course provides a survey of the different types of services provided by organizations. Topics include similarities and differences between production of services and production of products, the wide variety of services produced, proportion of organizations' offerings that are services, and accountability and quality of services.

MGT 607 Performance Management

This course provides an introduction to the connection between individual performance and organizational achievement. Topics include aligning individual objectives with organizational objectives, motivation, performance appraisal, coaching, and rewarding successful performance.

MGT 608 Managerial Support Systems

Survey of the principal information systems applications and how business decisions are facilitated by these applications, including information as a competitive resource. Also covered are supply chain management, enterprise resource planning, and knowledge management. Topics are approached from a systems standpoint, emphasizing effective managerial use of such systems.

MGT 610C Graduate Business Project

Prerequisites: Specific prerequisites for each program are indicated below: MBA students: completion of 31.5 quarter units in the MBA program.

A project where students work in teams or as individuals under the guidance of an assigned faculty advisor. Students clarify research topics and identify data sources in preparation for the project. Students then gather data and present their research in both written and oral form to faculty and classmates. Grading is H, S, or U only. MGT 610C is two months in length.

MGT 612 Global Strategic Project

This course is the capstone for the Master of Global Management. It provides a foundation in the creation and execution of organizational strategy. In this context, students are expected to draw on the content from program to successfully complete this project that has global strategic impact. This project should conclude with a set of actionable recommendations.

MGT 625 Managerial Communication

This course explores the important roles that communication plays in managers/leaders being effective in their tasks as they exchange meaning with supervisees, peers, supervisors, the larger organization, and the community. Both formal and informal communication will be addressed. Additionally, issues such as cross-cultural communication, ethics, conflict resolution, crisis communication, and developing organizational communication competencies will be investigated.

MGT 635 The Org Consulting Process

A survey of the history, values, assumptions, methods, and limitations of the organization consulting process, the course discusses both internal and external consulting as well as roles of managers as both consultants and administrators of the consulting process.

MGT 640 Operation Planning and Impleme

This course presents the connection between the operations management of an organization and its productivity. Issues of 1) supply chain management,

2) production planning, processes, locations, and quality, 3) human resources, and 4) project management are explored from an operations management perspective. The course identifies the impact of the internet and intranets on operations management as well as the operations management issues resulting from the continued growth of e-commerce.

MGT 651 Managing Safety Issues & Regs.

An analysis of current issues manifested by major legislation and the significant health and hygiene regulations faced by health safety managers, the course covers safety program models including workers compensation insurance, fire protection, product liability, and other casualty risks involved in safety and health programs.

MGT 652 Business Simulation

MGT 652 is a simulation of strategic decision-making, and a thorough knowledge of business strategy theory and models is required to participate productively in this simulation. A thorough exercise in strategic decision-making at the functional and corporate levels. Students make strategic choices on key marketing, finance, accounting, human resources and operations management issues, and deal with the effect of changes in the economic and political environment on consumer demand, the exchange rate and tariffs. They take corrective action after each round, evaluating results in terms of a cumulative balanced scorecard.

MGT 685C Business Strategy and Policy

Prerequisites: MGT 605, MGT 608, MKT 602, MNS 601, ECO 607, IBU 606, ACC 604 and FIN 609A

The course provides students with an opportunity to integrate the various topics introduced throughout the learner's program by engaging in strategy execution. An integral part of the course will be preparation of a comprehensive, written case analysis. The perspective is a holistic one which views the organization as a total system, which encompasses internal, specialized sub-systems, interacting with an external, dynamic environment. The emphasis will be on the development, implementation, and analysis of organization strategies and policies that impact a firm's survival and success in a progressively competitive global marketplace. Models for strategic formulation, implementation, and control are developed that facilitate an integrated understanding of the courses that comprise the MBA curriculum. Readings and lectures illustrate strategic management theories and frameworks while case discussions, experiential exercises, and team projects provide opportunities for application.

MGT 690 Guided Study (variable units)

This is individual study under direction of instructor. It requires prior approval of appropriate academic department.

MGT 695C Capstone

Prerequisites: MGT 605, MGT 608, MKT 602, ECO 607, MNS 601, ACC 604, FIN 609A and IBU 606

This is a capstone course in which students work as individuals or as a group under the guidance of an assigned faculty advisor. In this course students have the opportunity to conduct research and gather relevant data, to integrate and apply knowledge and skills learned in preceding courses. A capstone course requires students to integrate principles, theories, and methods learned in courses required throughout their

academic career. Students creatively analyze, synthesize, and evaluate learned knowledge in projects having a professional focus and communicate the results of their projects effectively at a professional level.

MKT – Marketing

MKT 200 Basic Marketing

Introduction to contemporary marketing and its application in the marketing implementation process. It places special focus on the use of the four P's (Price, Promotion, Product and Place) as well as market opportunities, product development, promotion planning, pricing decisions, and channels of distribution.

MKT 210 Intro to Consumer Behavior

Prerequisites: MKT 200

A study of the dynamics of human behavior and how it relates to the purchasing decision, this course provides a general view of the different factors that influence the consumer's decision-making including, personality, social groups, culture, values structure, perception and learning.

MKT 220 Intro to Personal Selling

Prerequisites: MKT 200

Overview of the elements of success in sales, including researching products and competitors, handling objections, making sales through in-person interviews or over the phone, identify different types of customers and how to sell best to each type, and selling to corporations.

MKT 230 Basic Advertising Concepts

Prerequisites: MKT 200

Introduction to the principles of advertising where students learn how to select and use the various advertising media to meet specific marketing problems and opportunities. It encompasses an overview of radio, television, print media, outdoor advertising, and media budgets.

MKT 302A Marketing Fundamentals

This course is the introduction to contemporary marketing theory and its application in the marketing implementation process. It places special focus on identifying market opportunity, product development, promotion planning, pricing decisions, and channels of distribution.

MKT 420 Principles of Consumer Behavior

Prerequisites: MKT 302A

A study of the dynamics of human behavior and how it relates to the purchase decision, the course provides an in-depth view of the many factors that influence the consumer's decision-making process including personality, social groups, culture, values structure, perception, and learning. Course material is related to market strategy development through lecture, case, and field study.

MKT 430 Intro to Global Marketing

Prerequisites: MKT 302A

An introduction to the cultural environment of global markets, including such topics as cultural dynamics, management styles, and political and legal environments. Students learn how to assess global marketing opportunities as well as develop and implement strategies to capitalize on those opportunities.

MKT 434 Intro to Market Research

Prerequisites: MKT 302A

A course that gives the student an overview and practical application of contemporary methods for gathering, analyzing, and preparing market research for use in marketing decision making. It focuses on defining organizational information needs and designing appropriate research methods to obtain it. Specific topic areas include qualitative and quantitative research methods, secondary research, internal market intelligence systems, and data analysis.

MKT 440A Sales Techniques & Methodology

Prerequisites: MKT 302A

A survey of the essential principles of salesmanship and selling techniques, the course includes the approach to non-manipulative selling and benefit identification. Also covered is how to identify the right market segment, prospect, and plan for personal selling. It introduces direct selling and provides exercises that enhance the direct selling process.

MKT 441 Channel and Value Networks

Prerequisites: MKT 302A

A study of all phases of management skills in the field of physical distribution with emphasis on customer service and international distribution strategies, the course covers distribution strategies for products and services. It pays specific attention to direct distribution (from manufacturing to retail), indirect distribution (agents, independent representatives, and VARs), and direct marketing (fulfillment centers).

MKT 442A Intro to Public Relations

An exploration of the various methods for dealing with three of the most critical audiences for business information: investors, government agencies and the public.

MKT 443 Introduction to Advertising

Prerequisites: MKT 302A

A survey of effective advertising techniques in multiple media (virtual, visual, radio, television) and advertising campaign allocation methods.

MKT 445 e-Marketing

Prerequisites: MKT 302A

An introduction to the interactive methods of marketing using a digital platform including social media, web-based and advanced global marketing techniques.

MKT 446 Introduction to Services Mkt

Prerequisites: MKT 302A

This course examines services marketing as distinct and separate from product marketing. Discussions focus on the theory and practice of designing and developing service marketing strategies for segmented populations. Emphasis is placed on positioning various types of services through added value and immediate response using technology to communicate effectively in a global market.

MKT 447 Marketing for Entrepreneurs

Prerequisites: MKT 302A

A discussion of the strategies and ideas for building a business in the global economy for the entrepreneurial business owner taking a hands on approach to managing a company. This course focuses on innovation and creativity, global thinking, service support, and the importance of the internet in developing marketing strategy in both large and small companies.

MKT 448 Not-For-Profit Marketing

Prerequisites: MKT 302A

A study of the marketing dynamics of Not-For-Profit organizations in which multiple groups, often with conflicting goals and needs, must be simultaneously satisfied for organizational success. A particular emphasis is placed on the identification and attraction of funding sources in the community.

MKT 449 Advanced Market Research

Prerequisites: MKT 434

Data is everywhere, but knowledge is precious. Organizations require extensive information to identify new markets and new ways of addressing existing markets. Students will learn how to use software to extract and analyze data, find patterns and interpret the results to develop marketing strategies and messages for traditional and Web 2.0 media.

MKT 480 Marketing Project

Prerequisites: Completion of 31.5 quarter units of upper-division core requirements, MKT 302A

A synthesis of the marketing knowledge gained in the undergraduate program as expressed through a professional research- or internship experience-based writing project overseen by a faculty member. Grading is S/U.

MKT 602 Marketing Management

An in-depth examination of marketing environments and the impact marketing activities have on organizational operations in competitive, global, multicultural business settings, the course discusses both domestic and international frameworks of the fundamental marketing functions of product, pricing, distribution, and promotion. It explores and analyzes modern marketing problems and solutions from conceptual, legal, social, and ethical perspectives. It explains marketing information systems and the use of advanced technologies in marketing decision making.

MKT 620 Consumer Behavior

Prerequisites: MKT 602

An in-depth study of how psychological, sociological, and cultural variables influence buying behavior and marketing strategy development. It focuses on identifying the relevant behavioral variables in a given product purchase situation and determining how marketing strategy can be adapted to meet the ways in which consumers perceive, select, and buy. It uses advanced cases and a field study project.

MKT 631 Global Marketing

Prerequisites: MKT 602

A study of strategic planning and organizing for international marketing, researching global markets, marketing consumer products, industrial products, and services in the world market, the course explores the international advertising and promotion effort, personal selling and personnel management, pricing, distribution systems, export trade mechanics and logistics, financial requirements for international marketing, and coordinating and controlling global operations. It also discusses the effect of trade agreements on international business.

MKT 633 Sales Management

Prerequisites: MKT 602

This course is a survey of all facets of sales management, including estimating sales potential and forecasting sales, manning territories, selecting, training, motivating, supervising and compensating the sales

force, and interfacing with other company functions. Also covered are typical sales management problems and potential solutions.

MKT 634 Market Research

Prerequisites: MKT 602

An examination of principles and techniques of market research with emphasis on quantitative applications, this course focuses on defining organizational information needs and designing appropriate research methods to obtain information. It covers qualitative and quantitative research methodologies, secondary research, internal market intelligence systems, and data analysis.

MKT 635 Ad Management & Marketing

Prerequisites: MKT 602

An analysis of marketing communications from business, social, economic, and political perspectives, this course provides an in-depth discussion of advertising and promotion as key tools in marketing new and established products. It examines advertising planning and management, research, creative development, media selection, direct response, and advertising agencies. Emphasis is on new media technologies and the growing use of alternative media in communicating with selected publics.

MKT 651 Mobile Marketing

Prerequisites: MKT 602

This course covers how mobile marketing is defining business today, including strategy, tracking ROI, advertising, applications and mobile websites. From text messaging to QR codes, consumer interactions with mobile devices, and the laws and ethics of mobile marketing are explored in this course.

MKT 652 Adv Mobile Mkt Strategies

Prerequisites: MKT 651

This course will present a strategic focus for marketing in the mobile world. Students will cover the 3 C's: Communication, Content, and Commerce as it relates to mobile marketing. Students will be exposed to the most current cases in mobile marketing, and will be challenged to validate the ROI of mobile marketing in business globally. This course will include use of QR codes, Near Field Technology (NFT) and Location Based Services (LBS).

MKT 653 Social Media

Prerequisites: MKT 602

This course gives a foundation to the practical business applications of social media in a marketing world. Through Facebook, LinkedIn, blogs, YouTube, Pinterest and other platforms, students discover that social media is for more than just making friends and that there are now only a few degrees of separation globally. Students learn that social media is about marketing at the right time, place and with the right message for existing as well as prospective customers with both legal and ethical behaviors.

MKT 654 Adv Social Media for MKT

Prerequisites: MKT 653

Mastering business using social media is about sustaining relationships with customers and tracking them throughout the supply chain. Customer Relationship Management and the three M's will be covered: Monitoring, Measurement, Metrics. Case studies will be used throughout the course to illustrate the mastery of the subject.

MKT 655 Mobile MKT Social Media Project

Prerequisites: MKT 654 and MKT 652

Students work in teams or as individuals under the guidance of an assigned faculty advisor. Students gather intelligence and then create a strategic Mobile Marketing/Social Media Plan for an existing or new company. Students present their plans in both written and oral forms to faculty, industry experts and classmates. Presentations include how to implement and evaluate their plan's effectiveness for products or services in a global marketplace.

MKT 660 Strategic Marketing Simulation

Prerequisites: MKT 602, MKT 620, MKT 631 and MKT 634

Students will participate in a group simulation activity and will have hands on "live" experience, making strategic marketing decisions that affect the business viability. Students master the marketing concepts of production, channels of distribution, branding, promotion, segmentation, targeting, pricing and competition as they make decisions that affect the future profitability of the business entity.

MKT 670 Selected Topics in Marketing

Prerequisites: MKT 602

This course that is developed on request from regional centers to serve specific regional educational and business needs. Potentially it covers topics such as telecommunications, computers, health care services, marketing communications, retail management, and/or industrial marketing.

MNP – Mental Health Nurse Practitioner

MNP 643 Psychopharmacology in MH Care

Advanced concepts in pharmacogenomics, pharmacokinetics, and pharmacodynamics for targeted symptoms in the management of various psychiatric disorders. Management of symptoms for various populations and risk-mitigation strategies are presented for clinical problems in primary mental health settings. Use of psychopharmacologic agents with medical comorbidities. Patient adherence strategies examined.

MNP 687 MH Care: Children/Adolescents

Evidence-based biopsychosocial assessment, diagnosis and treatment of children and adolescents with mental illness and/or developmental disorders are explored. Facilitate the knowledge of professional, policy and practice issues influencing the nurse practitioner's role as mental health provider of children and adolescents with mental illness and/or developmental disorders.

MNP 688A Introduction to Psychotherapy

Corequisites: MNP 688B

Provides a comprehensive review of psychotherapy principles and treatment approaches commonly used in primary mental health care services. Explores ways of developing effective therapeutic relationships with an emphasis on therapeutic communication. Individual, group and family psychotherapy across the lifespan are analyzed. MNP688A and MNP688B are taken concurrently.

MNP 688B Intro Psychotherapy Practicum*Corequisites: MNP 688A*

Learner applies theories and principles of psychotherapy learned in MNP 688A. Assesses motivation and readiness for treatment. Applies various theories of behavior patterns, belief systems, therapeutic relationship strategies based on evidence to reduce emotional stress, facilitate cognitive and behavior change, and foster growth. MNP 688A and MNP 688B are taken concurrently. Grading is S/U only.

MNP 694 MH Care: Adults/Aging Adults*Corequisites: MNP 696A*

Evidence-based assessment, diagnosis and treatment/management approaches to various psychiatric symptoms and disorders are explored. Analyze concepts of neurophysiology and neuropathophysiology of adult/aging adults with psychiatric disorders. Examine the professional, policy and practice issues influencing the nurse practitioner's role as a mental health provider for adult/aging adults with psychiatric disorders.

MNP 696A Adults/Aging Adults Practicum*Corequisites: MNP 694*

Facilitate practicum experience of the PMHNP student with adults/aging adults in mental health care settings. Accurately assess, plan, intervene, and evaluate the care of adults/aging adults with mental illness. Perform the advance practice role of manager, clinician, educator, researcher, and consultant in the provision of mental health services. Grading is S/U only.

MNP 696B Children/Adoles Practicum*Corequisites: MNP 687*

Facilitate Practicum experience of the PMHNP student with children/adolescents in mental health care settings. Accurately assess, plan, intervene, and evaluate the care of children/adolescents with developmental, behavioral or psychiatric disorder. Perform the advance practice role of manager, clinician, educator, researcher, and consultant in the provision of mental health services. Grading is S/U only.

MNP 697 PMHNP Capstone*Corequisites: MNP 696B*

Students demonstrate integration of knowledge from the core, core clinical and clinical coursework in the MSN-PMHNP Program. The compilation and interpretation of information from previous courses is demonstrated in a scholarly paper and successfully passing an exam which mirrors the national board certification examination for PMHNPs.

MNS – Management Science**MNS 205 Intro to Quantitative Methods***Prerequisites: Placement Evaluation*

An examination of advanced algebra techniques in the business setting, including linear systems, polynomials, exponential and logarithmic functions, as well as introduction to probability and statistics. The primary quantitative course required for MNS 407. (Students who have taken college algebra (MTH 215) within the last three years are exempt from this course.)

MNS 407 Management Science*Prerequisites: MNS 205*

A survey of the fundamentals of management science. Emphasizes the concepts and mathematical techniques most useful in business and finance.

MNS 601 Statistics for Business

An examination of the increasing complexity of business problem-solving confronting today's managers, this course covers the role statistics and forecasting play in the business decision-making process, as well as the principles and steps involved in planning and conducting business research. Within the context of this course, students propose to study a situation that exists within an organizational setting and identify a faculty research advisor with knowledge in the focus area.

MNS 606 Decision Systems for Managers

Focus on major corporate applications of information technology, learning how business decisions are facilitated by these applications, including information as a competitive resource, supply chain management, enterprise-wide systems, knowledge management, and data mining. Topics are addressed from a systems approach, emphasizing effective managerial use of such information systems.

MRA – Clinical Regulatory Affairs**MRA 600 Intro to Regulatory Affairs**

This course is designed to present an introduction to the regulations and documents necessary for FDA approval of a new medical device or pharmaceutical product. The student will be introduced to federal regulations (CFR), human subject regulations, clinical trials and evidence based documents, clinical protocols, data management, clinical trial data, investigational review board and submissions of drug and device approval documents. An introduction to clinical and manufacturing process and standard operating procedure documentation will also be included.

MRA 601 Clinical Documentation

This course will focus on the laws and regulations, documentations and process imposed by the Federal government especially the Food and Drug Administration related to pharmaceutical and medical device approval and the clinical trials associated with the approval process. Emphasis is placed on designing and implementing appropriate clinical trial protocol documents as well as all forms associated with the clinical trials used for evidence based documentation of the trial(s). Statistical justification will also be introduced for use as to methodology and analysis of the trial.

MRA 602 Human Subjects in Clinical Tri

This course is designed to give the student the fundamental knowledge in the protection of human subjects in a clinical trial. The course will emphasize federal, state and local regulations in protecting the health and welfare of human subjects in a clinical trial. Proper documentation, HIPAA regulations, IRBs, international codes of conduct, Declaration of Helsinki, Informed Consent, adverse events CFRs and all other pertinent documents and codes will be covered.

MRA 603 Medical Device and Pharmaceuti

This course will focus on the laws and regulations, documentations and process imposed by the Federal government especially the Food and Drug Administration related to pharmaceutical and medical device approval. The course will provide students with detailed knowledge and practical application as it applies to appropriate documentation and process of approval for pharmaceutical and medical devices. The students will understand the nomenclature of the regulatory agencies; have a thorough knowledge of the code of Federal Regulations as it applies to medical devices and pharmaceutical products.

MRA 604 Coordinating and Monitoring Cl

This course is designed to give the student comprehensive knowledge in coordinating and monitoring clinical trials and clinical trials research. Emphasis is placed on understanding regulations, good clinical practice, an overview of research, standard operating procedure, data documentation, preparing and working with subjects, monitoring clinical trials and study closure.

MRA 605 Analytical Methods for Regulat

This course will give the student the fundamental knowledge of statistical concepts and analytical methods as applied to biomedical science and clinical trials. It will emphasize basic concepts of methodology and experimental design, quantitative analysis of data and statistical significance. A case study approach will be used to cover the basic designs of clinical trials with emphasis on appropriate methodologies, endpoint variables, control groups, blinded studies, eligibility criteria and placebo control. The course will cover statistical analysis including probabilities and variables. Students will be required to design and implement a full protocol for a fictitious drug or medical device elucidating the data for approval.

MRA 606 FDA Regulations & Submissions

This course will give the student the fundamental knowledge of FDA regulations as they apply to medical devices and pharmaceutical products and the documentation needed for such approval. The code of Federal Regulations will be utilized with emphasis on CFR 21, FDA compliance, ICH guidelines for international harmonization and Good Clinical Practice (GCP), investigator study files, FDA audits and Adverse Event reporting.

MRA 610A Regulatory Affairs Capstone

A two month course that meets on a once a week basis, this course is designed to have the student develop and implement a research document that integrates all facets of a clinical trial including regulations, documentation, clinical evidence, data management, statistical analysis of the data and other principles taught throughout the entire program. Grading is by S or U only. Course is eligible for an "IP" grade.

MRA 610B Regulatory Affairs Internship

This course is designed to give the student a "hands on" real world experience working in a clinical trial environment. The student will acquire fundamental knowledge in evidence based clinical data, statistical analysis and documentation of clinical results. The student will be required to write a critical evaluation of the clinical trial a complete analysis of methodology, clinical forms, FDA regulations and data manage-

ment. Grading is by S or U only. Course is eligible for an “IP” grade.

MTH – Mathematics

MTH 12A Algebra I

First of a two-course sequence covering methods of simplifying formulas and expressions, solving equations and inequalities, operating with exponents, and translating statements to symbols. Calculator use is highly recommended. Grading is S or U only. (This course is remedial in nature and does not award collegiate credit.)

MTH 12B Algebra II

Second of a two-course sequence extending skills and logical analysis begun in MTH 12A. Course covers rational expressions, linear equations in two variables, algebraic and graphical solutions of systems of equations, scaling and variations, quadratic and rational equations with emphasis on practical applications. Calculator use is highly recommended. Grading is S or U only. (This course is remedial in nature and does not award collegiate credit)

MTH 204 Mathematics for Science

Prerequisites: MTH 12A and MTH 12B or Accuplacer test placement

A review of basic mathematics principles, including main algebra concepts, for business, probability and statistics, physical, natural, and social sciences for non-mathematics majors. This course provides the necessary skills to be successful in MTH 210, MTH 215, PHS 104 and PHS 104A, CHE 101 and CHE 101A, PHS 102, SOC 100 and SOC 260.

MTH 209A Fundamentals of Mathematics I

Prerequisites: Accuplacer test placement evaluation or MTH 12A and MTH 12B

A study of the real number system and its subsystems, ancient and modern numeration systems, problem-solving and simple number theory. Includes teaching materials and discussion of today’s professional organizations. This is a content course, not a methods course.

MTH 210 Probability and Statistics

Prerequisites: Accuplacer test placement evaluation or MTH 12A and MTH 12B

An introduction to statistics and probability theory. Covers simple probability distributions, conditional probability (Bayes Rule), independence, expected value, binomial distributions, the Central Limit Theorem, hypothesis testing. Assignments may utilize the MiniTab software, or text-accompanying courseware. Computers are available at the University’s computer lab. Calculator with statistical functions is required.

MTH 215 College Algebra & Trigonometry

Prerequisites: Accuplacer test placement evaluation or MTH 12A and MTH 12B

Examines higher degree polynomials, rational, exponential and logarithmic functions, trigonometry and matrix algebra needed for more specialized study in mathematics, computer science, engineering and other related fields. Computer and/or graphing calculator use is highly recommended.

MTH 216A College Algebra I

(3 quarter units)

Prerequisites: Accuplacer test placement evaluation MTH 12A and MTH 12B

The first part of a comprehensive two-month treatment of algebra and trigonometry preliminary to more specialized study in mathematics. The course covers higher degree polynomials, rational functions, exponential and logarithmic functions, transformations and the algebra of function, matrix algebra and basic arithmetic of complex numbers.

MTH 216B College Algebra II

(3 quarter units)

Prerequisites: MTH 216A

The second month of a comprehensive two-month treatment of algebra and trigonometry; this course is a continuation of MTH 216A. Topics include trigonometric functions, analytic trigonometry and application, parametric equations, matrix algebra, sequences and series, and applied problems. Graphing calculator may be required.

MTH 220 Calculus I

Prerequisites: Accuplacer test placement or MTH 216B or MTH 215

(Cross listed and equivalent to CSC208) An introduction to limits and continuity. Examines differentiation and integration concepts with applications to related rates, curve sketching, engineering optimization problems and business applications. Students may not receive credit for both MTH 220 and CSC 208.

MTH 221 Calculus II

Prerequisites: MTH 220

A discussion of differentiation and integration concepts of the natural logarithm, exponential and inverse trigonometric functions and applications to volumes of revolution, work and arc length. Covers improper integrals and highlights ideas and contributions of Natpier, Huygens and Pascal. Graphing calculator is required.

MTH 222 Calculus III

Prerequisites: MTH 221

A study of sequences, Taylor Polynomials, infinite series, and tests for convergence, and the power series. An overview of ordinary differential equations; the initial-value Problem; exactness and integrating factors; and Bernoulli and higher-order equations with forcing functions. Graphing calculator is required.

MTH 223 Calculus IV

Prerequisites: MTH 222

A study of functions of several variables: extrema and Lagrange Multipliers, with application to today’s optimization-problems in engineering, business, and ecology. Vector algebra and space geometry; Kepler’s Laws with application to satellite orbital velocity problems and the rendezvous phenomenon, iterated integrals and applications, the Jacobian transformation will be studied. A graphing calculator is required.

MTH 301 Fundamentals of Mathematics II

Prerequisites: MTH 209A or Accuplacer test placement evaluation

This continuation of MTH 209A includes concepts of measurement, geometry, probability and statistics, elementary synthetic and Euclidean Geometry. Com-

puter programming in BASIC is introduced. Methods are incorporated whenever possible. However, both MTH 209A and MTH 301 are content/concept courses as prescribed by State regulations, not methods courses. Calculator may be required.

MTH 304 Math Practicum and Portfolio

Prerequisites: MTH 215 or MTH 216A and MTH 216B or placement evaluation

Should be taken as early as possible in the student’s program. Students observe and reflect on the actual work of public secondary school mathematics teachers (at least 28 hours in public middle or secondary school mathematics classrooms and at least 3.5 hours of student activities and administrative meetings). Grading is by S or U only. Course is eligible for an “IP” grade.

MTH 311 Topics from Geometry

Prerequisites: Accuplacer test placement or MTH 216B or MTH 215

A survey of main concepts of Euclidean geometry with the emphasis on the axiomatic approach, constructions, logic of proof, and some ideas from non-Euclidean geometry including historical aspects. A study of axioms of Euclidean Geometry, inference rule, some basic theorems of Euclidean Geometry, and rigorous proofs will be offered.

MTH 317 Mathematical Modeling

Prerequisites: MTH 215 or MTH 216A and MTH 216B and MTH 210

An introductory to mathematical modeling, utilizing a variety of diverse applications from physical, biological, business, social, and computer sciences. Discuss the limitations, as well as the capabilities, of mathematics as applied to understanding of our world. Teaches problem identification, models of solutions and model implementation. Graphing calculator is required.

MTH 325 Discrete Mathematics

Prerequisites: MTH 215 or MTH 216A and MTH 216B

(Cross listed and equivalent to CSC331) This course studies combinatory and graph theory as the theoretical foundation for today’s advanced technology. It analyzes algorithms, logic, circuits, number bases, and proofs. Ample applications (graphs, counting problems, Turing Machines, codes) examine the ideas of Euler, Boole, Floyd, Warshall, Dijkstra, Church and Turing, Shannon, Bernoulli. Graphing calculator is required. Students may not receive credit for both MTH325 and CSC331.

MTH 410 Technology in Math Education

Prerequisites: MTH 215 or MTH 216A and MTH 216B or MTH 301

Computer Technology in the Mathematics Classroom An overview of the computer-based technology in the mathematics classroom. Evaluates graphing calculators, and computer software such as Maple, Scientific Workplace, Geometer’s Sketchpad, MiniTab, SPSS, and others to determine their value in illuminating concepts in the curriculum.

MTH 411 Number Theory

Prerequisites: MTH 216B or MTH 215 or MTH 301

An examination of fundamental concepts of numbers, including divisibility, congruencies, the distribution of Primes, Pythagorean triples, the Euclidean Algorithm, the Fundamental Theorem of Arithmetic,

Diophantine equations, and Goldbach's conjecture. Emphasizes active student involvement in posing and testing conjectures, formulating counter examples, logical arguments and proofs.

MTH 412 History of Mathematics

Prerequisites: MTH 215 or MTH 301 or MTH 216A and MTH 216B

Examines currents in the development of mathematics and throughout ancient Egypt, Babylon, China, and the Middle East. It studies math's influence on society through the major events of Europe, contemporary developments, and some projections into the future, including the women and men who played key roles in evolution of mathematics.

MTH 416 Algebraic Structures

Prerequisites: MTH 435 and MTH 325

A look at groups, rings and fields, as well as applications of these structures. Discusses equivalence relations, Lagrange's Theorem, homomorphisms, isomorphisms, Cayley's Theorem and quaternions. Graphing calculator may be required.

MTH 417 Foundations of Geometry

Prerequisites: MTH 216A and MTH 216B or MTH 215 and MTH 311

A discussion of fundamental ideas and processes common to Euclidean and Non-Euclidean Geometries: projective, affine and metric geometry. Examines the interplay between inductive and deductive reasoning and formal and informal proof. Addresses uses in science (transformations, scaling), art (Escher-type tessellations, projections), architecture (three-dimensional figures) and computer science (fractals, computer-aided design).

MTH 418 Statistical Analysis

Prerequisites: MTH 210 and MTH 220

An examination of statistical applications to business, computer science, psychology, education, social sciences, and mathematics with fundamental concepts of probability distribution, mathematical models relating independent and dependent random variables, hypothesis testing and experimental design. Includes fundamental analysis of variance, various distributions and methods of regression, analysis and scaling.

MTH 432 Advanced Calculus

Prerequisites: MTH 223

A look at sets, functions and the real numbers. Topics include the Completeness axiom, cardinality and Cantor's Theorem, LimSup and LimInf ; the topology of \mathbb{R}^1 and \mathbb{R}^2 , open sets, limit points, compactness and the Heine-Borel Theorem, continuous functions properties, uniform continuity, the Mean-Value theorem; the Riemann integral and the Lebesgue Measure.

MTH 433 Differential Equations

Prerequisites: MTH 223 and MTH 435 or CSC 209 and CSC 310

A study of ordinary differential equations with emphasis on linear equations and systems of linear equations. An analysis of the existence and uniqueness of solutions of ordinary differential equations with initial conditions, so called Cauchy problem. Examines linear differential equations of first, second and higher orders, and linear systems of ordinary differential equations. Stresses application to engineering problems.

MTH 435 Linear Algebra

Prerequisites: MTH 220 and MTH 325

An examination of systems of linear equations and matrices, elementary vector-space concepts and geometric interpretations. Discusses finite dimensional vector spaces, linear functions and their matrix representations, determinants, similarity of matrices, inner product, rank, eigenvalues and eigenvectors, canonical form and Gram-Schmidt process. Computer software will demonstrate computational techniques with larger matrices. Graphing calculator or appropriate software may be required.

MTH 438 Applied Mathematical Modeling

Prerequisites: MTH 433, MTH 416 and MTH 432

A capstone course intended to culminate the core mathematics major studies and should be taken at or near the end of the program. Discusses principles and methods of constructing, analyzing, interpreting, evaluating, and refining mathematical models. Compares analytic and simulation, discrete and continuous, deterministic and stochastic models.

MTH 440 Numerical Analysis

Prerequisites: MTH 220

An introduction to numerical computation. Discusses errors in numerical computation, truncation and discretization, and machine storage restrictions as well as function approximation, roots of nonlinear equations, systems of linear equations, algebraic eigenvalue problems, polynomial interpolation, and cubic spline interpolations, quadratures, numerical differentiation, initial and boundary-value problems.

MTH 441 Abstract Algebra

Prerequisites: MTH 416

This course continues and advances the work done in MTH 416 Algebraic Structures, discussing selected fundamental algebraic structures, the main concepts of Sylow Theory of finite groups, finite permutation groups (Cayley's Theorem), Lattices Theory, Coding Theory and Cryptography.

MTH 442 Functions of Complex Variables

Prerequisites: MTH 223

This course is a study of functions of complex variables and their applications to other mathematics branches, sciences, and engineering. The following topics will be examined: the complex plane, analytic functions, integration and Cauchy's Theorem, sequences and series, residue calculus, Fourier and Laplace transforms, and applications.

MTH 450A Mathematics Project Course I

Prerequisites: Completion of Mathematics Core for B.S. and interview with Department Chair.

The project courses are not independent study. They are directed student team projects or internships in mathematics. Requires utilization of previously acquired skills and knowledge to complete the project. Students can select project topics from industry, government, business, education, or research. Grading is S or U only.

MTH 460 Problem Solving Strategies

Prerequisites: MTH 416 and MTH 417

The aim in the course is not to impart any specific body of knowledge, but rather to foster the students' understanding that mathematics is a science of identifying, solving problems and generalizing. The course includes the description of main approaches to solving standard and challenge math problems.

MTH 461 Methods of Teaching Math

Prerequisites: MTH 311, MTH 412, MTH 210 and MTH 460

A critical inquiry into present-day tendencies in teaching mathematics in order to help prospective mathematics teachers to acquire their professional skills in the teaching of mathematics in secondary school. The teaching strategies that align to the new CA Common Core Standards receive a special consideration. Fundamental concepts of mathematics and effective approaches to their teaching will be discussed.

MTH 490 Guided Study

(variable units)

Individual study under direction of a faculty member. Requires prior approval of appropriate academic department and school dean. Requests should be made well in advance.

MTH 610 Topics in Modern Algebra

Recommended Preparation: MTH 416, MTH 435 and MTH 411

Examines the algebra of various mathematical structures with the goal of gaining a broader and more sophisticated understanding of algebraic structures. Topics include groups, rings, fields and other main algebraic structures.

MTH 620 Number Systems

Prerequisites: MTH 610

Provides students with a deeper understanding of algebraic foundations of the real number system and its generalizations, covers the algebraic and topological properties of the real number system and several of its subfields and subrings.

MTH 630 Fundamentals of Geometry

Prerequisites: MTH 620

Recommended Preparation: MTH 417

Considers areas of Euclidean and non-Euclidean geometries, axiomatic systems, synthetic and analytic representations, relationships with algebra, and selected topics and applications

MTH 640 Real Analyses

Prerequisites: MTH 630 and MTH 620

Topics include real and complex number systems, elements of point-set topology of Euclidean space, numerical sequences and series, continuity and differentiability for functions of one and several variables. The Riemann-Stieltjes integral as a generalization of the Riemann integral, sequences and series of functions, and Fourier series will be studied as well.

MTH 650 Topics in Functional Analysis

Prerequisites: MTH 640

A generalization of the main notions and concepts of analysis, geometry and algebra. Topics include operators (functions), metric and topological spaces, complete spaces, completion of metric spaces, contraction mapping principle, separable spaces, compactness of sets and criteria of compactness in a metric spaces, linear spaces and linear operators, linear normed spaces, finite spaces and subspaces, abstract Hilbert spaces, linear operators in linear normed spaces, space of linear operators.

MTH 660 Mathematical Statistics

Prerequisites: MTH 650

Recommended Preparation: MTH 438

Theory and practices of statistical analysis and in-

ference with emphasis on analyzing and solving real problems using statistics. Descriptive statistics, topics from probability, sampling distributions, estimation, hypotheses testing, regression, correlation, non-parametric techniques and analysis of variance, and computer programming incorporated throughout.

MTH 670 Mathematics Curriculum

Prerequisites: MTH 610, MTH 620, MTH 630 and MTH 660

Analyze secondary school mathematics curriculum development from a historical perspective and discuss past influences on current methodology. Distinguish current curriculum trends and design alternatives. Evaluate contemporary curriculum by assessing an existing text or program. Explores the current state and various facets of the changing mathematics curriculum, instruction, and assessment, looking at the national standards from the past and exploring directions and practical strategies for the future.

MTH 681 Research in Math and Math Ed I

Prerequisites: MTH 670

The first course designated to the initial stage of the thesis development. The content of these courses will include an analysis of mathematics foundations of curricular materials and/or issues in mathematics education. Students will develop a proposal for thesis research in mathematics or mathematics education, incorporating fundamentals of research and possible practical implementation. Grading is S/U/H only.

MTH 682 Research in Math and Math Ed 2

Prerequisites: MTH 681

A continuation of MTH 681 course. The content of these courses will include an analysis of mathematics foundations of curricular materials and/or issues in mathematics education. Within this course the students initiate and develop thesis research based on the approved research proposal in MTH 681 under guidance of thesis advisor. Course is S/U/H grading only.

MTH 683 Research in Math and Math Ed 3

Prerequisites: MTH 682

The last and final course from the series of MTH 681, 682, 683 Research in Mathematics Education project courses. Includes an analysis of mathematics foundations of curricular materials and/or issues in mathematics education. Within this course the students continue developing and finalize the thesis research under guidance of thesis advisor. Grading is S/U/H only.

MUL – Multimedia

MUL 200 Communication Tools

Prerequisites: ENG 100, ENG 101 and COM 100 or COM 103

An overview of digital communication tools and techniques used in today's workplace, as well as an introduction to message design and the social and ethical responsibilities within the digital communication field. Through intensive practice, students learn how to write for various business, education and entertainment purposes, such as analytical, descriptive, procedural, summative and technical. They learn foundations of web design, web animation, copy editing and formatting techniques in conjunction with traditional and online research skills. Software instruction includes Macromedia Studio MS Word,

PowerPoint, Internet browsers, compression utilities, and FTP programs.

MUL 245 Principles of Web Design

Prerequisites: ENG 100, ENG 101 and COM 100 or COM 103

Introduces the terminology, history and evolution of web design and the use of hypertext. Provides an overview of effective web page design and efficient site architecture. Covers content development, navigation, and usability. Software instruction is in Dreamweaver.

MUL 255 Interactive Design

Prerequisites: ENG 100, ENG 101 and COM 100 or COM 103

Provides a hands-on introduction to the basics of web presentation. Students apply aesthetic and usability criteria to produce web presentations, movies, and other animated components for placement into websites. Covers technological constraints of web presentation and animation, appropriate uses of motion in a web page, gaming element, game design, and digital asset management for optimal delivery of animated content. Software instruction is in Macromedia Flash.

MUL 300 Convergence Media

Prerequisites: COM 220, ENG 100 and ENG 101

An integration of digital communication tools and techniques used in today's workplace. Learn how to create digital media products for various business, education, and entertainment purposes.

MUL 305 Graphic Design and Artistry

Prerequisites: ENG 100

Hands-on application of principles and techniques of graphic design for print, video and digital media. Cover concepts including color theory, composition, photo manipulation and special effects in digital production. Focus on understanding and defining a personal style in the digital visual medium.

MUL 309 Camera and Image

Prerequisites: ENG 100

A hands-on, project based exploration of the use of still and video cameras in production. Focus will be on a balance between the technical and the aesthetic. Essential camera functions are well known and timeless as the technology for image capture and replication advances rapidly.

MUL 310 Introduction to Video Gaming

Prerequisites: ENG 100, ENG 101 and COM 100 or COM 103

An overview of video gaming and its applications: the current soft- and hardware tools used to build and deliver video games; the history and evolution of the field; and its social and ethical implications. Students learn the fundamentals of how a video game is created from its inception to release and become familiar with the roles of programmers, designers, artists, and writers in developing the product. Includes an overview of the basics of mathematics and physics used in video game development, as well as the computer languages appropriate for the various game genres: action, role-playing, adventure, simulation, etc.

MUL 315 Video Game Design

Prerequisites: ENG 100, ENG 101 and COM 220

An in-depth review of video game development, with emphasis on game design theory and practice.

Fundamental principles and strategies of game design transform a story or game vision into a virtual environment prototype that integrates player activity, interface, and graphics. Cover basic algorithms that control interactivity and representation while learning about the various tools available to designers, such as prototyping software and game engines.

MUL 318 Video Game Production

Prerequisites: All general core courses.

A survey course in the fundamental principles and strategies of video game production. Students assume the role of producer, as they learn game assembly, project management and tracking. The course introduces the challenges posed by the ever-changing technologies used to make and deliver video games, and students become familiar with the many different game engines available to developers. Software instruction is in Anark, Genesis3D, MS Project, and Concurrent Version System/Revision Control System (CVS/RCS).

MUL 318A Video Game Production Lab

(1.5 quarter units)

Prerequisites: MUL 315

This laboratory course provides students with an opportunity to use tools and methods of video game production. While not intended to be an extensive and comprehensive course on the game production process, the lab introduces the student to the basic tools while providing hands-on experience on how they are used to produce the final product. This will include teaching the student the fundamental parts of a video game engine and providing examples of how the professional community makes modifications to these engines to achieve specific objectives. The student will also use tracking software during game production. Software instruction is in Anark, Genesis3D, MS Project, and Concurrent Version System/Revision Control System (CVS/RCS).

MUL 325 Psychology of Video Games

Prerequisites: All general core courses and PSY 100

An overview of the psychological aspects of game playing, with particular emphasis on video gaming. The course presents the historical foundations of research into human play activity, as well as current research into video gaming and its impact on individuals and society. Students learn about the interaction between people and video games in terms of individual sensory response, personality, and social behavior. Covers human-computer interaction issues specific to video gaming, such as cognitive processing, reaction time, idiosyncratic navigation, and non-traditional interface design. Topics include motivation, addiction, fantasy escapism, conflict, aggression, reward, player prestige, and alienation.

MUL 332 Electronic Design and Layout

Prerequisites: ENG 100, ENG 101 and COM 100

An introduction to layout design for print and Web publishing that covers typography, layout theory, prepress production methods and project management. Emphasizes practical development techniques to produce digital visual images efficiently. Software instruction is in Adobe Illustrator.

MUL 335 Digital Design for Print

Prerequisites: ENG 100, ENG 101 and COM 100 or COM 103

This course covers the stages of publishing in print media from the inception of a project through to the

distribution of a finished product. It provides students with the opportunity to put their theoretical and classroom knowledge to practical use in the design, creation and printing of a project. Topics include: typography, layout theory, prepress production and project management. Students learn through intensive practice layout techniques for digital and print delivery. Software instruction is in QuarkXPress and InDesign.

MUL 336 2-D Graphic Imaging

Prerequisites: MUL 200, MUL 245 and MUL 255

An intermediate course in computer-aided photographic manipulation and the merging of vector and raster graphic files used in web authoring and print design. Students produce images in a variety of digital formats, applying aesthetic and composition design principles. Covers technological limitations of Internet graphics. Software instruction is in Adobe Photoshop and Illustrator.

MUL 345 Applied Web Design

Prerequisites: ENG 100, ENG 101 and COM 220

Hands-on application of principles and techniques of web design for digital media and provides an in-depth study of effective web page design and efficient site architecture. Engage in projects in content development, navigation, and usability.

MUL 355 Game Scripting

Prerequisites: ENG 100, ENG 101 and COM 220

In-depth, hands-on application of web programming, game scripting, and web presentation. Apply aesthetic and usability criteria to produce web presentations, "movies" and other animated assets for placement into student projects. Explore applied technological constraints of web presentation and animation, game design, game scripting, appropriate uses of motion in a web page, and digital asset management for optimal delivery of animated content.

MUL 365 Digital Video Editing

Prerequisites: ENG 100, ENG 101 and COM 220
Online Course requires fluent communication

In this course, students develop hands-on experience in advanced nonlinear editing. Students assess the aesthetic impact of editing decisions and demonstrate proficiency with timing, continuity, music cuing, transitions, and the use of color. Focus is placed on the role of editing in telling a compelling story.

MUL 370 Digital Interactivity

Prerequisites: ENG 100, ENG 101 and COM 220

Hands-on introduction in the basics of web interactivity along with its potential for e-business, entertainment and education. Apply aesthetic and usability criteria to visual, textual and aural components integrated into interactive presentations, games and instructional media. Engage in the exploration of the technological constraints of Web delivery, interactive design, composition and media integration techniques.

MUL 375 3-D Modeling for Game Art

Prerequisites: ENG 100, ENG 101 and COM 220

Hands-on application of 3-D graphics in still sequential and non-sequential media. Produce basic 3-D elements and apply aesthetic and usability criteria to their projects in digital, animated sequence, video and print media applications. Students compare technological constraints of 3-D applications, appropriate uses of sequential and non-sequential 3-D elements to maximize

impact of message delivery, and the management of digital assets for optimal delivery of media.

MUL 381 Video Game Art

Prerequisites: All general core courses.

A hands-on course to learn video game art and its design for entertainment, military, and education; the course presents the current software tools used to build and deliver video game art. Students learn the fundamentals of how video game art is created from its inception to incorporation into a video game; they learn the role of artists in the video game development team; and also the current tools used to create game art.

MUL 385 Video Game Animation

Prerequisites: All general core courses

Provides a hands-on introduction to the basics of 3-D and character animation for video game development. Students produce basic 3D environments and animation, as well as animated characters for use in video games and simulations. They apply aesthetic and usability criteria specific to video games. The course covers technological constraints of 3D and character animation; appropriate uses of animated 3D characters and elements to enhance game message delivery and interactivity; and the management of digital assets for optimal delivery of media. Software instruction is in 3-D Studio Max.

MUL 399 Emerging Technologies

Prerequisites: ENG 100, ENG 101 and COM 220

Topical lectures and investigations into new trends and technologies in the Digital Media Design field. Explore developing technological trends and the strategies for utilizing them in the production of content. Focus on integrating the new tools and trends into digital media production.

MUL 401 Advanced Video Game Design

Prerequisites: All general core courses.

Students learn advanced video game design techniques. They become familiar with advanced techniques for game production management, game asset management, and advanced prototyping tools. The advanced design documents and prototype developed in this class will be used to further produce and/or further modify a video game in the follow-on course, MUL 411 (Video Game Production Project).

MUL 410 Authoring Corporate Training I

Prerequisites: ENG 100, ENG 101 and COM 100

Provides an introduction to instructional design for corporate training through e-learning and multimedia. Students evaluate digital training packages according to instructional design theory and learn multimedia authoring skills to apply to instructional modules they produce. Covers learning theories, authoring tools, multimedia development and usability criteria applied to instructional media. Software instruction is in Macromedia Authorware.

MUL 411 Video Game Production Project

Prerequisites: All general core courses, MUL 325, MUL 318 and MUL 401

Students apply advanced theory and practice to create a professional video game design and production product. They develop the game concept they evolved in prior classes into a commercial quality set of game production documents together with a high quality prototype or game engine modification suitable for a commercial pitch of a game to a client.

MUL 420 Multimedia Arts Portfolio Proj

Prerequisites: All general core courses and concentration courses.

In this two-month capstone course, students assemble a portfolio of their best work from previous Digital Media Design courses and edit/polish those pieces until they are suitable to show a prospective digital media design industry employer. The final portfolio will include some combination of the digital presentations and graphics, websites, game elements and animations. Printed materials such as journal style documentation, creative briefs, proposals, flow charts, executive summaries and descriptive critiques are also encouraged. Grading is S or U only.

MUL 430 Advanced Design Project

Prerequisites: COM 100 or COM 103 and COM 220

Advanced course in digital graphic manipulation. Produce a portfolio of images, applying successful aesthetic and composition design principles. Cover strategies to create focused, clear imagery that conveys a well-defined message. Continue to work on the visual themes they have developed in earlier courses in preparation for final portfolio.

MUL 431 Adv Page Layout / Production

Prerequisites: All general core courses, MUL 336 and MUL 430

A hands-on course on advanced techniques of web graphics production. The course presents the current software tools and techniques for the creation and production of web graphics intended to create identity, atmosphere, and navigation on websites. Students will be exposed to advanced techniques of web graphics, including working with layers, slicing, hotspots, rollovers, using graphics as framing devices on websites and the use of graphics for content. Students will use current industry software to master the skills of print production, including Photoshop, ImageReady and Dreamweaver.

MUL 432 Print / Web Production

Prerequisites: All general core courses, MUL 336, MUL 430 and MUL 431

This is a hands-on course on print production. The course presents the current software tools and techniques for print production of a wide variety of projects and materials. Students will be exposed to the concepts and techniques of print production, including digital pre-press, color management, and the steps required to prepare printed pieces for final output. Students will use current industry software to master the skills of print production, including learning the Adobe Acrobat PDF workflow for digital pre-press and the latest digital production tools.

MUL 440 Multimedia Design for the Web

Prerequisites: All general core courses.

Intermediate Web page authoring and site design. Students compile graphics, animation and text to produce sites that demonstrate e-business, entertainment and distance education uses of the Internet. Students apply aesthetic and usability criteria to websites developed according to industry practice. Software instruction is in Macromedia Dreamweaver. Certified Internet Webmaster (CIW) curriculum included.

MUL 445 Digital Project Management

Prerequisites: ENG 100, ENG 101 and COM 220

Advanced course in understanding and planning the production of a digital media project. Covering the concepts of the production pipeline and establishing

the basis and timeline for the final project. Plan and present preparations for their final digital media portfolio.

MUL 450 Advanced Web Presentation

Prerequisites: MUL 440, All general core courses.

Provides hands-on training in advanced Web presentation techniques. Students learn media integration techniques for quick-loading websites that use streaming vector animation and sound. Covers conceptual 14 approaches to building interactivity into Web presentations; advanced usability testing for user satisfaction; and digital asset management theory and practice. Software instruction is in Macromedia Flash.

MUL 460 Advanced Digital Audio & Video

Prerequisites: MUL 365

Advanced digital audio and video production techniques. Students write scripts, create storyboards and program a/v clips for business, entertainment and educational purposes. Covers advanced Web casting techniques and strategies to overcome technological limitations of Web video and sound. Software instruction is in Sonic Foundry Sound Forge, Adobe Premiere and Terran Media Cleaner.

MUL 461 Motion Graphics

Prerequisites: ENG 100, ENG 101 and COM 220

A hands-on course in motion graphics for broadcast, video, and film; the course presents the current software tools used to build and deliver motion graphics. Apply concepts and techniques of compositing layers of computer-generated imagery and live action video, special effects, camera movements and cinematic points of view, as well as the design of titling and motion imagery. Survey works of professional animators, directors, and producers to demonstrate industry-standard techniques.

MUL 462 Digital Audio Creation

Prerequisites: ENG 100, ENG 101 and COM 220

Computer-aided digital audio creation used in DVD, video, and Web authoring. Students learn basic music theory and composition practices applied to digital audio production, utilizing professional software tools used in the field, as well as hardware applications. Covers file management and compression for specific delivery mediums.

MUL 463 Digital Video Production Project

Prerequisites: All general core courses, MUL 460, MUL 461 and MUL 462

Students apply advanced theory and practice to create a professional video production. They develop a concept into a script and manage all phases of production, such as field lighting, videography, sound recording, editing, and producing to DVD and tape. Software instruction is Premiere Pro, Acid Pro, Pro Tools, and Audition.

MUL 470 Interactive Multimedia

Prerequisites: All general core courses.

Provides hands-on training in the production of interactive products for e-business, entertainment and education. Students conduct needs assessments for a variety of potential interactive presentations, games and instructional media and apply project management skills to a product they produce. Covers strategies to overcome the technological constraints of Web and CD-ROM delivery; interactive design theory and practice; needs assessment procedures; and

methods of project management. Software instruction is in Macromedia Studio and MS Project.

MUL 471 Adv Digital Interactivity Proj

Prerequisites: ENG 100, ENG 101 and COM 220

Advanced training in the production of interactive products using computer-based authoring tools for e-business, entertainment, and education. Conduct extensive reviews of interactive presentations, games, and instructional media and apply lessons learned to programming user friendly interactive models in real-time virtual environments. Cover advanced problem solving techniques applied to; interactive design theory and practice; and methods of project management.

MUL 480 Character Animation

Prerequisites: All general core courses.

Provides a hands-on introduction to the basics of 3-D animation. Students produce basic 3-D animation and apply aesthetic and usability criteria for appropriate and effective use. Covers technological constraints of 3-D animation; appropriate uses of animated 3-D elements to enhance message delivery; and the management of digital assets for optimal delivery of media. Software instruction is in 3-D Studio Max.

MUL 481 Advanced Animation Project

Prerequisites: All general core courses, MUL 381, MUL 385 and MUL 481

A hands-on course to learn video game art and its design for entertainment, military, and education; the course presents the current software tools used to build and deliver video game art. Students learn the fundamentals of how video game art is created from its inception to incorporation into a video game; they learn the role of artists in the video game development team; and also the current tools used to create game art projects.

MUL 490 Guided Study

(variable units)

Prerequisites: Faculty Determined.

Courses require individual study under direction of instructor. Furthermore, course requires proper approval of appropriate academic department.

MUL 495 Internship

(variable units)

Internship

MUS – Music

MUS 100 Fundamentals of Music

An examination of the basic structure of Western music, musical styles, form, different periods and their chief representatives and the dynamics of musical expression and appreciation. Introduces students to elements of music theory common to many cultures.

MUS 200 Music Composition

Recommended Preparation: MUS 100 or MUS 326 or MUS 327

An introduction to composing and notating original music which covers the elements of music theory—melody, harmony, rhythm and form—in the context of a computer-based notation program. Students complete an original composition of modest scope as a culminating project.

MUS 300 Film Music

Prerequisites: ENG 100 and ENG 101

Recommended Preparation: MUS 100

An introduction to the history and methods of music in film from the silent era to the present. A roughly chronological approach sketches the main technological innovations and explores theories of how music contributes to the meaning of moving images and narrative scenes. Elements of music are reviewed and applied to representative film scores by American and international composers.

MUS 326 American Music

Prerequisites: ENG 100 and ENG 101

A survey of American music from the Colonial period to the present. Emphasizes political, social and economic developments as related to the evolution of American music, including popular, religious and art music in a broad array of styles.

MUS 327 World Music

Prerequisites: ENG 100 and ENG 101

An exploration of musical traditions and techniques in a variety of cultures, including Japan, India, Native America, South America, and Africa. Broadens students' cultural understanding of music.

NBC – National Board Certified

NBC 639 Leadership Portfolio

This course is designed to provide classroom educators the knowledge and skills required to understand and evaluate research relevant to their roles as professional educators. Teachers will develop a professional portfolio that incorporates knowledge, understanding, and evaluation of research providing evidence of meeting NBPTS certificate standards by performance-based assessments. Course is eligible for an "IP" grade.

NBC 680 Quality Teaching and Learning

This course will provide students with an overview that leads to clear interpretations and understanding of the various components and interconnections that shape and influence the quality of teaching, student learning, professional development and leadership in our schools and communities.

NBC 681 Membership in Learning Community

This course will guide students in the review of research and articles that focus on the definitions, features and significance of learning communities in schools, classrooms, and associations.

NBC 682 Videotape Analysis

This course will provide students with extended time and opportunities to explore and comment on accomplished teaching practices related to the NBCT standards in their fields of expertise.

NBC 683 Student Work and Assessments

This course will provide students with opportunities to review research and commentary that guide and shape decisions and judgments we make when determining the levels of progress students are making toward achieving academic goals, and to identify elements of our practice that contribute to successful learning outcomes.

NBCX – National Board Certified (Extended Education)

NBCX 6001X NBCT

NBC Teacher Academy provides new and active NBCT candidates with a year-long, comprehensive approach to support and assistance. All aspects of the certification process are explored while candidates develop a strong, fundamental foundation and increased competence in identifying and increasing content and instructional knowledge, application, and articulation of skills and approaches.

NPL – Nonprofit Leadership

NPL 500 Cause Sales (Level 1)

Emphasis on the importance of using good relationship-building tactics as the cornerstone of effective fundraising. Featured topics include individual and team fundraising, and development practice in a multi-cultural world. Grounded in industry-approved ethical standards of fundraising, the course offers a detailed examination of donor behavior and communication styles and the factors and motivations that influence donors in the philanthropic decision-making process. In addition, students will gain a greater understanding of one's own solicitation style while honing the tools to navigate various attributes of behavior, versatility as a communication tool, gender style differences, and each donor's unique context.

NPL 510 Cause Sales Practice (Level 2)

Prerequisites: NPL 500

Building on the knowledge gained in Cause Selling I, this sequential course focuses on preparation for "the ask." Course components include methods and tools for donor prospecting, qualification, and constituent relationship management (CRM); development of the unique values proposition to connect each donor with the cause; techniques for engaging the donor in meaningful dialogue, marrying effective questioning with equally effective listening; and skills for handling objections. Students will learn about the "asking frame of mind", the various functions involved with "the ask", timing of the ask, and creative solicitation approaches, as well as motivational factors and goal-setting for fundraisers. This is an experiential course, and participants will engage in role-play and simulation in order to develop their practice.

NPL 600 Nonprofit Fundamentals

Comprehensive overview of principles and practices related to the governance and management of nonprofit organizations. Topics include the historical, legal, and social foundations of the nonprofit sector as well as aspects of nonprofit operations including mission statements, ethics and leadership, managerial and financial controls, building organizational capacity, fundraising and revenue generation, marketing and external environment, board governance, information technology, performance management, and IRS compliance and transparency.

NPL 610 Volunteer Leadership

Prerequisites: NPL 600

Overview of the history and extent of volunteerism and philanthropy in nonprofit organizations. Topics include administrative leadership; legal and operating definitions; the purpose, function, and role of boards and committees; board identification, selec-

tion, and development: building positive board/staff relationships: communication, decision-making, group leadership, etc. Emphasis will be on leadership issues including defining roles and managing boundaries (role of the board of directors, executive leadership, relationship between the board and the executive director).

NPL 620 Financial Management

Prerequisites: NPL 600

Examination of the theory and practice that are essential to understanding how fiscal management should be conducted within a nonprofit organization from a tax, legal, board, and donor perspective. Overview of the knowledge and skills necessary to provide financial leadership in a nonprofit organization, with emphasis on appropriate financial and management strategies including types of giving, gifts processing, grant administration, long- and short-range planning, financial resource management, budgets, financial statements, tax benefits and planning, compliance and financial decision-making tools. The fiduciary responsibilities of both board and staff will be delineated.

NPL 630 Applied Cause Leadership

Prerequisites: NPL 600

Using a mix of case studies, interactive discussions, and group exercises, this course prepares current and future nonprofit leaders with the historical and social foundations of leadership theory grounded in the political, social, and economic contexts in which nonprofit organizations operate. Students are charged with crafting their own leadership philosophy that will enable them to inspire and motivate diverse groups including staff, volunteers, donors, decision-makers involved in policy-making, the constituents they serve, and the community at large, with an emphasis on cultivating a deep appreciation for others' perspectives and realities.

NPL 640 Making the Ask: Dev. Methods

Prerequisites: NPL 600

The successful development cycle includes identification, cultivation, solicitation and stewardship of donors. Students will explore these aspects of the development cycle and best practice approaches through efforts including annual campaigns, major gifts, planned giving, capital campaigns, corporate relations, crowd-funding, and donor recognition. Emphasis will be placed on building relationships with and managing donors in the context of organizational mission, and training and motivating the board and volunteers to serve as partners in the development initiative.

NPL 650 Making the Case: Marketing NPs

Prerequisites: NPL 600 and NPL 640

Identifying an organization's unique niche/offering is pivotal to the crafting of the narrative and development of the case for support, yet extends even further to the development of programs that fill the need. The importance of marketing and positioning plans for nonprofit organizations and the significance of linking these tools to the organization's mission and purpose are emphasized. Branding and image integrity are linked to a clear understanding of the ideas, priorities, individuals, and events shaping the landscape of the community.

NPL 680 Leading at a Higher Level

Prerequisites: NPL 600, NPL 620, NPL 610, NPL 630, NPL 640, NPL 650, NPL 500, NPL 510 and LED 620

Developing a shared vision is uniquely important in cause leadership given the varied constraints and opportunities of the nonprofit sector. In order to lead others effectively and to inspire engagement by multiple stakeholders, participants will identify the importance of anchoring to their own and the organization's purpose. Special focus will be given to the development of leadership capacity in others to ensure the ongoing sustainability and success of the organization.

NPL 690 Capstone Course

Prerequisites: NPL 600, NPL 620, NPL 610, NPL 630, NPL 640, NPL 500, NPL 650, NPL 510, LED 620 and NPL 680

The Capstone is designed to be the culminating experience of the concepts, theories and practices of the Cause Leadership master's degree. This hands-on learning opportunity transforms educational concepts into action. Graduates will draw inspiration and instruction from their capstone course experience as they assume positions of leadership in the nonprofit sector. The nonprofit arena, in turn, will benefit from the vast reservoir of experience and high level of excellence that Cause Leadership graduates will bring to their positions in the world of philanthropy. Course is H/S/U only and eligible for In Progress grading. Students will choose between two projects for the capstone course: Option 1: Develop a comprehensive fundraising/marketing plan which includes a financial viability assessment that takes into consideration a) the organization's finances and b) trends in the sector. Option 2: Nonprofits commonly engage in a retreat process in order to think about and create a strategic plan. However, with the benefit of quantitative tools to yield rich data, a full marketing assessment, involvement of key stakeholders and knowledge of community partners, organizations can gain a more complete view of their strengths and opportunities that will inform future endeavors. Participants will focus on methods of identifying strategic questions and setting direction for nonprofit organizations by taking a client organization or one's own through a comprehensive strategic planning process. Students will undertake a strategic plan utilizing concepts and skills garnered throughout this program which include: Identifying your unique offering and its value; Identifying your resources (human and otherwise); Leveraging your resources; Creating a strategic plan with vision, mission, values, goals, objectives and actions.

NSG – Nursing

NSG 200 Foundations of Nursing

Prerequisites: "C" or better in, NSG 211T and "S" in, NSG 211A

Corequisites: NSG 200A

Using the nursing process, this course focuses on meeting basic human needs through planning and implementing nursing. This course covers beginning knowledge and skills required for nursing care of patients with commonly occurring health problems. Basic concepts of therapeutic communication are discussed. Concurrent enrollment in NSG 200A is required.

NSG 200A Foundations Clinical Lab

Prerequisites: "C" or better in NSG211T and "S" in NSG 211A

Corequisites: NSG 200

Using nursing language, students devise basic plans of care for patients. Practical application of beginning knowledge and skills required for nursing care of patients is demonstrated in both Lab and clinical settings through simulation and patient interaction. Concurrent enrollment in NSG 200 is required unless approved by the Department Chair. Grading is by S or U only.

NSG 202 Nursing Pharmacology Concepts

Students will learn basic pharmacological concepts related to pharmacotherapeutics, pharmacodynamics, and pharmacokinetics. The course is organized using major drug classifications, and prototypes to illustrate drug actions, side effects, contraindications, precautions and nursing implications. The nursing process is introduced in the context of drug therapy. Other special considerations will be discussed.

NSG 204 Nrs Found & Health Assess

Corequisites: NSG 204A

Utilizing the nursing process framework, this course focuses on meeting basic human needs through planning and implementing nursing care to contribute to achievement of health goals of the patient. This course covers beginning knowledge of patients with commonly occurring health problems. The student will learn therapeutic communication techniques and develop interviewing skills. The student will learn a holistic approach to health assessment as the basis for nursing intervention and practice. Concurrent enrollment in 204A is required unless approved by the Department Chair. (Nevada only).

NSG 204A Nrs Found & Health Assess Lab

Corequisites: NSG 204

This course covers practical application of holistic health assessment as the basis for nursing intervention and practice, interviewing skills, health history, physical examination, cultural variations and laboratory and diagnostic procedures throughout the lifespan of clients. Using the language of nursing, students will devise basic plans of care for patients. Practical application of beginning knowledge and skills required for nursing care of patients with commonly occurring health problems is demonstrated in both laboratory and clinical settings. Through simulation and patient interaction, use of therapeutic skills of communication will be analyzed. Clinical Laboratory is graded on a Satisfactory/ Unsatisfactory basis based on successful completion of the course requirements. Concurrent enrollment in 204 is required. (Nevada only)

NSG 205 Medical-Surgical Nursing I

Prerequisites: NSG 200 and NSG 200A or NSG 204 and NSG 204A

Corequisites: NSG 205A

The course focuses on concepts relating to care of the adult in the acute care setting with commonly occurring medical-surgical problems. Emphasis of this course is on the use of the nursing process and in developing competence in providing and coordinating nursing care. Concurrent enrollment in NSG 205A is required.

NSG 205A Medical-Surgical I Clinical

Prerequisites: NSG 200 and NSG 200A or NSG 204 and NSG 204A

Corequisites: NSG 205

Practical application of knowledge and skills required for nursing care of adult patients with commonly occurring medical-surgical problems is demonstrated in both Lab and clinical settings. Using the language of nursing, students will devise and implement care plans and teaching plans. Concurrent enrollment in NSG 205 is required unless approved by the Department Chair. Clinical Lab is graded on a Satisfactory/ Unsatisfactory basis based on successful completion of the course requirements.

NSG 211A Health Assessment Clinical

(1.5 quarter units)

Corequisites: NSG 211T

This course covers practical application of holistic health assessment as the basis for nursing intervention and practice, interviewing skills, health history, physical examination, cultural variations and lab and diagnostic procedures. Concurrent enrollment in NSG 211T is required. Grading is by S or U. This course is 45 contact hours.

NSG 211T Health Assessment

(3 quarter units)

Prerequisites: Admission to nursing program and completion of required general education preparation with a minimum GPA 2.75

Corequisites: NSG 211A

This course covers holistic health assessment as the basis for nursing intervention and practice, interviewing skills, health history, physical examination, cultural variations and lab and diagnostic procedures. Concurrent enrollment in NSG 211A is required. This course is 30 contact hours.

NSG 280 Human Lifecycle Development

Prerequisites: ENG 100, ENG 101 and PSY 100

Introduction to the physical, psychological, and social growth and changes affecting individuals during the stages of the lifecycle including infancy, childhood, adolescence, adulthood, and old age. Theoretical underpinnings and associated developmental tasks of each stage of the lifecycle are included. Application of health promotion concepts to growth and development, especially caregiving concepts, are emphasized.

NSG 302 Professional Nursing Issues

Prerequisites: Admission into the Bachelor of Science in Nursing or have a LVN/LPN License. For Generic BSN Students, completion of all non-nursing courses is required to enroll in this course

Introduction to nursing professional issues, including scope and standards of nursing practice, social policy in nursing, ethics, health care regulation and legal issues in professional practice. Students begin study of patient safety and holistic and patient-centered care concepts as they develop a professional identity.

NSG 303 Professional Issues for RNs

Addresses professional values, ethics, diversity and their associated behaviors foundational to the practice of nursing. Provides the student with tools to begin thoughtful discussion and problem solving within the social context of health care delivery and the practice environment of nursing. This course covers the Quality and Safety in Nursing Education (QSEN)

competencies and the Institute of Medicine's framework, legal issues and policies, ethics and finance.

NSG 304 Pharmacology in Nursing

This course will present an overview of pharmacokinetics and pharmacodynamics of drugs, as well as drug classifications. Current issues in drug legislation, design, manufacturing and marketing will be explored. Emphasis will be placed on the role of the professional nurse in medication administration, including both expected and unexpected effects of drugs on patients.

NSG 310 Professional Nursing Values

This course provides an introduction to fundamental values as a foundation for professional nursing practice. It provides an understanding of key components necessary for demonstration of professional value-based behaviors. The concept of caring will be examined through the values of altruism, autonomy, human dignity, integrity and social justice.

NSG 314 Child-bearing Family Nursing

Prerequisites: "C" or better in NSG 205 and "S" in NSG 205A

Corequisites: NSG 314A

This course focuses on the health care needs of parents and newborns during the childbearing experience. Introducing the concept of the family as a unit, emphasis is placed on the variations in health care due to behavioral, life cycle, physiological, cultural, and environmental factors. Concurrent enrollment in NSG 314A is required.

NSG 314A Child-bearing Family Clinical

Prerequisites: "C" or better in NSG 205 and "S" in NSG 205A

Corequisites: NSG 314

This course covers practical application of knowledge and skills required for nursing care of families in the childbearing period. Using the language of nursing, students will care for the family as a unit, considering behavioral, life cycle, physiological, cultural and environmental factors. Concurrent enrollment in NSG 314 is required unless approved by the Department Chair. Clinical Lab is graded on a Satisfactory/Unsatisfactory basis based on successful completion of the course requirements.

NSG 315 Pediatric Nursing

Prerequisites: NSG 314 and NSG 314A

Corequisites: NSG 315A

Continuing examination of the family as a unit, this course focuses on the health care needs of families with children. Emphasis is placed on the variations in health care due to behavioral, life cycle, genetic, cultural, and environmental factors. Concurrent enrollment in NSG 315A is required unless approved by the Department Chair.

NSG 315A Pediatric Nursing Clinical

Prerequisites: NSG 314 and NSG 314A

Corequisites: NSG 315

This course covers practical application of knowledge and skills required in nursing care for families with children. Using the language of nursing, students will care for the family with children as a unit, considering behavioral, life cycle, genetic, cultural and environmental factors. Concurrent enrollment in NSG 315 is required unless approved by the Department Chair. Clinical Lab is graded on a Satisfactory/ Unsatisfactory basis based on successful completion of the course requirements.

NSG 320 Medical-Surgical Nursing II

Prerequisites: C" or better in NSG 315 and "S" in NSG 315A

Corequisites: NSG 320A

This course focuses on concepts relating to care of the adult in the acute care setting with medical-surgical problems. In addition, urgent and critical nursing care responses to symptomatology are addressed. Emphasis is on refining use of the nursing process to provide nursing care for individuals with specific health care needs/problems. Concurrent enrollment in NSG 320A is required unless approved by the Department Chair.

NSG 320A Medical-Surgical II Clinical

Prerequisites: C" or better in NSG 315 and "S" in NSG 315A

Corequisites: NSG 320

Practical application of knowledge and skills required for nursing care of adult patients with commonly occurring acute/critical medical-surgical problems is demonstrated in both Lab and clinical settings. Concurrent enrollment in NSG 320 is required unless approved by the Department Chair. Clinical Lab is graded on a Satisfactory/Unsatisfactory basis based on successful completion of the course requirements.

NSG 325 Psychosocial Nursing

Prerequisites: C" or better in NSG 320 and "S" in NSG 320A

Corequisites: NSG 325A

This course demonstrates the relevance of psychosocial nursing concepts to all areas of professional practice. It provides a conceptual integration of the nursing process, theories, and research from the biopsychosocial sciences and humanities to promote mental health and provide care to elderly people and people with mental disorders. Concurrent enrollment in NSG 325A is required.

NSG 325A Psychosocial Nursing Clinical

Prerequisites: "C" or better in NSG 320 and "S" in NSG 320A or see specific degree

Corequisites: NSG 325

Practical application of knowledge and skills required for nursing care of older adult and mentally ill patients with commonly occurring problems is demonstrated in both Lab and clinical settings. Concurrent enrollment in NSG 325 is Clinical Lab is graded on a Satisfactory/Unsatisfactory basis based on successful completion of the course requirements.

NSG 332 Evidence-Based Practice

Prerequisites: BST 322

This course introduces the concept of evidence based practice. Emphasis is placed on identification, evaluation, and application of best evidence for improving patient-centered care. Focus is on levels and sources of evidence such as research, professional guidelines and other best practices.

NSG 340 Nursing Leadership/Management

Prerequisites: "C" or better in NSG 325 and "S" in NSG 325A

Corequisites: NSG 340A

The primary purpose of this course is to facilitate the development of a broad view of the management of health care delivery systems and the nurse's role in that arena. Concurrent enrollment in NSG 340A is required unless approved by the Department Chair.

NSG 340A Leadership/Management Clinical

(1.5 quarter units)

Prerequisites: "C" or better in NSG 325 and "S" in NSG 325A

Corequisites: NSG 340

This course covers practical application of skills and knowledge required to coordinate care for multiple patients in a multidisciplinary setting. Concurrent enrollment in NSG 340 is required. Clinical Lab is graded on a Satisfactory/Unsatisfactory basis based on successful completion of the course requirements.

NSG 341 Leadership & Mgmt in Nursing

(3 quarter units)

The primary purpose of this course is to facilitate the development of a broad view of the management of health care delivery systems and the nurse's role in that arena.

NSG 342 RN-BSN Nursing Management

The purpose of this course is to facilitate the development of a broad view of the management of health care delivery systems and the nurse's role in that arena.

NSG 403 Nursing Theories and Models

This course facilitates the practice of professional nursing by providing students with an opportunity to experiment with the application of various conceptual models in order to evaluate the impact of conceptual models on nursing practice.

NSG 404 Pharmacology for Nurses

This course will synthesize pharmacological concepts including an overview of the history of drugs along with current issues. Pharmacotherapeutics, pharmacodynamics, pharmacokinetics, contraindications and precautions for prototype drugs for multiple body systems will be discussed. Major emphasis will be placed on nursing management practices as well as the nurse's role in pharmacological research.

NSG 410 Community: Population Focus

Prerequisites: NSG 411

Corequisites: NSG 410A

A study of community health nursing concepts as they apply to the health of individuals. Explores the nursing care of individuals in the community using primary, secondary and tertiary models of therapeutic intervention. This course includes a required clinical practicum.

NSG 410A Population Focus Practicum

(1.5 quarter units)

Corequisites: NSG 410

This course is part three of a series of three courses for community health nursing practicum. The community/public health clinical practicum experience focuses on nursing's role in promoting and protecting the health of populations in accordance with The American Nurses Association Scope and Standards of Public Health Nursing Practice (2007). Theories, principles, and strategies of population-based health care are used to design, implement, and evaluate services and plans of care to promote, maintain, and restore health in a defined population. Students focus on population aggregates in structured or unstructured settings across care environments. Strategies to evaluate health outcomes and costs of care are emphasized. Completion of this course partially fulfills the California Board of Nursing requirements for

certification as a Public Health Nurse (Business and Professions Code of California, Section 2816-2819), which requires completion of a minimum of 90 community health clinical hours. Grading is satisfactory (S) or unsatisfactory (U) only. Students must be enrolled concurrently in NSG 410, Community Health: Population Focus.

NSG 411 Community Health Frameworks

Prerequisites: NSG 412

Corequisites: NSG 411A

A study of providing nursing care to families in the community using community health nursing concepts. Explores nursing care using primary, secondary and tertiary models of intervention. This course includes a required clinical practicum.

NSG 411A Community Health Framework Pra

(1.5 quarter units)

Corequisites: NSG 411

This course is part two of a series of three courses for community health nursing practicum. The student will focus on various theories, models and frameworks that are utilized in designing, planning and implementing health promotion within the community and population. This course will explore key issues related to public and global health relevant to professional nursing practice. Through the use of epidemiology methods, students will track the natural history of a disease and identify its frequency, distribution, and cause. The community/public health clinical practicum experience focuses on nursing's role in promoting and protecting the health of populations in accordance with The American Nurses Association Scope and Standards of Public Health Nursing Practice (2007). Completion of this course partially fulfills the California Board of Nursing requirements for certification as a Public Health Nurse (Business and Professions Code of California, Section 2816-2819). Grading is satisfactory (S) or unsatisfactory (U) only. Students must be enrolled concurrently in NSG 411, Community Health Framework.

NSG 412 Community Healthcare Delivery

Corequisites: NSG 412A

A study of community health nursing concepts as they apply to the health of groups and the community at large. Explores nursing care using primary, secondary and tertiary models of intervention. This course includes a required clinical practicum

NSG 412A Community Healthcare Delivery

(1.5 quarter units)

Corequisites: NSG 412

This course is part one of a series of three courses for community health nursing practicum. The community/public health clinical practicum experience focuses on nursing's role in promoting and protecting the health of populations in accordance with The American Nurses Association Scope and Standards of Public Health Nursing Practice (2007). This course will examine the role of nursing in community-based and community oriented practice and create conditions that promote healthy living. Theories of community-based and community-oriented nursing practice will be explored in the provision of acute and chronic nursing care to individuals and families that enhances their capacity for self-care and promote autonomy in decision-making. Students practice community assessment, development of partnerships with clients and an appreciation of the values of the community. Completion of this course partially ful-

fills the California Board of Nursing requirements for certification as a Public Health Nurse (Business and Professions Code of California, Section 2816-2819). Grading is Satisfactory (S) or Unsatisfactory (U) only. Students must be enrolled concurrently in NSG 412, Community Health Care Delivery.

NSG 413 Population Based Nursing

(6 quarter units)

Corequisites: NSG 413A

Concepts of nursing at the level of groups, communities and populations are introduced and analyzed. A systems focus is utilized for health promotion within selected vulnerable populations. Health policy development through collaboration with stakeholders at the level of individual, family, neighborhood, and community are evaluated.

NSG 413A Population Based Nursing Lab

(3 quarter units)

Corequisites: NSG 413

Application of concepts in clinical prevention, risk assessment, health promotion and population health to a community health problem. Students are required to implement a community health project and evaluate the results of the project during the course. Course is S/U grading basis.

NSG 414 Nursing Leadership

(3 quarter units)

Corequisites: NSG 414A

Facilitates acquisition of the knowledge, skills, and attitudes of a generalist professional nurse in the role of leadership and management of health care. The student will analyze organizational, legal, and interpersonal principles within the health care setting.

NSG 414A Nursing Leadership Practicum

(1.5 quarter units)

Corequisites: NSG 414

The focus is practical application of the knowledge, skills, and attitudes of a generalist professional nurse in the leadership and management of health care within a variety of settings. The student will apply principles of delegation, supervision, prioritization and collaboration within the health care team. Course is S/U grading.

NSG 422 Nursing Research

Prerequisites: BST 322

This course introduces students to quantitative and qualitative research in nursing by reviewing, evaluating and critiquing current research studies which use a variety of designs. Throughout the course, an emphasis will be placed on the philosophical underpinnings of the quantitative and qualitative research paradigms as well as the use of research in nursing practice.

NSG 435 Cooperative Clinical Practicum

Prerequisites: Students must have a GPA of 3.0 or higher in all NU Nursing courses that are prerequisite to this course. Students must have successfully completed all NU NSG theory and clinical courses through Medical-Surgical Nursing II as follows: NSG 403, NSG 211T, NSG 211A, NSG 304, NSG 200, NSG 200A, NSG 205, NSG 205A, NSG 320 and NSG 320A

This course combines work experience with regular college instruction. Participants earn college credit while working in a position related to the role of BSN graduate.

NSG 440 Professional Issues in Nursing

This course introduces nursing professional issues. Key concepts include: Scope and standards of nursing practice, social policy in nursing, ethics, regulation and legal issues in professional practice. Students begin study of patient safety, holistic and patient centered care concepts, and are guided to begin their development of a professional identity.

NSG 442 NSG Leadership and Management

Corequisites: NSG 442A

This 8 week course provides for the study of leadership and management principles as they apply to the delivery of quality health care and professional nursing practice. Models and concepts will be identified and explored as the nurse learns the importance of leading within the climate of a changing healthcare environment.

NSG 442A NSG Leadership and Management Practicum

(3 quarter units)

Corequisites: NSG 442

This 8 week practicum course focuses on organizational and systems leadership, quality improvement, and safety within a variety of health care settings. Emphasis is on the development of imaginative, innovative and creative strategies to promote a systems change. Grading is S/U only.

NSG 443 Evidence Based Practice

Prerequisites: BST 322

Explores evidence-based practice as a foundation for improved nursing practice and healthcare outcomes. Emphasizes the application of research theory to evidence-based practice, including ethics in research and application of the research process.

NSG 444 Community Population NSG

(6 quarter units)

Corequisites: NSG 444A

This 8 week course focuses on the analysis of the community nursing role and practice in examining the health status of a selected population to determine community oriented care. Addresses public health ethics, nursing advocacy and healthcare disparities. Topics include the importance of health promotion and the preservation of health across the lifespan, vulnerable populations, and global health considerations. Completion of community health courses can lead to the Public Health Nursing Certification in California.

NSG 444A Comm Pop NSG Practicum

(3 quarter units)

Corequisites: NSG 444

This 8 week practicum course provides students with the opportunity to use data to target community interventions, define strategies and access the determinants and distribution of health. Emphasis is on the epidemiologic and ecological principles that affect the health of vulnerable populations. Grading is S/U only.

NSG 445 Quality Improvement/Proj Mgmt

Prerequisites: BST 322 and NSG 332

This course introduces the concepts, techniques, strategies and metrics of quality improvement in nursing. Patient care quality and safety in the context of structure, process and outcomes in healthcare delivery are explored. Identification of improvement opportunities, action plan development and outcomes evaluation through use of project management strategies are addressed.

NSG 446 Quality Improvement Practicum

Prerequisites: BST 322 and NSG 332

Corequisites: NSG 445

Students collaborate with a clinical facility based Quality Improvement (QI) Team to conduct a Quality Improvement project under the supervision of a Practicum Preceptor and the course instructor. A written report of the project is required. Course is S/U grading.

NSG 447 Qual Improvement

Prerequisites: BST 322

Corequisites: NSG 447A

This course introduces the concepts, techniques, strategies and metrics of quality improvement using the Quality and Safety Education for Nurses (QSEN) framework. Patient care quality and safety in the context of structure, process and outcomes in care delivery are explored. Identification of improvement opportunities, action plan development and outcomes evaluation through project management are addressed.

NSG 447A Qual Improvement Practicum

Prerequisites: NSG 443

Corequisites: NSG 447

During this 8 week course students conduct a quality improvement project under the supervision of a mentor or preceptor and the course instructor. Grading is S/U only.

NSG 600 Advanced Practice Nursing

This course explores the role of the Advanced Practice Nurse within a changing health care environment, focusing on role theory and role development related to advanced practice. Leadership skills are developed for independent practice and collaboration within multidisciplinary professional and organizational frameworks.

NSG 606 Health Policy & Finance

Addresses the acquisition of knowledge and skills to promote health, help shape the health delivery system, and advance values through policy processes and advocacy. The intricacies of the organization and financing of healthcare delivery systems and the effect of health policies on healthcare delivery are the foci.

NSG 607 EBP for Advanced NSG Practice

Exploration of types and quality of evidence used to support nursing practice. Study of research designs, measurement tools, and other methods for the safe application of evidence to development of improved care and care systems are emphasized. Identification of an evidence-based scholarly question pertinent to advanced practice nursing.

NSG 620 Theory in Advanced Practice

This course develops critical thinking skills to support advancement of nursing knowledge through theory development, analysis, and application of advanced nursing practice in diverse settings. Students explore the philosophical and theoretical underpinnings of nursing practice and develop skill in analysis of nursing and related theories.

NSG 622 QI & Project Management

Centers on identifying and developing the skills needed by leaders in today's healthcare arena. Students will employ the concept of leadership in the four key domains of advanced practice: clinical prac-

tice environments, the nursing profession, at the systems level, and in the health policy arena.

NSG 623 Biomedical Statistics

This course explores fundamental concepts and methods of statistics as applied to health related fields. The topics of this course include: introduction to basic concepts of descriptive and inferential statistics as they apply to health research; basic and intermediate concepts for testing, statistical hypotheses, construction and interpretation of confidence intervals; applying selected parametric and nonparametric techniques; regression and multiple regression; analysis of covariance, multivariate ANOVA, and related multivariate analyses. Computer software will be used to illustrate statistical procedures.

NSG 641 Advanced Pharmacology I

First of two courses designed to meet the needs of the nurse practitioner student for advanced knowledge about pharmacological agents useful in the management of a variety of common clinical situations. It includes pharmacokinetics, pharmacodynamics and pharmacotherapeutics. Ethical/legal issues will be reviewed and standardized procedures will be covered. Not designed to supersede or replace dosage and treatment protocols established within the nurse practitioner's setting for clinical practice.

NSG 642 Advanced Pharmacology II

Second course of a two course series. Within each class of therapeutic drugs, the course examines clinical application, drug actions, interactions, reactions, and contraindications. The course will also include principles of prescribing and patient compliance.

NSG 681 Advanced Physical Assessment

(6 quarter units)

Presents information expanding the student's knowledge base related to current health patterns across the lifespan. Faculty will facilitate the students' acquisition of advanced skills in collecting subjective data and performing an adult physical and mental status examination. Students interpret data acquired through assessment and results of diagnostic studies.

NSG 682 Advanced Pathophysiology

Provides pathophysiological principles and concepts essential for performing advanced clinical assessments, differential diagnoses, and therapeutic decision-making. Describes disordered physiology and clinical consequences of common disease processes. Analyses of the biophysical rationale are used during seminar, problem-solving exercises and case studies to recognize the pathophysiologic bases of clinical findings.

ODV – Organizational Development

ODV 410 OD, Career Systems, & Training

A survey of organizational development, career systems, and training and development practices. The course explores and defines the origin and interrelationship of the three areas under the auspice of Human Resource Development. The exploration examines these areas as they relate to helping practitioners achieve organizational goals and increase effectiveness. Students learn about both theory and practice as it relates to their ability to assist individuals while seeking greater consonance between individual, group, and organizational change and growth.

ODV 420 Intro to Organizational Behavior

An introduction to the impact that individuals, groups, and structure have on behavior within organizations for the purpose of applying such knowledge toward improving an organizations effectiveness. The course will focus on work-related behavior with an emphasis on individual and group performance as it relates to organizational productivity and processes. A central theme will be the development of "people" skills to help all employees- staff, front-line supervision, and management- improve their effectiveness.

ODV 600 Theory & Practice of OD

The course overviews how, why, and when to integrate the behavioral sciences with human resource management principles to increase individual and organizational effectiveness. Students will analyze, evaluate, and design relevant theories as they relate to practical application in the workplace.

ODV 601 Integrating Performance Mgmt

Prerequisites: ODV 600

This course examines and assesses how technology can best be integrated into and utilized in the workplace to maximize human performance. Implications for information management and organizational communication are investigated and classified. A key aspect is how the two components are impacted by organizational communication. It examines current trends in enterprise-wide technology solutions, specifically as they relate to HRM and OD, implementation of technology, productivity as it relates to use and misuse, and how it facilitates change in human performance and organizational growth.

ODV 606 Seminar in Training & Developm

Employee development is the responsibility of the line manager, the human resources professional, and the employee. This course provides essential managerial-level comprehension of training theory and its practical applications in the business and management environment. Students learn the functions and duties of training: trainer/developer, the identification and assessment of training needs, program design and development, selection of delivery methods and means of instruction, the implementation of training programs, and evaluation. The course integrates training and development, organizational development and career development, critical components of Human Resource Development.

ODV 610 Adv Studies in Org Behavior in

An in-depth review of current organizational behavior issues in the areas of workforce planning and performance management is covered as it relates to employee diversity. Using case studies, the course provides an integrated perspective of theory and practical aspects of interpersonal and group communication, organizational structures and system, and employee performance in the diverse workplace.

PAD – Public Administration

PAD 100 Public Policy & Admin Basics

A survey course of the crucial elements of the contemporary field of public administration. It includes vocabulary, critical concepts, history and development and the field, major theories and theorists and principal sub-fields of public administration. It presents the student to program resources; develop criti-

cal thinking, reasoning skills, and permit students to investigate this field.

PAD 115 Leadership Skills in the Public

This course examines the theories of administrative leadership and the strategic application of leadership skills in an urban-government environment. In addition students will review current approaches to organizational excellence and its applicability to urban-government leadership.

PAD 205 Research Methods in Public Adm

The purpose of this course is to acquaint students with major research and analytical techniques used in public policy and administration. The course is intended to both promote an understanding of the theories and approaches to public administration research and to assist the student to acquire a working knowledge of the skills involved in research analysis.

PAD 400 Intro to Public Administration

A general survey course of the theory and practice of public administration, its legal and constitutional foundation and the role of the public administrator in public policy. The context of the discussions are based on the current issues facing administrators.

PAD 401 Public Policy Development

This course discusses the public policy issues facing communities and the role of the public administrator in implementing policy. Examines the role of community action groups in developing and influencing policies. Evaluates the impact of policy decisions on communities and the ethical issues surrounding decisions.

PAD 402 Urban Environments

This course explores the role urban environments play in the nation. Discusses the issues unique to cities and large metropolitan areas and the role of governments and public agencies in addressing the issues. Discusses the ethical issues facing public administrators in dealing with urban and rural environments.

PAD 403 Government Relations

This course is an exploration of how to communicate with citizens in a positive and helpful fashion. Discusses how to interact with community groups and the press and how to promote public understanding of, and support for, government activities.

PAD 404 Nonprofit Management

The course discusses the theories and roles of nonprofits in public administration. It explores the relationships between nonprofits and the public sector; and sources of revenue. Discusses the public policies towards the nonprofit sector and the ethical issues surrounding the sector.

PAD 405 Senior Research Project

Prerequisites: Satisfactory completion of 36qu of BPA major coursework.

Supervised senior project undertaken by students of public administration when they have completed all core courses in the program. Coordinated by full-time faculty and chaired by a public administration faculty member chosen by the student from previous courses taken within the program. Students select a viable topic in public administration to research and then meet with their chair once a week for two months. Upon completion, students present their project to chair, other faculty and peers in an open

forum. Accelerated study is not permitted with this course. PAD 405 is two months in length. Students who do not complete the Senior Project within the two-month period are eligible, at the discretion of the instructor, to receive a grade of "IP" with a maximum of a one-time, six-month extension. Students who do not complete the project at the end of the extension period will need to retake the course. Grading is by H, S, or U only. Course is eligible for an "IP" grade.

PAD 620 Foundations of Public Admin

A general survey course covering the role of the public sector manager in American society today. Studies current issues and leading concepts in the field of non-profit management.

PAD 622 Seminar in Urban Affairs

An examination of influences affecting decisions in the urban political arena. Covers segments of the community that impact the decision-making process (i.e., employee groups, labor influences, community groups, media and other special interests). Examines the relationship between intergovernmental agencies.

PAD 626 Public Personnel Policy

An examination of the important aspects of personnel management in government, including civil service procedures, affirmative action, employee motivation and organizational development.

PAD 627 Quantitative Methods

A practical study of graphical methods and statistical procedures specifically aimed at presenting, interpreting and solving problems related to public administration.

PAD 628 Ethics

Role, values, and issues of public management in democratic governance, citizen participation, power structures, and professional codes of conduct.

PAD 631 Urban Planning & Redevelopment

An examination of historical development of urban planning practices and concepts, general plans and their elements in the urban community. Also discusses the use of technology in planning. Students must complete a minimum of five Public Administration courses prior to taking this course.

PAD 632 Finance Mgt & Grant Admin

An exploration of current governmental fiscal management techniques and issues. Examines various types of financial and technical assistance to quasi-governmental and non-profit management organizations.

PAD 640 Public Finance

An overview of the fundamental microeconomic analysis of policy issues in public finance, emphasizing taxation. Major topics include public good and externalities, tax incidence and equity and fiscal federalism.

PAD 641 Local Government Budgeting

A comprehensive, straightforward look at local government budgeting. Topics dealt with include the advantages and disadvantages of various approaches to revenue projection, the collection and review of departmental proposals, the development of capital budgeting policy and other budgeting tasks. Also

considered are budget implementation, accounting and financial reporting. A variety of methods for maintaining budgetary balance, preventing over-spending and dealing with contingencies are presented and discussed.

PAD 642 Public-Private Financing

An examination of financing partnerships between private businesses and public agencies such as school districts, college and university institutions and city and state governments. The course focuses on the design and construction of needed public facilities and the sponsoring of commercial redevelopment projects. Case studies provide detailed coverage of the complex process involved in taking a real estate project from conceptualization through construction.

PAD 643 Contract Negotiations

An analysis of bargaining and negotiation principles and practices in the public sector. The course focuses on the financial issues of contract negotiations and labor relations. Case studies, simulation exercises, research projects and group discussions complement the presentation of theory and practical experience in developing effective negotiation skills.

PAD 644 MPA Project

A project where students work in teams or individually under the guidance of an assigned faculty advisor. Students clarify research topics and identify data sources in preparation for the project. Students then gather data and present their research in both written and oral form to faculty and classmates. Grading is H, S, or U only. PAD 644 is two months in length.

PED – School Psychology

PED 504 School Psychology Orientation

(1.5 quarter units)

An exploration of the field of School Psychology and its suitability as a personal career choice. Emphasis is on an understanding of the multiple roles of school psychologists that includes counseling, coordination and collaboration. Field experiences, using interviews and observations, will give students insight into their future vocations. Emphasis is placed on oral and written communication, and observational skills. Practicum experience is required. Grading is by S or U only.

PED 603 School Psychology Orientation

This course will serve to provide an orientation to the requirements of National University in general (NU Catalog); the School Psychology program in particular (School Psychology Handbook); the expectations of a graduate level candidate, including demonstrating "Professional Dispositions;" the importance of APA writing style; an overview of the profession of School Psychology (by reading current literature in the field); gaining an understanding of current issues in the field; and how both the education, training and practice of a School Psychologist differs from other professions that work with children, such as School Counselor, Special Education teacher, General Education Teacher, Social Worker, Marriage and Family Therapist, and Clinical Psychologist.

PED 625 Research Methods in Education

Prerequisites: PED 665

An introductory educational research course designed to provide knowledge, skills, and dispositions required for students to understand and demonstrate quantitative and qualitative research. Emphasis is on the knowledge and skills required to be a competent consumer and producer of educational research.

PED 637 School Psychology Research

Prerequisites: PED 625

This course will provide knowledge and skills required to generate and evaluate research relevant to School Psychology. School Psychology candidates prepare a research proposal, obtain appropriate approval, conduct the study and prepare an oral and written report. Maximum length of time is 12 months. Grading is by H, S, or U only. Course is eligible for an "IP" grade.

PED 652 Child Psychopharmacology

Prerequisites: PED 666

Evaluates and lists the primary medications in use today; critiques pertinent research in psychiatric intervention as it relates to psychotherapy; analyzes selected issues in resolving possible conflict in treatment goals. School Psychology candidates learn to recognize signs and symptoms that might be amenable to medication. Many disorders are discussed.

PED 665 Test and Measurements

Covers concepts of validity, reliability, norms, item analysis, and standardization; selection, administration, and interpretation of published psychological and educational tests; development of measurable goals by decision makers for various evaluation purpose, and the development and /or selection of tests, and collection of data.

PED 666 Human Neuropsychology

Prerequisites: PED 504

Explores the theories and analysis of brain function, structure, and brain behavior relationships.

PED 667 Developmental Psychopathology

Addresses emotional and behavior pathology most likely to be encountered by school psychologists and School Counselors working in school settings. It examines human development, and the biological, psychosocial, and cultural variables in the etiology of these disorders. Students will become familiar with characteristics, classification, assessment and diagnosis of such disorders, as well as developmental theories and stages of human development.

PED 670 Advanced Social Psychology

Focuses on how individuals are affected by, and in turn affect social processes. Topics include social cognition; social influences on beliefs, attitudes, attributions and identity; conformity, obedience and persuasion; culture and gender; small group influences and processes; stereotyping, prejudice, conflict, aggression and genocide; interpersonal attraction and love.

PED 671 Cognitive Assessment

Prerequisites: PED 665 and PED 680

Practice in administration, interpretation and communication of results from the assessment of cognitive abilities. Emphasis is placed on interviewing, behavioral observation, interpretation, and integrat-

ing results into case studies, as well as implementing interventions and evaluating outcomes.

PED 672 Psycho-Academic Assessment

Prerequisites: PED 671

Introduces School Psychology candidates to the administration, interpretation, and communication of results from psycho-academic tests. Focus is on achievement and process measures, as well as the development of curriculum-based assessment. Continued emphasis on interviewing, behavioral observation, interpretation, integration of results, implementing interventions, and follow-up.

PED 673 Social/Emotional Assessment

Prerequisites: PED 672

This course will support understanding in the knowledge and competencies that are required for proper administration and interpretation of standardized measures and other research-based evaluations of emotional and behavioral conditions.

PED 674 Special Populations Assessment

Prerequisites: PED 673

Emphasizes eligibility for special education that includes assessment of preschool children, diagnosis of disabling conditions, remediation and IEP development. The course provides an introduction to the assessment of low incidence populations such as Visually Impaired, Deaf and Hard of Hearing, Autistic Spectrum Disorders, Physically Impaired, Traumatic Brain Injured and Dual Sensory Impaired.

PED 675 Alternative Assessment

Prerequisites: PED 674

Course focuses on alternative assessment techniques, diagnosis of disabling conditions, and eligibility for special education, remediation and IEP development. School Psychology candidates will discuss the role of primary language and socio-cultural variables on cognitive development, the implications of assessment on placement and integrating assessment materials for the purpose of writing psychological test reports.

PED 676 Applied Behavior Analysis

Applied Behavior Analysis is a scientific based method of understanding human behavior and using that understanding to change socially significant behaviors. This course provides an overview of the major components - philosophical as well as applied - of Applied Behavior Analysis, including assessment and intervention design.

PED 677 Curriculum Interventions

(1.5 quarter units)

The focus of this class is to introduce School Psychology candidates to a conceptual framework for assessing and evaluating a wide range of academic concerns within a problem solving approach using nontraditional academic assessment techniques and an RTI model.

PED 678 Practicum in School Psychology

Prerequisites: PED 673, PED 671 and PED 672

The purpose of the school-based practicum is to provide School Psychology candidates with an orientation to school and community professionals as well as to clarify the role of the school psychologist. Candidates are placed in a school setting and attend a

university-based seminar. Placement consists of 450 hours. Grading is by S or U only.

PED 680 Roles, Issues and Ethics

Prerequisites: PED 603

Introduction to professional, ethical, legal, theoretical, and practical aspects of School Psychology. School Psychology candidates will examine the roles and responsibilities of school psychologists, professional organizations, and associations. Historical and social context along with emerging professional issues and directions are included. National Standards and ethical guidelines for practice are examined.

PED 683 Program Evaluation

This course focuses on history and foundations of program evaluation, to perform a needs assessment, variety of program evaluation methodologies, and evaluation of current empirically-based programs that address student needs. School Psychology candidates will learn skills necessary to implement a program to meet the needs of the schools they are servicing.

PED 685 Internship Seminar

Prerequisites: Students must have completed all program core requirements (except PED 625 and PED 637), 450 hours of practicum, eligible to be enrolled in the internship and have permission of the faculty advisor.

Students will review the knowledge, skills, and standards of the graduate program in school psychology in final preparation for their employment as professional school psychologists. Students will prepare for the ETS Praxis examination, complete their program portfolios, and present their school project as part of this course. Grading is by H, S, or U only.

PED 687 School Psych Internship I

Prerequisites: Students must have completed all program coursework, must be enrolled in their internship and have permission of the faculty advisor

Students will review the knowledge, skills, and standards of the graduate program in school psychology in final preparation for their employment as professional school psychologists. Student will prepare for the ETS Praxis examination, complete their program portfolios, and present their school project as part of this course. Grading is H, S, or U only.

PED 688 School Psych Internship II

Prerequisites: Students must have completed all program coursework, must be enrolled in their internship and have permission of the faculty advisor
Students will review the knowledge, skills, and standards of the graduate program in school psychology in final preparation for their employment as professional school psychologists. Student will prepare for the ETS Praxis examination, complete their program portfolios, and present their school project as part of this course. Grading is H, S, or U only.

PED 689 School Psych Internship I

Prerequisites: Students must have completed all program coursework, must be enrolled in their internship and have permission of the faculty advisor
Students will review the knowledge, skills, and standards of the graduate program in school psychology in final preparation for their employment as professional school psychologists. Student will prepare for

the ETS Praxis examination, complete their program portfolios, and present their school project as part of this course. Grading is H, S, or U only.

PED 690 School Psychology Intern II

Prerequisites: Students must have completed all program coursework, must be enrolled in their internship and have permission of the faculty advisor
Students will review the knowledge, skills, and standards of the graduate program in school psychology in final preparation for their employment as professional school psychologists. Student will prepare for the ETS Praxis examination, complete their program portfolios, and present their school project as part of this course. Grading is H, S, or U only.

PED 694 Thesis

Prerequisites: ILD 625 and an undergraduate or graduate statistics course. Students must have written permission of lead faculty to enroll in the course
This course is a supervised experience culminating in the completion of a thesis. The student prepares a research proposal, obtains Institutional Review Board (IRB) approval, conducts the study and prepares the written thesis. This class is scheduled for 2 months, meets once a week and at the end of that time a grade of "IP" will be posted then the maximum length of time is 10 additional months. Grading is H, S, or U only.

PHL – Philosophy

PHL 238 Logical & Critical Thinking

Prerequisites: ENG 100 and ENG 101

Introduction to the fundamentals of logic and critical thinking. Focuses on the core skills of logical analysis, argumentation, recognition of fallacious reasoning, linguistic structural analysis, introductory levels of propositional and categorical argumentation, and various forms of inductive reasoning. Broadens the student's abilities to engage in the lifelong-learning processes of self-inquiry and self-reflection and promotes effective communication and an awareness of diverse perspectives in all areas of thought and inquiry.

PHL 320 World Religions

Prerequisites: ENG 100 and ENG 101

Major world religions, including Hinduism, Buddhism, Confucianism, Taoism, Judaism, Christianity, and Islam, are surveyed in their historical, literary, and historical contexts. The sociology of religion is extensively addressed, and parallels in myths, rituals, conversion, and rites of passage are compared. Recent and contemporary religious trends are also addressed.

PHL 326 Chinese Thought

Prerequisites: ENG 100 and ENG 101

History of Chinese thought and religion from 5th B.C. until 10th century A.D., with an emphasis on the continuing relevance of these traditions in China today. The course will focus on the following schools of thought and related religions: Confucianism, Mohism, Daoism, Legalism, Buddhism.

PHL 336 Philosophy of Science

Prerequisite: ENG 100 and ENG 101

A survey of major theories of science. Considers the nature of scientific knowledge, the roots of science in our everyday cognition and behavior, the relation of

theory to experimentation, the social implications of science, the relation of physical to social science and the relation of science to technology.

PHL 337 Ethics

Prerequisite: ENG 100 and ENG 101

An examination of theories of value and ideological differences in practical applications to clarify ethical differences. Course emphasizes the dilemmas of personal and professional responsibility, including business and workplace circumstances, social relationships, and political practice.

PHL 339 Study of a Major Philosopher

Prerequisite: ENG 100 and ENG 101

An in-depth analysis of the writings of a major figure in the history of philosophical thought. The particular emphasis will be determined by the instructor in the context of the specific thinker chosen.

PHL 375 Environmental Ethics

Prerequisite: ENG 100 and ENG 101

An exploration of ethical theories as they inform and are applied to contemporary environmental issues such as animal rights, habitat loss, species extinction, pollution, industrialization, population control, ecofeminism and political ecology. Western cultural and ecological assumptions are examined through the lenses of humanitarian, eco-centric, utilitarian, deontological, and ethics-of-care perspectives.

PHS – Physics

PHS 102 Survey of Physical Science

An introduction to the basic principles and general concepts of the physical sciences. Develops selected topics from chemistry and physics. A general education course for non-technical majors.

PHS 104 Introductory Physics

Prerequisites: 2 years of high school algebra and MTH 204 or MTH 215 or MTH 216A and MTH 216B

Non-calculus based general physics course for earth and life science majors. Study of force, laws of motion, heat, fluid mechanics, electricity, magnetism, light (optics) and modern physics.

PHS 104A Introductory Physics Lab

(1.5 quarter units)

Prerequisites: PHS 104 or PHS 171 for science majors

Non-calculus based general physics course for earth and life science majors. Laboratory experiments/exercises, including data analysis on topics, including but not limited to: electricity, magnetism, light (optics) and nuclear physics.

PHS 130A Physics Lab for Engineering

(1.5 quarter units)

Non-calculus based general physics lab course for Master of Science in Environmental Engineering online program. The course includes interactive illustrations, explorations, and problems in major parts of General Physics: Kinematics, Dynamics, Electric current and Optics.

PHS 171 General Physics 1

Prerequisites: MTH 215 or MTH 216A and MTH 216B

Non-calculus based general physics course. Intended for Science majors. Study of one-dimensional and two-dimensional kinematics, dynamics, statics, work, energy, linear momentum, circular motion and gravitation.

PHS 172 General Physics 2

Prerequisites: PHS 171

Non-calculus based general physics course for Science majors. Study of temperature, kinetic theory, gas laws, heat, oscillatory motion and waves, and electricity.

PHS 173 General Physics 3

Prerequisites: PHS 171 and PHS 172

Non-calculus based general physics course intended for Science majors. Extended study of magnetism, electromagnetic induction and waves, optics, relativity, quantum physics, nuclear reactions and elementary particles.

PHS 181 Physics for Non-Sci Majors I

Prerequisites: 2 years of high school algebra and MTH 204 or MTH 215 or MTH 216A or MTH 216B

Non-calculus based general physics course for non-science majors. Study of one-dimensional and two-dimensional kinematics, dynamics, statics, work, energy, linear momentum, solids and fluids, temperature and kinetic theory, heat, vibrations and waves, and electrostatics.

PHS 182 Physics for Non-Sci Majors II

Prerequisites: PHS 181

Non-calculus based general physics course for non-science majors. Study of electric current and resistance, magnetism, electromagnetic induction, optics, relativity, quantum physics, quantum mechanics and atomic physics, and nuclear physics.

PHS 231 Calculus-based Physics 1

Prerequisites: PHS 104 and MTH 220 or CSC 208 and MTH 221 or CSC 209

Calculus-based physics course. Intended for Science majors and Engineering students. Study of one, two and three-dimensional kinematics including integral calculus, graphical analysis, numerical integration and vector kinematic, dynamics, uniform and non-uniform circular motion, gravitation, and Newton's synthesis, work and energy with vector algebra principles, linear momentum, rotational motion, statics including elasticity and fracture.

PHS 232 Calculus-based Physics 2

Prerequisites: PHS 104, PHS 231, MTH 220 or CSC 208 and MTH 221 or CSC 209

Calculus-based physics course. Intended for Science majors and Engineering students. Study of different types of oscillations and wave motion, electrostatics with electric field calculations for continuous charge distribution, Gauss's law, electric potential due to any charge distribution, electric energy storage with applications, electric currents and resistance, magnetism and magnetic field, electromagnetic induction and transmission of power, DC and AC circuits, Maxwell's equations and electromagnetic waves

PLA – Paralegal Studies

PLA 200 Legal Theory & Ethics

Introduces the law and legal system and an overview of the major areas of legal practice. Focuses on legal problem-solving, case analysis, fact pattern analysis, selected topical surveys of law, and legal ethics and professional responsibility for the paralegal.

PLA 201 English for Professionals

Teaches legal professionals to write well by examining English, composition, grammar, punctuation, and writing mechanics in the context of good legal writing. Students complete focused exercises designed to build their legal vocabulary and enable them to draft discourses.

PLA 202 Property

Examines the law relating to the various types of real-property interests and estates, methods of transferring title, recording statutes and title searches, the nature and scope of easements, leasehold interests, the rights and obligations of landlords and tenants, the law of adverse possession, and covenants regarding title.

PLA 203 Leg Res Wrtg-Persuasive Wrtg.

Develops legal research skills through focused exercises using print and computerized research. Exposes students to primary and secondary legal authorities, with an emphasis on practice and ethical rules. Develops legal writing skills by implementing the IRAC method, synthesizing various legal authorities, and applying proper legal citation.

PLA 303 Law Office Administration

Explores the organization and functioning of a law office. Topics include financial planning and management, problem-solving techniques, personnel administration, job descriptions, hiring practices, new employee orientation and training techniques, salary administration, productivity measurement, and interpersonal considerations.

PLA 311 Internship

Provides students with on-the-job experience in a private law firm, government agency, judicial setting, or corporate law department. Placements are available in a range of legal specializations. Ninety hours of fieldwork are required. Students unable to enroll in the credit course may apply for consideration as a non-credit intern.

PLA 314 Workers' Compensation

A study of the basic principles of California Workers' Compensation law, including eligibility, compensation coverage, medical treatment, compensation payments, permanent disability, death benefits, settlement, vocational rehabilitation, benefits, procedural matters, and the preparation of documents and forms from both the applicant and defense positions.

PLA 315 Bankruptcy Law & Procedure

A study of the substantive law of bankruptcy and its application, including voluntary and involuntary liquidations, discharge of debts, exemptions, creditors' claims, bankruptcy courts, officers and trustees, reorganizations, Chapter 13 plans, and alternate insolvency proceedings. Emphasis is on the preparation of documents and forms.

PLA 316 Entertainment Law

A course designed to familiarize students with the legal aspects of the entertainment industry, emphasizing the role of the legal assistant in preparing and monitoring legal documents. Material covered includes documents used in the acquisition of music rights, agreements used during the production of a motion picture, analysis of distribution and exhibition contracts, financing agreements, and complete review of the “old” and “new” copyright laws.

PLA 317 Immigration Practice

This course introduces students to the law regarding citizenship, naturalization, and immigrant and non-immigrant categories. The course also examines the grounds for removal prior and subsequent to entry, as well as relief from removal. After acquiring a foundation in the substantive law, students complete assignments designed to give them practical exposure to immigration forms and documents.

PLA 318 Remedies & Dispute Resolution

Prerequisites: PLA 202, PLX 2100X and PLX 2102X

Examines the substantive and procedural aspects of remedies and enforcement of judgments. The first part of the course comprises a study of legal and equitable remedies, including damage, restitutionary, coercive, and declaratory remedies, prejudgment (provisional) remedies, and procedures for the enforcement of judgments. The second part of the course discusses various methods of resolving disputes, including negotiation, mediation, and arbitration.

PLA 325 Litigation I

Explores civil procedure in both state and federal courts, including jurisdiction, venue, parties, pleadings, motions, and an analysis of civil-litigation strategies. Emphasizes the role of the paralegal in discovery and includes discussions of various types of discovery (including depositions, interrogatories, and demands for production of documents), the attorney-client privilege, the work product doctrine, and trial-setting matters.

PLA 329 Corporations I

Covers the formation and structure of corporations, analysis of common corporate documents, initial and amended articles of incorporation, by-laws, meetings and minutes, initial stock-issuance documents, documents relating to internal management of corporate affairs, stock options, buy/sell agreements, resolutions, stock dividends and splits, and liquidation and dissolution.

PLA 333 Criminal Law I

Examines criminal law, including the criminal legal system, what constitutes a crime, the elements of crimes, inchoate crimes, and criminal defenses.

PLA 335 Employment Law

This course is designed to provide the student with an introduction and understanding of the laws concerning the employment relationship including what constitutes an employee, at-will employment, termination of employees, employee rights, wage and hour regulations and employee privacy issues. This course will also provide the student with an introduction to employment discrimination laws and regulations concerning sexual harassment, race discrimination, disability discrimination and age discrimination.

PLA 404 Wills, Trusts, & Estate Planni

A study of the laws concerning intestate succession, wills, and trusts (with an emphasis on California law), the principles of federal estate and gift taxation, and the relationship of succession and taxes. Students learn how to draft wills, trusts, codicils, and trust amendments and how to do death tax projections.

PLA 407 Family Law I

The law of family relations, including the law of marriage, annulment, dissolution, judicial separation, spousal and child support, legitimacy of children, custody, adoption, the classification of separate and community property, and problems arising from the dissolution of the marital community.

PLA 413 Juvenile Law and Procedure

A study of procedural law and substantive law relating to the special status of minors in our society. The emphasis of this course is Juvenile jurisdiction in three areas: Incurability, Dependency, and Delinquency. Students learn the unique aspects of representation of juveniles, including interviewing, preparation of disposition reports, and development of files of alternative treatment programs. A term project and field trips to court and various juvenile facilities develop the skills needed for a legal assistant to work in this field.

PLA 421 Family Law II

This course covers advanced issues of family law including marital settlement agreements, domestic violence, enforcement techniques, tax issues, prenuptial agreements, paternity law, the Uniform Child Custody Jurisdiction Act and the Uniform Interstate Family Support Act. Emphasis will be placed on familiarization with California Judicial Council Forms, pleading preparation, research, and internet tools.

PLA 426 Litigation II

Prerequisites: PLA 325

Focuses on the trial process in civil litigation, with a discussion of the law of evidence. Includes a review of civil procedure before trial. Students examine the role of the paralegal at trial, analyze the use of testimony by expert witnesses, and discuss the practical problems associated with the use of documentary evidence at trial. Covers settlement and negotiation strategies, trial briefs, motions in limine, and other related documents, and includes a brief overview of the law of judgments and the process of appeals.

PLA 427 Probate and Estate Planning I

Recommended: Prior completion of: PLA 404

This course covers the following: basic property concepts (the basic differences of community, quasi-community, and separate property; recognition of probate assets and non-probate assets; the differences between joint tenancy and tenancy-in-common; trust assets; fringe benefits; insurance proceeds); non-probate procedures (clearing title to joint tenancy, the various summary administration procedures, and spousal property petitions); and probate procedures (initiating administration; jurisdiction and venue; intestate succession; preparation of petition and other documents; review of will, notice requirements, Independent Administration of Estates Act, ancillary probate; and the necessity of maintaining a calendar or tickler system).

PLA 428 Probate and Estate Planning II

This course covers the following material: Asset accumulation, management, and creditors' claims, location and marshaling of assets of the estate; preparation of inventories; function of probate referee; review of procedures for payment of debts and creditors' claims; study of management of estate assets; sales of real businesses; and family allowance. This course also covers miscellaneous court proceedings and termination of proceedings: will contests, contract to make a will, quiet title actions, buy-sell agreements, options, redemptions, and partition. Preparation of a court accounting and petition for final distribution, discharge of representation, and statutory fees. In addition, the course will review special petitions: Petition under Probate Code Sec. 9860, petition for instructions, petition to determine distribution rights, nunc pro tunc orders, settlements, preliminary distributions, and report of status of administration of estate.

PLA 430 Corporations II

Prerequisites: PLA 329

Examines the regulation of the sale of securities (analysis of the requirements regarding the forms and supporting materials for the registration of securities for California, preparation of California exemption forms, and an overview of federal securities laws), and acquisition and merger agreements (analysis of different types of acquisitions and mergers, statutory requirements of such transactions, and the customary range of provisions that appear in such agreements).

PLA 431 Real Estate I

Recommended: Prior completion of: PLA 202

The course covers ownership of real-estate leasing (extensive analysis and preparation of residential, commercial, and industrial leases); purchase and sale of real estate (analysis and study of common documents relating to the purchase and sale of real estate, including standard broker listing agreements, deposit receipts, offers to purchase, escrow instructions, deeds, title insurance, and surveys); financing and secured transactions (study of types and provisions of security devices, including deeds of trust and land-sale contracts; review of various methods of financing, including all-inclusive deeds of trust; analysis of various provisions of security devices, including due-on-sale, subordination, reconveyance, and prepayment; and the remedies available to holders of securities devices).

PLA 432 Real Estate II

Prerequisites: PLA 431

This course covers condominiums, planned-unit developments and cooperatives (analysis of the basic law relating to these forms of ownership, the basic constituent documents and regulations by the Department of Real Estate); land-development regulation (study of zoning laws, Subdivided Lands Act and Subdivision Map Act, and the several forms relating to these regulatory schemes); and miscellaneous topics, such as mechanics' liens, the impact of the bankruptcy laws on lenders, landlord remedies, and toxic hazardous waste considerations.

PLA 434 Criminal Law II

Prerequisites: PLA 333

Covers criminal procedure, including search and seizure, confessions and pretrial identification procedures, initial appearance, extradition, grand jury, pretrial conference, constitutional rights, sentencing, punishment, and review.

PLA 495 Objective Writing Capstone

Prerequisites: All other courses required for the major (except PLA 496) must be completed prior to enrolling in this course.

Allows students the opportunity to conduct in-depth legal research using both print and online resources. Focuses on creating an objective legal document, such as an office memorandum or scholarly legal article, suitable for publication or use as a writing sample on a job interview.

PLA 496 Persuasive Writing Capstone

Prerequisites: All other courses required for the major must be completed prior to enrolling in this course.

Allows students the opportunity to conduct in-depth legal research using both print and online resources. Focuses on creating a persuasive legal document, such as a motion, mediation brief, or appellate argument, suitable for publication or use as a writing sample on a job interview.

PLX – Paralegal Studies (Extended Education)

PLX 1804X Foundations of Property Law

Examines real property law, including interests in land, landlord/tenant, easements, and conveyances.

PLX 1806X Legal Writing Project

Prerequisites: PLX 2101X and PLX 2103X

Allows students the opportunity to prepare a legal writing work product using both print and online legal resources.

PLX 1807X Litigation Essentials

Covers civil procedure in both state and federal courts and civil litigation strategies. Emphasizes the paralegal's role in discovery, pre-trial, and trial proceedings. Includes discussion of various forms of discovery, such as depositions, interrogatories, and demands for production of documents, and introduces judgments and the appellate process.

PLX 1808X Essentials of Corporate Law

Examines the formation, operation, and dissolution of various types of corporate entities. Introduces students to common corporate documents, securities, and mergers and acquisitions.

PLX 1809X Essentials of Criminal Law

Covers criminal law and procedure, including crimes and their defenses, constitutional protections, and criminal litigation practice.

PLX 2100X Torts

Examines the fundamental principles of the law of intentional torts (e.g., battery, assault, false imprisonment, intentional infliction of emotional distress); negligence (standard of care, breach of duty, causation, damages); strict liability; the torts of nuisance, defamation, invasion of privacy torts; and the defenses to each of these torts. Also addresses the concepts of products liability and vicarious liability.

PLX 2101X Leg Res Wrtg-Briefing/Analysis

Develops legal research skills through focused exercises using print and computerized research. Exposes students to primary and secondary legal authorities, with an emphasis on constitutions and statutes. De-

velops writing skills by analyzing and briefing court opinions, drafting letters, and examining the purposes and uses of a legal memorandum.

PLX 2102X Contracts

Examines basic contract principles, including formation, validity, defenses to formation, rights of third parties, performance, breach, remedies, and damages. Emphasizes case analysis and application of principles, and covers code sections from Article 2 of the Uniform Commercial Code and the Restatement Second of Contracts.

PLX 2103X Leg Res Wrtg-Legal Memo

Develops legal research skills through focused exercises using print and computerized research. Exposes students to primary and secondary legal authorities, with an emphasis on legislative history, administrative materials and loose-leaf services. Develops writing skills by examining different parts of the legal memorandum, including questions presented, brief answers, statements of fact, and conclusions.

PLX 2105X Computers & the Law

Teaches computer technology as a tool to assist the legal professional in the practice of law. Utilizes lecture, group discussion, and hands-on computer use. Using the latest software for time and billing, case management, docketing control, and litigation support, students complete legal projects with assignments in the computer lab. Students learn how to effectively evaluate vendor products, and design and manage a litigation database project. Also covered are telecommunications and computer-assisted research, and ethical considerations, such as software piracy, misuse of software and databases, security, and protecting client data.

PMB – Project Management

PMB 400 Project Management Essentials

Prerequisites: MGT 451

Introduction to the concept of project management, covering the essential elements of planning a project, initiating the project, implementing the project, and the termination of the project, while emphasizing the importance of team building and leadership, as well as incorporating cost, scheduling and budgetary principles according to contractual terms.

PMB 410 Project Planning and Control

Prerequisites: MGT 451 and PMB 400

Examination of the elements of project planning and control by studying each element in depth. Addresses topics such as work breakdown structure, budgets, costs, resource planning and allocation, project monitoring and reporting, and project and process control methods, as well as the termination and audit of a project.

PMB 420 Program Management

Prerequisites: MGT 451 and PMB 400

Study the management of a portfolio of projects leading to organizational change, creation of a model that compares the program with other segments in an organization using benchmarks, and develops a plan that builds an infrastructure of critical chains for parallel projects.

PMB 430 Project Accounting Fundamentals

Prerequisites: MGT 451 and PMB 400

Explanation of the application of cost accounting concepts to a project according to its contractual parameters. It develops alternative cost methods and outlines an approach to track and measure the progress of any project according to its contractual or planned milestones and measurement of value.

PMB 440 Contract Management

Prerequisites: MGT 451 and PMB 400

Overview of the management of contracts made with customers, vendors, or partners. Contract management includes negotiating the terms and conditions in contracts and ensuring compliance, as well as documenting and agreeing to changes that may arise during its implementation of execution.

PME – Advanced Project Management

PME 601 Advanced Project Management

Prerequisites: ENM 600, ENM 601, ENM 602 and ENM 603

Introduction to the in-depth theory and practice involved in the design and management of projects. It guides students through Concept, Study, Design, and Implementation. The latest developments in the field such as intricate framework of organizational behavior and structure, global project management, project management maturity model will be covered.

PME 602 Skills Management

Focus on modern concepts and practical guidelines for leading people effectively and confidently towards challenging project and organizational objectives. The concepts behind dealing with diverse project teams, issues of delegation, empowerment, accountability, control, commitment, organizational linkages, alliances and intricacies of matrix management will be studied.

PME 603 Product Management

Prerequisites: ENM 600, ENM 601, ENM 602 and ENM 603

Coverage of three major tasks facing today's product managers namely analyzing the market, developing objectives and strategies for the product or service in question, and making decisions about price, advertising, promotion, channels of distribution and service.

PME 604 Project Financing Management

Prerequisites: ENM 600, ENM 601, ENM 602 and ENM 603

Discussion of essential concepts in finance related to project management such as accounting statements and their interpretation, forecasting, risk and return, time value of money, project budgeting, and project finance management such as working capital, cash flow management, account receivables and inventory and global finance management.

POL – Political Science

POL 100 Introduction to Politics

Prerequisites: ENG 100 and ENG 101

A broad overview of the field of political science including main issues and central questions studies by political scientists and methods used to gain knowledge about politics. A survey course designed to ac-

quaint the student with selective concepts, theories, and of political process.

POL 201 American Politics

Prerequisites: ENG 100 and ENG 101

A critical introduction to the structure of American government. Topics include classical and modern democratic theories, constitutionalism and federalism; the political process, including the mass media, voting behavior and political parties and interest groups; the institutions of government; the courts, civil liberties and civil rights; and public policy. (Includes study of the Constitution)

POL 320 Politics of Social Movements

Prerequisites: ENG 100 and ENG 101

Introduction to social movements and political action, covering several theoretical perspectives on how to understand and analyze social movements in recent global history, from their origins to their demise; a global survey of the processes of social and political awareness, mobilization and development of such movements.

POL 330 Political Theory

Prerequisites: ENG 100 and ENG 101

Survey of political theory and major figures in the history of political philosophical thought. Questions concerning the role of government and the relationship between government and individuals are explored.

POL 340 Comparative Politics

Prerequisites: ENG 100 and ENG 101

A study of selected foreign states from among industrial, developing, and under developing states, and their development, organization, administration, and politics; introduces students to analytical methods used to compare political systems and governments; explores several issues, including democratization, economic development, political culture and political change.

POL 350 International Relations

Prerequisites: ENG 100 and ENG 101

A survey of the nature of the international system and the theoretical framework used by political scientists to examine it; in particular, this course focuses on the decision-making process within the international arena. International negotiation and decision-making are utilized.

POL 360 Public Policy

Prerequisites: ENG 100 and ENG 101

An introduction to the public policy process in the United States, theory and practice of process of formulating public policy, why some problems reach the public agenda and why others are rejected, examination of policy making at the national, state and local level, and public policy in foreign political systems.

POL 400 European Politics

Prerequisites: ENG 100 and ENG 101

This course provides an introduction to European politics, with emphasis on political institutions and politics of Western and Eastern European states, as well as the institutions and policies of the European Union (EU).

POL 410 Middle Eastern Politics

Prerequisites: ENG 100 and ENG 101

Historical examination of the Middle East region, focusing on the key social forces and the sources of

conflict; exploration of the Israeli-Palestinian conflict in-depth and the peace process; exploration of the U.S. involvement in Iraq and elsewhere in the Middle East.

POL 415 Petroleum and the Persian Gulf

Prerequisites: ENG 100 and ENG 101

This course is an introduction to modern day issues in the Persian Gulf. Among the variety of issues presented and discussed, particular attention will be given to social, intellectual, and political contexts from which these works have originated.

POL 418 Modern Economy & Govt of China

Prerequisites: ENG 100 and ENG 101

A survey of major political and economic events in China. The role of the Chinese Communist Party and the recent ideological shift from Marxism-Leninism towards Nationalism as its core ideology will be examined, as will the continuing domestic and international effects of ongoing Economic Reform and Opening Up policies.

POL 490 Guided Study

(variable units)

Individual study under direction of instructor. Requires prior approval of appropriate academic department.

POL 499 Capstone Seminar in Politics

Prerequisites: ENG 240 and completion of at least 27 units of core courses in the major

The subject of the capstone seminar is to emphasize the study of some aspect of the political science discipline. Students will critically review various concepts, theories, approaches and methodologies and will employ a particular theory and methodology to research and write a substantial research paper involving critical literature review. Grading is H, S, or U only.

POL 539 Dynamics of World Politics

An examination of international relations and politics, the factors underlying international crises from different theoretical perspectives and the future of the global community. Explores the historical and intellectual antecedents of contemporary world events.

POL 540 American Political System

A look into the origins and development of the American political system with special emphasis on aspects of democratic theory and practice, political parties, interest groups, public opinion and political ideology and political economy. Students are encouraged to pursue topics of particular interest.

PSY – Psychology

PSY 100 Introduction to Psychology

A survey of the field of psychology that provides an overview of the scientific principles and theories in psychology. Topics include: biological psychology, abnormal behavior, motivation, emotion, sexuality and gender, and personality theory.

PSY 300 Social Psychology of Sport

Prerequisites: ENG 100, ENG 101 and PSY 100

The relationship between psychology, social relationships, and sport. The concepts of group dynamics, motivation, social support, coaching relationships, and the wider social context's relationship to the in-

dividual and the sport will be explored. The course will utilize both theoretical and research findings to suggest practical applications in sports performance.

PSY 301 Child Development

Prerequisites: ENG 100 and ENG 101

Familiarizes students with the foundational theories of human development, current research directions in developmental psychology, major developmental perspectives and research approaches in developmental psychology and issues surrounding diversity, emphasizing an ecosystemic model of thinking about and understanding children and their development. In addition to the previous topics, the following areas will be discussed: the history of childhood; developmental theories and appropriate practices in education; play as a medium for learning and development; and the field of discipline particularly as it relates to development, behaviors and considering temperament in children.

PSY 302 Foundation of Sport Psychology

Prerequisites: ENG 100, ENG 101 and PSY 100

Introduction and overview of the growing field of Sport Psychology, applying psychological principles to athletic performance. Topics will include theoretical foundations of behavior, psychological interventions for performance enhancement, adherence and maintenance of gains, and the impaired athlete.

PSY 303 Motor Learning

Prerequisites: ENG 100, ENG 101 and PSY 100

Students will learn the major principles underlying the acquisition of motor skill and how control of skilled movements is gained, maintained, and adapted. This course covers the various ways that people learn to move, learn skilled actions, and how the principles of motor performance and learning can be useful in teaching, coaching, and rehabilitation.

PSY 340A Counseling Techniques I

Prerequisites: ENG 100, ENG 101 and PSY 100

An introduction to basic counseling techniques such as nonjudgmental listening, reflection, feedback, goal setting, and basic solution skills. Examines transference, countertransference, and therapist attributes such as empathy, congruence, acceptance, genuineness and respect. The online version has a significant live chat component that requires computer imaging and voice technology. Grading is H, S or U only.

PSY 340B Counseling Techniques II

Prerequisites: PSY 340A

An examination of intermediate counseling techniques, including imagery, role-playing, confrontation, and crisis management. Focus is on application of techniques applied to clinical, non-clinical and culturally diverse populations. Students will gain practical experience through in-class demonstrations and role plays. Grading is S or U only.

PSY 426 History & Philosophy of Psych

Prerequisites: ENG 100, ENG 101 and PSY 100

Explores the intellectual history and contemporary diversity of psychology in dialogue with a cultural understanding about the nature of the person. Topics include: psychology and science, philosophy of mind, functionalism, measurement, applied psychology, gestalt, behaviorism, the unconscious mind, phenomenological and existential psychology, clinical psychology and mental health, and qualitative perspectives.

PSY 427 Biological Psychology

Prerequisites: ENG 100, ENG 101 and PSY 100

A study of the way in which the brain mediates behavior, emotion, and cognition. Topics include sensory systems, neural development, emotion, learning, memory, consciousness, reproduction, and neurological and psychological disorders.

PSY 428 Developmental Psychology

Prerequisites: ENG 100, ENG 101 and PSY 100

A study of the major transitions from fetal development through death in the physical, cognitive, social and emotional domains. The impact of ethnic, gender and cultural factors on development will be examined.

PSY 429 Intro to Personality Theory

Prerequisites: ENG 100, ENG 101 and PSY 100

The study of psychological characteristics of the individual that endure in stable form for substantial periods of time. Examines influential theories of personality and supporting research.

PSY 430 Intro to Psychopathology

Prerequisites: ENG 100, ENG 101 and PSY 100

An overview of sociocultural views and scientific theories of normalcy and deviance. The major psychological, cognitive, and behavioral disorders and their classification are examined.

PSY 431 Psychological Testing

Prerequisites: ENG 100, ENG 101 and PSY 100

An introduction to theories and principles of psychological testing and measurement and to a variety of standardized tests of intelligence, personality, achievement, interest, neuropsychology and other areas. Emphasizes the principles by which tests are constructed and validated. Also examines controversies regarding the valid, appropriate and fair use of psychological tests.

PSY 432 Social Psychology

Prerequisites: ENG 100, ENG 101 and PSY 100

A study of the responsiveness of individuals to various sources and forms of social influence. Major areas of study include persuasion, conformity, obedience, prejudice, attitude formation and change, social behavior, altruism, aggression and the influence of the mass media. Emphasizes social circumstances rather than variations in personal characteristics, as in personality theory.

PSY 433 Cognitive Psychology

Prerequisites: ENG 100, ENG 101 and PSY 100

The study of psychological functioning in the area of mental operations, largely uninfluenced by individual differences in personality or motivation. This encompasses the areas of attention, pattern recognition and other perceptual achievements, memory, problem solving, categorization and concept formation, language acquisition and use, textual interpretation and decision making.

PSY 434 Psychological Research

Prerequisites: PSY 435

A survey of core issues involved in scientific psychological research. Includes the study of the nature of explanation in psychology, the role of theory in research, the connection between research findings and theory, the distinction between experimental and other forms of research, the design of experiments,

threats to the validity of research findings, operationalizing psychological concepts in a manner that yields quantitative data and ethical considerations in terms of confidentiality, informed consent and the possibility of doing harm to subjects.

PSY 435 Analysis of Data in Research

Prerequisites: MTH 210, PSY 100, ENG 100 and ENG 101

A study of how conclusions are made on the basis of submitting research data to statistical tests. The general area is called inferential or inductive statistics. Covers methods for analyzing parametric and non-parametric data, single-group and multiple-group sources of data and data derived from one source of information and multiple sources of information.

PSY 436 Computer Apps in Psychology

Prerequisites: ILR 260 and PSY 435

A survey of the uses of computers in psychology, including the application of computers in psychological research and the analysis of statistical packages for the social sciences. Also considers computer-aided instruction. Lecture and laboratory format.

PSY 437 Theories of Psychotherapy

Prerequisites: ENG 100, ENG 101 and PSY 100

A presentation of clinical theories of treatment that correspond to theories of psychopathology, personality and development already encountered in courses under such titles. Topics include specific treatment approaches, the nature of the therapeutic relationship and how it effects change and therapeutic interventions.

PSY 438 Intro to Group Counseling

Prerequisites: PSY 340A and PSY 340B

A basic examination of the dimensions of group process, dynamics, and practice is the emphasis in this course. Focus is on effective strategies and procedures for facilitating group process practiced by clinicians in the counseling as well as practitioners in human services, criminal justice, behavioral analysis business and education. Opportunities to practice effective strategies with children, adolescents, adults and the elderly will be part of classroom experiences.

PSY 439 Counseling Diverse Populations

Prerequisites: PSY 340A, PSY 340B and PSY 438

An introduction to diversity and multicultural perspectives in psychology, and their impact on counseling practices. Focus will be on dimensions of culture, ethnicity, life style, religion, gender, identity development models and the effects of privilege and oppression on individuals and groups. Basic multicultural counseling competencies will be presented, with opportunities for student self-examination and practice of strategies and techniques.

PSY 440 Sport Psychology for Coaches

Prerequisites: PSY 100 and PSY 302

This course looks at the significant developments in the history of coaching and sport psychology. Contemporary research on successful coaching will be discussed and applied to athletic performance.

PSY 441 Global Psychology

Prerequisites: PSY 100

Covers the history, current status and future direction of cultural psychology theory and practice in the context of globalization. A critique of the Western bias

of the field of psychology and of the effects of its application to non-European originated populations within the United States and around the world.

PSY 442 Sem Applied Sport Psychology

Prerequisites: Satisfactory completion of 9 courses in the major

An advanced course in the application of psychological theories and research to sports and exercise behaviors. The seminar will focus upon skills in assessment, interviewing, case formulation, and interventions with athletes.

PSY 443 Culture and Sport Psychology

Prerequisites: PSY 100 and PSY 302

This course looks at the importance of culture on the development of sports, performance, and sport psychology. Research and case studies will be used to study the importance of integrating a multicultural perspective when working with athletes.

PSY 444 Wellness and Peak Performance

Prerequisites: ENG 100, ENG 101 and PSY 100

This course looks at the role of wellness and peak performance in athletic performance. Topics include fitness, physiology, weight management, stress management, personality, self-esteem, and motivation.

PSY 445 Applied Sport Psychology

Prerequisites: PSY 100 and PSY 302

This course examines the application of psychological theories and research to sports and exercise behaviors. Case studies from a variety of sports will be explored to develop a set of psychological skills that can be applied across sports.

PSY 446 Positive Psychology

Prerequisites: ENG 100, ENG 101 and PSY 100

Historical development of positive psychology and its applications to the practice of wellness, health, and peak performance. Topics include self-esteem, relationship building, happiness, and mindfulness.

PSY 448 History of Sport & Sport Psych

Prerequisites: PSY 100 and PSY 302

This course looks at the interrelated historical development of psychology, applied psychology, and sport psychology. Topics include the role of the scientific method and applied methods in research and practice, the role of culture in sport and sport psychology, the history of sports, and current trends in sport and applied psychology.

PSY 449 Group Dynamics in Sport

Prerequisites: ENG 100, ENG 101 and PSY 100

This course looks at group dynamics in team sports and coaching relationships. Topics include the use of self in groups, leadership styles in the team setting, features of a successful group or team environment, and the role of motivation in team sports.

PSY 454 Psychology of Religion

Prerequisites: PSY 100 and ENG 100

The relationship between psychology, spirituality, and religion. Exploring the nature of religious experience, how religion and spirituality influence social and societal behaviors, and how religion and spirituality affects psychological and physical health will be examined.

PSY 455 Psychology of Bereavement

Prerequisites: ENG 100, ENG 101 and PSY 100

An exploration of the basic psychological concepts associated with death, dying, and bereavement. Course work will include lectures, discussions, exams, research, and experiential exercises.

PSY 457 Forensic Psychology

Prerequisites: ENG 100 and PSY 100

Survey of the application of psychological knowledge or methods to a task faced by the legal system. General areas to be covered include, but are not limited to, eyewitness testimony, trial consultation and syndrome evidence.

PSY 458 Health Psychology

Prerequisites: ENG 100, ENG 101 and PSY 100

An examination of the relationship between behavior, psychological variables, and physical illness and health. A strong emphasis is placed on health psychology theory, research and applications focused on wellness promotion and the prevention and behavioral treatment of illness.

PSY 460 Intro to Addictive Disorders

Prerequisites: ENG 100, ENG 101 and PSY 100

An overview of the nature of addictive disorders, including the various theories regarding etiology, development and psychopathology of such disorders. Also covers the etiology, diagnosis, assessment and treatment of compulsive gambling and nicotine addiction.

PSY 466 Personal Growth & Development

Prerequisites: ENG 100 and ENG 101

Integrates views of human nature and developmental change across the lifespan, including personality theory, therapeutic practice, and mystical traditions. Emphasizes humanistic-transpersonal growth through the integration of emotion with embodied knowledge. Experiential and theoretical focus on feminist, existential, Hindu, Buddhist, and Sufi views of self in relation to cultural norms and ideals.

PSY 467 Multicultural Mental Health

Prerequisites: ENG 100 and ENG 101

Examination of the ways in which culture influences the definition of mental health and abnormal psychological functioning. Exploration of cultural effects on mental health and expressions of mental health problems. Review of different means of classifying mental disorders.

PSY 468 Spirituality and Global Health

Prerequisites: ENG 100 and ENG 101

Exploration of spirituality as a foundation for global well-being. Analysis of the philosophical and experiential dimensions of Buddhism, mystical Christianity, Judaism, Islam, Taoism, Vedic, Yogic, pagan, and indigenous wisdom traditions. Consideration of emerging paradigms supporting psycho-spiritual and pluralistic models for individual and global health.

PSY 469 Human Sexuality

Material related to human sexual thoughts, feeling and behavior will be presented utilizing a balanced bio-psycho-social perspective. Within a scientific framework and the context of human sexual rights and well-being, the course will include an examination of the methodology of sexology, human sexual

anatomy, health and functioning, sexuality through the lifespan, and issues relating to sexual identity.

PSY 470 Qualitative Analysis

Prerequisites: ENG 100 and ENG 101

Examination of qualitative methods appropriate for phenomenological, observational and ethnological content in research. Discussion of philosophical/conceptual issues, connections among theoretical and practical frameworks, research questions, and methods of data collection and analysis. Practice activities involved in the planning and implementation of a research study.

PSY 471 Intimate Relationships

Prerequisites: ENG 100 and ENG 101

Explores intimate relationships from multiple theoretical perspectives. Examines familial relations, romantic relations, and deep friendships. Discusses parallels and differences between queer and heterosexual relationships. Explores benefits and costs of intimate relationships. Discusses power dynamics, intimate violence, and relationship dissolution. Analyzes roles of evolution, gender, and culture, in shaping relationships.

PSY 472 Social Construction

Prerequisites: ENG 100 and ENG 101

Exploration of the way in which knowledge, meaning, and understanding is constructed by groups. Examination of human behavior within groups with an emphasis on the idea that reality is constructed through interaction with other individuals, organizations, the environment, media, and language. Analysis of how social phenomena such as discrimination, implicit attitudes and decision-making are created, institutionalized and enforced by groups of people and become traditions.

PSY 473 Somatic Psychology

Prerequisites: ENG 100 and ENG 101

Study of the relationship between mind and body. Exploration of the history of metaphysical dualism along with contemporary moves to view the mind and body as one with respect to psychological health. Included are Eastern, Western, and feminist perspectives.

PSY 474 Ecopsychology

Prerequisites: ENG 100 and ENG 101

Exploration of the symbiotic relationship between humans and the natural environment. Examination of the synthesis of psychology and ecology. Exploration of historical and sociocultural factors influencing perceptions of the natural world and the health consequences of the objectification of nature.

PSY 475 Psychology of Consciousness

Prerequisites: ENG 100 and ENG 101

Exploration of interdisciplinary theories of consciousness rooted in Eastern and Western philosophy, neuroscience, and quantum theory. Examination of how subjective experiences arise from objective brain processes, the neuroscience and neuropathology of consciousness, altered states of consciousness, mystical experiences and dreams, the effects of drugs and meditation, and the nature of self.

PSY 476 Symbolic Expression

Prerequisites: ENG 100 and ENG 101

Explorations of the origins and development of symbolic expression through the visual and performing

arts and literature. Emphasis on the use of symbols to communicate individual and collective themes about the human experience. Cross-cultural similarities and differences in symbolizing and interpreting the human condition are included.

PSY 477 Play

Examination of the role of play in learning, socialization, and mental health with an emphasis on cross-species comparisons of play. Consideration of cultural influences and the neurobiology of play.

PSY 480 Senior Project

Prerequisites: Completion of all core coursework.

Development of a major cumulative paper integrating what students have learned in the program with an applied area of student interest. Covers empirical or theoretical study of specific topics in psychology with an emphasis on independent and creative activity. Students will be required to submit a portfolio for evaluation at the onset of the course. Students must earn a grade of "C" or better or must repeat the course.

PSY 484 Senior Project

Prerequisites: ENG 100, ENG 101 and Completion of all core courses

Development of a major cumulative project integrating knowledge gained in the program with an applied area of student interest. Covers empirical, theoretical, and/or experiential study of specific topics in integrative psychology with an emphasis on creative activity aimed at fostering a deeper understanding of human experience or promoting social and/or global change.

PSY 485 Sport Psychology Sr. Project

Prerequisites: Satisfactory completion of ALL Major requirements

A two-month course in applied sport and peak performance psychology. An applied exploration of how the mind influences performance in sports, business, health, and wellness. Students will use real-world experiences as a laboratory for understanding, developing, and advancing the principles of applied sport psychology.

PSY 491 Guided Study for Honors Student

(variable units)

Prerequisites: Satisfactory completion of core courses with a GPA of 3.75 or higher

In this capstone course students will design a research project under the direction and supervision of a faculty member. The research project will include data gathering, data analysis and interpretation of data and will be written in APA style and format. Grading is H, S, or U only.

PSY 501A Foundations in Counseling I

A study of the essential principles and theories of psychology. Topics include social, developmental, and cognitive psychology. Grading is S/U only.

PSY 501B Foundations in Counseling II

A study of the essential principles and theories in psychology. Topics include an overview of biological psychology, personality theory, and abnormal psychology. Grading is S/U only.

PSY 602 Sport/Performance Psychology

This course examines the history, purpose, discipline, and basic techniques of sport and performance psychology. Students will examine how foundational principles in psychology were applied to performance and sport settings, and how current practices are shaped by ongoing research, inquiry, and application.

PSY 603 Performance Psy Alt Population

This course is designed to provide a knowledge base for applying principles of performance excellence in performance areas other than traditional athletics. Topics include foundational skills for performance consulting, required domain specific knowledge, understanding the specific performance context, and how these factors impact effective strategies for working within those systems.

PSY 604 Performance Psy Corporate Pops

This course examines how the principles of performance psychology can be applied to corporate settings. Themes include proper employee selection, training and development, guided change, leadership, morale, organizational behavior, and work/family issues.

PSY 605 Lifespan Development

Prerequisites: Bachelor's Degree in Psychology or PSY 501A and PSY 501B

This course examines the theories of development as applied to the clinical assessment, diagnosis, and treatment of children, adolescents, adults, and older adults. Areas considered will include diversity, gender, and multi-cultural issues as well as identifying normative developmental transitions and their differentiation from deviant developmental patterns.

PSY 606 Motor Behavior

This course examines the role of motor and biomechanical factors in performance situations. Course content includes the biomechanics of performance, linear and angular kinetics, the role of torque and force in performance, and the risks associated with biomechanical stress.

PSY 607 Ethics in Performance Psy

This course examines the professional laws and ethics pertaining to the practice of counseling and psychotherapy, with an emphasis on the laws and ethics pertaining to therapy and consulting with individuals and groups in a wide variety of settings. The content of various relevant legal and ethical codes will be reviewed, and the similarities and differences in ethical practice between the contexts of psychotherapy and performance psychology consulting will be explored in depth.

PSY 609 Psychopathology

This course explores relevant theory and research on the etiology and treatment of psychological disorders. Students are encouraged to critically evaluate the role of neurobiology, culture, and social context in the evaluation of mental disorders.

PSY 610 Case Management

Prerequisites: Bachelor's Degree in Psychology or PSY 501A and PSY 501B

This course examines the concepts and principles of case management practice emphasizing strength-based approaches, the bio-psycho-social-spiritual and recov-

ery models. It introduces the role of mental health case management including strengths assessment, development, and delivery of mental health services.

PSY 611A Counseling Paradigms I

Prerequisites: Bachelor's Degree in Psychology or PSY 501A and PSY 501B

This course provides an overview of major current and evolving paradigms of psychotherapy and how they influence counseling theory and practice. Students acquire core skills related to effective therapeutic communication and to the therapist's role in promoting exploration, insight, and behavior change.

PSY 611B Counseling Paradigms II

This course focuses on integrating and applying the full range of theoretical models used in psychotherapy. Students gain practical experience with both process and content issues through in-class role playing and demonstrations and receive both instructor and peer feedback. Grading is H, S or U only.

PSY 612A Clinical Assessment I

This course discusses clinical assessment from the bio-psycho-social-spiritual, resiliency, recovery and medical models. Interviewing skills and the use of assessment instruments are covered. Assessment, diagnosis, and treatment approaches for anxiety disorders and obsessive-compulsive and related disorders.

PSY 612B Clinical Assessment II

Prerequisites: PSY 612A

This course covers the assessment and diagnosis for Anxiety, Psychotic, Personality, Dissociative, and Sexual and Gender Identity Disorders in the DSM and other assessment systems. Students will practice assessment skills and development of treatment plans during the course. Outcomes assessment and case conceptualization processes will be discussed.

PSY 613 Performance Consulting Skills

Prerequisites: PSY 602 and PSY 603

Students will integrate their theoretical approach to consultation, knowledge of intervention strategies, and personal philosophy of performance enhancement in order to design and present appropriate performance psychology programs. Opportunities to develop both individual and group interventions for diverse populations are provided. An emphasis is placed on the students' professional development, experience as consultants, learners, and peer mentors, as well as the necessity of reflective practice. This is a 2-month course.

PSY 614 Counseling in Performance Psy

This course offers an overview of major theoretical counseling orientations and techniques and their application in performance psychology settings. Emphasis is on basic interviewing, assessment, and counseling skills that facilitate the helping process through integration of various theoretical models.

PSY 615 Fieldwork

Prerequisites: Successful completion of all core requirements

The fieldwork experience or internship provides practical application of performance psychology principles in a professional setting. A thesis consisting of the written report of an investigation or of a successful fieldwork project is required. This project must be initiated, executed, and reported by the stu-

dent under the supervision of the faculty. The student must consult the lead faculty prior to beginning the fieldwork experience.

PSY 616 Counseling Theories

Overview of major theories of counseling as they are applied to psychotherapy. Students are expected to acquire and practice knowledge and skills related to development of a good therapeutic relationship and the therapist's role in promoting communication, insight, and behavior change within the therapeutic setting.

PSY 617A Family Systems

Part one of a two-part sequence. A comprehensive examination of the family as a social institution and how it shapes the course of human development. The student is exposed to models and systems of family development, the multifaceted dynamics of intrafamily relationships, and interactions of the family with various elements of the sociocultural environment. Attention is also focused on family interaction patterns, including communication processes, power relationships, open and closed family systems, parent-child relationships, and conflict resolution processes.

PSY 617B Advanced Family Systems

Prerequisites: PSY 617A

Part two of a two-part sequence. Examines the various structures and roles of families, and explores what kinds of support families need to optimize their successful functioning. Students increase efficacy in utilizing genograms as a clinical assessment and intervention tool in helping to strengthen families. Students examine cultural context in which relationship problems are understood and from which solutions emerge. Emphasis will be on creating, selecting, and applying appropriate intervention tools from across the micro-macro spectrum, including those developed in other parts of the world.

PSY 620 Perspectives on Psychology

Prerequisites: Bachelor's Degree in Psychology or PSY 501A and PSY 501B

An examination of professional issues in counseling psychology, including concepts of psychological health and disorder, critical thinking, evidence-based treatment, best practices, systems of care, the role of research and how to access/utilize it, and various models of diagnosis and treatment, including the medical model, recovery model, and the multicultural model. An emphasis is placed on exploring the current status of these issues and how they are impacting the practice of psychotherapy.

PSY 623 Diagnosis and Assessment

Explores the realm of mental illness from the perspectives of etiology, diagnosis, and assessment. Covers relevant contextual issues often considered to be related to etiology and treatment. These include neurobiology, culture, family and development. Also covers post-modern considerations regarding pathology and treatment.

PSY 624 Assess Techniques for MFT

Recommended Preparation: MA Counseling Psychology Student Group

Acquaints students with the various information-gathering techniques used in clinical practice for the purposes of diagnosis and treatment planning. Emphasizes building conceptual and practical bridg-

es between initial presenting symptoms, diagnosis and treatment planning.

PSY 624A Testing and Assessment

Acquaints students with the standard career interest measures used in clinical practice, including the psychometric principles of the measures. Emphasizes integrating conceptual, ethical, and practical information drawn from client background and assessment reports.

PSY 625 Counseling Techniques and Prac

Overview of major theoretical concepts, techniques, and their applications the therapeutic setting. Emphasis is on basic interviewing, assessment, and counseling skills that facilitate the helping process through integration of various theoretical models.

PSY 626 Human Sexuality

Advanced introduction to the interdisciplinary field of human sexuality. Students in this course will engage in the mastery of theoretical and practical knowledge relating to sexual development, identity, relationships, and behavior. Students will develop an awareness of the range of sexuality across cultures and human development, and the application of clinical skills to human sexual behavior.

PSY 627 Legal & Ethical Issues

This course examines the laws and professional codes of ethics pertaining to the practice of counseling and psychotherapy. How legal and ethical issues impact the profession of counseling with an emphasis on current California law is discussed.

PSY 627A Legal and Ethical Issues

Examines the professional laws and ethics pertaining to the practice of counseling and psychotherapy, with an emphasis on the laws and ethics pertaining to the practice of professional counseling, the content of these legal and ethical codes, and the underlying principles involved.

PSY 628 Group Therapy

A comprehensive study of the major approaches, techniques and interventions used in group psychotherapy. Also emphasizes dynamics of group process including the types, stages and formation of groups.

PSY 629 Lifespan Development

An examination of developmental theories from childhood through old age as they relate to the practice of psychotherapy. Areas considered will include diversity, gender, and multi-cultural issues as well as identifying normative developmental transitions and their differentiation from deviant developmental pattern

PSY 629A Adulthood and Aging

An opportunity to examine major topics in adult development and aging as they relate to the practice of psychotherapy. Includes developmental challenges and tasks unique to adult life, theories which assist in understanding the adult experience, issues related to work and career and the impact aging has on individuals and society.

PSY 632A Family Therapy

This course provides a comprehensive review of the theories, strategies, techniques, and critical issues involved in clinical work with families. This course will discuss various treatment approaches including an emphasis on evidence-based, recovery, and resilience-based approaches. Students will have the opportunity to role play family sessions.

PSY 632B Couples Therapy

This course provides a comprehensive look at the theories, techniques, and critical issues involved in treating couples. It will provide a focus on major approaches to the treatment of married and unmarried couples, including resilience and recovery models, as well as a survey of research on marriage and marital therapy. Students will have an opportunity to practice counseling sessions with couples in a role-play format.

PSY 635 Childhood and Adolescence

A seminar focusing on the application of developmental theories and research to the clinical practice of assessment, diagnosis and treatment of children and adolescents. Considers all areas of the developmental process will be considered in addition to issues surrounding diversity, gender and other relevant contexts. Addresses differences between normal developmental transitions, adjustment reactions to life events and/or trauma and deviations in development.

PSY 636 Child and Adolescent Therapy

This course examines assessment techniques, perspectives, and strategies essential to the treatment of children and adolescents. It also includes the therapeutic relationship, assessment and diagnosis, evidence-based treatment, family systems perspective, and legal/ethical concerns related to working with children and adolescents. Public settings and treatment based on cultural awareness as well as the recovery/resiliency model are covered.

PSY 637 Cultural Competencies

Exploration of the role of culture in concepts of mental health practice. Students will examine how their own cultural background frames their understanding of themselves and others. Family heritage, culturally informed assessment and treatment, and the limitations of the dominant Eurocentric psychological world view to diverse populations is explored.

PSY 638 Wellbeing & Wellness

Overviews contemporary concepts and practices related to psychological wellbeing and wellness. Emphases are on examination of, and coping with, stressors that affect psychotherapists as well as integration of wellbeing and wellness models into psychotherapy.

PSY 639 Consulting Practice Dev.

Focuses on the development and production of a completed business plan for the purpose of starting a consulting business practice. Students will examine relevant issues such as vision, mission, marketing, profitability, technology, legal, and operational management. Covers ideas and tangible tools to develop a successful practice in today's business world.

PSY 642 Relational Violence

An examination of child abuse, battering partners and abuse of the elderly as issues rooted in relationships of one form or another. This course covers classical, modern and post-modern identification, assessment and treatment of relational violence as well as preventive intervention. Addresses relevant cultural and gender issues.

PSY 651A Counseling Practicum I

(3 quarter units)

Prerequisites: Regional Lead Faculty Approval

Part one of a four part field practicum in which students work as counselor trainees under the supervision of a licensed therapist. Students also participate in an academic seminar at the University. Students select an approved practicum site and accumulate 100 hours of counseling experience that includes 75 hours of face-to-face work with clients during a three-month period. Regular course work continues during this period. The academic seminar meets one and one half hours per week and runs concurrently with onsite work. Seminar work focuses on professional and training issues, including process issues, case conceptualization, oral, written and videotaped presentations and integration of relevant research. On-site psychotherapy and supervision hours may be used as partial fulfillment of required licensing hours. Grading is Satisfactory or Unsatisfactory only. This three-month seminar may meet in the late afternoon outside of regular class hours. Grading is by S or U only. Course is eligible for an "IP" grade.

PSY 651B Counseling Practicum II

(3 quarter units)

Prerequisites: Regional Lead Faculty Approval

Part two of a four part field practicum in which students work as counselor trainees under the supervision of a licensed therapist. Students also participate in an academic seminar at the University. Students select an approved practicum site and accumulate 100 hours of counseling experience that includes 75 hours of face-to-face work with clients during a three-month period. Regular course work continues during this period. The academic seminar meets one and one half hours per week and runs concurrently with onsite work. Seminar work focuses on professional and training issues, including process issues, case conceptualization, oral, written and videotaped presentations and integration of relevant research. On-site psychotherapy and supervision hours may be used as partial fulfillment of required licensing hours. Grading is Satisfactory or Unsatisfactory only. This three-month seminar may meet in the late afternoon outside of regular class hours. Grading is by S or U only. Course is eligible for an "IP" grade.

PSY 651C Counseling Practicum III

(3 quarter units)

Prerequisites: Regional Lead Faculty Approval

Part three of a four part field practicum in which students work as counselor trainees under the supervision of a licensed therapist. Students also participate in an academic seminar at the University. Students select an approved practicum site and accumulate 100 hours of counseling experience that includes 75 hours of face-to-face work with clients during a three-month period. Regular course work continues during this period. The academic seminar meets one and one half hours per week and runs concurrently with onsite work. Seminar work focuses on professional and training issues, including process issues, case conceptualization, oral, written and videotaped

presentations and integration of relevant research. On-site psychotherapy and supervision hours may be used as partial fulfillment of required licensing hours. Grading is Satisfactory or Unsatisfactory only. This three-month seminar may meet in the late afternoon outside of regular class hours. Grading is by S or U only. Course is eligible for an "IP" grade.

PSY 651D Counseling Practicum IV

(3 quarter units)

Prerequisites: Regional Lead Faculty Approval

Part four of a four part field practicum in which students work as counselor trainees under the supervision of a licensed therapist. Students also participate in an academic seminar at the University. Students select an approved practicum site and accumulate 100 hours of counseling experience that includes 75 hours of face-to-face work with clients during a three-month period. Regular course work continues during this period. The academic seminar meets one and one half hours per week and runs concurrently with onsite work. Seminar work focuses on professional and training issues, including process issues, case conceptualization, oral, written and videotaped presentations and integration of relevant research. On-site psychotherapy and supervision hours may be used as partial fulfillment of required licensing hours. Grading is Satisfactory or Unsatisfactory only. This three-month seminar may meet in the late afternoon outside of regular class hours. Grading is by S or U only. Course is eligible for an "IP" grade.

PSY 653 Research and Evaluation

A comprehensive study of research and evaluation with an emphasis on research methods, the use of research to inform evidence-based practice, and the importance of research in advancing the profession of counseling. Statistical methods used in research, needs assessment, and program evaluation will be examined.

PSY 654 Career & Lifestyle Development

Overview of career and lifespan development theories and skills, including how personal growth and life stages impacts individuals and society. Emphasis is on understanding career and job choices and personal strategies for career decision-making. Students become acquainted with print and electronic resources, counseling techniques, and assessment instruments.

PSY 678 Clinical Biopsychology

This course explores the biological basis of human behavior as it pertains to professional counselors. An emphasis is placed on drugs used in the treatment of psychological disorders. Functional neuroanatomy and experience-dependent brain plasticity are explored.

PSY 679 Psychology of Trauma

This course is an examination of trauma with a focus on the sources of trauma and the distinctions between them. Relational violence is studied as a specific example of trauma. An emphasis is placed on empirically-based assessment and intervention of the different trauma-related disorders. Crisis counseling and multi-disciplinary treatment is also covered.

PSY 680A Counseling Practicum I

Prerequisites: PSY 611B

First of a two-course field practicum where students work as MFT or LPCC trainees. Students participate in an academic seminar for six months at the university. Students must complete a minimum of 125 hours of face-to-face work with clients at a clinical site. This class will meet outside of regular class hours.

PSY 680B Counseling Practicum II

Prerequisites: PSY 680A

Second of a two-course field practicum where students work as practicum trainees. Students participate in a four-month academic seminar at the university. Students must complete the remainder of the state-required practicum experience hours of face-to-face work with clients in a community agency. This course will meet outside of regular class hours.

PSY 690 Guided Study

(variable units)

Individual study under direction of instructor. Requires prior approval of appropriate academic department.

RTT – Radiation Therapy

RTT 200 Introduction to Radiation Ther

Foundations in radiation therapy and the practitioner's role in the health care delivery system. Principles, practices and policies of the educational program, health care organizations, principles of radiation and health safety and professional responsibilities of the radiation therapist.

RTT 201 Introduction to Radiation Ther

(2.25 quarter units)

Foundations in radiation therapy and the practitioner's role in the health care delivery system. Principles, practices and policies of the educational program, health care organizations, principles of radiation and health safety and professional responsibilities of the radiation therapist.

RTT 300 Medical Imaging

Prerequisites: RTT 200, Acceptance into the Radiation Therapy Program or RTT 201

Designed to establish a knowledge base in factors that govern and influence the production and recording of radiographic images for patient simulation, treatment planning and treatment verification in radiation oncology. General radiography, computerized tomography, sonography and nuclear medicine imaging modalities and equipment will be emphasized. An overview of radiation protection will be provided.

RTT 305 Patient Care I

(3 quarter units)

Prerequisites: BIO 201, BIO 202, BIO 203 and RTT 300

Corequisites: RTT 320

Foundation in terminology, concepts and competencies in assessment and evaluation of the patient for service delivery. Examination of the psychological and physical needs and factors affecting treatment outcomes. Routine and emergency care procedures will be discussed.

RTT 306 Patient Care II

Prerequisites: RTT 305

Focuses on assessment, evaluation and treatment plans for treatment related side effects. Issues related to death and dying and practitioner self-care will be discussed. Course also includes an exploration of local, state and national cancer care resources.

RTT 310 Sectional/Topographic Anatomy

Prerequisites: BIO 201 and BIO 202

Identification of anatomical structures on a variety of medical imaging formats. Basic anatomical relationships will be compared and located using topographical and cross-sectional images.

RTT 315 Clinical Concepts I

Prerequisites: RTT 305 and RTT 306

Overview of cancer and the specialty of radiation therapy. The historic and current aspects of cancer treatment along with basic principles and practice of treatment and simulation will be emphasized.

RTT 316 Clinical Concepts II

(2.25 quarter units)

Prerequisites: RTT 315 and RTT 480

Corequisites: RTT 415

Current principle and practice of treatment for cancers of the skin, brain, head and neck, thorax and gastrointestinal tract are emphasized.

RTT 317 Clinical Concepts III

(2.25 quarter units)

Prerequisites: RTT 316

Corequisites: RTT 416

Current principle and practice of treatment for cancers of the genitourinary, lymphoreticular, musculoskeletal, integumentary, hematopoietic, endocrine systems and pediatric cancers are emphasized.

RTT 320 Pro Ethics and Legal Issues

(1.5 quarter units)

Prerequisites: RTT 300

Corequisites: RTT 305

Designed to provide sequential development, application, analysis, integration and evaluation of ethical and legal concepts and theories as they relate to radiation therapy practice.

RTT 410 Clinical Radiation Physics I

Prerequisites: MTH 215, PHS 171 and RTT 300

Focus is on the characteristics and interactions of electromagnetic and particulate radiation. X-ray production, equipment, measurement and quality of radiation produced and radiation safety.

RTT 411 Clinical Radiation Physics II

Prerequisites: RTT 410

A clinical focus of radiation therapy physics that examines factors related to absorbed dose, calculation of dose from all sources of radiation, principles of treatment planning and an overview of advanced technologies.

RTT 455 Medical Dosimetry

Prerequisites: RTT 315, RTT 316, RTT 317, RTT 410 and RTT 411

Content is designed to examine factors that influence and govern clinical planning of patient treatment. This encompasses isodose distributions, influence of beam modification, radiobiologic considerations, do-

symmetric calculations and clinical application of radiation. Electromagnetic and particulate beams as well as advanced and emerging technologies are covered.

RTT 480 Internship I

Prerequisites: RTT 300, RTT 305, RTT 306, RTT 310 and RTT 320

Content is designed to provide sequential development, application, analysis, integration, synthesis and evaluation of concepts and theories in radiation therapy. Objectives and competencies in this course focus on patient-centered care, team work principles, introduction to and safety procedures for treatment and simulation equipment, and lower level treatment procedures. Requires 101 hours/quarter unit and 2 hours of classroom meeting/week.

RTT 481 Internship II

Prerequisites: RTT 480

Continuation of clinical internship practice. This course focuses on specific principles and techniques utilized for assigned cancer treatments. Students will demonstrate clinical competencies in the application of specific radiation therapy techniques. Requires 101 hours/quarter unit and 2 hours of classroom meeting/week.

RTT 482 Internship III

(6 quarter units)

Prerequisites: RTT 481

Continuation of clinical internship practice. This course focuses on advanced principles and techniques utilized for specific cancer treatments. Students will demonstrate competence in the deliver and simulation of specific radiation therapy techniques and medical dosimetry. Requires 101 hours/quarter unit and 2 hours of classroom meeting/week.

RTT 490 Advanced Capstone

Prerequisites: Completion of major requirements.

A capstone course that examines historical and current issues within the profession as a radiologic professional. Preparation for entry into the profession and completion of capstone project will be accomplished. Professional roles, responsibilities and development will be emphasized.

SCD – Social Transformation & Community Development

SCD 600 Global Development

This course explores the synchronic and diachronic context for understanding human social processes in colonialization, globalization, and the current world order. Colonial and postcolonial issues such as inequality, resource competition, ethnic and national conflict, migration, and the transition from traditional subsistence-based communities to market-driven consumerism are illustrated.

SCD 610 Human Environments

Social transformation and community development occurs within an ecological context. Development requires a holistic approach to the community, including natural resources, population dynamics, nutrition, disease, and quality of life. Social influences may include migration, urbanization, and technology. This course explores the relationships among natural environments, adaptive responses, and human societies.

SCD 630 Culture and Change

Methods for assessing cultural competency and comparing their own cultural values with those of various national and ethnic groups. Simulations will be used to illustrate the influence of stakeholder values in community development projects. Discussions focus on appropriateness and compatibility of outside development models and approaches to traditional communities.

SCD 680 Planning and Evaluation

Methods and processes for planning and managing development projects are discussed. Students develop a project plan, including effective use of resources, staff, schedules, development goals. Relationships with funding sources and strategies for creating self-sufficiency in the community are analyzed. Students apply models and processes for evaluating social transformation and community development.

SCD 690 Strategies for Consulting

Focus on perspectives and skills for advising and providing assistance. Models for change consulting, including appropriate ways to provide assistance in change and development initiatives. Simulations of community development situations are used to analyze change and development issues and problems. Needs assessment, resistance to change, conflict, and effective communication.

SCD 699 Integrative Seminar

Prerequisites: Completion of 2 SCD courses

Content of previous courses integrated into a seminar format in order to promote dialogue and critical analysis of community issues. Appropriate topics and issues related to social transformation and community development analyzed. Students discuss how they will apply knowledge and skills learned in the program in their future professional experiences. Students will create dialogue, identify and frame complex issues and apply critical thinking to examples. Grading is H, S, or U only.

SCI – Natural Sciences

SCI 300 Geography

Examination of relationships between geographical features of the earth and human societies. Includes the study of map construction, mapping tools, geographical data, and the influence of geomorphological features on the development and spatial distribution of political systems, languages, and religions.

SCI 303 GIS: Geographic Info Systems

Interdisciplinary features in Geographic Information Systems. Aspects include geography, cartography, and computer science for scientific, business, and environmental applications. This will include teaching the student how to input spatial data into the computer, organize the data and perform basic spatial operations.

SCI 400 History of Science

Prerequisites: One 4.5 quarter unit science course from the natural sciences.

A study of the history of science throughout all human cultures. Emphasizes the mutual interaction between science and society, especially in modern times.

SCI 490 Guided Study

(variable units)

Individual study under direction of instructor. Requires prior approval of appropriate academic department.

SCM – Supply Chain Management

SCM 610 Supply Chain Collaboration

Prerequisites: MGT 608

Supply Chain Collaboration focuses on aligning business processes and goals between firms within the supply chain toward improving the performance of all members. This course presents the eight managerial processes at the strategic and operational levels, first within the firm and then between firms. Successful Supply Chain Collaboration requires cross-functional integration, right-sizing of partnerships and correct adoption of performance measures, which will be studied in depth with attention to practical applications and deployment techniques.

SCM 620 Strategic Supply Management

Prerequisites: SCM 610 and MGT 608

Strategic Supply Management focuses on the fundamental principles, processes and strategies that are currently used by successful companies to manage their supply networks and significantly improve their bottom lines. This course provides strategic and comprehensive insights into the field of supply management by analyzing markets, suppliers and business needs. Concepts also include developing and implementing effective supply management strategies that balance quality, technology and delivery to achieve the lowest Total Cost of Ownership. The course puts a strategic focus on sourcing, price management and supplier relationship management with emphasis on risk management, by covering key knowledge and skills that are in demand today.

SCM 630 Supply Chain Planning

Prerequisites: SCM 610 and MGT 608

This course focuses on the fundamentals of planning as a primary input into the conception and execution of a robust supply chain architecture. Core facets of planning such as Resource capacity maximization, Supply and demand balancing, Forecast development, Service requirements, Internal and external plan collaboration, and Inventory optimization are discussed in detail. Using simulation and mathematical models as a basis, coupled with practical real life scenarios, this course connects the individual components of the production and inventory planning functions into an integrated supply chain strategy.

SCM 640 Distribution Management

Prerequisites: SCM 610 and MGT 608

The ability to deliver the right products to the right customer at the right cost, the right time and the right quantity is mission-critical to any business' success. Successful companies have turned this competency into a key competitive advantage. With most supply chains now spanning the globe several times over, a multitude of service providers, IT systems and distribution systems must all work in concert to deliver excellence. This course will provide the student with an in-depth understanding of the building blocks of transportation modes, warehousing techniques and the strategies companies employ to achieve a competitive advantage in the marketplace.

SCM 695C Supply Chain Risk Capstone

Prerequisites: SCM 610, SCM 620, SCM 630, SCM 640 and MGT 608

Supply chains are becoming more complex with increasing globalization while simultaneously becoming more fragile with leaner inventory buffers. This increases the risk of disruptions exponentially as additional suppliers and logistics providers are added, with potentially devastating financial impacts. However, simply applying cost management strategies are no longer comprehensive enough. This course will present traditional risk management techniques and alternatives including the new application of resilience to the business world. Throughout the course an interactive, competitive simulation will test individual knowledge and leadership skills that encompass MBA disciplines with emphasis on managing supply chain operations in a turbulent, global marketplace.

SCR – Screenwriting

SCR 650 Script Reading and Coverage

This seminar focuses on screenplay analysis as an essential tool of the film and television industry. The core components of screenplays are explored including the three act structure, characterization, dialog, tone, theme and voice. Students learn to write “coverage” including synopses and producer-appropriate commentary.

SCR 665 Introduction to TV Writing

This one-month seminar focuses on making students conversant in elements of series idea creation as well as offering a general overview of the history of television, how the TV business works and the differences between one-hour drama and sit-com writing.

SCR 667 Marketing for Film & TV

Overview of marketing in the entertainment industry, including analysis of studio blockbusters, independent films, network and syndicated Television, Internet, Transmedia and documentaries.

SCR 668 Introduction To Transmedia

This one-month seminar focuses on the current state of transmedia, its history, IP creation and pitching as well as exploring the components of transmedia-friendly properties.

SCR 670 Dev-Prod Writing

Prerequisites: SCR 681 and SCR 681P

Covers the rewrite and notes stage of script development including receiving and interpreting notes, how creative executives and producers work with writers, and what happens once a project is “greenlit” and enters the production writing phase.

SCR 670P Development/Production Practic

(2.25 quarter units)

Prerequisites: SCR 681, SCR 670 and SCR 681P

Corequisites: SCR 675

This onsite “studio practicum” taken concurrently with SCR 675 covers the various stages of project development including pitching projects, how creative executives work with writers, and what happens once a project is “greenlit” and enters the production/writing phase. Students learn firsthand from professionals in the film, television and/or transmedia business.

SCR 671 Character and Dialog

This seminar focuses on developing realistic characters and writing credible dialog for entertainment projects such as movies, TV series or any filmed media in which fictional characters exist.

SCR 675 The Business of Screenwriting

Prerequisites: SCR 681, SCR 681P and SCR 670

Corequisites: SCR 670P

This seminar explores the business side of film, TV and/or Transmedia writing and provides an in-person experience. Professionals from the entertainment business such as screen and television writers, IP developers, development executives, producers, marketing strategists, agents and managers, studios, guilds and other entities integral to the entertainment industry deconstruct how they choose projects and engage in the business of Hollywood.

SCR 679 Cinematic Writing

Analysis and structural breakdown of classic and current screenplays and introduction to the “cinematic idea.” Students will learn how screenwriters from the past and present achieved cinematic storytelling in a written work designed to be part of a larger collaborative medium. This course does not require students to write screenplays. Assignments include structural breakdowns of films, course participation and discussion.

SCR 680 Screenwriting I

Prerequisites: SCR 679

An introductory screenwriting workshop that provides a foundational study of the theory and practice of writing for feature film. The course is designed to enable students to complete an outline for a full-length feature screenplay and a first draft of a feature script based on their own original ideas. Through this course, students will sharpen critical and analytical skills, develop a critical vocabulary to talk and write perceptively, articulately, and precisely about professional and student-generated screenplays, and to articulate their own aesthetic tastes and artistic goals. As a result of taking this course, students should understand the need to take risks in order to explore and develop one’s creative potential to discover and develop original work from one’s personal vision.

SCR 680P Screenwriting I Practicum

(2.25 quarter units)

Prerequisites: SCR 680

In this independent “studio practicum” taken after SCR 680 Screenwriting I, students develop a “first draft” of an original screenplay guided by practical assignments developed by the instructor. The original draft screenplay will receive a minimum of two individual critical reviews. Grading is H, S, or U only.

SCR 681 Screenwriting II

Prerequisites: SCR 680

Corequisites: SCR 681P

In this workshop, students complete a second draft revision and “final polish” of an original screenplay. The course is designed to enable students to advance their analytical skill and apply them to professional and student-generated screenplays. Taken concurrently with SCR 681P “studio practicum.”

SCR 681P Screenwriting II Practicum

(2.25 quarter units)

Prerequisites: SCR 680P

Corequisites: SCR 681

In this independent “studio practicum”, taken concurrently with SCR 681, students develop a second “polished draft” of an original screenplay guided by critical feedback provided by the instructor. The original screenplay will receive a minimum of two individual critical reviews. Grading is H, S, or U only.

SCR 682 Adv Screenwriting Workshop

Prerequisites: SCR 681 and SCR 681P

Building on core screenwriting courses, this advanced workshop focuses on creating an outline that employs more sophisticated structural and character elements. Students receive critical review of their outline and in a consultation with the instructor will create an action plan for writing the screenplay.

SCR 682P Adv Screenwriting Practicum

(2.25 quarter units)

Prerequisites: SCR 682

Building on SCR 682 Screenwriting workshop, this advanced studio practicum focuses on writing a feature length screenplay and, in consultation with the instructor, creating an action plan for future revision.

SCR 683 Adaptation Workshop

Prerequisites: SCR 681 and SCR 681P

Building on core screenwriting courses, this advanced workshop focuses on creating an outline for a feature-length screenplay based upon source material from another medium such as short stories, news articles and other sources. Students receive critical review of their outline and in a consultation with the instructor will create an action plan for writing the screenplay.

SCR 683P Adaptation Practicum

(2.25 quarter units)

Prerequisites: SCR 681, SCR 681P and SCR 683

Building on core screenwriting courses, this advanced studio practicum focuses on writing a feature length screenplay based upon an adaptation and the outline created in SCR 683.

SCR 684 TV Pilot/Series Writing Worksh

Prerequisites: SCR 665

This advanced workshop focuses on creating an outline for a television pilot and series based upon source material from another medium or an original idea. Students receive critical review of their outline and in a consultation with the instructor will create an action plan for writing the TV pilot/series.

SCR 684P TV Writing Practicum

(2.25 quarter units)

Prerequisites: SCR 665 and SCR 684

This advanced studio practicum focuses on writing a teleplay for a series pilot based upon the outline created in SCR684 and, in consultation with the instructor, planning for future revision and series bible. This course is graded S, U, or H.

SCR 685 Transmedia Writing Workshop

Prerequisites: SCR 668

This advanced workshop focuses on creating a transmedia project based upon source material from another medium or an original idea (IP). Students receive critical review of their outline and in a con-

sultation with the instructor will create an action plan for the transmedia project.

SCR 685P Transmedia Writing Practicum

(2.25 quarter units)

Prerequisites: SCR 685 and SCR 668

This advanced studio practicum focuses on writing a transmedia project based upon the outline/prospectus created in SCR 684 and, in consultation with the instructor, create an action plan for future revision. This course is graded S, U, or H.

SCR 689 Advanced Rewriting

Prerequisites: SCR 675

This seminar enables students to revise creative work prior to choosing projects for thesis. Course is customized for film, TV and Transmedia projects based upon student area of focus.

SCR 690 Screenwriting Thesis

Prerequisites: All other program courses with potential exception of one elective and/or the onsite residency (by lead faculty approval only)

MFA candidates work independently with a thesis advisor and/or committee to develop the required components for Thesis. Thesis candidates have up to one year to develop a thesis portfolio that includes two full-length, polished original or adapted screenplays, an aesthetic statement discussing his/her evolution as an artist and a marketing plan for introducing their work to the entertainment industry. Grading is S, U only. Course is eligible for an "In Progress" (IP) grade after two months. Course may be repeated once.

SCR 690A Advanced Rewriting

Prerequisites: SCR 690

Students will revise ONE screenplay previously written in the program. The focus of this course is economical screenwriting and thinking cinematically. Advanced rewriting techniques will be used to hone the "words on the page." Grading is S, U only.

SCR 691 Thesis Qualification & Review

Prerequisites: SCR 690

Candidate submits a thesis portfolio consisting of two polished, industry-ready original or adapted screenplays, an aesthetic statement discussing his/her evolution as an artist and a marketing plan and pitch. Course is eligible for an "In Progress" (IP) grade after two months. Course may be repeated once. The thesis review committee determines if the thesis meets the qualifications for the Master of Fine Arts. Grading is H, S, or U only. Thesis Qualification Review is the last phase of the thesis sequence completed in SCR690. The minimum requirements for Qualification Review are two professional level screenplays that tell complete, well-paced and structured story with complex and compelling characterizations.

SCR 692 Graduate Internship

Prerequisites: SCR 675 and SCR 670P; For MFA in Professional Screenwriting students, an internship can only be taken after onsite residency is completed. *Recommended Preparation:* MFA Students from other disciplines may be required to fulfill specific prerequisites prior to taking an internship. TBD by lead faculty for program.

Combines work experience with college instruction. Educators and employers in the film, TV and transmedia industries cooperate to give students practical

experience in the entertainment industry and to make vital contacts that may help with employment opportunities in the future.

SCR 693 Guided Study

Recommended Preparation: Students must demonstrate advanced skills and talent in order to be considered for participation.

Guided study is typically (although not exclusively) an extra-curricular course that deals with material not required in the MFA in Professional Screenwriting Program. Such courses may include (but not be limited to) Advanced Screenwriting Workshops by invitation only held in conjunction with film festivals and/or screenwriting conferences.

SCR 693P Guided Study Practicum

(2.25 quarter units)

Prerequisites: SCR 670P and SCR 675

Guided study is typically (although not exclusively) an extra-curricular course that deals with material not required in the MFA in Professional Screenwriting Program. Such courses may include (but not be limited to) Advanced Screenwriting Workshops by invitation only held in conjunction with film festivals and/or screenwriting conferences.

SEM – Sustainability Management

SEM 604 Life Cycle and Risk Assessment

Hands-on experience on how to conduct life cycle and risk assessments. Practical application of these methodologies into products and processes. Environmental management systems such as ISO 9000 / 14001 will be discussed.

SEM 605 Energy Management

Overview of sustainable energy management practices in order to increase energy efficiency, and decrease the release of energy-related pollutants into the environment. Coverage materials related to not only energy from conventional sources but also renewable. Special focus on energy conservation will be discussed. Various techniques to lower energy use will be discussed.

SEM 606 Environmental Management

Comprehensive overview of applicable air pollution, water pollution, drinking water and toxics environmental laws and regulations in the U.S. In addition, various pollution sources, and their impact are presented. Specific strategies to develop and implement environmental management practices are presented.

SEM 607 Watershed Management

Overview of the watershed management and planning process. Relate interdisciplinary topics such as the use of public policies, regulations, and management tools to effectively manage water resources for a sustainable future. Specific case study examples will be used to illustrate the concepts.

SEM 608 Sustainable Buildings

Examination of environmental, economic and social benefits of green building. Specifically addresses the various methodologies that can be integrated into the built environment for energy savings while maintaining the highest indoor environmental quality. Specific strategies to secure LEED certification will be presented.

SEM 610A Project I

Prerequisites: SUS 601, SUS 602, SUS 603, SEM 604, SUS 604, SEM 605, SEM 606, SEM 607 and SEM 608

Focus on the application of sustainability methods learned through this program. The student teams select research topics and write a detailed project proposal. The student teams define the research problem and gather data from literature searches and/or the client organization, if applicable. Grading is by H, S, or U only; course is not eligible for an "IP" grade. SEM 610A is a one month course taken immediately before SEM 610B.

SEM 610B Project II

Prerequisites: SEM 610A

This continuation course focuses on methodology, data analysis, results, modeling/simulation, conclusions and recommendations related to the project selected. Student teams are required to present their research in both written and oral form to students and faculty and if applicable to client organization. Grading is by H, S, or U only; course is not eligible for an "IP" grade. SEM 610B is a two month course taken immediately after SEM 610A.

SEM – Sustainability Management (Extended Education)

SEM 6005X Energy Management

Prerequisites: 1. Maintain an overall B average in UCSD Extension's sustainability certificate. 2. A bachelor's degree from an accredited university. 3. Successfully completed a college-level statistics class. 4. Complete and submit a copy of official certificate and transcript to National University.

This proficiency exam is specifically for UCSD Extension students who have completed their Sustainability Business Practices certification with an overall grade of B or higher. If successfully completed, this exam will serve as a course substitution for SEM 605, Energy Management, in the Master of Science Sustainability Management program at National University.

SEN – Software Engineering

SEN 601 Software Eng Fundamentals

A survey of principles of modern software engineering; requirements analysis, development and maintenance of a software product and its supporting documents, software lifecycle and various models of development. Course also introduces students to tools and processes needed to develop a software product, system or application, in a systematic manner.

SEN 602 Software Architecture Principle

Prerequisites: SEN 601 or approval of lead faculty. Software architecture and its components and relationships, functionality, specifications, properties, interfaces, and data models are examined during this course. Topics discussed include net-centric computing, cloud computing, distributed processes, open source programs and service-oriented architecture.

SEN 632 Software Architecture Appl.

An in-depth study of software architecture. Defines and discusses object-oriented design, modeling and

programming at an advanced level using UML. An advanced study of a standard implementation of a distributed, object-oriented middleware technology (e.g., J2EE, Microsoft.NET, etc.). Students design and implement an architecture using modern technologies such as J2EE, .NET.

SEN 635 Software Testing

An overview of software testing strategies and software metrics. Develops topics on structured walk-through, unit, white and black box, integration, system, acceptance and regression testing. Formalizes process for requirements verification and software functional verification and validation. Introduces, examines and surveys advanced concepts of software engineering metrics and models from an application perspective.

SEN 662 Engineering Software Quality

Emphasizes quality engineering approaches for software project management, planning, estimating, design, development and distribution. Analysis of Capability Maturity Models, ISO 9001 and IEEE 12207 Standards are also emphasized. Based on their operational concepts document, students develop a well-defined Software Quality Assurance plan.

SOC – Sociology

SOC 100 Principles of Sociology

Prerequisites: ENG 100 and ENG 101

Critical introduction to basic sociology concepts. Examination of major theoretical perspectives and research methods. Topics include: economic stratification, race, gender, family, deviance, complex organizations.

SOC 260 Cultural Anthropology

Prerequisites: ENG 100 and ENG 101

An introduction to the principles and processes of anthropology and culture. This course offers a mix of theoretical approaches that include evolutionism, historical particularism, diffusionism, functionalism and French structuralism, as well as methods of fieldwork and ethnography. Students explore the impact of culture on human behavior, the interrelationships among different parts of a culture and the adaptive quality of cultural systems.

SOC 310 Cultural Workplace Dynamics

Prerequisites: ENG 100 and ENG 101

This course defines the relationship of the workplace to the community and examines the historical development and relevance of social and economic matters crucial to a healthy perspective for employers and employees.

SOC 325 Popular Culture

Prerequisites: ENG 100 and ENG 101

Introduces students to the concept and origins of popular culture and to social theories used by academics to analyze its impact on self and culture in modern consumer societies. Topics include mass media, TV, the internet, video games, sports, leisure, fashion, celebrity, shopping, advertising, and youth culture.

SOC 327 Arab Culture

Prerequisites: ENG 100 and ENG 101

This course will introduce the students to the major aspects of Arab culture, civilization, and history from pre-Islamic times to the present. Social composition of the Arab world and the issue of national identity will be stressed. The transformation of Arabic society will be considered in this course.

SOC 328 Intercultural Thinking

Prerequisites: ENG 100 and ENG 101

An expansive overview of world consciousness, drawing upon the significant, creative contributions of men and women from varied cultures and different fields of learning. Emphasizes the approach of comparative synthesis. Studies the world's outstanding creative thinkers and the interconnectedness of their works.

SOC 331 Sociology of Health & Illness

Prerequisites: ENG 100, ENG 101 and SOC 100

Employs "the sociological imagination" to explore issues of health, illness and medical practice. It examines the social contexts of physical and mental health, illness and medical care and gives prominence to the debates and contrasting perspectives which characterize the field of medical sociology. Exploring the social, environmental, and occupational factors in health and disease, the development of health professions and the health care workforce, doctor patient relationships, the structure and processes of health care organizations, health care and social change, it is designed for students interested in the organization and analysis of health care in the U.S.

SOC 336 American Film and Society

Prerequisites: ENG 100 and ENG 101

A critical examination of the complex relationship between film and society and the processes by which film both influences and is influenced by society. Emphasizes the importance of locating the meaning of film texts within social and historical perspective and identifies how the film industry influences the presentation of different groups of people and issues in society. Explores the interrelationship between film and technology, the impact of narrative and the institution of Hollywood on the sociological imagination and the nature of representation, particularly as it applies to race, class and gender.

SOC 338 Chinese Film and Television

Prerequisites: ENG 100 and ENG 101

This course will briefly introduce students to the history of film in China prior to 1949, with a focus on the Shanghai scene, while the bulk of the course will concentrate on the development of film in the People's Republic of China since that time. Attention also will be given to influences of pre-1949 film and Hong Kong and Taiwan film and TV on the development of post-1976 cinematography and television in China, detailing the move away from political propaganda-based film and TV and the increasing importance of market-driven (both domestic and international) entertainment values.

SOC 344 Marriage, Sex and the Family

Prerequisites: ENG 100 and ENG 101

Examines the institutions of marriage and family structures and their historical development. Topics include kinship, changing gender roles, changing family forms, divorce, domestic violence, economic structure.

SOC 350 Cultural Diversity

Prerequisites: ENG 100 and ENG 101

Examines race, gender, ethnicity and class in 20th century American society. Introduces students to methods for studying the changing nature of our society and explores ways in which our increasingly urbanized and technological culture affects all aspects of professional and unskilled work. May involve work in oral history.

SOC 352 Modern Chinese Culture

Prerequisites: ENG 100 and ENG 101

This course will introduce the students to the major aspects of modern Chinese culture since 1949. The changing social composition and the development of a modern popular culture since 1976 will be closely examined, as will the transformation of Chinese society from Maoist conformity to the cultural pluralism of today, as well as the new social problems these changes have brought.

SOC 365 Classical Social Theory

Prerequisites: SOC 100 and ILR 260

This course examines the foundational theories that have engaged major social theorists. It analyzes the cultural, social, economic, political, intellectual, and biographical contexts within which they developed; and it appraises the extent to which they continue to inform sociological research and thinking.

SOC 375 Contemporary Social Theory

Prerequisites: ENG 100, ENG 101 and SOC 100

Examines the major social theories that have engaged social theorists from the mid-twentieth century onward. The course also investigates the historical, sociological, intellectual, and biographical contexts within which contemporary social theories have developed and the extent to which they inform current sociological research and thinking.

SOC 385 Methods of Social Inquiry

Prerequisites: ENG 100, ENG 101 and SOC 100

Research design and methods including survey, network, experiment, qualitative, quantitative, and collection, organization and interpretation of research data.

SOC 430 Culture, Technology & Society

Prerequisites: ENG 100 and ENG 101

Examines the social, cultural and historical development of technology from the Industrial Revolution to today, and its consequences.

SOC 443 Sociology of Deviance

Prerequisites: ENG 100, ENG 101 and SOC 100

Employs a critical sociological approach to deviance and social control in contemporary society. The topics to be considered include: the origins and functions of deviance in society; the institutional production and categorization of deviance; the impact of deviance on personal and social identity; deviant careers; and deviance and social change. We will consider several major theoretical perspectives on deviance within sociology, we will make use of current data on crime and current research in sociological and criminological journals and web sites, and we will examine portrayals of deviance and social control in literature, film and popular culture.

SOC 445 Contemporary Social Problems

Prerequisites: ENG 100 and ENG 101

Uses the functionalist, conflict and interactionist perspectives, this course explains how human conditions come to be perceived as social problems, and how to evaluate their proposed solutions.

SOC 449 Sociology of Law

Prerequisites: ENG 100, ENG 101 and SOC 100

Explores the social, political, and economic foundations of law, the study of punishment and criminality, formal systems of social control and their legitimacy in law, and the relationship of political agendas to victimization, human rights, and legalized oppression. Emphasis will be on explanations of social order, legal definitions of appropriate and inappropriate behaviors, the history of law, the political uses and structure of the law, criminal justice system components, and critical sociopolitical analyses of law. The impact of the legal system on society and the individual will also be explored. Assignments and readings are designed to connect historical understandings with present day knowledge about law.

SOC 455 Organizational Sociology

Prerequisites: ENG 100, ENG 101 and SOC 100

A course about organizations and their behavior. The study of social structure is central to sociology and the study of formal organizations is fundamental to the study of contemporary society. Much of our educational and working lives are spent within and passing between organizations. This course foregrounds the key issues in the sociology of organizations. The focus of the course is the major theoretical approaches and debates in organizational theory, an interdisciplinary field that is primarily grounded in sociology but that also has roots and practitioners in economics, political science, and management studies

SOC 460 The Individual and Society

Prerequisites: ENG 100, ENG 101 and SOC 100

About social interaction: the behavior and cognitive processes that occur in groups. Students consider the individual as social actor and the development of self-image or identity and the socialization process. Students analyze group interactions including conformity, productivity, and leadership. The course examines links between the individual and society.

SOC 490 Guided Study

(variable units)

Individual study under direction of instructor. Requires prior approval of appropriate academic department.

SOC 499 Sociology Senior Project

Prerequisites: SOC 100 and ENG 240 or equivalent

Must be taken at the end of the program after completion of all requirements for the major and completion of six or more electives. Students produce an original sociological paper or project exemplified by extensive research, critical thought and intellectual engagement. Grading is H, S, or U only.

SOC 500 Cultural Pluralism in the USA

Prerequisites: ENG 100 and ENG 101

Examines the origins of cultural pluralism in the USA and the valuing of diversity as a socio-cultural imperative. Explores voluntary and involuntary immigration, internal colonization, the implications of demographics, and the history of discrimination in the USA, based on race, ethnicity, religion, and gender.

SOC 540 Power and Social Change

Prerequisites: ENG 100 and ENG 101

A critical examination of theories of power, including the relationship of power to culture, social class, the economic order, government, ideology, poverty, race, sex and other topics. Studies community, national and international power structures and institutional leaderships.

SOC 604 Culture and Socialization

An in-depth examination of the concepts of culture and socialization, this course analyzes the socialization process as the key means through which culture is reproduced. Through a critical engagement with competing theories of socialization, students undertake advanced research projects, oral presentations and written assignments. Lecture and discussion topics include issues of ethnic identity and cultural diversity, socio-economic, gender and racial stratification, media representations, dress, language and religion and schooling and the reproduction of inequality. Issues are explored from a cross-cultural perspective.

SPD – Special Education

SPD 404 Psychological Foundations

Prerequisites: TED 320 and Completion of General Education Requirements Section of the program.

An examination of the learning processes in educational settings addressing human motivation; development of children and youth in affective, cognitive, social, and personal domains; individual differences; and implications of theory and research for teaching and learning. (NV TL: BI, II)

SPD 408 Introduction to Special Ed

Prerequisites: TED 320 and Completion of General Education Requirements Section of the program.

A survey course of history and definitions of special education and characteristics of student with various mild/moderate disabilities. Examines cultural and linguistic factors and policies of inclusion. (NV TL: B I, III)

SPD 414 Classroom & Behavior Mgt

Prerequisites: TED 320 and Completion of General Education Requirements Section of the program.

This course examines the principles of classroom management and student assessment. Best practices for classroom management, positive behavior support and the use of informal and formal assessments to plan for instruction are explored. (NV TL: B VII)

SPD 416 Collab, Law, & Transitions

Prerequisites: TED 320 and Completion of General Education Requirements Section of the program.

This course provides an overview of the professional, legal, and ethical practices for educators with an emphasis on law. Collaborative practices with peers, other service providers, community members and family members are examined. Partnerships and planning for transition to the next learning environment are explored. (NV TL: B VII, IX)

SPD 422 Assessment of Diverse Learners

Prerequisites: TED 320 and Completion of General Education Requirements Section of the program.

This course examines the use of formal and diagnostic assessments to determine strengths and weaknesses

of students. Tests commonly used with students with Mild/moderate disabilities are administered and interpreted. Candidates will learn about selection, administration, and analysis of assessment instruments and to use the data to write a formal report, an IEP with goals and objectives, and to help prepare lesson plans. (NV TL: B V)

SPD 428 Reading and Language Arts M/M

Prerequisites: TED 320 and Completion of General Education Requirements Section of the program.

The course provides research-based instruction to teach reading/language arts to students with disabilities. Candidates demonstrate their ability to deliver a program of systematic instruction in reading, writing, listening, and speaking aligned to the adopted curriculum. They administer a variety of reading/writing assessments to diagnose students' reading/language arts abilities. (NV TL: B, VIII, X)

SPD 430 Preparing Teachers to Use Tech

Prerequisites: TED 320 and Completion of General Education Requirements Section of the program.

This introductory course is designed to provide candidates the skills needed to integrate technology in teaching and learning as required in the INTASC Standards including assessment, monitoring of student progress, evaluation of media and technology and plan instruction to meet the needs of diverse learners, colleagues and families. (NV TL: B VII, X)

SPD 432 Instructional Strategies

Prerequisites: TED 320 and Completion of General Education Requirements Section of the program.

This course provides candidates with knowledge in identifying students with mild/moderate disabilities and their needs for service delivery, placement, IEP development and instruction. Positive behavior support, learning strategies, study skills, instructional and behavioral support partnerships with parents and establishing positive environments are also covered. (NV TL: B IV, VIII, X)

SPD 436 Math/Writing for M/M

Prerequisites: TED 320 and Completion of General Education Requirements Section of the program.

This course provides an overview of the educational demands experienced by K-12 students with M/M disabilities in all settings. This course focuses on planning for instruction in two areas: written expression and mathematics. The course emphasizes learning strategies, study skills, and core vocabulary development as they relate to the IEP and accessing the general education curriculum. (NV TL: B VIII, X)

SPD 438 Differentiation of Instruction

Prerequisites: TED 320 and Completion of General Education Requirements Section of the program.

An in-depth look at students with mild to moderate disabilities served both in and out of the general education classroom with an emphasis on differentiating instruction for successful learning. (NV TL: B I, II)

SPD 481A Student Teaching

Corequisites: SPD 487

Six weeks or 30 days of full-day supervised teaching with Mild/Moderate special education students. Candidates are supervised by a teacher with a clear special education credential and by a certified University Supervisor. The course is graded satisfactory (S) or unsatisfactory (U).

SPD 481B Student Teaching

Prerequisites: SPD 481A and SPD 487

Six weeks or 30 days of full-day supervised teaching with Mild/Moderate special education students. Candidates are supervised by a teacher with a clear special education credential and by a certified University Supervisor. The course is graded satisfactory (S) or unsatisfactory (U).

SPD 487 Student Teaching Seminar

(2.25 quarter units)

Corequisites: SPD 481A

The Professional Portfolio is developed, completed and approved by the instructor in order to successfully pass this course. The course is graded satisfactory (S) or unsatisfactory (U) only. Eligible for In Progress (IP) grading.

SPD 604 Psychological Fdns of Educ.

An examination of learning processes in educational settings will address human motivation; development of children and youth in the affective, cognitive, social, and personal domains; individual differences; and implications of theory and research for teaching and learning.

SPD 608 Exceptionalities

An examination of four major types of learners: students with disabilities, English learners, students with gifts and talents, and students at risk. Explores how these groups of learners can best be served in general education using effective instructional strategies, including accommodations, modifications, and differentiated instruction.

SPD 614 Classroom and Behavior Mgmt

This course is designed to assist candidates in developing a practical working knowledge of the basic principles of classroom and behavior management. Candidates will examine the impact of classroom rules, consequences, procedures, physical layout, instructional pacing, diversity, and other topics. Candidates will analyze antecedents to behavior, remediation strategies for misbehavior, and promotion of positive behavior. Best practices for classroom management and positive behavior support will be reviewed.

SPD 616 Law, Collaboration & Transition

A comprehensive overview of the professional, legal, and ethical practices for educators. The focus is on special education law and issues, but also incorporates legal issues related to education in general. The candidate will also examine collaborative practices with all practitioners including community members and family members.

SPD 618 Law, Transition, & Collab

This course offers a heightened awareness of working with other professionals and parents of special needs students. It is designed to insure that each candidate will recognize his/her role in the understanding and practice of the professional, legal, and ethical practices for instructing students with disabilities.

SPD 622 Assessment

Prerequisites: Candidates must complete 8 core courses prior to taking this course.

This course emphasizes the use of formal and diagnostic assessments to determine strengths and weaknesses of students. Tests commonly used for children and youth with a variety of suspected disabilities are

administered and interpreted. Candidates will learn about the selection, administration, and analysis of assessment instruments and to use the data to write a formal report, an IEP with goals and objectives, and to help prepare lesson plans. This is a two month on-site course, which cannot be taken concurrently with any other course.

SPD 624 Transition/Community Resources

An overview of transition across all age groups and disability categories. Includes dealing with families, involving students, developing transition curriculum, collaborating with stakeholders for transition planning, working with community agencies and developing strategies for success at all transition stages. Career education, preparation for employment and strategies for adult adjustment are emphasized.

SPD 626 Effective Clsrm & Beh Mgmt

Course content focuses on effective classroom and behavior management emphasizing practical working understanding of the principles of classroom behavior management, positive behavioral supports, functional behavior analysis, and positive behavior intervention plans. Basic principles of behavior management and reinforcement are delineated. Emphasis is placed on effective classroom management and functionally-derived positive behavioral strategies for use in educational settings.

SPD 628 Teaching Reading/Lang Arts

Prerequisites: SPD 622

The course provides substantive, research-based instruction to teach reading/language arts to students with disabilities. Candidates will demonstrate their ability to deliver a comprehensive program of systematic instruction in reading, writing, listening, and speaking aligned to the English/Language Arts Content Standards and the Reading/Language Arts Framework. They will exhibit the ability to administer a variety of reading/writing assessments to diagnose students' reading/language arts abilities. This is a two month onsite course, which cannot be taken concurrently with any other course.

SPD 630 Tech for Teaching & Learning

This introductory course is designed to provide special education candidates with the skills needed to integrate technology in teaching and learning as required in the INTASC Standards including assessment and monitoring of student progress, evaluation of media and technology, the use of technology to effectively plan instruction to meet the needs of diverse learners, colleagues, and families. Course content includes designing lesson plans for integration of technology in classrooms serving students with mild/moderate disabilities, respond to case study utilizing technology to assess, monitor progress, and provide targeted support for a student with special needs, a research paper on the selection of effective media and technology resources, a PowerPoint presentation on the legal, and ethical use of information and technology including social media and development of newsletter or video as a communication tool to engage learners, families and the global community.

SPD 632 Charac/Instr Stds w/ M/M Disab

This course provides candidates with knowledge in identifying students with mild/moderate disabilities and their needs for service delivery, placement, IEP development and instruction. Positive behavior support, learning strategies, study skills, instructional

and behavioral support partnerships with parents and establishing positive environments are also covered. Candidates will recognize how mild/moderate disabilities affect students in their ability to learn the California core curriculum.

SPD 634 Assess of Std w/ M/M Disab

This course is designed to provide the candidate with knowledge and skills required for assessing children and youth with disabilities and special needs with mild/moderate disabilities using formal and informal assessment techniques. The course also provides knowledge and skills required for linking assessment findings to instructional planning, including development, implementation and communication of the Individualized Education Program.

SPD 636 Teaching Math/Writing for M/M

This course provides an overview of the educational demands experienced by K-12 students with M/M disabilities in all settings. Candidates will develop skill in planning and evaluating curriculum, methods, techniques, strategies, materials and media for teaching students. This course focuses on planning for instruction in two areas: written expression and mathematics. The course emphasizes learning strategies, study skills, and core vocabulary development as they relate to the IEP and accessing the general education curriculum.

SPD 638 Content Differentiation

An in-depth look at students with mild to moderate disabilities served both in and out of the general education classroom with an emphasis on differentiating instruction for successful learning.

SPD 642 Academic Instruction M/S

This course covers identifying and teaching academic content for students with severe disabilities across the educational placement continuum, including instruction in the general curriculum, use of Universal Design principles, and a functional skills approach. The course presents methods for determining functional skills, curriculum selection, development and adaptation to approximate the general education curriculum using the California curriculum frameworks and State standards. Assessment in all areas of academic instruction is emphasized.

SPD 644 Life Skills & Transitions M/S

Life Skills and Transitions for Learners with Moderate/Severe disabilities. This course is advanced methodology designed to ensure that candidates will be able to meet curriculum needs of their students with moderate/severe disabilities in the areas of teaching life skills, self-advocacy, and transition to post-secondary school needs. Issues regarding parent involvement, IEPs and ITPs, Community Living, recreation and leisure are included.

SPD 646 PBS, Comm & Social Skills M/S

This course prepares candidates to meet the communication, behavior, and social skill needs of students with moderate/severe disabilities. Candidates conduct behavioral assessments and plan behavior interventions for the behavioral needs of these students. They learn strategies to meet the communicative needs of their students, including using AAC devices. Methods for improving social skills of these students in all settings are presented. Collaboration, assistive technology, and functional communication training are emphasized.

SPD 648 Medical & Asst Tech Issues M/S

In this course candidates will demonstrate knowledge and ability to support the movement, mobility, sensory and specialized health care needs required for students to access school and the community to the fullest extent of their ability through utilizing appropriate techniques, procedures, materials, assistive technology, and adaptive equipment. Candidates will also demonstrate mandated considerations for assistive, augmentative, alternative, and sign language communication technology for students with moderate/severe disabilities and their application to facilitate communication, improved academic performance, and skill.

SPD 651 Ed Hist Perspt, Iss Trends SPD

This course is designed as an introduction to issues and trends in Special Education. Candidates in this course will examine, analyze, and synthesize current legislation, instructional formats, and Special Education research. They will be required to look at recent policies, issues, and trends that impact the Special Education field. Candidates will be expected to complete the first step in the research process and identify a research problem related to an issue or a trend in which they have a personal interest.

SPD 652 21 Century SPD Prac. & Systems

Prerequisites: SPD 651

This course examines the process of how to (a) name key roles needed to implement special education effectively; (b) specify the knowledge and skills relevant to individuals in each role; (c) identify essential professional development and parent education necessary to ensure the readiness of members of a multi-disciplinary team to perform responsibilities effectively; and (c) compare and contrast various types of such growth opportunities. In this course candidates will develop step 2 of the research process: Review of the Literature

SPD 653 Assist Tech & Practices in SPD

Prerequisites: SPD 651 and SPD 652

This course will provide opportunities for candidates to refine their skills as consumers of technology in order to make informed decisions regarding reliability of technology and applications (APPS) designed to provide accessibility to the curriculum for students with disabilities. Universal Design for Learning is at the core of this course, and will provide candidates with the ability to adapt technology, instruction, and assessment to meet a range of student needs. During this course, candidates will complete step 3 of the research process: Specifying a Purpose. Candidates will complete a draft of the IRB review form.

SPD 654 SPD Law & Leadership Practice

Prerequisites: SPD 651, SPD 652 and SPD 653

This course is designed to extend knowledge of federal and state courts interpretation of statutes and regulations addressing the delivery of special education and related services to students with disabilities. The candidate will also examine the collaborative practices with families, school personnel, and community members. During this course, candidates will complete step 4 of the research process: Step 4 Choosing a Research Design. Candidates will also submit the IRB review form.

SPD 660 Clear Orientation Seminar

Prerequisites: California Preliminary Education Specialist Credential (DHH, M/M, or M/S) and a full-time teaching position in special education in a P-12 school or a pre-approved long term contracted substitute position.

A continuation of professional development for new Preliminary Education Specialist teachers. Participating teachers will assess their current teaching practice, explore professional teaching standards and design a growth plan to meet their needs and the needs of students they serve. Must be taken as the first course for the Education Specialist Clear Credential Program.

SPD 661 Special Topics MM MS DHH

Prerequisites: SPD 660

Course focuses on synthesis and application of evidence based research informing data driven instruction for monitoring student behavior and academic progress. Advanced practice in creating effective learning environments for special needs and EL students, collaborating with families and service providers, developing instruction and technology to facilitate curriculum mastery are examined.

SPD 664 Clear Capstone

Prerequisites: SPD 660, SPD 661 and the elective course must be completed. A 3.0 grade point average is required to complete the program.

Final course in the Clear Education Specialist Induction Program for M/M, M/S or DHH. Participating teachers will upload summative evidence in e-portfolio demonstrating mastery of each CTSP including documentation of IIP completion and reflection for each Competency Objective. Must be taken as the last course in the program.

SPD 672 Intro to ECSE

Prerequisites: Individuals who hold a preliminary, Level I, professional clear, clear, Level II, or life special education teaching credential may take this course.

This course surveys current knowledge of young children with disabilities within the context of development and learning, birth to five. It examines historical factors, legislation affecting service delivery, etiology, characteristics and needs of young children who are at-risk for or who have identified disabilities. From a cultural diversity perspective, the role of family-professional partnerships, educational strategies, and models of service delivery are explored. Field experience is required.

SPD 674 Collaborative Partners

Prerequisites: ECSE Added-Authorization Candidates: Individuals who hold a valid preliminary, Level I, professional clear, clear, Level II, or life special education teaching credential may take this course.

Examination of interpersonal and interactive techniques required of the special education teacher when working with parents and families of young children and students with special needs and other professionals. This course addresses the sharing of knowledge and mutual efforts between professionals and parents to effectively serve youngsters with special needs. Problem solving, decision-making, and collaborative strategies for working with parents, professionals, and agencies when implementing services are explored. Field work is required.

SPD 676 ECSE Assessment & Intervention

Prerequisites: Individuals who hold a preliminary, Level I, professional clear, clear, Level II, or life special education teaching credential may take this course.

This course is designed to provide knowledge of a wide range of ECSE assessment instruments, administration and the skills to analyze results across developmental domains. Candidates translate assessment information into functional goals and objectives (IFSP, IEP) to meet the individualized needs of young children with disabilities and their families, including synthesis of data from other professionals and adaptation of assessments. Assessment results are utilized to develop individualized teaching and learning strategies, adaptations/modifications, and inclusion strategies in a natural environment. Field Experience is required.

SPD 678 ECSE Field Experience

Prerequisites: SPD 672, SPD 674 and SPD 676

This course must be taken as the final course in the ECSE program, candidates complete observations and teach children with disabilities through in-depth experiences (80 hrs total) with children are culturally diverse in in-home and preschool settings in small and whole groups. Candidates arrange ECSE field experiences and participate in reflective supervision with a site supervisor. At least 10 hours must be at a site where you do not work and the ECSE Exit Exam is taken in this course.

SPD 681A Nevada Student Teaching M/M

Prerequisites: SPD 604, SPD 608, SPD 614, SPD 618, SPD 622, SPD 628, SPD 630, SPD 632, SPD 636 and SPD 674; Candidates must be enrolled in SPD 687A Clinical Practice Seminar concurrently with SPD 681A; Student teaching candidates must have successfully completed all coursework in the licensure program (Corequisite, Core and Advanced Specialization Courses) with an overall GPA of 3.0 or better.

The student teaching experience requires candidates to be placed in a special education program that serves student with Mild/Moderate disabilities for 9 weeks or 40 days of full-day supervised teaching. Candidates are supervised/supported by a classroom teacher with a clear special education credential and by a certified University Supervisor. The course is graded satisfactory (S) or unsatisfactory (U).

SPD 681B Nevada Student Teaching M/M II

Prerequisites: SPD 681A and SPD 687A

The student teaching experience requires candidates to be placed in a special education program that serves student with Mild/Moderate disabilities for 9 weeks or 40 days of full-day supervised teaching. Candidates are supervised/supported by a classroom teacher with a clear special education credential and by a certified University Supervisor. The course is graded satisfactory (S) or unsatisfactory (U).

SPD 682A Student Teaching M/M

Corequisites: SPD 688A

Six weeks or 30 days of full-day supervised teaching with Mild/Moderate special education students. Candidates are supervised by a teacher with a clear special education credential and by a certified University Supervisor. The course is graded satisfactory (S) or unsatisfactory (U).

SPD 682B Student Teaching M/M

Corequisites: SPD 688B

Six weeks or 30 days of full-day supervised teaching with Mild/Moderate special education students. Candidates are supervised by a teacher with a clear special education credential and by a certified University Supervisor. The course is graded satisfactory (S) or unsatisfactory (U).

SPD 684A Student Teaching M/S

Corequisites: SPD 688A

Six weeks or 30 days of full-day supervised teaching with Moderate/Severe special education students. Candidates are supervised by a teacher with a clear special education credential and by a certified university supervisor. The course is graded satisfactory (S) or unsatisfactory (U).

SPD 684B Student Teaching M/S

Corequisites: SPD 688B

Six weeks or 30 days of full-day supervised teaching with Moderate/Severe special education students. Candidates are supervised by a teacher with a clear special education credential and by a certified university supervisor. The course is graded satisfactory (S) or unsatisfactory (U).

SPD 687A Portfolio Clinical Seminar

(2.25 quarter units)

Prerequisites: Candidates must be enrolled in SPD 687A Clinical Practice Seminar concurrently with SPD 681A

SPD 687A is taken concurrently with Student Teaching (SPD 681A) to support the development of the Clinical Practice Portfolio submitted the last week of SPD 681B. During SPD 687A, candidates will focus on 10 INTASC Standards create or revise artifacts reflecting their knowledge and skills in each of the standards. These artifacts and reflections will be uploaded into their Professional Portfolio within the eCompanion Course. The completed Portfolio must be approved by the instructor in order to successfully pass this course. Grading is Honors, Satisfactory or Unsatisfactory.

SPD 688A Clinical Practice Seminar

(2.25 quarter units)

Corequisites: SPD 682A or SPD 684A or DHH 682A or LAD 682A

Focus on three CTC Teaching Domains. Create or revise artifacts reflecting knowledge and skills in each of those Domains to be uploaded into their Professional Portfolio. The Professional Portfolio must be completed and approved by the instructor in order to successfully pass this course. Grading is S/U only. Eligible for In Progress (IP) grading.

SPD 688B Clinical Practice Seminar

(2.25 quarter units)

Corequisites: SPD 682B or SPD 684B or DHH 682B or LAD 682B

Focus on three of CTC Teaching Domains, and creating or revising artifacts reflecting their knowledge and skills in each of those Domains to be uploaded into their Professional Portfolio. The Professional Portfolio must be completed and approved by the instructor in order to successfully pass this course. Grading is S/U only. Eligible for In Progress (IP) grading.

SPD 692A Internship M/M

Prerequisites: SPD 608, SPD 614, TED 621B;

Candidates must be admitted to the University internship program.

The National University Special Education Internship for Mild/Moderate disabilities is designed as an alternative route for the preparation of Education Specialist candidates. Candidates selected for an internship serve as teachers of record in special education classrooms/programs, earn full-time salaries and receive benefits. Interns receive support and supervision, from the university program and the school site, for a minimum of 4 months while completing required coursework for authorization to teach students with mild/moderate disabilities. Does not grant graduate units towards graduate degree.

SPD 692B Internship M/M

Prerequisites: SPD 692A

The National University Special Education Internship for Mild/Moderate disabilities is designed as an alternative route for the preparation of Education Specialist candidates. Candidates selected for an internship serve as teachers of record in special education classrooms/programs, earn full-time salaries and receive benefits. Interns receive support and supervision, from the university program and the school site, for a minimum of 4 months while completing required coursework for authorization to teach students with mild/moderate disabilities. Does not grant graduate units towards graduate degree.

SPD 692C Internship Support

(2.25 quarter units)

Prerequisites: SPD 692B

The purpose of this course is to provide ongoing support for intern candidates who have not completed the Preliminary Education Specialist Credential Program. Interns who have passed the two initial internship clinical practice courses in Mild/Moderate (SPD 692A and SPD 692B), but have remaining credential requirements to complete, must register for SPD 692C Internship Support M/M which provides continuous, targeted support for their internship as required by the Commission on Teacher Credentialing (CTC). This 2 month (2.25 unit) course will be repeated by individual interns until they have successfully completed all of the credential requirements for the Preliminary Education Specialist Credential with Authorization in Mild/Moderate. All internship clinical practice courses are designed to address CTC standards and requirements for recommendation for the Education Specialist Preliminary Credential. Does not grant graduate units towards graduate degree. This course can be repeated up to 8 times.

SPD 694A Internship M/S

Prerequisites: SPD 608, SPD 614, TED 621B;

Candidates must be admitted to the University internship program.

The National University Special Education Internship for Moderate/Severe disabilities is designed as an alternative route for the preparation of Preliminary Education Specialist candidates. Candidates selected for an internship serve as teachers of record in special education classrooms/programs, earn full-time salaries and receive benefits. Interns receive support and supervision, from the university program and the school site, for a minimum of 4 months while completing required coursework for authorization to teach students with moderate/severe disabilities. Does not grant graduate units towards graduate degree.

SPD 694B Internship M/S

Prerequisites: SPD 694A

The National University Special Education Internship for Moderate/Severe disabilities is designed as an alternative route for the preparation of Preliminary Education Specialist candidates. Candidates selected for an internship serve as teachers of record in special education classrooms/programs, earn full-time salaries and receive benefits. Interns receive support and supervision, from the university program and the school site, for a minimum of 4 months while completing required coursework for authorization to teach students with moderate/severe disabilities. Does not grant graduate units towards graduate degree.

SPD 694C Internship Support M/S

(2.25 quarter units)

Prerequisites: SPD 694B

The purpose of this course is to provide ongoing support for intern candidates who have not completed the Preliminary Education Specialist Credential Program. Interns who have passed the two initial internship clinical practice courses in Moderate/Severe (SPD 694A and SPD 694B), but have remaining credential requirements to complete, must register for SPD 694C Internship Support M/S which provides continuous, targeted support for their internship as required by the Commission on Teacher Credentialing (CTC). This 2 month (2.25 unit) course will be repeated by individual interns until they have successfully completed all of the credential requirements for the Preliminary Education Specialist Credential with Authorization in Moderate/Severe. All internship clinical practice courses are designed to address CTC standards and requirements for recommendation for the Education Specialist Preliminary Credential. Does not grant graduate units towards graduate degree. This course can be repeated up to 8 times.

SPD 695 Understanding Edu. Research

This course is designed to provide the student with the basic knowledge and skills required to read, interpret and evaluate both quantitative and qualitative educational research in order to determine if research results have implications for program, curriculum or instructional decisions.

SPD 696 Capstone Project

Prerequisites: SPD 695

Apply knowledge, skills, and dispositions to complete a culminating project. Candidates will identify a topic of interest in their classroom, school, or district; conduct a review of the literature on the topic of their choice; and design a process to gather information on the topic. Grading is H, S, or U only. Course is eligible for In Progress (IP) grade.

SPD 697 Research in SPD: Design

Prerequisites: SPD 651, SPD 652, SPD 653 and SPD 654

This course is designed to provide an introduction to empirical research and a variety of research approaches common to the field of education. Upon completing the course, participants will be able to locate, understand, evaluate, and interpret qualitative as well as quantitative educational research and use these skills to become consumers of research and develop a draft of the capstone.

SPD 698A Internship Seminar

(2.25 quarter units)

Prerequisites: SPD 608, SPD 614, TED 621B;

Candidates must also complete all pre-requisite requirements for the internship credential as outlined by CTC.

This course provides additional synchronous and asynchronous support and mentoring for interns specific to their classroom teaching experiences and needs. The course emphasizes the Teaching Performance Expectations (TPEs) for Education Specialists. During the three-month seminar, candidates submit evidence of their knowledge and skills in each TPE area as part of a portfolio requirement completed and approved by the instructor.

SPD 698B Internship Seminar

(2.25 quarter units)

Prerequisites: SPD 608, SPD 614, TED 621B;

Candidates must also complete all pre-requisite requirements for the internship credential as outlined by CTC.

This course provides additional synchronous and asynchronous support and mentoring for interns specific to their classroom teaching experiences and needs. The course emphasizes the Teaching Performance Expectations (TPEs) for Education Specialists. During the three-month seminar, candidates submit evidence of their knowledge and skills in each TPE area as part of a portfolio requirement completed and approved by the instructor.

SPD 699 Research in SPD Capstone

Prerequisites: SPD 651, SPD 652, SPD 653 and SPD 654

This course addresses fundamental concepts and practices in educational research in special education. Covers specific applications of educational research methods in special education. Emphasizes review and critique of special education research, and applied classroom research for teachers in diverse settings. This course is designed as the capstone course in which candidates will complete the research project and present it before a panel of experts for feedback and recommendations.

SPN – Spanish

SPN 100 Beginning Spanish I

Introduction to Spanish and to the culture of its speakers. Facilitation of the application of the language in both oral and written modes. Activities include chat live discussions, links to cultural sites, and exposure to daily life situations through assignments corresponding to each unit.

SPN 101 Beginning Spanish II

Prerequisites: SPN 100

Sequel to beginning Spanish I. Further application of the language in both oral and written modes. Activities include chat live discussions, links to cultural sites, and exposure to daily life situations through assignments corresponding to each unit.

SPN 200 Intermediate Spanish I

Prerequisites: SPN 101

Intermediate Spanish and the culture of its speakers. Facilitation of the application of the language in both oral and written manners in a more advanced form. Activities include chat live discussions, links

to cultural sites, and exposure to daily life situations through assignments corresponding to each unit.

SPN 201 Intermediate Spanish II

Prerequisites: SPN 200

Sequel to the Intermediate Spanish I course. Continued practice in the oral-aural skills, with increasing importance placed on acquiring Spanish grammatical skills, while extending and enhancing vocabulary and insight into the Spanish-speaking world through a study of its culture.

SPN 300 Advanced Spanish I

Prerequisites: SPN 201

Integration of speaking, listening, reading, and writing within a cultural context by immersion in the target language. Designed to give further insight into the Spanish-speaking world through a study of its culture, society, history, and politics.

SPN 301 Advanced Spanish II

Prerequisites: SPN 300

A sequel to Advanced Spanish I. It continues to develop student skills in idiomatic and conversational forms of speech, and proficiency in moderately complex written structures. Studies and grammar review supplemented with readings, media and computer based materials.

SPN 310 Literary Readings in Spanish

Prerequisites: LIT 100 and SPN 301

Introduction to a variety of prominent 20th century Latin American literary texts in their original language. Readings will come from a variety of Spanish-speaking countries and historical movements. Discussions, collaborations, and writing assignments will be in English.

SPN 320 Advanced Spanish Conversation

Prerequisites: SPN 201 or 3 semesters of college level Spanish language.

Focus on intensive oral practice obtained through the use of video programs, class discussions, and other interactive activities. Students will put into practice key elements of communication in standard spoken Spanish, with some focus on dialectal variations.

SPN 330 Intro Lat Am Cultures

Prerequisites: SPN 301

The Spanish-speaking world is a rich tapestry of cultures and histories. The aim is to overview this heterogeneous reality through a survey of some of its significant cultural, historical, social, and political themes. Introduction to strategies of cultural analysis, discussions, collaborations, and writing assignments will be in Spanish.

SPN 340A Spanish for the Work Place

This course provides English-speaking students the necessary tools for communication with Spanish speakers in the work place.

SPN 341 Cross-Cultural Communication

An examination of the basic cultural differences generally encountered in the workplace. Special emphasis is given to cross-cultural communication in the workplace.

SPN 350 Film and Culture

Prerequisites: SPN 301

Films and documentaries from and about the Spanish-speaking world serve as the basis for lectures, discussions, and class projects. Diverse topics will be explored along with a range of cultural social issues. This course also introduces strategies of cultural analysis. Discussions, collaborations, and writing assignments will be in Spanish.

SPN 420 Literature and Culture I

Prerequisites: SPN 310 and SPN 330

Introduction to cultural productions from the Pre-Columbian period to the mid-19th century in Spanish. Readings will come from a variety of regions and historical and cultural movements. Discussions, collaborations, and writing assignments will be in Spanish.

SPN 430 Literature and Culture II

Prerequisites: SPN 420

Introduction to Latin American literature and culture during the late 19th and 20th century with a focus on key aspects (analysis of genre, form, structure, language, history, society, politics, gender, sexuality, etc.) necessary to the understanding of Latin American culture. Discussions, collaborations, and writing assignments will be in Spanish.

SPN 450 Identity and Multiculturalism

Prerequisites: SPN 310 and SPN 330

Introduction to prominent Latin American and Hispanic cultural productions that deal with identity and multicultural issues. Most of the readings will deal with Hispanic/Latino authors. Readings will come from a variety of countries and historical and cultural movements. Discussions, collaborations, and writing assignments will be in Spanish.

SPN 490 Guided Study in Spanish

Individual study under direction of instructor. Requires prior approval of appropriate academic department.

SPN 499 Spanish Capstone

Prerequisites: SPN 430

In this two-month seminar students will demonstrate the knowledge they have learned in their core courses. Students will develop a portfolio consisting of their revised papers and new essays to create a final project. There will be a final capstone paper for this course.

SUS – Sustainability Management Business

SUS 601 Introduction to Sustainability

An introduction to sustainability concepts. An interdisciplinary approach is used by combining environmental, economic and social dimensions of sustainable development by looking into relevant local, and global environmental issues. Various sustainable forces that may impact an organizational operation will be discussed.

SUS 602 Enterprise Excellence

Prerequisites: CSC 220 or permission from lead faculty.

Overview of statistical tools needed to measure business improvement related to sustainability. Step-by-step guide to develop and institute metrics for sustainability improvement will be provided. Enterprise excellence including process improvement analysis and management systems for business, industry, academic, government and military organizations will be covered.

SUS 603 Sustainable Innovation

Presentation of the concepts of sustainable innovation through culture, innovation network and leadership. Specifically, concepts such as innovation leadership are addressed. The focus is on innovation drivers and their implications in stimulating and managing innovation in the workplace. Relevant case studies will be used.

SUS 604 Sustainable Supply Chain

Examination of how supply chain can be used to improve the sustainable operations of an organization. Specific topics would include the development and implementation of supply chain and organizational policies to meet the global requirements.

SUSX – Sustainability Management Business (Extended Education)

SUSX 6001X Introduction to Sustainability

Prerequisites: 1. Maintain an overall B average in UCSD Extension's sustainability certificate. 2. A bachelor's degree from an accredited university. 3. Successfully completed a college-level statistics class. 4. Complete and submit a copy of official certificate and transcript to National University.

This proficiency exam is specifically for UCSD Extension students who have completed their Sustainability Business Practices certification with an overall grade of B or higher. If successfully completed, this exam will serve as a course substitution for SUS 601, Introduction to Sustainability, in the Master of Science Sustainability Management program at National University.

SYE – Systems Engineering

SYE 600 Introduction to Systems Design

Detailed overview of the nature of systems and the systems engineering design process of human-made systems. The main emphasis is on the four phases of systems design: conceptual design, preliminary design, detail design, and evaluation and testing. Life cycle engineering and requirements analysis are introduced.

SYE 601 Systems Analysis & Design Eval

Prerequisites: SYE 600

An in depth study of system analysis and design evaluation. The emphasis is on using various modeling tools to predict system performance and evaluate various system alternatives under multiple design criteria and conditions of risk and uncertainty. Use of calculus and MS Excel are required.

SYE 602 Advanced System Design

Prerequisites: SYE 601

Advanced system design concepts and details the methodologies of design for operational feasibility: system reliability, maintainability, usability (human factors), supportability (serviceability), producibility and disposability, and affordability (life-cycle costing). The course also provides an introduction to systems engineering management, including planning, organization, and program control and evaluation.

SYE 603 System Dynamics

Prerequisites: SYE 602

Analysis of complex systems, system behavior, and system of systems. Includes the concept of intended and unintended consequences, systems thinking, modeling dynamic systems and decision making, system instability and oscillation, and testing of system models. System dynamic programming software is provided with the text.

TED – Teacher Education

TED 300 Fundamentals of Education

Prerequisites: TED 320 or TED 305 or TED 306

Examines the role and nature of schools in the United States through an exploration of a range of cultural, philosophical, historical, legal, political, and ethical perspective.

TED 305 Teaching as a Profession

First course in California Teacher Credentialing program, candidates introduced to California Standards of the Teaching Profession (CSTP), Teaching Performance Expectations (TPEs) and California Teaching Performance Assessment (TPA) process. Candidates explore role of teachers within schools, community, society, and in world; and an understanding of the commitment, rewards and responsibilities of a teaching career, as well as the process and procedures for creating a Professional Electronic Portfolio. Includes 15 hours of field experience. Course will be offered over a 2 month format and must be completed prior to enrollment in other TED courses.

TED 306 21st Century Teaching Methods

Preparation of pre-service teachers for 21st Century culturally and technologically enriched classrooms. Strategies will include how teaching, learning, and technology work together to develop a holistic view of education.

TED 310 Development and Learning

Prerequisites: TED 305 or TED 320 or TED 306

Focuses on the cognitive, social, and emotional development of children from both theoretical and practical perspective. This course includes an introduction to learning theory and practice and its relationship to student achievement and motivation.

TED 320 Introduction to Teaching

(1.5 quarter units)

Introduces teacher candidates to teaching as a profession. Included in this course is the process and procedures for creating an ePortfolio. Course is offered over a 2 month period to be completed prior to enrollment in other TED courses.

TED 330A Reading and Lang. Arts Methods

Prerequisites: TED 305 or TED 320 or TED 306

Includes content, methods and materials for teaching reading in an integrated elementary classroom. Teacher candidates will learn strategies for managing classroom instructional activities to enhance student achievement. Teacher candidates are required to complete five hours of observing and assisting in a public school classroom as directed by the instructor.

TED 330B Reading and Language Arts

Prerequisites: TED 305 or TED 320

Includes content, methods and materials for teaching reading in a secondary classroom. Candidates will learn strategies for management of activities/materials, planning lessons, using technology, evaluating learning, and integrating reading into other content areas. Student Teaching Candidates are required to complete five hours of observing and assisting in a public school classroom as directed by the instructor.

TED 340 Content Area Reading Methods

Prerequisites: TED 305 or TED 320

Includes content, methods, and materials for teaching reading across the curriculum. Teacher candidates will learn instructional strategies for integrating reading in the content area. Teacher candidates are required to complete five hours of observing and assisting in a public school classroom as directed by the instructor.

TED 350 Math and Science Methods

Prerequisites: TED 305 or TED 320 or TED 306

Includes content, methods, and materials for teaching mathematics and science in an integrated elementary classroom. Strategies for implementing and assessing student achievement will be introduced.

TED 351 Teaching STEM Methods

Prerequisites: TED 305 or TED 306 or TED 320

This eight week course is designed to prepare pre-service teachers with the knowledge and skills necessary to teach students in grades K-8 science, technology, engineering, and mathematics (STEM). This includes developing rigorous, standards-based lessons that are engaging, enjoyable, and meaningful to students. Opportunities will also be provided to explore, analyze, and incorporate digital resources for teaching STEM methods.

TED 355 Hist/Social Science Methods

Prerequisites: TED 305 or TED 320 or TED 306

Includes content, methods and materials for teaching history-social science in the elementary classroom. Candidates will learn classroom management of activities/materials, planning lessons, using technology, evaluating learning, and integrating history and social science into other content areas. Student Teaching Candidates are required to complete five hours of observing and assisting in a classroom as directed by the instructor.

TED 380 Arts/PE/Health Methods

Prerequisites: TED 305 or TED 320 or TED 306

Includes content, methods, and materials for teaching visual and performing arts, physical education, and health in the elementary classroom.

TED 410 Survey of Multicultural Lit.

Prerequisites: TED 305 or TED 320 or TED 306
Provides K-12 teacher candidates with knowledge of the wide-range of genres of multicultural literature. Teacher candidates will learn instructional methodologies and strategies for selecting appropriate literature that reflects the interests and reading abilities for diverse student populations.

TED 420 Diversity in Schooling

Prerequisites: TED 305 or TED 320
Provides teacher candidates with background knowledge on how to ensure parity of treatment of students who differ in race, class, exceptionality, ethnicity, culture, gender, and religion. Teacher candidates must complete five hours observing and assisting within diverse classrooms in a public school classroom as directed by the instructor.

TED 430 Special Needs Students

Prerequisites: TED 305 or TED 320 or TED 306
Provides instructional strategies and methodologies for adapting content, assessment and pedagogy that ensures every student with exceptional learning needs is taught under optimal conditions for learning.

TED 434 Methods of Teaching Social Sci

Prerequisites: TED 305
Prepares candidates in History/Social Science to be effective and reflective teachers, emphasizing current research. Comprehensive study of teaching methods in the social sciences: economics, history, political science, and geography. Candidates learn pedagogical content knowledge, methods of teaching and learning, classroom management strategies, lesson planning, and assessment of student learning.

TED 440 Leadership and Assessment

Prerequisites: TED 305 or TED 320 or TED 306
Provides teacher candidates with classroom leadership strategies to create a classroom environment that is conducive to teaching and learning. Teacher candidates will also learn how to determine students' abilities through formative and summative assessments and to use this information to provide appropriate instructional strategies to enhance student learning.

TED 450 Methods of Teaching English

Prerequisites: TED 305 or TED 320
Prepares prospective English language arts teachers to be accomplished teachers in present day diverse middle or secondary school classrooms. Fundamental language skills including reading, writing, listening, speaking, viewing and visually representing will be studied. Prospective teachers will display knowledge and mastery of these skills and demonstrate how to imbue these concepts across the English language arts curriculum through rigorous and varied teaching methods. Opportunities will be provided to explore and analyze resources and to demonstrate and celebrate a commitment and responsibility to developing teaching skills.

TED 455 Methods of Teaching Science

Prerequisites: TED 305, or TED 320
Prepare prospective science teachers to be accomplished teachers in present day diverse middle or secondary school classrooms by creating a vision for successful science teaching. Candidates will deliver pedagogical content knowledge through appropriate instructional materials and by creating context for

meaningful learning methods, strategies, and best practices.

TED 461 Mathematics Teaching Methods

Prerequisites: TED 305, or TED 320
A critical inquiry into present-day tendencies in teaching mathematics in order to help prospective mathematics teachers acquire their professional skills in the teaching of mathematics in secondary school. Fundamental concepts of mathematics and effective approaches to their teaching will be discussed.

TED 464 Mths Teach Sec Health Sci

Prerequisites: TED 305, TED 300, TED 310, TED 430, HED 351 and COH 100

Recommended: Prior completion of: TED 330B, TED 420, COH 320, COH 416, COH 317, COH 318, COH 319, HED 308, HED 311, HED 414 and COH 321

Prepares individuals seeking a single subject teaching credential in Health Science to be effective and reflective teachers in middle or secondary schools. Candidates will learn pedagogical content knowledge, methods of teaching and learning, classroom management strategies, lesson planning, and assessment of student learning.

TED 465A Student Teaching I

Prerequisites: Completion of all upper division course requirements, including all TED coursework. Elementary and secondary teacher candidates, who have met the university student teaching requirements, will be assigned for student teaching in an accredited school where they will implement the state approved content standards for their subject area(s) and the content performance standards for the teaching profession. Grading is by S or U only.

TED 465B Student Teaching II

Prerequisites: Completion of all upper-division course requirements, including all TED coursework. Teacher candidates, who have successfully completed Student Teaching I, will enter their second phase of supervised fieldwork where they will continue to implement the state approved content standards for their subject area(s) and the content performance standards for the teaching profession. Grading is by S or U only.

TED 465C Student Teaching III

Prerequisites: Completion of all upper-division course requirements, including all TED coursework. Teacher candidates who have successfully completed Student Teaching II will continue to implement the state approved standards for their subject area(s) and the content performance standards for the teaching profession for student teaching that includes assessing their readiness for assuming responsibility for daily classroom instruction. Grading is by S or U only.

TED 465D Student Teaching IV

Prerequisites: Completion of all upper-division course requirements, including all TED coursework. Teacher candidates, who have successfully completed Student Teaching III, will continue to implement the state approved standards for their subject area(s) and the content performance standards for the teaching profession including assessing their readiness for daily classroom instruction. Grading is by S or U only.

TED 470 Student Teach/E-Portfolio

(3 quarter units)
Prerequisites: Completion of all course requirements and admission to Student Teaching, this course must be taken concurrently with TED 465A-D

The Student Teaching Seminar is designed to assess teacher candidates' development as professional educators. Teacher candidates will be guided through their student teaching seminar to demonstrate their professional education competency by successfully completing a Professional Electronic Portfolio. The ePortfolio is aligned with the six Teaching Performance Expectation Domains cited in the Student Teaching Handbook. The Student Teaching Seminar Syllabus is designed for either an online or face-to-face (on-site) delivery mode. The online Threaded Discussion Topics and Assignments can be adapted for small or large group discussions within a face-to-face (on-site) classroom setting. When the delivery mode for this course is online, students must upload their artifacts/reflections in two places: 1) the Seminar Course electronic drop-box and 2) the ePortfolio (foliotex). Grading is by S or U only.

TED 530A Student Teaching I

Corequisites: TED 531A
Student Teaching comprises the first half of a semester long Student Teaching experience. Candidates are placed with certified, P-12, Supervising Teachers. Candidates must successfully demonstrate competency in the six Teaching Performance Expectations (TPE) Domains. Grading is S or U.

TED 530B Student Teaching II

Prerequisites: TED 530A
Corequisites: TED 531B
Student Teaching II comprises the second half of a semester long Student Teaching experience. Candidates are placed with certified P-12 Supervising Teachers. Candidates must successfully demonstrate competency in the six Teaching Performance Expectations (TPE) Domains. Grading is S or U.

TED 531A Student Teaching Seminar I

(2.25 quarter units)
Corequisites: TED 530A
This course is taken concurrently with TED 530A: Student Teaching I and provides student teachers with opportunities to integrate and reflect on knowledge, skills, and dispositions acquired during their clinical experiences. Candidates focus on assessing PK-12 student learning and are required to pass CalTPA Task (3) Assessing Learning. Grading is by S or U only. Eligible for In Progress (IP) grading.

TED 531B Student Teaching Seminar II

(2.25 quarter units)
Prerequisites: TED 530A and TED 531A
Corequisites: TED 530B
This course is taken concurrently with TED 530B: Student Teaching II and provides student teachers with opportunities to integrate and reflect on designing effective differentiated instruction for diverse K-12 learners. Candidates are required to pass CalTPA Task (4) Culminating Teaching Experience.

TED 538 Parent Engagement

This course covers strategies for parent and community engagement. Working with diverse communities will be covered. The benefits of parent and community engagement will be discussed. Teacher candidates

learn the importance of building relationships with all stakeholders in the community in order to support student achievement will be covered. This course is required for a Nevada license.

TED 601 Teaching and Credentialing

(1.5 quarter units)

Designed as the first course in the multiple and single subjects California Teacher Credentialing program. Candidates are introduced to the California Standards of the Teaching Profession (CSTP), the Teaching Performance Expectations (TPEs) and the California Teaching Performance Assessment (TPA). (This course must be taken within the first three courses.)

TED 602 Educational Foundations

Theoretical foundations of education with emphasis in the historical, legal, ethical, philosophical, and political areas. Emphasis on the intersection of legal, political, historical, social, and philosophical contexts of both areas. A field experience is required.

TED 605 The Diverse Classroom

Complexity of today's classroom through cultural diversity, student development, curriculum planning, including curriculum development, design, implementation and evaluation.

TED 606 Equity and Diversity

Examination of experiences of diverse groups in American society and California schools. Principles of education equity and practices that maximize student achievement are reviewed. The course includes instruction in understanding and acceptance of differences in culture, cultural heritage, ethnicity, language, age, religion, social economic status, gender identity/expression, sexual orientation, and abilities and disabilities of individuals serve. Culturally relevant learning pedagogy to meet individual and collective learners' academic and social equity needs are addressed.

TED 610 Best Internship Practices

Prerequisites: Admission to the intern program; SPD 608

This course is designed to provide learning opportunities for candidates to integrate and reflect on the knowledge, skills, abilities and dispositions acquired in the pre-service coursework with their student teaching experience.

TED 611 Educational Psychology

Examines how educational psychology is applied to learning and teaching. Learning theories, instructional approaches, learning environments and student assessment are studied.

TED 612 Curric, Assess, & Instruction

Students in this course will learn the theoretical foundations of curriculum, instruction, and assessment. Students will apply the key principles in designing effective curriculum, instruction, and assessment strategies for diverse learners in a variety of settings. This course is one of six Core courses and serves those students not interested in earning a PK-12 teaching credential.

TED 615 The Foundations of Education

TED 615 is the first course in the Teacher Preparation Program. The role and nature of schooling is explored through a range of philosophical, historical, legal, and sociological perspectives within the context of our society.

TED 616A C&I I: History & Social Science

Elementary education curriculum development and teaching History and the Social Sciences using Nevada content standards. Content specific teaching practices, lesson design, learning environments and assessment of student learning are emphasized to provide access to the curriculum for all students.

TED 616B C&I II: Math & Science

Elementary education curriculum development and teaching Mathematics and Science using Nevada content standards. Content specific teaching practices, lesson design, learning environments and assessment of student learning are emphasized to provide access to the curriculum for all students.

TED 616C C&I III: V & P Arts Health & PE

Elementary education curriculum development and teaching the Visual & Performing Arts and Health and Physical Education using Nevada content standards. Content specific teaching practices, lesson design, learning environments and assessment of student learning are emphasized to provide access to the curriculum for all students.

TED 621A Lang. Dev. Methods: Elem. Sch.

Prerequisites: SPD 604, SPD 608, TED 602, TED 606, Pass CBEST and CSET

Designed for multiple subject credential candidates and focuses on current theories and research in language structure and use, and in language learning, particularly those in the first and second language development. Considers social, cultural, political, legal, psychological, general pedagogic and specific methodological factors affecting the first and second language development. Addresses application of these theories, strategies and techniques of second language learning across content areas in diverse educational environment in elementary schools.

TED 621B Reading/Lang. Arts Methods

Prerequisites: TED 621A

Multiple Subject Candidates use research-based theories and strategies to design and implement a balanced and comprehensive program of instruction in reading, writing, speaking, and listening based on state adopted Content Standards and Reading/Language Arts Framework for California Public Schools. Prepares candidates for TPAs and RICA. It is strongly recommended students take RICA examination after completion of this course.

TED 623 Lang. Dev. Methods: Secondary

Prerequisites: TED 602, SPD 604, TED 606, SPD 608, Pass CBEST and CSET

Designed for single-subject candidates, course focuses on current theories and research in language structure and use, language learning, L1 & L2 development; social, cultural, political, legal, psychological, pedagogic and methodological factors; and application of strategies and techniques of L2 learning across content areas in diverse classrooms.

TED 624 Literacy for Content Areas

Prerequisites: TED 623

This course is aligned with the California Board of Education adopted academic content standards in English Language Arts and the Reading/Language Arts Framework for students who are speakers of English, English language learners (ELLs) and students with special needs and is designed to assist Single Subject Credential Candidates in developing the background and skills necessary to teach literacy in the content areas to middle/junior and/or senior high school students in the culturally and linguistically diverse classrooms in the California public schools.

TED 625A Curriculum Design Sec. Learner

Prerequisites: TED 623

Integration of California's K-12 SACs, student learning data, research-based curriculum development, learner assessment strategies and instructional principles in designing short and long-term learning plans for each middle/high school learner. In actual G7-12 school activities, teacher candidates are guided in the application of these concepts, skills and dispositions.

TED 625B Instruction and Classroom Mana

Prerequisites: TED 632

This course builds on TED 625A by incorporating within a well-designed learning plan, effective instructional and classroom management strategies needed to engage each middle/high school learner. Teacher candidates develop classroom management plans and skills, use the plans in decision-making scenarios and apply the skills in various classroom situations.

TED 628A Internship Clinical Practice I

Corequisites: TED 610 and TED 631A

This four-month clinical practice course is taken concurrently with TED 631A Internship Seminar and it provides interns with opportunities to apply, examine, integrate and reflect on knowledge, skills, abilities, and dispositions as they analyze and assess their teaching performances in their K-12 classrooms as teachers of record. Does not grant graduate units towards graduate degree.

TED 628B Internship Clinical Pract. II

Prerequisites: TED 628A

Corequisites: TED 631B

This four-month clinical practice course is taken concurrently with TED 631B Internship Seminar and it provides interns with opportunities to apply, examine, integrate and reflect on knowledge, skills, abilities, and dispositions as they analyze and assess their teaching performances in their K-12 classrooms as teachers of record. Does not grant graduate units towards graduate degree.

TED 628C Clinical Practice III

(2.25 quarter units)

Prerequisites: TED 628A, TED 628B, TED 631A and TED 631B

The purpose of this course is to provide ongoing support for intern candidates who have not completed the Preliminary Multiple or Single Subject Teaching Credential. The course is designed to meet the Commission on Teacher Credentialing's requirement for 'continuous support and supervision'. This is a two-month (2.25 unit) course and will be repeated by individual interns until they have successfully completed all credential requirements needed to earn the preliminary teaching credential. Does not grant grad-

uate units towards graduate degree. This course can be repeated up to 8 times.

TED 629 Student Teaching Seminar

(3 quarter units)

Corequisites: TED 630A, TED 630B, TED 630C and TED 630D

Integrates theory and practical approaches to situations experienced by candidates during their Student Teaching experience. Content areas include: (1) School/Classroom Culture and Professional Responsibilities, (2) Learning Environment and Classroom Management, (3) Assessment and Evaluation, (4) Lesson Design and Differentiated Instruction. Grading is H, S, or U only.

TED 629I Intern Teaching Seminar

(3 quarter units)

Prerequisites: May only be taken by students approved for the internship program.

Corequisites: TED 628I

Designed for interns to learn and apply developmentally appropriate pedagogy; planning for and implementing differentiated instruction; and exploring principles of assessment and potential adaptations in response to K-12 students. Grading is S or U only.

TED 630A Student Teaching I

(**Note:** This course does not grant graduate level credit.) TED 630A comprises the first month of the semester-long Student Teaching experience. Candidates are placed with certified Supervising Teachers. Candidates must successfully complete four components: (1) school site classroom orientation and responsibilities, (2) observations, (3) professional dispositions and (4) lesson plan design, implementation and reflection. Grading is H, S, or U only.

TED 630B Student Teaching

Prerequisites: TED 630A

(**Note:** This course does not grant graduate level credit) TED 630B, C, D comprises the second, third and fourth months of the semester-long Student Teaching experience. Candidates are placed with certified Supervising Teachers. Candidates must successfully complete four components: (1) classroom responsibilities and professional dispositions, (2) learning environment and classroom management, (3) assessment and evaluation, and (4) lesson design and differentiated instruction. Grading is S or U.

TED 630C Student Teaching

Prerequisites: TED 630B

(**Note:** This course does not grant graduate level credit) TED 630B, C, D comprises the second, third and fourth months of the semester-long Student Teaching experience. Candidates are placed with certified Supervising Teachers. Candidates must successfully complete four components: (1) classroom responsibilities and professional dispositions, (2) learning environment and classroom management, (3) assessment and evaluation, and (4) lesson design and differentiated instruction. Grading is S or U.

TED 630D Student Teaching

Prerequisites: TED 630C

(**Note:** This course does not grant graduate level credit) TED 630B, C, D comprises the second, third and fourth months of the semester-long Student Teaching experience. Candidates are placed with certified Supervising Teachers. Candidates must successfully complete four components: (1) classroom

responsibilities and professional dispositions, (2) learning environment and classroom management, (3) assessment and evaluation, and (4) lesson design and differentiated instruction. Grading is S or U.

TED 631A Internship Seminar I

(2.25 quarter units)

Prerequisites: TED 610

This two-month seminar is taken concurrently with TED 628A Internship Clinical Practice and provides interns with opportunities to integrate and reflect on knowledge, skills, abilities, and dispositions acquired during their clinical practice experiences. Candidates focus on providing safe and engaging learning environments for K-12 students through differentiated instruction and purposeful assessment.

TED 631B Internship Seminar II

(2.25 quarter units)

Prerequisites: TED 628A and TED 631A

Corequisites: TED 628B

This two-month seminar is taken concurrently with TED 628B Internship Clinical Practice and provides interns with opportunities to integrate and reflect on knowledge, skills, abilities, and dispositions acquired during their clinical practice experiences. Candidates focus on providing safe and engaging learning environments for K-12 students through differentiated instruction and purposeful assessment.

TED 632 Content Area Curriculum

Prerequisite: TED 623

This course provides teacher candidates with the knowledge and skills required to design effective subject-specific short and long-term planning needed to assist G7-12 diverse learners in achieving state-adopted standards. Emphasis is placed on student learning and evidence. Four-hours of work in a G7-12 classroom are required.

TED 633 Content Area Instruct-Assess

Prerequisite: TED 623 with a minimum grade of C.

This course focuses on content area, subject-specific instruction and assessment strategies effectively engaging all G7-12 students in learning. Candidates will develop a repertoire of content area specific materials, instructional methods, and standards-based assessment strategies for all diverse learners. This course requires four-hours of work in a G7-12 classroom.

TED 634 Content Area Literacy

Prerequisite: TED 623

This course is aligned with the California Board of Education adopted academic content standards in English Language Arts and the Reading/Language Arts Framework for students who are speakers of English, English language learners (ELLs) and students with special needs and is designed to assist Single Subject Credential Candidates in developing the background and skills necessary to teach literacy in the content areas to middle/junior and/or senior high school students in the culturally and linguistically diverse classrooms in the California public schools.

TED 635 Methods: History/SS-Heal-PE-Art

Prerequisites: TED 621A

Multiple subject curriculum development in teaching History, Social Science, Health, Physical Education, Visual and Performing Arts using State of California content standards. Content-specific teaching practices, lesson design, and assessment of student learning

are emphasized to provide access to the curriculum for all students. Four-hours of field experiences in a K-6 classroom are required.

TED 636 Methods: Mathematics-Science

Prerequisites: TED 621A

Multiple subject curriculum development in teaching math and science using State of California content standards. The course emphasizes content-specific teaching practices, lesson design, and assessment of student learning used to provide access to the curriculum for all students. This course requires four-hours of field experiences in a K-6 classroom.

TED 638 Spanish for the Math and Scien

Development of relevant Spanish vocabulary, comprehension and speaking skills to effectively support student learning in Mathematics and Science. Learning through the use of instructional scaffolds, teachers incorporate the strategies into their teaching repertoire and enhance their sensitivity to second language learners.

TED 639 Spanish for the Humanities Cla

Development of relevant Spanish vocabulary, comprehension and speaking skills to effectively support student learning in the Humanities. Learning through the use of instructional scaffolds, teachers incorporate the strategies into their teaching repertoire and enhance their sensitivity to second language learners.

TED 640A Student Teaching I

(6 quarter units)

Focuses upon the practice and development of teaching skills in the classroom in a full day, eight-week term at a school site. Elementary education candidates meet the requirements of the Teacher Performance Expectations and are mentored by a university supervisor and a master teacher at the school site. Students attend the seminar concurrently with the student teaching experience. Grading is by S or U only.

TED 640B Student Teaching II

(6 quarter units)

A continuance of TED 640A, and as such, continues to focus upon the practice and development of teaching skills in the classroom in a full day, eight-week term at a school site. Elementary education candidates continue to meet the requirements of the Teacher Performance Expectations as they are mentored by a university supervisor and a master teacher at the school site. Students continue to attend the seminar concurrently with the student teaching experience. Grading is by S or U only.

TED 643 Added SS Authorization

Prerequisites: Passing CSET in desired Single Subject content area authorization.

This course is for individuals: 1) pursuing a second Single Subject authorization or 2) who possess a Multiple Subject Credential and desire an initial Single Subject credential. Passing CSET scores in the desired authorization is a prerequisite. Course is repeatable for credit for each additional Single Subject content area authorization.

TED 649 Student Teaching Seminar

Merging coursework knowledge and teaching practice in relation to classroom management and appropriate student behavior. Problems met within the

student teaching experience are discussed, and conflict resolutions skills are practiced. Assessment of teaching practice before and during student teaching occurs through completion of the e-portfolio. Grading is by S or U only.

TED 670 Educational Research

Prerequisites: TED 602, SPD 604, TED 606, SPD 608 and TED 612

This course provides an overview of educational inquiry approaches. Students will select an area of interest and demonstrate research and evaluation competencies in completing an educational inquiry project.

TED 680 Dev as a Professional Educator

Prerequisites: California Preliminary Multiple or Single Subject Credential and a full-time teaching position in a P-12 school or a pre-approved long term substitute position.

A continuation of professional development for beginning teachers. Teachers will review their learning from their professional preparation program, explore professional standards for the teaching profession and design a growth plan to meet their needs and the needs of the students they serve. This is the first course for the Clear Credential program.

TED 682 Instructional Technology

Prerequisites: TED 680; California Preliminary Multiple or Single Subject Credential and a full-time teaching position in a P-12 school or a pre-approved long term substitute position.

An examination of technology used in classrooms with particular attention to maximizing available resources for communication and collaboration with a variety of stakeholders as well as assessing, planning and delivering instruction.

TED 684 Using Standards and Frameworks

Prerequisites: TED 680; California Preliminary Multiple or Single Subject Credential and a full-time teaching position in a P-12 school or a pre-approved long term substitute position.

Beginning teachers will review, select, utilize and reflect upon appropriate content standards and other instructional materials in order to meet the learning goals for the class/ school/ district.

TED 686 Assessment and Instruction

Prerequisites: TED 680; Full-time teaching position in a public, charter or private school. A long-term substitute position may be used but needs pre-approval.

Beginning teachers will focus on the types of assessments used at their school, in district, state and national levels. Strategies for strengthening the use of assessment data for instructional planning will be researched, applied and reflected upon.

TED 688 Meeting Needs of All Learners

Prerequisites: TED 680; Full-time teaching position in a public, charter or private school. A long-term substitute position may be used but needs pre-approval.

This course covers background information on and strategies for use with a variety of learners including those with special needs, gifted and talented, English learners and struggling readers.

TED 690 Capstone

Prerequisites: TED 530B or TED 628B or TED 628I or TED 640B

M.Ed. degree's culminating course. Candidates build a professional development portfolio based on P-12 student learning evidence and other data. Then, use educational research in creating, implementing, and evaluating their professional development projects. Students work in a community of learners to plan and share evidence-based research-based practices, strategies, and findings.

THR – Theater

THR 200 Theater Arts

An introduction to theater as a dramatic medium, focusing on performance and production skills in a variety of genres and contexts.

TMG – Technology Management

TMG 610 Global Trends in Technology

This course focuses on our current technology trends that support the global economy. Students will gain understanding of the factors that drive this ever changing technological environment and why it is so important to transfer and apply the cost effective technological solution to their own organization. The economic, political and technological processes that impact our global organizations must be understood. Therefore, students will examine transnational corporations and organizations that are engaged in this dynamic technological environment. The problems, issues, and solutions must be analyzed by students because we live in a diverse cultural economy with global technological applications requirements.

TMG 620 Principles of Technology Mgmt.

This course provides an in-depth analysis allowing students to apply the key concepts in technology management and the role of technology managers in both private- and public- sector organizations. It provides an understanding of how organizational entities can be structured and managed to respond effectively to dynamic changes caused by technology and international competition.

TMG 625 Systems Analysis and Design

Students apply the fundamentals of systems analysis and design. The purpose is to provide an understanding of the systems view of a product, service, or process to include a generic representation of its elements, security, and dynamics. The skills, tools and methodologies needed to quantitatively analyze and optimize systems, and to make decisions as technology managers are provided.

TMG 635 Mgmt. of Tech & Innovation

Students apply strategic analysis techniques to business policy and organizational development. Emphasis is placed on linking technology policy with corporate strategy and the identification of technology options appropriate for the business or organizational strategy being executed.

TMG 640 Managing Technology Change

This course provides students with skills and knowledge that will help them introduce new technology or continuous improvement initiatives smoothly and effectively. During this course, students learn a structured approach for dealing with the organizational and human aspects of technology transition, including the key concepts of change management, communication, and managing resistance.

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