Division of Health Sciences

The health issues facing our local, state, and national governments are complex, and the solutions will require research, innovation, and collaboration from individuals and agencies representing the full spectrum of health and wellness.

UNLV's Division of Health Sciences — along with other health science-related programs in the Nevada System of Higher Education — is addressing today's pressing needs and making tomorrow's discoveries.

The division is comprised of the schools of Dental Medicine, Nursing, Community Health Sciences and Allied Health Sciences. Guided by a mission that demands UNLV serves its community, the division is using research, education, training, and service to form unique public and private partnerships. These partnerships are helping provide quality health care to the underserved, educating future professionals, and exploring ways to improve the health and well-being our citizens. Taken together, UNLV is helping build a foundation for a healthier and more vibrant Nevada.

Doctor of Philosophy - Interdisciplinary Health Sciences

Plan Description

This Ph.D. in IHS will provide students from different disciplines an opportunity to learn how to approach complex healthcare problems. Team science will direct this activity and will prepare students to create functioning teams to solve problems that interface with a number of different disciplines. Understanding team science concepts will better position graduates as valuable and productive research and academic collaborators who will be able to answer broader and more important translational research questions. This team science concept will form the core of the coursework in this program. These core interdisciplinary courses will be the foundation of the Ph.D.; however, students will be able to select a track or sub-plan (i.e., Nursing, Rehabilitation Sciences, Health Physics, Kinesiology) which will also have a set of discipline-specific core classes. This will allow them to apply team science concepts while developing expertise in a specialized area of study.

For more information about your program, including your graduate program handbook and learning outcomes, please visit the Degree Directory.

Admission Requirements

Students will be admitted into the program by the program director of the sub-plan or sub-plan Ph.D. admissions committee to which they are applying.

However, the minimum requirements of the Ph.D. in IHS are:

1. An overall undergraduate/graduate GPA of 3.25 or higher
2. Greater than the 50th average percentile on the quantitative, verbal, and analytic portions of the GRE (taken within the last 5 years)
3. Three letters of recommendation
4. Interview with two core faculty members
5. A curriculum vitae
6. A personal statement.

7. If the applicant is from a country where English is not an official language, then the applicant must demonstrate English proficiency by scoring 80 or higher on the Test of English as a Foreign Language, by scoring 7.0 or higher on the International English Language Testing System, by earning a score of greater than the 70th percentile on the GRE-verbal, or by earning a baccalaureate or higher at a regionally accredited institution in the U.S. or in a university where English is the language of instruction.

See specific sub-plan requirements below:

Admissions Requirements - Nursing Track

Students applying for the Nursing track of the Doctor of Philosophy - Interdisciplinary Health Sciences must meet the following requirements:

1. A BSN or MSN from an accredited School of Nursing. Master's degree in a health-related discipline and a BSN from an accredited institution would also meet this requirement.
2. Applicants must have a current RN license in the U.S. or country of residence.

Admissions Requirements - Rehabilitation Track

Students applying for the Rehabilitation track of the Doctor of Philosophy - Interdisciplinary Health Sciences must meet the following requirements:

1. Have graduated from an accredited rehabilitation clinical sciences profession (e.g., physical therapy, occupational therapy, speech therapy, athletic training) at either the Master's or first-professional clinical doctoral level. If the applicant has a professional Bachelor's degree only, then 30 additional credits of degree-consistent, graduate-level coursework (determined by the sub-plan committee) will be required.

Admissions Requirements - Health Physics Track

Students applying for the Health Physics track of the Doctor of Philosophy - Interdisciplinary Health Sciences must meet the following requirements:

1. Graduated with a Master's degree from a regionally accredited institution in the field of health physics, physics, chemistry, engineering or other related field. Applicants with Bachelor degrees may be admitted to the program but are required to take an additional 30 credits of elective, degree-consistent, graduate level coursework (determined by the Health Physics Graduate Committee).

Admissions Requirements - Kinesiology Track

Students applying for the Kinesiology track of the Doctor of Philosophy - Interdisciplinary Health Sciences must meet the following requirements:

1. Graduated with a Master's degree from a regionally accredited institution in the field of kinesiology/exercise science, biology, chemistry, computer science, engineering, psychology or other related field.

Plan Requirements

See Subplan Requirements below.

Subplan Requirements 1: Nursing Track

Total Credits Required: 60

Course Requirements

Interdisciplinary Research Core Courses - Credits: 9

Choose three of the following courses:

HSC 701 - Interdisciplinary Team Science
HSC 702 - Translational Research Design
HSC 703 - Interdisciplinary Grant Writing for Health Sciences
HSC 704 - Selected Applications in Statistics 2
HSC 705 - Clinical Trial Design And Analysis

Interdisciplinary Health Seminar - Credits: 3

HSC 710 - Seminar

Nursing Core - Credits: 31

NURS 709 - Teaching and Learning in Nursing Education
NURS 739 - Biobehavioral Approaches in Nursing Research
NURS 771 - Theory Development in Nursing
NURS 772 - The Nurse as Leader
NURS 775 - Statistical Methods for Nursing Research I: Univariate Methods
NURS 780 - Quantitative Methods in Nursing
NURS 781 - Qualitative Research Methods in Nursing
NURS 789 - Independent Study
NURS XXX Introduction to laboratory procedures for bio-behavioral studies (2)*
NURS XXX Bio-behavioral mechanism, pathways and measurements (3)*
NURS XXX Bio-behavioral Nursing Seminar: Developing a dissertation study (2)*

Elective Courses - Credits: 5

Complete 5 credits of advisor approved graduate-level Nursings (NURS) courses.

Dissertation - Credits: 12

HSC 711 - Dissertation

Degree Requirements

1. Students must complete 24 credits in the interdisciplinary health sciences core (12 of which are dissertation credits) and must complete 36 credits in the sub-plan core. The minimum credit total in the program is 60 credits.
2. Students must complete the degree with a cumulative GPA >3.0 and graduation must occur within 6 years for students enrolling with master's degrees and 8 years for students enrolling with bachelor's degrees.
3. Grades below B will not be acceptable. If the grade was received in a core class, then the student must retake the class. If a core class was not satisfactorily passed on two attempts, the student will be dismissed from the program. If the grade was in an elective class, then the class can be retaken or replaced with another elective class.
4. Students will complete a comprehensive examination which will be an interdisciplinary grant application. That is, this extramural grant proposal will have to have an interdisciplinary team science approach to answer a focused and important health science question. If a student fails the comprehensive examination they will be able to retake it again after a minimum of three months. If they fail a second time they will be separated from the program.
5. Students will also be required to complete a prospectus prior to dissertation in a focused research area. The dissertation committee will have an interdisciplinary element as two of the committee members will be from the chosen sub-plan but the other two committee members will be from outside the sub-plan discipline (one will be the Graduate College Representative). Thus, the committee will have an interdisciplinary membership and will have a stronger voice for a team science approach.
6. Students will complete at least one national/international presentation as a platform or a poster from research generated during their Ph.D. program.

Graduation Requirements

See Plan Graduation Requirements

Subplan Requirements 2: Rehabilitation Post-Bachelor's Track

Total Credits Required: 90

Course Requirements

Interdisciplinary Research Core Courses - Credits: 9

Choose three of the following courses:

HSC 701 - Interdisciplinary Team Science
HSC 702 - Translational Research Design
HSC 703 - Interdisciplinary Grant Writing for Health Sciences

HSC 704 - Selected Applications in Statistics 2
HSC 705 - Clinical Trial Design And Analysis

Interdisciplinary Health Seminar - Credits 3

HSC 710 - Seminar

Rehabilitation Sciences Core - Credits: 21

DPT 712 - Physiological Bases of Rehabilitation
DPT 713 - Genomic and Regenerative Rehabilitation Concepts
DPT 714 - Neuroplasticity
DPT 715 - Pathobiomechanics

And at least 3 additional graduate level courses (9 credits) relevant to course of study

Rehabilitation Sciences Core –12 Credits

DPT 702 - Critical Appraisal and Synthesis of Research in Rehabilitation
DPT 703 - Admission to PhD in Interdisciplinary Health Sciences program

And at least 2 additional graduate level statistics courses (6 credits)

Rehabilitation Pedagogy Core - 3 Credits

One pedagogy class from College of Education from the list below or another advisor approved pedagogy course.

EDH 627 - Student Learning and Development
EDH 733 - The Professorate
EDH 742 - Academic Governance in Higher Education
EDW 733 - Workforce Education Curriculum and Program Development
EDW 747 - Workforce Education Teaching
EPY 712 - Foundations of Learning and Cognition
EPY 757 - Theory and Philosophy of Educational Psychology
EPY 767 - Human Learning and Cognition
EPY 777 - Cognitive Development
CIT 608 - Integrating Technology in Teaching and Learning
CIT 643 - Designing Digital Materials for Education
CIT 647 - Creating Online Learning Environments
CIT 648 - Issues and Methods in Online Learning
CIT 653 - Creating Digital Materials for Education
CIT 667 - Technology and Educational Change
CIT 669 - Advanced Web Design and Development for Educators
CIT 778 - Instructional Design

Elective Courses - Credits: 30

Complete 30 credits of advisor approved graduate-level courses.

Dissertation - Credits: 12

HSC 711 - Dissertation

Degree Requirements

1. Students must complete 24 credits in the interdisciplinary health sciences core (12 of which are dissertation credits) and must complete 36 credits in the sub-plan core. The minimum credit total in the program is 60 credits.
2. Students must complete the degree with a cumulative GPA >3.0 and graduation must occur within 6 years for students enrolling with master's degrees and 8 years for students enrolling with bachelor's degrees.
3. Grades below B will not be acceptable. If the grade was received in a core class, then the student must retake the class. If a core class was not satisfactorily passed on two attempts, the student will be dismissed from the program. If the grade was in an elective class, then the class can be retaken or replaced with another elective class.
4. Students will complete a comprehensive examination which will be an interdisciplinary grant application. That is, this extramural grant proposal will have to have an interdisciplinary team science approach to answer a focused and important health science question. If a student fails the comprehensive examination they will be able to retake it again after a minimum of three months. If they fail a second time they will be separated from the program.
5. Students will also be required to complete a prospectus prior to dissertation in a focused research area. The dissertation committee

will have an interdisciplinary element as two of the committee members will be from the chosen sub-plan but the other two committee members will be from outside the sub-plan discipline (one will be the Graduate College Representative). Thus, the committee will have an interdisciplinary membership and will have a stronger voice for a team science approach.

6. Students will complete at least one national/international presentation as a platform or a poster from research generated during their Ph.D. program.

Graduation Requirements

See Plan Graduation Requirements

Subplan Requirements 3: Rehabilitation Post-Master's Track

Total Credits Required: 60

Course Requirements

Interdisciplinary Research Core Courses - Credits: 9

Choose three of the following courses:

HSC 701 - Interdisciplinary Team Science
HSC 702 - Translational Research Design
HSC 703 - Interdisciplinary Grant Writing for Health Sciences
HSC 704 - Selected Applications in Statistics 2
HSC 705 - Clinical Trial Design And Analysis

Interdisciplinary Health Seminar - Credits: 3

HSC 710 - Seminar

Rehabilitation Sciences Core - Credits: 21

DPT 712 - Physiological Bases of Rehabilitation
DPT 713 - Genomic and Regenerative Rehabilitation Concepts
DPT 714 - Neuroplasticity
DPT 715 - Pathobiomechanics

And at least 3 additional graduate level courses (9 credits) relevant to course of study

Rehabilitation Sciences Core - Credits: 12

DPT 702 - Critical Appraisal and Synthesis of Research in Rehabilitation
DPT 703 - Admission to PhD in Interdisciplinary Health Sciences program

And at least 2 additional graduate level statistics courses (6 credits)

Rehabilitation Pedagogy Core - Credits: 3

One pedagogy class from College of Education from the list below or another advisor approved pedagogy course.

EDH 627 - Student Learning and Development
EDH 733 - The Professorate
EDH 742 - Academic Governance in Higher Education
EDW 733 - Workforce Education Curriculum and Program Development
EDW 747 - Workforce Education Teaching
EPY 712 - Foundations of Learning and Cognition
EPY 757 - Theory and Philosophy of Educational Psychology
EPY 767 - Human Learning and Cognition
EPY 777 - Cognitive Development
CIT 608 - Integrating Technology in Teaching and Learning
CIT 643 - Designing Digital Materials for Education
CIT 647 - Creating Online Learning Environments
CIT 648 - Issues and Methods in Online Learning
CIT 653 - Creating Digital Materials for Education
CIT 667 - Technology and

Educational Change
CIT 669 - Advanced Web Design and Development for Educators
CIT 778 - Instructional Design

Dissertation - Credits: 12

HSC 711 - Dissertation

Degree Requirements

1. Students must complete 24 credits in the interdisciplinary health sciences core (12 of which are dissertation credits) and must complete 36 credits in the sub-plan core. The minimum credit total in the program is 60 credits.
2. Students must complete the degree with a cumulative GPA >3.0 and graduation must occur within 6 years for students enrolling with master's degrees and 8 years for students enrolling with bachelor's degrees.
3. Grades below B will not be acceptable. If the grade was received in a core class, then the student must retake the class. If a core class was not satisfactorily passed on two attempts, the student will be dismissed from the program. If the grade was in an elective class, then the class can be retaken or replaced with another elective class.
4. Students will complete a comprehensive examination which will be an interdisciplinary grant application. That is, this extramural grant proposal will have to have an interdisciplinary team science approach to answer a focused and important health science question. If a student fails the comprehensive examination they will be able to retake it again after a minimum of three months. If they fail a second time they will be separated from the program.
5. Students will also be required to complete a prospectus prior to dissertation in a focused research area. The dissertation committee will have an interdisciplinary element as two of the committee members will be from the chosen sub-plan but the other two committee members will be from outside the sub-plan discipline (one will be the Graduate College Representative). Thus, the committee will have an interdisciplinary membership and will have a stronger voice for a team science approach.
6. Students will complete at least one national/international presentation as a platform or a poster from research generated during their Ph.D. program

Graduation Requirements

See Plan Graduation Requirements

Subplan Requirements 4: Biomechanics Track

Total Credits Required: 60

Course Requirements

Interdisciplinary Research Core Courses - Credits: 9

Choose three of the following courses:

HSC 701 - Interdisciplinary Team Science
HSC 702 - Translational Research Design
HSC 703 - Interdisciplinary Grant Writing for Health Sciences
HSC 704 - Selected Applications in Statistics 2
HSC 705 - Clinical Trial Design And Analysis

Interdisciplinary Health Seminar - Credits 3

HSC 710 - Seminar

Kinesiology Core - Credits: 12

KIN 752 - Selected Application of Statistical Techniques II
KIN 789 - Dissertation Prospectus
And two of the following courses:
KIN 736 - Biomechanical Applications in Kinesiology
KIN 740 - Advanced Exercise Physiology
KIN 760 - Motor Skill Learning and Performance

Biomechanics Core - Credits: 24

Select 24 credits from the following courses and/or advisor approved graduate-level coursework.

KIN 656 - Biomechanics of Endurance Performance
KIN 700 - Special Problems in Kinesiology

KIN 717 - Survey and Analysis of Professional Literature
KIN 737 - Biomechanics of Strength
KIN 740 - Advanced Exercise Physiology
KIN 760 - Motor Skill Learning and Performance
KIN 765 - Neurophysiology of Movement
KIN 788 - Independent Study
DPT 711 - Medical Terminology
EGG 651 - Ergonomics
EGG 747 - Orthopedic Biomechanics - Lower Extremities and Spine
EGG 750 - Analysis of Human Movement

Dissertation - Credits: 12

HSC 711 - Dissertation

Degree Requirements

1. Students must complete 24 credits in the interdisciplinary health sciences core (12 of which are dissertation credits) and must complete 36 credits in the sub-plan core. The minimum credit total in the program is 60 credits.
2. Students must complete the degree with a cumulative GPA >3.0 and graduation must occur within 6 years for students enrolling with master's degrees and 8 years for students enrolling with bachelor's degrees.
3. Grades below B will not be acceptable. If the grade was received in a core class, then the student must retake the class. If a core class was not satisfactorily passed on two attempts, the student will be dismissed from the program. If the grade was in an elective class, then the class can be retaken or replaced with another elective class.
4. Students will complete a comprehensive examination which will be an interdisciplinary grant application. That is, this extramural grant proposal will have to have an interdisciplinary team science approach to answer a focused and important health science question. If a student fails the comprehensive examination they will be able to retake it again after a minimum of three months. If they fail a second time they will be separated from the program.
5. Students will also be required to complete a prospectus prior to dissertation in a focused research area. The dissertation committee will have an interdisciplinary element as two of the committee members will be from the chosen sub-plan but the other two committee members will be from outside the sub-plan discipline (one will be the Graduate College Representative). Thus, the committee will have an interdisciplinary membership and will have a stronger voice for a team science approach.
6. Students will complete at least one national/international presentation as a platform or a poster from research generated during their Ph.D. program

Graduation Requirements

See Plan Graduation Requirements

Subplan Requirements 5: Exercise Physiology Track

Total Credits Required: 60

Course Requirements

Interdisciplinary Research Core Courses - Credits: 9

Choose three of the following courses:

HSC 701 - Interdisciplinary Team Science
HSC 702 - Translational Research Design
HSC 703 - Interdisciplinary Grant Writing for Health Sciences
HSC 704 - Selected Applications in Statistics 2
HSC 705 - Clinical Trial Design And Analysis

Interdisciplinary Health Seminar - Credits 3

HSC 710 - Seminar

Kinesiology Core - Credits: 12

KIN 752 - Selected Application of Statistical Techniques II
KIN 789 - Dissertation Prospectus

And two of the following courses:

KIN 736 - Biomechanical Applications in Kinesiology
KIN 740 - Advanced Exercise Physiology

KIN 760 - Motor Skill Learning and Performance

Exercise Physiology Core - Credits: 24

Select 24 credits from the following courses and/or advisor approved graduate-level coursework.

KIN 607 - Comp & Integrative Med. Nutrition Therapy
KIN 657 - Physiology of Endurance Performance
KIN 700 - Special Problems in Kinesiology
KIN 717 - Survey and Analysis of Professional Literature
KIN 720 - Issues & Trends in Exercise Physiology
KIN 738 - Human Physiology
KIN 739 - Evaluation of Physical Working Capacity
KIN 744 - Thermoregulation During Physical Work
KIN 745 - Human Energy Metabolism
KIN 765 - Neurophysiology of Movement
KIN 788 - Independent Study
KIN 7XX - Advanced Sport Nutrition
KIN 7XX - Experimental Techniques in Nutrition & Metabolism

Dissertation - Credits: 12

HSC 711 - Dissertation

Degree Requirements

1. Students must complete 24 credits in the interdisciplinary health sciences core (12 of which are dissertation credits) and must complete 36 credits in the sub-plan core. The minimum credit total in the program is 60 credits.
2. Students must complete the degree with a cumulative GPA >3.0 and graduation must occur within 6 years for students enrolling with master's degrees and 8 years for students enrolling with bachelor's degrees.
3. Grades below B will not be acceptable. If the grade was received in a core class, then the student must retake the class. If a core class was not satisfactorily passed on two attempts, the student will be dismissed from the program. If the grade was in an elective class, then the class can be retaken or replaced with another elective class.
4. Students will complete a comprehensive examination which will be an interdisciplinary grant application. That is, this extramural grant proposal will have to have an interdisciplinary team science approach to answer a focused and important health science question. If a student fails the comprehensive examination they will be able to retake it again after a minimum of three months. If they fail a second time they will be separated from the program.
5. Students will also be required to complete a prospectus prior to dissertation in a focused research area. The dissertation committee will have an interdisciplinary element as two of the committee members will be from the chosen sub-plan but the other two committee members will be from outside the sub-plan discipline (one will be the Graduate College Representative). Thus, the committee will have an interdisciplinary membership and will have a stronger voice for a team science approach.
6. Students will complete at least one national/international presentation as a platform or a poster from research generated during their Ph.D. program

Graduation Requirements

See Plan Graduation Requirements

Subplan Requirements 6: Motor Learning/Control Track

Total Credits Required: 60

Course Requirements

Interdisciplinary Research Core Courses - Credits: 9

Choose three of the following courses:

HSC 701 - Interdisciplinary Team Science
HSC 702 - Translational Research Design
HSC 703 - Interdisciplinary Grant Writing for Health Sciences
HSC 704 - Selected Applications in Statistics 2
HSC 705 - Clinical Trial Design And Analysis

Interdisciplinary Health Seminar - Credits 3

HSC 710 - Seminar

Kinesiology Core - Credits: 12

KIN 752 - Selected Application of Statistical Techniques II
KIN 789 - Dissertation Prospectus

And two of the following courses:

KIN 736 - Biomechanical Applications in Kinesiology
KIN 740 - Advanced Exercise Physiology
KIN 760 - Motor Skill Learning and Performance

Motor learning/Control electives - Credits: 24

Select 24 credits from the following courses and/or advisor approved graduate-level coursework.

KIN 614 - Enhancing Mental and Motor Abilities
KIN 700 - Special Problems in Kinesiology
KIN 743 - Research Techniques in Biomechanics
KIN 746x - Matlab Programming
KIN 762 - Motor Learning Applications
KIN 788 - Independent Study
EGG 750 - Analysis of Human Movement
PSY 620 - Psychology of Learning
PSY 701 - Biological Bases of Behavior
PSY 702 - Sensation and Perception
PSY 703 - Cognitive Psychology
PSY 719 - Behavioral Neuroscience
PSY 720 - Systems and Cognitive Neuroscience
PSY 741 - Psychology and Health
PSY 742 - Psychopharmacology
PSY 744 - Neuropsychology

Dissertation - Credits: 12

HSC 711 - Dissertation

Degree Requirements

1. Students must complete 24 credits in the interdisciplinary health sciences core (12 of which are dissertation credits) and must complete 36 credits in the sub-plan core. The minimum credit total in the program is 60 credits.
2. Students must complete the degree with a cumulative GPA >3.0 and graduation must occur within 6 years for students enrolling with master's degrees and 8 years for students enrolling with bachelor's degrees.
3. Grades below B will not be acceptable. If the grade was received in a core class, then the student must retake the class. If a core class was not satisfactorily passed on two attempts, the student will be dismissed from the program. If the grade was in an elective class, then the class can be retaken or replaced with another elective class.
4. Students will complete a comprehensive examination which will be an interdisciplinary grant application. That is, this extramural grant proposal will have to have an interdisciplinary team science approach to answer a focused and important health science question. If a student fails the comprehensive examination they will be able to retake it again after a minimum of three months. If they fail a second time they will be separated from the program.
5. Students will also be required to complete a prospectus prior to dissertation in a focused research area. The dissertation committee will have an interdisciplinary element as two of the committee members will be from the chosen sub-plan but the other two committee members will be from outside the sub-plan discipline (one will be the Graduate College Representative). Thus, the committee will have an interdisciplinary membership and will have a stronger voice for a team science approach.
6. Students will complete at least one national/international presentation as a platform or a poster from research generated during their Ph.D. program.

Graduation Requirements

See Plan Graduation Requirements

Subplan Requirements 7: Health Physics Post-Bachelor's Track

Total Credits Required: 90

Course Requirements

Interdisciplinary Research Core Courses - Credits: 9

Choose three of the following courses:

HSC 701 - Interdisciplinary Team Science
HSC 702 - Translational Research Design
HSC 703 - Interdisciplinary Grant Writing for Health Sciences
HSC 704 - Selected Applications in Statistics 2
HSC 705 - Clinical Trial Design And Analysis

Interdisciplinary Health Seminar - Credits 3

HSC 710 - Seminar

Health Physics Core - Credits: 18

HPS 602 - Radiation Detection
HPS 603 - Radiation Physics and Instrumentation Laboratory
HPS 701 - Applied Nuclear Physics
HPS 703 - Radiation Interactions and Transport
HPS 720 - Radiation Dosimetry
HPS 730 - Advanced Radiation Biology

Elective Courses - Credits: 48

Complete 48 credits from the list below and/or other advisor approved graduate-level Health Physics (HPS) courses.

HPS 611 - Health Physics Seminar
HPS 616 - Advanced Health Physics
HPS 670 - Environmental Health Physics
HPS 718 - Radiochemistry Laboratory
HPS 719 - Introduction to Radioanalytical Chemistry
HPS 740 - Medical Imaging Physics
HPS 742 - Radiation Therapy Physics
HPS 742L - Therapy Physics Clinical Rotation and Lab
HPS 750 - Radiation Risk Assessment
HPS 760 - Environmental Restoration and Radioactive Waste Management
HPS 790 - Radiation Oncology Physics Clinical Internship
HPS 795 - Independent Study

Dissertation - Credits: 12

HSC 711 - Dissertation

Degree Requirements

1. Students must complete 24 credits in the interdisciplinary health sciences core (12 of which are dissertation credits) and must complete 36 credits in the sub-plan core. The minimum credit total in the program is 60 credits.
2. Students must complete the degree with a cumulative GPA >3.0 and graduation must occur within 6 years for students enrolling with master's degrees and 8 years for students enrolling with bachelor's degrees.
3. Grades below B will not be acceptable. If the grade was received in a core class, then the student must retake the class. If a core class was not satisfactorily passed on two attempts, the student will be dismissed from the program. If the grade was in an elective class, then the class can be retaken or replaced with another elective class.
4. Students will complete a comprehensive examination which will be an interdisciplinary grant application. That is, this extramural grant proposal will have to have an interdisciplinary team science approach to answer a focused and important health science question. If a student fails the comprehensive examination they will be able to retake it again after a minimum of three months. If they fail a second time they will be separated from the program.
5. Students will also be required to complete a prospectus prior to dissertation in a focused research area. The dissertation committee will have an interdisciplinary element as two of the committee members will be from the chosen sub-plan but the other two committee members will be from outside the sub-plan discipline (one will be the Graduate College Representative). Thus, the committee will have an interdisciplinary membership and will have a stronger voice for a team science approach.
6. Students will complete at least one national/international presentation as a platform or a poster from research generated during their Ph.D. program.

Graduation Requirements

See Plan Graduation Requirements

Subplan Requirements 8: Health Physics Post-Master's Track

Total Credits Required: 60

Course Requirements

Interdisciplinary Research Core Courses - Credits: 9

Choose three of the following courses:

HSC 701 - Interdisciplinary Team Science
HSC 702 - Translational Research Design
HSC 703 - Interdisciplinary Grant Writing for Health Sciences
HSC 704 - Selected Applications in Statistics 2
HSC 705 - Clinical Trial Design And Analysis

Interdisciplinary Health Seminar - Credits 3

HSC 710 - Seminar

Health Physics Core - Credits: 18

HPS 602 - Radiation Detection
HPS 603 - Radiation Physics and Instrumentation Laboratory
HPS 701 - Applied Nuclear Physics
HPS 703 - Radiation Interactions and Transport
HPS 720 - Radiation Dosimetry
HPS 730 - Advanced Radiation Biology

Elective Courses - Credits: 18

Complete 18 credits from the list below and/or other advisor approved graduate-level Health Physics (HPS) courses.

HPS 611 - Health Physics Seminar
HPS 616 - Advanced Health Physics
HPS 670 - Environmental Health Physics
HPS 718 - Radiochemistry Laboratory
HPS 719 - Introduction to Radioanalytical Chemistry
HPS 740 - Medical Imaging Physics
HPS 742 - Radiation Therapy Physics
HPS 742L - Therapy Physics Clinical Rotation and Lab
HPS 750 - Radiation Risk Assessment
HPS 760 - Environmental Restoration and Radioactive Waste Management
HPS 790 - Radiation Oncology Physics Clinical Internship
HPS 795 - Independent Study

Dissertation - Credits: 12

HSC 711 - Dissertation

Degree Requirements

1. Students must complete 24 credits in the interdisciplinary health sciences core (12 of which are dissertation credits) and must complete 36 credits in the sub-plan core. The minimum credit total in the program is 60 credits.
2. Students must complete the degree with a cumulative GPA >3.0 and graduation must occur within 6 years for students enrolling with master's degrees and 8 years for students enrolling with bachelor's degrees.
3. Grades below B will not be acceptable. If the grade was received in a core class, then the student must retake the class. If a core class was not satisfactorily passed on two attempts, the student will be dismissed from the program. If the grade was in an elective class, then the class can be retaken or replaced with another elective class.
4. Students will complete a comprehensive examination which will be an interdisciplinary grant application. That is, this extramural grant proposal will have to have an interdisciplinary team science approach to answer a focused and important health science question. If a student fails the comprehensive examination they will be able to retake it again after a minimum of three months. If they fail a second time they will be separated from the program.
5. Students will also be required to complete a prospectus prior to dissertation in a focused research area. The dissertation committee will have an interdisciplinary element as two of the committee members will be from the chosen sub-plan but the other two committee members will be from outside the sub-plan discipline (one will be the Graduate College Representative). Thus, the committee will have an interdisciplinary membership and will have a stronger voice for a team science approach.

6. Students will complete at least one national/international presentation as a platform or a poster from research generated during their Ph.D. program.

Graduation Requirements

See Plan Graduation Requirements

Plan Graduation Requirements

1. The student must submit all required forms to the Graduate College and then apply for graduation up to two semesters prior to completing his/her degree requirements for both the Master's and Doctoral portions of the program.
2. The student must submit and successfully defend his/her dissertation by the posted deadline. The defense must be advertised and is open to the public.
3. Student must submit his/her approved, properly formatted dissertation to the Graduate College, and submit the approved electronic version to ProQuest by the posted deadline.

School of Allied Health Sciences

The School of Allied Health Sciences provides undergraduate and graduate education to students interested in studying one of the many different health sciences curriculums. The curricula are designed to prepare students to readily assume health-related employment opportunities or continue on with further graduate or professional studies. Educational experiences include rigorous classroom instruction, laboratory/clinical practice (on and off campus sites), research opportunities with faculty, and professional mentoring. It is a goal of the School of Allied Health Sciences faculty to produce graduate students who are professionally competent, thoroughly capable of critical thinking, and highly sought after by employers. Graduates will exhibit high ethical professional standards, be devoted to lifelong learning and be prepared to respond to local, regional or national level demands in their fields of study.

Carolyn Yucha, Ph.D., Dean, School of Allied Health Sciences

John A. Mercer, Ph.D., Associate Dean

Health Physics & Diagnostic Sciences

Many industries, medical facilities, and research laboratories demand professionals who understand the safe and effective use of radiation and radioactive materials. Health physics is the study of radiation protection, and the safe use of radioactive materials. Our M.S. program provides students with instruction and research opportunities focused in two career paths: Medical Physics, the effective use of radiation for medical imaging and therapy, and Environmental Health Physics, radiation protection, the industrial applications of radiation and radioactive materials, and the behavior and evaluation of radiation in the environment. The Department of Health Physics faculty members look forward to working with prospective students in this challenging program of study.

Health physics is the profession dedicated to the protection of the individual, the population, and the environment from the potentially harmful effects of radiation while allowing society to benefit from all the beneficial applications of radiation and radioactive materials in the modern world. It incorporates the principles and technical skills from many disciplines including: physics, chemistry, biochemistry, biology, mathematics, and ecology.. The wide spectrums of knowledge required of the health physicist make this profession both challenging and rewarding. The Master of Science (M.S.) in Health Physics is designed to prepare students in the fields of health physics and medical physics to administer public and private radiation health programs; investigate medical uses of radioactivity; measure and control radiation in the workplace and the environment; ensure compliance with radiation protection regulations; assist in the cleanup of radioactive and hazardous waste sites; evaluate worker, patient, and public radiation doses; and conduct research in radiation protection, medical imaging, and radiation therapy.

The Master of Science in Health Physics is divided into two sub-plans: Environmental Health Physics and Medical Physics. The Environmental Health Physics sub-plan is accredited by the Applied Science Accreditation Commission of ABET (http://abet.org). The Medical Physics sub-plan is accredited by the Commission on Accreditation of Medical Physics Educational Programs (CAMPEP).

Steen Madsen, Ph.D., Chair
Gary Cerefice, Ph.D., Graduate Coordinator

Health Physics and Diagnostic Sciences Faculty

Chair

Madsen, Steen - *Full Graduate Faculty*
Professor; B.S., University of Toronto; M.S., Ph.D., McMaster University . *Rebel since 1997.*

Graduate Coordinator

Cerefice, Gary - *Full Graduate Faculty*
Assistant Professor; B.S., University of Illinois; M.S., Ph.D., Massachusetts Institute of Technology. *Rebel since 2009*.

Graduate Faculty

Cucinotta, Francis - *Full Graduate Faculty*
Professor; B.A. Rutgers, Ph.D. Old Dominion University. *Rebel since 2013*.

Hanson, Eric H. - *Associate Graduate Faculty*
B.S., Oregon State University; M.Ph., Uniformed Services University of the Health Sciences; M.D., Johns Hopkins University. *Rebel since 2010.*

Hirschberg, Henry - *Associate Graduate Faculty*
B.E.E. City University New York; M.D., Ph.D., University of Oslo, Norway. *Rebel since 2006.*

Kuang, Yu - *Full Graduate Faculty*
Assistant Professor; B.M.E., M.S., Zhejiang University; Ph.D., Case Western Reserve University. *Rebel since 2012*.

Ma, Bing - *Full Graduate Faculty*
Assistant Professor; B.S. Tsinghua University, M.S., Ph.D. University of Michigan. *Rebel since 2013.*

Meigooni, Ali S. - *Associate Graduate Faculty*
B.S. Tehran University; M.S., Ph.D., Ohio University. *Rebel since 2012.*

Riland, Carson A. - *Associate Graduate Faculty*
B.S. Bloomsburg University; M.S., Ph.D. Texas A&M University. *Rebel since 1996.*

Sudowe, Ralf - ***Full Graduate Faculty***
Associate Professor; Dipl.-Chem, Philipps Universitat Marburg, Germany. ***Rebel since 2006.***

Advanced Graduate Certificate in Medical Physics

Plan Description

The Certificate in Medical Physics is designed to provide individuals holding terminal degrees in physics or a closely related field with the didactic coursework required for eligibility to enter medical physics residency programs. This is a two-semester certificate offering courses in basic radiation sciences and clinical medical physics.

For more information about your program, including your graduate program handbook and learning outcomes, please visit the Degree Directory.

Plan Admission Requirements

Applications available on the UNLV Graduate College website.

Applications for admission must be completed through the Graduate College ApplyYourself online application system.
Applicants must:

1. Hold a terminal degree (Ph.D. or equivalent) in physics or a closely related field,
2. Have an overall GPA of 3.00 in graduate work,
3. Receive a composite score of 310 or higher on the verbal and quantitative sections of the Graduate Record Examination (GRE),
4. Successfully complete an anatomy and physiology course. Applicants not meeting the anatomy and physiology requirement may still be admiitted to the program, however, this prerequisite deficiency must be completed during either the first or second semester of study.
5. All domestic and international applicants must review and follow the Graduate College Admission and Registration Requirements.

Students are accepted into a degree program as described in the Graduate Catalog. The faculty and corresponding sub-disciplines and sub-plans within the described programs are subject to change at any time.

Plan Requirements

Total Credits Required: 18

Course Requirements

Required Courses – Credits: 18

HPS 602 - Radiation Detection
HPS 703 - Radiation Interactions and Transport
HPS 720 - Radiation Dosimetry
HPS 730 - Advanced Radiation Biology
HPS 740 - Medical Imaging Physics
HPS 742 - Radiation Therapy Physics

Certificate Requirements

1. Completion of a minimum of 18 credit hours with a minimum GPA of 3.00.
2. Students in the Certificate in Medical Physics must adhere to the Six-year Completion Rule.
3. No credit may be used in an advanced certification program for course work completed more than six calendar years immediately preceding the term in which all certificate requirements are completed.

Plan Certificate Completion Requirements

The student must submit all required forms to the Graduate College and then apply for graduation in MyUNLV by the appropriate deadline.

Master of Science - Health Physics

Plan Description

The Master of Science (M.S.) – Health Physics is designed to prepare students in the field of health physics to administer public and private radiation health programs; investigate medical uses of radioactivity; measure and control radiation in the workplace and the environment; ensure compliance with radiation protection regulations; assist in the cleanup of radioactive and hazardous waste sites; evaluate worker, patient, and public radiation doses; and conduct research in radiation protection.

For more information about your program including your graduate program handbook and learning outcomes please visit the Degree Directory.

Applications available on the UNLV Graduate College website.

Complete the Graduate College online application for admission. Completed applications, official Graduate Record Examination (GRE) scores, one copy of official transcripts from all post-secondary institutions, and all other documents (i.e., recommendation provider information and statement of professional goals) should be uploaded into the online application system.

Students seeking admission to the graduate program in health physics must fulfill the following admission requirements:

1. Overall GPA of 3.00 (A=4.00 or equivalent) in undergraduate work. Applicants with a GPA below 3.00, but not less than 2.75, may be admitted as a graduate provisional student.
2. Successful completion (grade of C or better) of the following course work:
    a. Seven-semester credits in biology including an introductory modern biology course and one higher level course
    b. Ten-semester credits in chemistry or geology including a general chemistry sequence and one higher-level course
    c. Eight-semester credits in elementary calculus (mathematics through differential equations is recommended)
    d. Twelve semester credits in physics including a general physics sequence
    e. A course in computer programming (an additional course in numerical methods or scientific computing is recommended) Applicants not meeting a limited number (maximum of nine credit hours) of prerequisite requirements may still be admitted to the program. However, prerequisite requirements may still be admitted to the program. However, prerequisite deficiencies must be completed during the first year of study and prior to registering for Thesis or Professional Paper.
3. Completion of a baccalaureate degree in health physics, one of the basic sciences, or in a closely related scientific or engineering field. Applicants holding a degree in a non-related field may be given special consideration if they have completed all prerequisite course work.
4. Students seeking entry to the medical physics specialization must have a strong foundation in physics and, as such, applicants are required to have either an undergraduate degree in physics or a degree in a related engineering or physical science discipline with course work equivalent to a minor in physics (includes at least three upper level undergraduate physics courses).
5. A score ranking in the 50th percentile or higher on the verbal and quantitative sections of the Graduate Record Exam (GRE). Tests taken prior to August 2011 require a composite score of 1,000 or higher on the verbal and quantitative sections of the Graduate Record Exam (GRE).
6. Three letters of recommendation from former instructors or employers that speak to the applicant's potential as a graduate student. Contact information for recommendation providers should be entered into the recommendation page of the online application. Recommenders will then upload their letters directly into the student's online application.

7. A statement of approximately 300 words indicating the student's professional goals and reason for seeking graduate education.
8. All domestic and international applicants must review and follow the Graduate College Admission and Registration Requirements.

Students are accepted into a degree program as described in the Graduate Catalog. The faculty and corresponding sub-disciplines and sub-plans within the described programs are subject to change at any time.

Plan Requirements

See Subplan Requirements below.

Subplan 1 Requirements: Environmental Health Physics

Total Required Credits: 40

Course Requirements

Required Courses – Credits: 24

HPS 602 - Radiation Detection
HPS 603 - Radiation Physics and Instrumentation Laboratory
HPS 670 - Environmental Health Physics
HPS 701 - Applied Nuclear Physics
HPS 703 - Radiation Interactions and Transport
HPS 720 - Radiation Dosimetry
HPS 730 - Advanced Radiation Biology
HPS 611 - Health Physics Seminar

Core Courses – Credits: 7

HPS 616 - Advanced Health Physics
HPS 718 - Radiochemistry Laboratory
HPS 719 - Introduction to Radioanalytical Chemistry

Elective Courses – Credits: 3

Complete 3 credits from the following list of courses, any graduate-level health physics (HPS) courses, or other advisor-approved graduate-level courses.

HPS 750 - Radiation Risk Assessment
HPS 760 - Environmental Restoration and Radioactive Waste Management

Culminating Experience – Credits: 6

Complete one of the following:

HPS 797 - Thesis
HPS 796 - Professional Paper

Plan Degree Requirements

1. Maintain a cumulative grade point average of 3.00 or above each semester enrolled.
2. Receive a grade of B (3.00) or above in all core health physics courses. If less than a B is earned, the course may be repeated. The student must be in good standing to repeat a course, and any core course may be repeated only once.
3. In consultation with his/her advisor, a student will organize an advisory committee of at least three departmental members. In addition, a fourth member from outside the department, known as the Graduate College Representative, must be appointed. An additional committee member may be added at the student and department's discretion. Please see Graduate College policy for committee appointment guidelines.
4. Pass the comprehensive oral examination. The comprehensive oral exam will be taken by all students after completion of the second semester of enrollment in the program. The exam will be pass/fail. Students who fail the exam may re-take the exam at the end of their third semester of enrollment. Students who fail their second attempt will be separated from the program. Students may not defend their thesis prospectus or proceed with their professional paper until successful completion of the oral exam. The exam will be administered by the graduate faculty from Health Physics.
5. Continuously register for three credit hours of thesis or professional paper each semester while working on the thesis or professional paper until completion.

6. Credit by Challenge Examination: Graduate courses in the Health Physics program may not be challenged for credit.
7. Allotment of Credits: Students have a choice of catalog under which they wish to graduate
    a. The year of official matriculation, or
    b. The year of graduation
    c. Students are encouraged to meet the requirements of the current catalog.
8. A final oral examination will be held following completion of the thesis or professional paper resulting from a research project. The final examination must be held by the Graduate College deadline in the term in which the student plans to complete the degree requirements.

Graduation Requirements

See Plan Graduation Requirements below.

Subplan 2 Requirements: Medical Physics

Total Required Credits: 40

Course Requirements

Required Courses – Credits: 21

HPS 602 - Radiation Detection
HPS 603 - Radiation Physics and Instrumentation Laboratory
HPS 701 - Applied Nuclear Physics
HPS 703 - Radiation Interactions and Transport
HPS 720 - Radiation Dosimetry
HPS 730 - Advanced Radiation Biology
HPS 611 - Health Physics Seminar - (three times)

Core Courses – Credits: 13

HPS 740 - Medical Imaging Physics
HPS 740L - Diagnostic Medical Physics Clinical Rotation and Laboratory
HPS 742 - Radiation Therapy Physics
HPS 742L - Therapy Physics Clinical Rotation and Lab
HPS 795 - Independent Study

Culminating Experience –Credits: 6

Complete one of the following:

HPS 797 - Thesis
HPS 796 - Professional Paper

Plan Degree Requirements

1. Maintain a cumulative grade point average of 3.00 or above each semester enrolled.
2. Receive a grade of B (3.00) or above in all core health physics courses. If less than a B is earned, the course may be repeated. The student must be in good standing to repeat a course, and any core course may be repeated only once.
3. In consultation with his/her advisor, a student will organize an advisory committee of at least three departmental members. In addition, a fourth member from outside the department, known as the Graduate College Representative, must be appointed. An additional committee member may be added at the student and department's discretion. Please see Graduate College policy for committee appointment guidelines.
4. Pass the comprehensive oral examination. The comprehensive oral exam will be taken by all students after completion of the second semester of enrollment in the program. The exam will be pass/fail. Students who fail the exam may re-take the exam at the end of their third semester of enrollment. Students who fail their second attempt will be separated from the program. Students may not defend their thesis prospectus or proceed with their professional paper until successful completion of the oral exam. The exam will be administered by the graduate faculty from Health Physics.
5. Continuously register for three credit hours of thesis or professional paper each semester while working on the thesis or professional paper until completion.
6. Credit by Challenge Examination: Graduate courses in the Health Physics program may not be challenged for credit.
7. Allotment of Credits: Students have a choice of catalog under which they wish to graduate
    a. The year of official matriculation, or
    b. The year of graduation

c. Students are encouraged to meet the requirements of the current catalog.

8. A final oral examination will be held following completion of the thesis or professional paper resulting from a research project. The final examination must be held by the Graduate College deadline in the term in which the student plans to complete the degree requirements.

Graduation Requirements

See Plan Graduation Requirements below.

Plan Graduation Requirements

1. The student must submit all required forms to the Graduate College and then apply for graduation up to two semesters prior to completing his/her degree requirements.
2. The student must submit and successfully defend his/her thesis or professional paper by the posted deadline. The thesis defense must be advertised and is open to the public.
3. If a thesis is completed, the student must submit his/her approved, properly formatted hard-copy document to the Graduate College, and submit the approved electronic version to ProQuest by the posted deadline.

Doctor of Medical Physics

Plan Description

The doctor of medical physics degree is a 4-year entry-level professional program designed to provide individuals with appropriate baccalaureate degrees the knowledge and skills required to practice medical physics in a clinical setting. Upon receiving this degree, students will be eligible to sit for the licensure examinations in medical physics. The program of study consists of 80 credit hours of graduate course work divided into classroom, clinical and research activities. During the first 5 semesters in the program, students take courses emphasizing the fundamental principles of radiological sciences and medical physics. The last six semesters consist of clinical rotations in radiation oncology clinics and/or hospitals where students are involved with all aspects of clinical medical physics including dosimetry and treatment planning, external beam physics, brachytherapy, quality assurance and special procedures.

For more information about your program, including your graduate program handbook and learning outcomes please visit the Degree Directory.

Plan Admission Requirements

Applications available on the UNLV Graduate College website.

Students seeking admission to the DMP program must fulfill the following admission requirements:

1. Overall GPA of 3.0/4.0 (B average) in undergraduate work. Applicants with a GPA below 3.0 but not less than 2.75 may be admitted as provisional students.
2. Bachelor's Degree in Physics, Applied Physics, Physical Science, or Engineering (with an equivalent of a minor in physics) from an accredited college or university.
3. Applicants with a master's degree from an accredited medical physics program who meet the entrance requirements may be considered for admission to the program. In addition, these applicants must have taken the American Board of Radiology (ABR) part 1 exam as a condition for admission to the program. These students will be required to take an additional 20 credits of electives (determined by the Health Physics Graduate faculty).
4. A score ranking in the 50th percentile or higher on the verbal and quantitative sections of the Graduate Record Examination (GRE).
5. Three letters of recommendation from former instructors or employers that speak to the applicant's potential as a graduate student. The individual writing the letter may use the form available from the Graduate College, which includes a release form for the student to sign.
6. A statement of approximately 300 words indicating the student's professional goals and reason for seeking graduate education.
7. International applicants whose native language is not English must show competency in the English language before they can be admitted. A satisfactory score (minimum 550 on the written version or 213 on the computerized version) on the "Test of English as a Foreign Language" (TOEFL) or comparable evidence of competency in English must be submitted by students as part of their application.
8. All domestic and international applicants must review and follow the Graduate College Admission and Registration Requirements.

Plan Requirements

See Subplan Requirements below.

Subplan 1 Requirements: Post-Bachelor's Track

Total Credits Required: 80

Course Requirements

Fall Semester 1st Year Courses - Credits: 10

HPS 676 - Sectional Anatomy in Medical Imaging
HPS 701 - Applied Nuclear Physics
HPS 730 - Advanced Radiation Biology
HPS 611 - Health Physics Seminar

Spring Semester 1st Year Courses - Credits: 9

HPS 703 - Radiation Interactions and Transport
HPS 602 - Radiation Detection
HPS 603 - Radiation Physics and Instrumentation Laboratory

Summer Semester 1st Year Courses - Credits: 6

HPS 790 - Radiation Oncology Physics Clinical Internship

Fall Semester 2nd Year Courses - Credits: 7

HPS 720 - Radiation Dosimetry
HPS 742 - Radiation Therapy Physics
HPS 611 - Health Physics Seminar

Spring Semester 2nd Year Courses - Credits: 8

HPS 740 - Medical Imaging Physics
HPS 742L - Therapy Physics Clinical Rotation and Lab
HPS 611 - Health Physics Seminar
HPS 792 - Ethics for Medical Physicists

Summer Semester 2nd Year Courses - Credits: 6

HPS 770 Radiation Therapy Physics: External Beam

Fall Semester 3rd Year Courses - Credits: 6

HPS 771 - Dosimetric Aspects of Radiation Therapy I

Spring Semester 3rd Year Courses - Credits: 6

HPS 772R: Radiation Therapy Physics: Brachytherapy

Summer Semester 3rd Year Courses - Credits: 6

HPS 773 - Dosimetric Aspects of Radiation Therapy II

Fall Semester 4th Year Courses - Credits: 8

HPS 774 - Clinical Medical Physics
HPS 794 - Clinical Physics Research

Spring Semester 4th Year Courses - Credits: 8

HPS 775 - Clinical Medical Physics II: Special Procedures
HPS 794: Clicnical Physics Research

Degree Requirements

1. Maintain a cumulative GPA of 3.0/4.0 or above each semester enrolled.
2. Receive a grade of B (3.0) or above (or satisfactory, where applicable) in all courses. If less than a B (or unsatisfactory) is earned, the course may be repeated. The student must be in good standing to repeat a course, and any course may be repeated only once.
3. Complete a minimum of six semester hours in each calendar year.
4. Students entering the program with a B.S. degree have the option of leaving the program with a masters degree after successful completion of all non-clinical coursework. These students are required to take an additional credits of professional paper (HPS 796) of thesis (HPS 797) in order to satisfythe research component of the masters degree.
5. A minimum of 80 credit hours is required for graduation from the DMP program (60 credits for students admitted with a masters degree).

Subplan 2 Requirements: Post-Master's Track

Total Credits Required: 60

Course Requirements

Fall Semester 1st Year Courses - Credits: 10

10 Credits of Advisor Approved Electives.

Spring Semester 1st Year Courses -

Credits: 10

10 Credits of Advisor Approved Electives.

Summer Semester 1st Year Courses - Credits: 6

HPS 770 Radiation Therapy Physics: External Beam

Fall Semester 2nd Year Courses - Credits: 6

HPS 771 - Dosimetric Aspects of Radiation Therapy I

Spring Semester 2nd Year Courses - Credits: 6

HPS 772R: Radiation Therapy Physics: Brachytherapy

Summer Semester 2nd Year Courses - Credits: 6

HPS 773 - Dosimetric Aspects of Radiation Therapy II

Fall Semester 3rd Year Courses - Credits: 8

HPS 774 - Clinical Medical Physics
HPS 794 - Clinical Physics Research

Spring Semester 3rd Year Courses - Credits: 8

HPS 775 - Clinical Medical Physics II: Special Procedures
HPS 794: Clicnical Physics Research

Degree Requirements

1. Maintain a cumulative GPA of 3.0/4.0 or above each semester enrolled.
2. Receive a grade of B (3.0) or above (or satisfactory, where applicable) in all courses. If less than a B (or unsatisfactory) is earned, the course may be repeated. The student must be in good standing to repeat a course, and any course may be repeated only once.
3. Complete a minimum of six semester hours in each calendar year.
4. Students entering the program with a B.S. degree have the option of leaving the program with a masters degree after successful completion of all non-clinical coursework. These students are required to take an additional credits of professional paper (HPS 796) of thesis (HPS 797) in order to satisfythe research component of the masters degree.
5. A minimum of 80 credit hours is required for graduation from the DMP program (60 credits for students admitted with a masters degree).

Plan Graduation Requirements

1. The student must submit all required forms to the Graduate College and then apply for graduation up to two semesters prior to completing his/her degree requirements.
2. The student must submit and successfully present his/her final research project by the posted deadline. The presentation must be advertised and is open to the public.
3. The student must submit his/her approved, properly formatted research project to the Graduate College, and submit the approved electronic version to ProQuest by the posted deadline.

Health Physics & Diagnostic Sciences Courses

HPS 602 - Radiation Detection
Credits 3
Provides a basic understanding of dosimetry and radiation detection. Energy loss through the interaction of radiation with matter. Differing typed of spectroscopy, electronics, and instrumentation involved in radiation detection. Statistics, errors, and interpretation encountered in data collection.
Note This course is crosslisted with HPS 402. Credit at the 600-level requires additional work.

HPS 603 - Radiation Physics and Instrumentation Laboratory
Credits 3
Laboratory experiments in basic radiation physics and detection. Includes operation and calibration of survey instruments and gas-filled counters. Theory and operation of alpha and gamma spectrometry equipment and liquid scintillation counters. Laboratories and discussions on counting statistics and basic electronics.
Note This course is crosslisted with HPS 403. Credit at the 600-level requires additional work.

HPS 611 - Health Physics Seminar
Credits 1
Forum for students, faculty, and/or invited speakers to present research activities, current events, market issues, and new products in the area of health physics.
Same as HPS 411
Note May be repeated for a maximum of three credits.

HPS 616 - Advanced Health Physics
Credits 3
Solutions to problems pertaining to radiation safety in the environment, industry, medical facilities, and nuclear reactors. Topics include shielding, accelerators, radon, non-ionizing radiation, and radiation dose-effect.
Prerequisites HPS 300 and HPS 402, or equivalent.

HPS 670 - Environmental Health Physics
Credits 3
Cosmic and terrestrial radiation sources. Emphasis on TENORM, radon and pathway modeling. Topics include environmental regulations, nuclear fuel cycle, nuclear weapons testing and accidents, geohydrology and geochemistry.
Note This course is crosslisted with HPS 470. Credit at the 600-level requires additional work.

HPS 676 - Sectional Anatomy
Credits 3
Sectional anatomy of organs and systems is presented using medical imaging modlities such as magnetic resonance imaging, computed tomography, single photon emission computed tomography, positron emission tomography and ultrasound.

HPS 680 - Industrial Hygiene
Credits 3
This course has been approved for graduate credit. A full description of this course may be found in the Undergraduate Catalog under the corresponding 400 number.
Prerequisites BIOL 189 or CHEM 122

HPS 701 - Applied Nuclear Physics
Credits 3
Atomic and nuclear structure; decay energetics and kinetics; interactions of radiation with matter; radiation protection standards; practical aspects of radiation protection; photon, neutron, beta and X-ray shielding; criticality; radiation protection at reactors, accelerators and medical facilities; radioactive material transportation regulations.

HPS 703 - Radiation Interactions and Transport
Credits 3
Decay energetics and kinetics; interactions of radiation with matter, radiation protection standards; practical aspects of radiation protection; photon, neutron, beta, and x-ray shielding, radioactive material transportation regulations, radiation transport
Prerequisites HPS 701.

HPS 718 - Radiochemistry Laboratory
Credits 3
Laboratory experiments in radiation detection, counting statistics and radiochemical separations are discussed. The operation and calibration of alpha- and gamma-ray spectrometry equipment and liquid scintillation counters will be examined.

Radiochemical separation and analysis of environmental samples are performed. Novel and standard procedures for sample examination will be covered.
Prerequisites Consent of instructor.
Corequisite HPS 602

HPS 719 - Introduction to Radioanalytical Chemistry
Credits 1
Introduction to the principles and concepts of radioanalytical chemistry, such as the use of tracers, carriers and spikes and isotope dilution analysis. Sample preparation and techniques for radioanalytical separations and source preparation. Differences between macro chemistry and tracer chemistry.
Prerequisites HPS 602.

HPS 720 - Radiation Dosimetry
Credits 3
Mathematical treatment of the fundamental principles of internal and external radiation dosimetry. Pathway models and bioassay techniques studied to support the calculation of radiation dose from the intake of radioactivity. General external dosimetry from a variety of industrial and medical sources is addressed.
Prerequisites HPS 701 or consent of instructor.

HPS 730 - Advanced Radiation Biology
Credits 3
Topics covered include: physics and chemistry of radiation absorption, cell survival curves, repair of radiation damage, radiation carcinogenesis, risk assessment models, cancer biology, model tumor systems, and dose fractionation in radiotherapy.

HPS 740 - Medical Imaging Physics
Credits 3
Conceptual, mathematical, and diagnostic aspects of commonly used clinical imaging modalities including film-screen radiography, computed tomography, magnetic resonance imaging, single photon emission computed tomography, positron emission tomography, and ultrasound.
Prerequisites HPS 701 or consent of instructor.

HPS 740L - Diagnostic Medical Physics Clinical Rotation and Laboratory
Credits 3
Covers the quality control and assurance aspects of commonly used clinical diagnostic modalities including film-screen and digital radiography, mammography, computed tomography, magnetic resonance imaging, single photon emission computed tomography (SPECT), and positron emission tomography (PET).
Prerequisites HPS 701
Corequisite HHPS 740 or consent of instructor.

HPS 742 - Radiation Therapy Physics
Credits 3
Use of ionizing and nonionizing radiation in radiation therapy to cause controlled biological effects in cancer patients. Emphasis on external treatment techniques using photon and electron beams, internal treatment techniques, and treatment planning.
Prerequisites HPS 701 or consent of instructor.

HPS 742L - Therapy Physics Clinical Rotation and Lab
Credits 3
An introductory course dealing with the practical aspects of clinical therapeutic physics. Labs will be performed in a clinical setting and students will be introduced to the technology and procedures commonly encountered in a modern radiation therapy facility.
Prerequisites HPS 742.

HPS 750 - Radiation Risk Assessment
Credits 3
Descriptive and mathematical treatment of radionuclide transport, bioaccumulation, and human uptake.
Note Risk analyses based on recent epidemiological studies reviewed.
Prerequisites HPS 670 or consent of instructor.

HPS 760 - Environmental Restoration and Radioactive Waste Management
Credits 3
Introduction to the nuclear fuel cycle and management of nuclear waste. Introduction to repository design and performance assessment. Overview of waste form performance, contaminant transport, and risk assessment as applied to nuclear waste management.
Prerequisites HPS 701 or consent of instructor.

HPS 772 - Environmental Radiation Measurements
Credits 3
Laboratory sessions provide practical experience with techniques to evaluate the presence of radioactivity in environmental media. Topics include environmental radiation sources, environmental monitoring plans, sample collection and analysis, in-situ gamma- ay spectrometry, data interpretation and laboratory quality control.
Note One hour lecture and three hours laboratory.
Prerequisites HPS 670 and HPS 718 or consent of instructor.

HPS 790 - Radiation Oncology Physics Clinical Internship
Credits 1-3
Overview of clinical radiation oncology physics techniques including treatment planning, linear accelerator operation, commissioning and quality assurance, dose calibration and on-board imaging.
Note May be repeated to a maximum of six credits.

HPS 791 - Graduate Seminar
Credits 1
Forum for students, faculty, and/or invited speakers to present research activities, current events, market issues, and new products in the area of health physics.
Same as HPS 611
Note Repeatable up to 3 credits.
Grading Letter grade.

HPS 792 - Ethics for Medical Physicists
Credits 1
Overview of the attributes and nuances of ethics and professionalism that are essential to the practice of medical physics.

HPS 795 - Independent Study
Credits 1 – 3
Individual directed study of a topic in health physics not covered in depth in other courses.
Note May be repeated to a maximum of six credits.
Prerequisites Graduate standing in health physics and consent of instructor.

HPS 796 - Professional Paper
Credits 3
Discussion of the components of a research proposal, writing a research proposal, and conducting pilot projects.
Note May be repeated but only six credits applied to the student's program.
Grading S/F grading only.
Prerequisites HPS 620, HPS 701, graduate standing in health physics, and consent of instructor.

HPS 797 - Thesis
Credits 3
Note May be repeated but only six credits applied to the student's program.
Grading S/F grading only.
Prerequisites HPS 620, HPS 701, graduate standing in health physics, and consent of instructor.

Kinesiology & Nutrition Sciences

Kinesiology is the study of human movement as it relates to human performance. The graduate degrees offered by the Department of Kinesiology and Nutrition Sciences are designed to prepare students for advanced study in biomedical sciences, clinical positions, and leadership positions in instituting physical fitness programs in public and private organizations. The department is committed to an interdisciplinary approach to professional preparation and scholarship and to creating an environment in which both basic and applied research in the field of kinesiology is stimulated. Comprehensive laboratories have been developed for the study of human performance, injury rehabilitation, and skill acquisition.

Students are afforded the opportunity to work closely with faculty in all areas of academics and research. The faculty are recognized internationally through their scholarship and research and are enthusiastically committed to graduate education.

Department of Kinesiology and Nutrition Sciences offers programs of study that lead to a Master of Science degree in Exercise Physiology or Kinesiology. These degree programs allow students a choice of preparation and opportunities to specialize in biomechanics, exercise physiology, motor learning/motor control and sports medicine. The goal of the graduate program in kinesiology is to provide students with the theory, knowledge, and skills necessary to apply the principles of human movement in a variety of community, research, clinical, or athletic settings, or to pursue advanced study at the doctoral level.

Richard Tandy, Ph.D., Chair

Mark Guadagnoli, Ph.D., Graduate Coordinator

Kinesiology and Nutrition Sciences Faculty

Chair

Tandy, Richard D. - *Full Graduate Faculty*
Associate Professor; B.S., Appalachian State University; M.S., Ph.D., Texas A&M University. *Rebel since 1989.*

Graduate Coordinator

Guadagnoli, Mark A. - *Full Graduate Faculty*
Professor; B.S., M.S., Texas A&M University; Ph.D., Auburn University. *Rebel since 1991.*

Graduate Admissions Coordinator

Wulf, Gabriele - *Full Graduate Faculty*
Professor; Diploma, Ph.D., Deutsche Sporthochschule Koln; Ph.D., University of Munich. *Rebel since 2001.*

Graduate Faculty

Dufek, Janet S. - *Full Graduate Faculty*
Associate Research Professor, B.S. University of Wisconsin, Superior; M.S. Illinois State University; Ph.D. University of Oregon. *Rebel since 2002.*

Golding, Lawrence A. - *Full Graduate Faculty*
Distinguished Professor; B.S., M.S., Ph.D., University of Illinois. *Rebel since 1976.*

Holcomb, William R.
Associate Professor; B.S. Berry College; M.S. U.S. Sports Academy; Ph.D. Auburn University. *Rebel since 2001.*

Kruskall, Laura J. - *Full Graduate Faculty*
Associate Professor; B.A. Mount Saint Mary College; M.S. Columbia University; Ph.D. Pennsylvania State Univesity. *Rebel since 1999.*

Mangus, Brent C.
Associate Professor; B.S., Utah State University; M.S., University of Oregon; Ed.D., University of Utah. *Rebel since 1985.*

Mercer, John - *Full Graduate Faculty*
Associate Professor; B.S., Buffalo State College of

New York; M.S., University of North Texas; Ph.D., University of Oregon. *Rebel since 1999.*

Rubley, Mack
Assistant Professor; B.S., University of Colorado; M.S., Pennsylvania State University; Ph.D., Brigham Young University. *Rebel since 2001.*

Young, John C. - *Full Graduate Faculty*
Professor; B.S.Ed., M.S., University of Michigan; Ph.D., University of Wisconsin, Madison. *Rebel since 1991.*

Master of Science - Exercise Physiology

Plan Description

The Master of Science – Exercise Physiology is designed to provide the student with an understanding of the physiological effects of exercise on the human body. The program also emphasizes the effect of regular exercise on adults and offers students experience in conducting physical fitness evaluations, and exercise testing. In addition, the graduate is prepared for entrance into a doctoral program in exercise physiology.

The program emphasizes academic preparation in exercise physiology, laboratory experience, knowledge of research methodology, and statistics. Students must complete a thesis in the general area of exercise physiology.

For more information about your program including your graduate program handbook and learning outcomes please visit the Degree Directory.

Plan Admission Requirements

Applications available on the UNLV Graduate College website.

Students are admitted in the fall, spring, and summer semesters. Applicants for admission must have an undergraduate major in kinesiology, exercise science, physical education, athletic training, biology, nutrition, or a related academic discipline.

Applicants must have a minimum overall undergraduate grade point average of 2.75 (A=4.0), or 3.00 (A=4.0) in the last two years. The Graduate Record Examination must be taken prior to applying. Successful applicants generally have a 3.00 undergraduate grade point average and a combined score of 300 on verbal and quantitative sections of the GRE and higher than 3.5 on the analytical section

Interested applicants must send the following information to the Graduate College:

1. A completed application for graduate studies.
2. Official transcripts of all colleges and universities attended.

Interested applicants must upload the following information into the Apply Yourself system:

1. Copies of all transcripts sent to the Graduate College.
2. Official GRE scores.
3. A letter of intent that addresses: Reason(s) for wishing to earn an advanced degree. Motivation for attending UNLV. Summary of educational goals. Summary of research activities and interests. Possible faculty mentors.
4. Two letters of recommendation from persons familiar with the applicant's academic record and potential for graduate study.

All domestic and international applicants must review and follow the Graduate College Admission and Registration Requirements.

Students are accepted into a degree program as described in the Graduate Catalog. The faculty and corresponding sub-disciplines and sub-plans within the described programs are subject to change at any time.

Plan Requirements

Total Required Credits: 33

Course Requirements

Required Courses – Credits: 12

KIN 605 - Sports Nutrition
KIN 738 - Human Physiology
KIN 739 - Evaluation of Physical Working Capacity
KIN 740 - Advanced Exercise Physiology

Research Courses – Credits: 6

KIN 750 - Research Methods
KIN 751 - Selected Application of Statistical Techniques I

Elective Courses – Credits: 9

Complete 9 credits of advisor-approved elective coursework.

Thesis –Credits: 6

KIN 749 – Thesis

Degree Requirements

1. Completion of a minimum of 33 credit hours with a minimum GPA of 3.00.
2. In consultation with his/her advisor, a student will organize a thesis committee of at least three departmental members. In addition, a fourth member from outside the department, known as the Graduate College Representative, must be appointed. An additional committee member may be added at the student and department's discretion. Please see Graduate College policy for committee appointment guidelines.

Plan Graduation Requirements

1. The student must submit all required forms to the Graduate College and then apply for graduation up to two semesters prior to completing his/her degree requirements.
2. The student must submit and successfully defend his/her thesis by the posted deadline. The defense must be advertised and is open to the public.
3. Student must submit his/her approved, properly formatted hard-copy thesis to the Graduate College, and submit the approved electronic version to ProQuest by the posted deadline.

Master of Science - Kinesiology

Plan Description

he Master of Science – Kinesiology is designed for students interested in the study of human performance. Students are provided with the theoretical foundations of the movement-based sciences and select an emphasis in biomechanics, motor learning/control, or sports medicine. Through involvement in directed research projects, students obtain an in-depth understanding of laboratory equipment research and applications in the biomedical sciences. Graduates are prepared to make applications of the movement sciences in research, clinical or athletic settings and for entrance into doctoral programs in kinesiology.

For more information about your program including your graduate program handbook and learning outcomes please visit the Degree Directory.

Plan Admission Requirements

Applications available on the UNLV Graduate College website.

Students are admitted in the fall, spring, and summer semesters. Applicants for admission must have an undergraduate major in kinesiology, exercise science, physical education, athletic training, biology, nutrition, or a related academic discipline.

Applicants must have a minimum overall undergraduate grade point average of 2.75 (A=4.0), or 3.00 (A=4.0) in the last two years. The Graduate Record Examination (GRE) must be taken prior to applying. Successful applicants generally have a 3.00 undergraduate grade point average and a combined score of 300 on verbal and quantitative sections of the GRE and higher than 3.5 on the analytical section Interested applicants must send the following information to the Graduate College:

1. A completed application for graduate studies.
2. Official transcripts of all colleges and universities attended.

Interested applicants must upload the following information into the Apply Yourself system:

1. Copies of all transcripts sent to the Graduate College.
2. Official GRE scores.
3. A letter of intent that addresses: Reason(s) for wishing to earn an advanced degree. Motivation for attending UNLV. Summary of educational goals. Summary of research activities and interests. Possible faculty mentors.
4. Two letters of recommendation from persons familiar with the applicant's academic record and potential for graduate study.

All domestic and international applicants must review and follow the Graduate College Admission and Registration Requirements.

Students are accepted into a degree program as described in the Graduate Catalog. The faculty and corresponding sub-disciplines and sub-plans within the described programs are subject to change at any time.

Plan Requirements

See Subplan Requirements below.

Subplan 1 Requirements: Thesis Track

Total Credits Required: 33

Course Requirements

Biomechanics Course – Credits: 3

Complete one of the following courses:

KIN 656 - Biomechanics of Endurance Performance
KIN 736 - Biomechanical Applications in Kinesiology
KIN 737 - Biomechanics of Strength
KIN 743 - Research Techniques in Biomechanics

Motor Learning/Motor Control Course – Credits: 3

Complete one of the following courses:

KIN 760 - Motor Skill Learning and Performance
KIN 761 - Human Motor Control
KIN 762 - Motor Learning Applications

Exercise Physiology Course – Credits: 3

Complete one of the following courses:

KIN 605 - Sports Nutrition
KIN 657 - Physiology of Endurance Performance
KIN 691 - Exercise Physiology
KIN 692 - Clinical Exercise Physiology
KIN 738 - Human Physiology
KIN 739 - Evaluation of Physical Working Capacity
KIN 740 - Advanced Exercise Physiology
KIN 744 - Thermoregulation During Physical Work
KIN 745 - Human Energy Metabolism

Research Courses – Credits: 6

KIN 750 - Research Methods
KIN 751 - Selected Application of Statistical Techniques I

Specialization Courses – Credits: 9

Complete 9 credits of advisor-approved coursework. Research opportunities and course work are available in biomechanics, motor learning/motor control, and sports medicine.

Elective Courses – Credits: 3

Complete 3 credits of advisor-approved elective coursework.

Thesis – Credits: 6

KIN 749 - Thesis

Degree Requirements

1. Completion of a minimum of 33 credit hours with a minimum GPA of 3.00.
2. In consultation with his/her advisor, a student will organize a thesis committee of at least three departmental members. In addition, a fourth member from outside the department, known as the Graduate College Representative, must be appointed. An additional committee member may be added at the student and department's discretion. Please see Graduate College policy for committee appointment guidelines.

Graduation Requirements

1. The student must submit all required forms to the Graduate College and then apply for graduation up to two semesters prior to completing his/her degree requirements.
2. The student must submit and successfully defend his/her thesis by the posted deadline. The defense must be advertised and is open to the public.
3. The student must submit his/her approved, properly formatted hard-copy thesis to the Graduate College, and submit the approved electronic version to ProQuest by the posted deadline.

Subplan 2 Requirements: Non-Thesis Track

Total Credits Required: 33

Course Requirements

Biomechanics Course – Credits: 3

Complete one of the following courses:

KIN 656 - Biomechanics of Endurance Performance
KIN 736 - Biomechanical Applications in Kinesiology
KIN 737 - Biomechanics of Strength
KIN 743 - Research Techniques in Biomechanics

Motor Learning/Motor Control Course – Credits: 3

Complete one of the following courses:

KIN 760 - Motor Skill Learning and Performance
KIN 761 - Human Motor Control
KIN 762 - Motor Learning Applications

Exercise Physiology Course – Credits: 3

Complete one of the following courses:

KIN 605 - Sports Nutrition
KIN 657 - Physiology of Endurance Performance
KIN 691 - Exercise Physiology
KIN 692 - Clinical Exercise Physiology
KIN 738 - Human Physiology
KIN 739 - Evaluation of Physical Working Capacity
KIN 740 - Advanced Exercise Physiology
KIN 744 - Thermoregulation During Physical Work
KIN 745 - Human Energy Metabolism

Research Courses – Credits: 6

KIN 750 - Research Methods
KIN 751 - Selected Application of Statistical Techniques I

Specialization Courses – Credits: 9

Complete 9 credits of advisor-approved coursework. Research opportunities and course work are available in biomechanics, motor learning/motor control, and sports medicine.

Elective Courses – Credits: 6

Complete 6 credits of advisor-approved elective coursework.

Professional Paper – Credits: 3

KIN 748 - Professional Paper

Degree Requirements

1. Completion of a minimum of 33 credit hours with a minimum GPA of 3.00.
2. In consultation with his/her advisor, a student will organize a committee of at least three departmental members. In addition, a fourth member from outside the department, known as the Graduate College Representative, must be appointed. An additional committee member may be added at the student and department's discretion. Please see Graduate College policy for committee appointment guidelines.

Graduation Requirements

1. The student must submit all required forms to the Graduate College and then apply for graduation up to two semesters prior to completing his/her degree requirements.
2. The student must successfully complete a professional paper.

Plan Graduation Requirements

Refer to your subplan for Graduation Requirements.

Doctor of Philosophy – Kinesiology

Plan Description

The Ph.D. program is designed specifically for professionals who desire tenure-track research, teaching, and administrative positions in postsecondary education. The Ph.D. program offers academic concentrations in Biomechanics, Exercise Physiology, and Motor Behavior.

Learning Objectives

1. Kinesiology Content Knowledge: demonstrate a broad conceptual knowledge of the Kinesiology field of study and develop related disciplinary content knowledge expertise in Biomechanics, Exercise Physiology, or Motor Behavior.
2. Effectively communicate knowledge in the discipline: Demonstrate the ability to write and speak about current scholarship and issues of the discipline to peers, practitioners, and the public.
3. Research Design: understand concepts pertinent to experimental research design relative to controlling internal and external threats to validity.
4. Research Methods: understand and applying sound scientific methodology to pursue a research question.

For more information about your program, including your graduate program handbook and learning outcomes please visit the Degree Directory.

Plan Admission Requirements

Applications available on the UNLV Graduate College website.

Admission to doctoral study will be granted to qualified applicants based on a combination of the following:

1. A master's degree from an accredited college or university
2. Official copies of all postsecondary transcripts
3. Professional vita or resume
4. Evidence of writing ability with appropriate examples including excerpt from a master's

thesis, professional paper, or published article
5. Three letters of recommendation from previous instructors and/or professional colleagues attesting to the applicant's ability to complete a doctoral program of study
6. A detailed statement explaining why the student desires admission to the program
7. A personal interview with the department graduate faculty.
8. Satisfactory GRE test scores (taken within five years from the date of application for admission)

All domestic and international applicants must review and follow the Graduate College Admission and Registration Requirements.

Admission Process

1. Contact the Department of Kinesiology prior to applying for admission.
2. Applications for the Ph.D. program will be considered once per year and deadline for receipt of application is March 1.
3. The online admissions application, fees, and transcripts should be submitted to the Graduate College. Further admission and application information may be obtained from the UNLV Graduate College website at: http://graduatecollege.unlv.edu/admissions.
4. Three letters of recommendation, professional resume or vita, GRE scores, official copies of all college transcripts, evidence of writing ability (e.g., excerpt from masters' thesis, professional paper or published article), a detailed statement explaining why the student desires admission, and a statement demonstrating evidence of professional/ educational compatibility with program goals should be submitted through the online application system.
5. As a final step in the admission process, a personal interview with the graduate faculty will be conducted.

Students are accepted into a degree program as described in the Graduate Catalog. The faculty and corresponding sub-disciplines and sub-plans within the described programs are subject to change at any time.

Plan Requirements

Total Required Credits: 66

Course Requirements

Content Knowledge Courses – Credits: 18

Complete 18 credits from the following course, or other advisor-approved courses.

KIN 747 - Graduate Seminar

Cognate Area Courses – Credits: 18

Select two advisor-approved cognate areas and complete 9 credits of coursework in each area.

Biomechanics

KIN 615 - Introduction to Forensic Kinesiology
KIN 656 - Biomechanics of Endurance Performance
KIN 736 - Biomechanical Applications in Kinesiology
KIN 737 - Biomechanics of Strength
KIN 743 - Research Techniques in Biomechanics

Motor Behavior

KIN 614 - Enhancing Mental and Motor Abilities
KIN 760 - Motor Skill Learning and Performance
KIN 761 - Human Motor Control
KIN 762 - Motor Learning Applications

Exercise Physiology

KIN 605 - Sports Nutrition
KIN 657 - Physiology of Endurance Performance
KIN 691 - Exercise Physiology
KIN 692 - Clinical Exercise Physiology
KIN 738 - Human Physiology
KIN 739 - Evaluation of Physical Working Capacity
KIN 740 - Advanced Exercise Physiology
KIN 744 - Thermoregulation During Physical Work
KIN 745 - Human Energy Metabolism

Sports Medicine

KIN 695 - Sports Medicine
KIN 730 - Organization and Administration of Athletic Training
KIN 731 - Orthopedic Assessment in Sports

Medicine
KIN 733 - Psychological Aspects of Sport and Rehabilitation
KIN 734 - Therapeutic Intervention in Sports Medicine
KIN 735 - Sports Medicine Rehabilitation Principles and Practices

Research Methodology Courses – Credits: 15

Complete 15 credits from the following list of courses, or other advisor-approved courses.

KIN 750 - Research Methods
KIN 751 - Selected Application of Statistical Techniques I
KIN 752 - Selected Application of Statistical Techniques II

Prospectus Course – Credits: 3

PED 796 - Dissertation Prospectus

Dissertation – Credits: 12

KIN 799 - Dissertation

Degree Requirements

1. Completion of a minimum of 66 credit hours with a minimum GPA of 3.00.
2. Scholarly Product Requirement – each student must satisfy a scholarly product requirement. This requirement can be met in one of two ways:
    a. Students may submit a research study to a refereed journal for publication.
    b. Students may submit a proposal for presentation of research at an annual conference of a national organization.
3. Student Advisory Committees - Students are required to select a graduate advisory committee by the end of their second semester.
    a. Advisory committees must consist of three Kinesiology graduate faculty members (one of which can be an associate graduate faculty member) and a graduate college representative from outside of the department.
    b. The chair of the advisory committee must be a graduate faculty member in the Department of Kinesiology.
    c. Advisory committees should be informed prior to the student's completion of 16 credit hours.
    d. The committee oversees the student's progress, including the comprehensive exams.
    e. A temporary advisor is assigned until the student becomes acquainted with the faculty and selects his/her advisory committee.
4. Comprehensive Examination – the student takes the comprehensive examination during the semester immediately preceding enrollment in dissertation.
    a. The comprehensive examination consists of six questions in which the student is allotted two hours per question. Questions are constructed and scored by the student's advisory committee.
    b. Students must file intent to take comprehensive examinations, adhering to timelines cited for other graduate programs scheduled by the Graduate College and the Department of Kinesiology. Students may petition the Kinesiology Graduate Faculty for permission to take comprehensive examinations pending approval of the advisory committee.
    c. The questions on the comprehensive examination address elements of content knowledge, research methodology, and related discipline electives. The student's advisory committee provides general parameters from which questions are selected. "Take-home" examinations, in whole or in part, are not allowed. Students may use college provided technology for word-processing. Grading consists of two categories: Pass and Fail.
    d. Upon receiving a passing grade for the written comprehensive examination, students will be required to pass an oral examination by their respective advisory committees. Students must successfully complete the

written and oral comprehensive examinations before enrolling in dissertation hours.

5. Dissertation Proposal and Defense
    a. Following the successful completion of the written and oral comprehensive examinations, the student must submit a dissertation proposal to the Doctoral Advisory Committee and submit the accompanying "Dissertation Prospectus Approval" form from the Graduate College. The Doctoral Advisory Committee will determine the acceptability of the prospectus.
    b. Upon approval of the prospectus, the student must obtain approval for the study from the Institutional Review Board for the Protection of Human Subjects.
    c. Upon completion of the dissertation, a defense will be scheduled and conducted in accordance with the Graduate College's policy for dissertation completion. Students should obtain The Graduate Study Guide and the Guide to Preparing and Submitting a Thesis or Dissertation from the Graduate College web site.

Plan Graduation Requirements

1. The student must submit all required forms to the Graduate College and then apply for graduation up to two semesters prior to completing his/her degree requirements.
2. The student must submit and successfully defend his/her dissertation by the posted deadline. The defense must be advertised and is open to the public.
3. The student must submit his/her approved, properly formatted hard-copy dissertation to the Graduate College, and submit the approved electronic version to ProQuest by the posted deadline.

Kinesiology & Nutrition Sciences Courses

CLS 612 - Clinical Immunology
Credits 3
Principles of immunology and the immune response as applied to states of health and disease, immune function and pathology. Topics include antibodies and other antigen receptors, antigens, cell-cell communications, major histocompatibility complex interactions, effector mechanisms, immune regulation, hypersensitivity reactions, immunoproliferative and immuno deficiency disease, transplantation immunology, and cancer mechanisms.
Notes This course is crosslisted with CLS 412. Credit at the 600-level requires additional work.

CLS 613 - Clinical Immunology Laboratory
Credits 1
Immunologic and molecular techniques used to analyze antigen-antibody reactions in the diagnosis of health or disease. Including liquid and gel precipitation; direct agglutination, and hemagglutination; secondary indicator systems (RIA, ELISA, FA); bacterial and viral serology, Western Blot, DNA, fingerpainting, PCR, nucleic acid probes, flow cytometry and cellular analyses.
Notes This course is crosslisted with CLS 413. Credit at the 600-level requires additional work.

CLS 614 - Transfusion - Immunohematology
Credits 2
Transfusion medicine stresses practical and theoretical aspects of the immunology of tissue antigens and blood group systems. Including ABO discrepancies, transfusion and compatibility testing, adverse reactions to transfusion, hemolytic disease of the newborn, hemotherapy, apheresis, immunomodulation, stem cell transplantation, donor selection and preparation.
Notes This course is crosslisted with CLS 414. Credit at the 600-level requires additional work.

CLS 615 - Transfusion Medicine Immunohematology Laboratory
Credits 3
Simulated clinical immunohematology laboratory designed to expose the student to the clinical practice of a modern blood bank service. Applied experiences in basic and advanced clinical testing related to

common blood group antigens and their associated antibodies, compatibility testing, alloantibody identification, adsorptions/elutions, transfusion reactions and pre/postnatal studies.
Notes This course is crosslisted with CLS 615. Credit at the 600-level requires additional work.

CLS 622 - Clinical Hematology I
Credits 3
Basic and diagnostic hematology with an emphasis on pathophysiology. Hematopoiesis, anemias, and hemostasis presented through lectures, case studies and morphologic review of peripheral blood and bone marrow smears. Differential diagnosis of these disorders through specified diagnostic laboratory tests.
Notes This course is crosslisted with CLS 442. Credit at the 600-level requires additional work.

CLS 623 - Clinical Hematology Laboratory I
Credits 2
Basic and diagnostic hematology with an emphasis on the laboratory tests used to differentially diagnose various hematologic disorders. Major emphasis on the various anemias and primary hemostatic bleeding disorders. Laboratory unknowns and peripheral/bone marrow microscopic slides used to correlate clinical tests and theoretical principles.
Notes This course is crosslisted with CLS 423. Credit at the 600-level requires additional work.

CLS 624 - Clinical Hematology II
Credits 3
Diagnostic hematology and body fluid analysis with emphasis on pathphysiology. Myeloproliferative, lymphoproliferative, myelodysplastic, acute and chronic leukemias and advanced topics in hemostasis presented through lectures, case studies and morphologic review of peripheral blood and bone marrow slides. Differential diagnosis of these disorders through specified laboratory tests.
Notes This course is crosslisted with CLS 424. Credit at the 600-level requires additional work.

CLS 625 - Clinical Hematology Laboratory II
Credits 2
Diagnostic hematology and body fluid analysis with an emphasis on the laboratory tests, cytochemical stains, and molecular markers used to differently diagnose the various hematologic malignancies and hemostasis disorders. Laboratory unknowns and peripheral/bone marrow microscopic slides used to correlate clinical tests and theoretic principles.
Notes This course is crosslisted with CLS 425. Credit at the 600-level requires additional work.

CLS 632 - Clinical Microbiology I
Credits 3
Introduction to medically significant microbial diseases of man. Microbial physiology and pathogenic interactions between man and microorganism. Epidemiology, triage, and diagnosis of microorganisms causing human diseases. Emphasis is on aerobic and anaerobic bacterial diseases, mycobacteria, vibrios, Legionella, Mycoplasma, spirochetes, Rickettsia and Chlamydia. Includes discussion of antimicrobial therapy and resistance mechanisms.
Notes This course is crosslisted with CLS 432. Credit at the 600-level requires additional work.

CLS 633 - Clinical Microbiology Laboratory I
Credits 2
Introduction to isolation, diagnostic and identification techniques for microbial diseases of humans. Emphasis is on aerobic and anaerobic bacteria, mycobacteria, vibrios, Legionella, Mycoplasma, spriochetes, Rickettsia and Chlamydia. Includes conventional microscopic, culture, molecular and immunological techniques as well as susceptibility testing methods.
Notes This course is crosslisted with CLS 433. Credit at the 600-level requires additional work.

CLS 634 - Clinical Microbiology II
Credits 3
Advanced medical microbiology. Microbial physiology and pathogenic interactions between man and microorganism. Epidemiology, prevention, diagnosis and treatment of microrganisms causing human diseases. Emphasis is on fungal, parasitic and viral diseases as well as miscellaneous bacteria from various body sites. Includes discussion of antimicrobial therapy and resistance mechanisms.
Notes This course is crosslisted with CLS 434. Credit at the 600-level requires additional work.

CLS 635 - Clinical Microbiology Laboratory II
Credits 2
Advanced practical applications in the recovery,

isolation and identification of microorganisms causing human disease. Emphasis is on methods for mycology, parasitology, and virology as well as miscellaneous bacteria from different body sites. Includes conventional microscopic, culture, molecular and immunological techniques as well as susceptibility testing methods.
Notes This course is crosslisted with CLS 435. Credit at the 600-level requires additional work.

CLS 642 - Clinical Chemistry I
Credits 3
Chemical analysis indicative of human health and disease. Theory and utilization of biochemical instrumentation including photometry, electrochemical, and electrophoresis. Emphasis placed on method application to analysis of carbohydrates, proteins, electrolytes, liver and pancreatic function.
Notes This course is crosslisted with CLS 442. Credit at the 600-level requires additional work.

CLS 643 - Clinical Chemistry I Laboratory
Credits 1
Manual and automated chemical methods used to measure normal and abnormal constituents, such as glucose, electrolytes, and proteins, in blood and body fluids. Use of spectrophotometric techniques, recognition of technical problems and selected abnormalities discussed.
Notes This course is crosslisted with CLS 443. Credit at the 600-level requires additional work.

CLS 644 - Clinical Chemistry II
Credits 3
Advanced study of chemical analysis of blood, urine and other body fluids in normal and abnormal physiological conditions. Emphasizes interdependency, physiological conditions affecting test results and clinical significance. Topics include endocrinology, toxicology, and radioimmunoassay.
Notes This course is crosslisted with CLS 444. Credit at the 600-level requires additional work.

CLS 645 - Clinical Chemistry II Laboratory
Credits 1
Advanced laboratory applications in chemical analysis of blood, urine and other body fluids in normal and abnormal physiological conditions. Emphasizes interdependency, physiological conditions affecting test results and clinical significance. Topics include endocrinology, toxicology and radioimmunoassay.
Notes This course is crosslisted with CLS 445. Credit at the 600-level requires additional work.

CLS 653 - Seminar in CLS IV
Credits 2
Discussion of topics in current clinical laboratory pathology. Individual and group projects used to reinforce concepts for interpretation and correlation of laboratory data to patient care. Includes
Notes This course is crosslisted with CLS 453. Credit at the 600-level requires additional work.

CLS 681 - Clinical Practicum in Hematology
Credits 3
Clinical practice module that allows the student to gain applied experiences and technical competencies in the area of hematology and body fluids. Clinical practicum in affiliated laboratories designed to develop entry-level cometencies and to assist the student in making the transition to clinical practitioner. Supervision by clinical/university faculty.
Notes This course is crosslisted with CLS 481. Credit at the 600-level requires additional work.

CLS 682 - Clinical Practicum in Chemistry
Credits 3
Clinical practice module that allows the student to gain applied experiences and technical competencies in the areas of chemistry, immunology, and urinalysis. Clinical practicum in affiliated laboratories designed to develop entry-level competencies and to assist the student in making the transition to clinical practitioner. Supervision by clinical/university faculty.
Notes This course is crosslisted with CLS 482. Credit at the 600-level requires additional work.

CLS 683 - Clinical Practicum in Immunohematology
Credits 3
Clinical practice module that allows the student to gain applied experiences and technical competencies in the area of immunohematology. Clinical practicum in affiliated laboratories designed to develop entry-level competencies and to assist the student in making the transition to clinical practitioner. Supervision by clinical/university faculty.

Notes This course is crosslisted with CLS 683. Credit at the 600-level requires additional work.

CLS 684 - Clinical Practicum in Microbiology
Credits 3
Clinical practice module that allows the student to gain applied experiences and technical competencies in the area of clinical microbiology, parasitology, and mycology. Clinical practicum in affiliated laboratories designed to develop entry-level competencies and to assist the student in making the transition to clinical practitioner. Supervision by clinical/university faculty.
Notes This course is crosslisted with CLS 484. Credit at the 600-level requires additional work.

CLS 685 - Advanced Clinical Practicum
Credits 3
Clinical practice module that allows the student to gain applied experience in the area of toxicology, flow cytometry, and molecular diagnostics. Clinical practicum in specified affiliated laboratories designed to provide exposure to the student in the specialty areas listed. Supervision by clinical/university faculty.
Notes This course is crosslisted with CLS 485. Credit at the 600-level requires additional work.

KIN 601 - History of Exercise and Sport Science
Credits 3
Historical concepts, systems, patterns, and traditions that have influenced American physical activity and sport, with emphasis on the evolution of kinesiology within the discipline of exercise and sport science.
Notes This course is crosslisted with KIN 401. Credit at the 600-level requires additional work.

KIN 605 - Sports Nutrition
Credits 3
This course has been approved for graduate credit. A full description of this course may be found in the Undergraduate Catalog under the corresponding 400 number.

KIN 614 - Enhancing Mental and Motor Abilities
Credits 3
Topics of mental and motor abilities including attention, arousal states, information processing, and practice schedules. Special emphasis on enhancing motor performance through mental strategies.
Notes This course is crosslisted with KIN 414. Credit at the 600-level requires additional work.

KIN 615 - Introduction to Forensic Kinesiology
Credits 3
Survey of forensic investigation. Focus on personal injury and accident avoidance from an interdisciplinary perspective. Emphasis on humans and their interactions in the physical environment.
Notes This course is crosslisted with KIN 415. Credit at the 600-level requires additional work.

KIN 656 - Biomechanics of Endurance Performance
Credits 3
The primary objective of this course is to provide a study of endurance performance from a biomechanical perspective. At the conclusion of the course, the student will be able to apply biomechanical terminology to understand factors that influence endurance swimming, biking, and running performance, for example.

KIN 657 - Physiology of Endurance Performance
Credits 3
The primary objective of this course is to provide a study of endurance performance from an exercise physiology perspective. At the conclusion of the course, the student will be able to demonstrate an understanding of physiological factors that influence endurance swimming, biking, and running performance, for example.

KIN 685 - Physical Activity and the Law
Credits 3
Legal principles associated with physical activity professions. Emphasis on practical application of legal issues in risk management, safety procedures, negligence, liability, contracts, and professional ethics, as well as recognition and minimization of legal risk during physical activity.
Notes This course is crosslisted with KIN 485. Credit at the 600-level requires additional work.

KIN 691 - Exercise Physiology
Credits 3
Physiological changes in human organisms during physical exercise; physiological bases for planning physical education programs; observations of respiratory, circulatory, nervous, and metabolic adjustments to physical exercise. Laboratory

experience to enhance learning.
Notes This course is crosslisted with KIN 491. Credit at the 600-level requires additional work.

KIN 692 - Clinical Exercise Physiology
Credits 3
Pathophysiology of cardiovascular disease; role of exercise in treatment and prevention of coronary heart disease; exercise stress testing principles and procedures; prescribing exercise programs for healthy adults and patient populations.
Notes This course is crosslisted with KIN 492. Credit at the 600-level requires additional work.

KIN 695 - Sports Medicine
Credits 3
This course has been approved for graduate credit. A full description of this course may be found in the Undergraduate Catalog under the corresponding 400 number.

KIN 700 - Special Problems in Kinesiology
Credits 1 – 6
Specialized instruction and/or research designed to develop depth in understanding a current kinesiology problem.
Notes May be repeated to a maximum of six credits.
Prerequisites Consent of instructor.

KIN 730 - Organization and Administration of Athletic Training
Credits 3
Develop and utilize organization and administrative theories and philosophies in managing facilities, co-workers and students in a variety of athletic settings.

KIN 731 - Orthopedic Assessment in Sports Medicine
Credits 3
Theory and methods of orthopedic assessment as they relate to the understanding, evaluation, treatment, and rehabilitation of sport injuries. Emphasis on advanced understanding of the theoretical applications of advanced assessment techniques for orthopedic injuries.
Prerequisites Consent of instructor.

KIN 733 - Psychological Aspects of Sport and Rehabilitation
Credits 3
Overview of theoretical concepts and techniques in sport psychology. Emphasis on the application of psychology to human movement, skilled athletic performance, and injury rehabilitation.

KIN 734 - Therapeutic Intervention in Sports Medicine
Credits 3
Theoretical background in the application of therapeutic intervention in a practical setting.

KIN 735 - Sports Medicine Rehabilitation Principles and Practices
Credits 3
Provides opportunity to study theory and techniques of various exercise rehabilitation processes and apply these processes on a case study basis.
Prerequisites Graduate standing and consent of instructor.

KIN 736 - Biomechanical Applications in Kinesiology
Credits 3
Provides opportunity to learn mechanical principles underlying human movement and apply these skills in a laboratory situation.
Prerequisites Graduate standing and consent of instructor.

KIN 737 - Biomechanics of Strength
Credits 3
Interdisciplinary examination of concepts and principles involved in strength development and force production. Includes study of neurological, physiological and mechanical factors affecting force/tension/power generation, and biomechanical interactions with external loads and various resistance training equipment.
Prerequisites Graduate standing or consent of instructor.

KIN 738 - Human Physiology
Credits 3
Study of mechanisms which regulate physiological systems and the way regulation functions to maintain homeostasis. Emphasis on those systems involved in the integrated response to exercise.
Prerequisites Consent of instructor, undergraduate course in anatomy and physiology.

KIN 739 - Evaluation of Physical Working Capacity
Credits 3
Concepts and methodology in the measurement of energy metabolism in humans. Examination of the various methods used to measure physical working capacity with the treadmill and ergometry. Understanding of basic electrophysiology of myocardium and pulmonary function measurements.
Prerequisites Consent of instructor.

KIN 740 - Advanced Exercise Physiology
Credits 3
Lecture, discussion, and laboratory experiences dealing with impact of acute and chronic exercise on several systems. Selected topics such as nutrition and exercise, weight control, physical working capacity, and body composition.
Prerequisites KIN 739

KIN 743 - Research Techniques in Biomechanics
Credits 3
Examination of some of the techniques used in biomechanical research for data collection, analysis, and presentation. Emphasis on developing an understanding of experimental techniques, their capabilities and limitations. The lecture/discussion/lab sessions provide a historical and theoretical basis for each of the techniques examined.
Prerequisites Graduate standing or consent of instructor.

KIN 744 - Thermoregulation During Physical Work
Credits 3
Emphasizes physical mechanisms of heat transfer and their physiological control: relationship among body temperatures, sweat rate, exercise loads, environmental temperature, and heat stress.
Same as (BIO 744)
Prerequisites KIN 739 and consent of instructor.

KIN 745 - Human Energy Metabolism
Credits 3
Study of the interactions between nutrition, energy metabolism, and physical exercise. Emphasis on how the body assimilates, stores, and makes available food energy to power muscular work.
Prerequisites KIN 739 or consent of instructor.

KIN 747 - Graduate Seminar
Credits 1
Oral presentations of proposed and completed research by graduate students, graduate faculty, and guests.
Notes May be taken for credit to a maximum of four credits.

KIN 748 - Professional Paper
Credits 1 – 6
Notes May be repeated but only three credits will be applied to the student's program.
Grading S/F grading only.

KIN 749 - Thesis
Credits 3 – 6
Notes May be repeated but only six credits will be applied to the student's program.
Grading S/F grading only.

KIN 750 - Research Methods
Credits 3
Overview of techniques used in historical, descriptive, and experimental research such as those found in exercise science, health, physical education, and recreation research publications. Procedures for formulating a research proposal; hypothesis testing; experimental designs and statistical applications.

KIN 751 - Selected Application of Statistical Techniques I
Credits 3
Introduction to descriptive and inferential statistical procedures utilized in studies reported in exercise science, health, physical education, and recreation.

KIN 752 - Selected Application of Statistical Techniques II
Credits 3
Statistical analysis techniques including correlation and regression, anova, multivariate analysis, manova for repeated measures designs. Introduction to selected statistical software packages; computer-aided graphics and data presentation techniques.
Prerequisites KIN 751 or consent of instructor.

KIN 755 - Research on Physical Activity Behavior
Credits 3
Students review the scholarly literature pertaining to physical activity behavior. Papers with special

implications for building a general knowledge base requisite to the conduct of research on physical activity behavior are read, discussed, and critically analyzed.

KIN 760 - Motor Skill Learning and Performance
Credits 3
Sensory and central contributions to skilled movement, and practice methods that enhance motor skill learning (e.g., in sports, physical therapy, athletic training, music). Discussions of influential factors such as feedback, attentional focus, unconscious learning, learning through observation, learner autonomy, practice scheduling, social-cognitive-affective influences on learning, and performance under pressure.

KIN 761 - Human Motor Control
Credits 3
Advanced studies in motor control, including sensory and central contributions to movement control, balance, movement observation, focus of attention, mindset, social-cognitive-affective influences on motor performance.

KIN 762 - Motor Learning Applications
Credits 3
Designed to explain basic concepts of motor learning involved in organizing and scheduling practice for efficient learning/teaching of motor skills. Includes discussions of memory, feedback, stages of learning, and other motor learning principles.

KIN 775 - Internship in Athletic Administration
Credits 3
The internship in Athletics is a culminating experience that provides an opportunity to apply knowledge and skills learned in the academic program while working within an athletic administration or related organization. Students will work under the direction of a supervisor in a area related to their selected interest for future employment.
Notes May be repeated to a maximum of six credits.

KIN 788 - Independent Study
Credits 1-3
Independent study of a selected topic in kinesiology and nutrition sciences.
Notes Repeatable up to 6 credits.

KIN 796 - Supervised Practice: Community Nutrition
Credits 2
For Students accepted into the Department of Nutrition Sciences Dietetic Internship. Students gain intensive experiences covering all aspects of community nutrition programming. Students will observe the diversity within community nutrition in terms of mission, target audience and programs and will actively participate in nutrition program development, implementation, evaluation, and marketing.
Corequisite KIN 797 and KIN 798.

KIN 797 - Supervised Practice: Food Service Management
Credits 2
For students accepted into the Department of Nutrition Sciences Dietetic Internship. Students will gain experience in managing the diet office, tray line production and supervision, food service production, cafeteria management, and catering.
Corequisite KIN 796 and KIN 798.

KIN 798 - Supervised Practice: Clinical Nutrition and Dietetics
Credits 2
For students accepted into the Department of Nutrition Sciences Dietetic Internship. Students will gain the skills required to screen and assess individual patients, interpret laboratory values, develop and implement appropriate care plans, complete appropriate diet instructions, and document all assessment and plan information in correct medical chart format.
Corequisite KIN 797 and KIN 798.

KIN 799 - Dissertation
Credits 1 – 12
Culminating research analysis and writing toward completion of dissertation and subsequent defense.

Physical Therapy

The Department of Physical Therapy offers a graduate program leading to a Doctor of Physical Therapy (DPT) degree. The program is designed to prepare students to plan and administer treatment to help patients regain diminished physical function lost secondary to injury or disease, to promote soft tissue healing, and to relieve pain. By determining the degree of impairment, physical therapists are then able to help patients return to full function by using various physical agents such as electrical stimulation, heat, and cold to decrease pain and by using therapeutic exercises to increase strength, endurance, and coordination.

The purpose of the Department of Physical Therapy is to provide students pursuing a career in physical therapy the opportunity to acquire the knowledge and skills required for the safe practice of physical therapy. Students are prepared as generalists, but also have some opportunity to investigate specialized aspects of physical therapy through numerous clinical exposures. The program of study consists of approximately 112 credit hours of graduate course work and consists of intense academic and clinical work spread over six semesters and three summers. These hours are divided between classroom, clinical and research activities.

The DPT degree is an entry-level professional program designed to provide individuals with appropriate baccalaureate degrees the knowledge and skills to develop clinical and research expertise in the provision of physical therapy. Upon receiving this degree, students will be eligible to sit for the licensure examination in physical therapy.

The mission of the UNLV Department of Physical Therapy is to develop competent, caring and autonomous practitioners who will serve the health care needs of the State of Nevada and the profession and who are doctorally prepared to engage in critical thinking, evidence-based practice, life-long learning, and service in a variety of health care settings, including rural and under-served areas.

Merrill Landers, PT, DPT, PhD, Chair

Emilio Puentedura, Ph.D., Graduate Coordinator

Carrie Gillis, Ph.D., Graduate Coordinator

Doctor of Physical Therapy

Plan Description

The course of study at the University of Nevada, Las Vegas is an entry-level professional program designed to prepare students to enter the profession of physical therapy. A Doctor of Physical Therapy Degree is awarded following the successful completion of the program that consists of intense academic and clinical work spread over six semesters and three summers. Students are prepared as generalists, but also have an opportunity to investigate specialized aspects of physical therapy through numerous clinical exposures. The program of study consists of 112 credit hours of graduate course work. These hours are divided among classroom, clinical, and research activities.

For more information about your program, including your graduate program handbook and learning outcomes, please visit the Degree Directory.

Plan Admission Requirements

Applications available on the UNLV Graduate College website.

Admission to the program is limited to 34 available spaces per class. Students enrolling in any class in the Department of Physical Therapy must be admitted (graduate standing only, no graduate provisional standing accepted) to the program in the Summer semester of each year. Since enrollment is limited in the Physical Therapy program, satisfactory completion of prerequisite courses does not assure an applicant of admission. No student may take any class as a "Non-Degree Seeking" student. Admissions criteria are reviewed by the faculty annually and are subject to change.

Prior to application to the program, the individual is advised to fully explore the nature of the profession of physical therapy. Students are expected to volunteer in or visit various physical therapy facilities in order to gain a broad view of the roles and responsibilities of a physical therapist. As part of the interview process, students will be assessed on their knowledge of the scope of the profession of physical therapy.

The application deadline is December 15th preceding the June in which admission is desired. After applications are received, they are reviewed regarding the minimum requirements, i.e., baccalaureate degree, GPAs, etc. Only the leading candidates will be invited for interviews during the Spring semester, which are based on satisfactory completion of the admission requirements.

All domestic and international applicants must review and follow the Graduate College Admission and Registration Requirements.

The following requirements are considered for admission into the Doctor of Physical Therapy program:

1. Prior to entering the program, candidates must complete prerequisite courses and earn a baccalaureate degree from an accredited college or university. There is no preference given to any particular baccalaureate degree.
2. A minimum overall undergraduate grade point average of 3.0 on a 4.0 scale with a minimum average of 3.0 on a 4.0 scale for prerequisite courses.
3. An interview will be required.
4. A composite score of 300 or higher on the verbal and quantitative sections of the Graduate Record Examination (GRE) is preferred. A score of 4 out of 6 is recommended on the Analytical Writing Section of the GRE.
5. Students must apply to the DPT program via the new Physical Therapy Centralized Application Service (PTCAS). Only applications from PTCAS will be considered. Please use the URL www.ptcas.org to complete your application.

   The following are required with your application to PTCAS:

   a. Three letters of recommendation. Two of the letters need to be from a licensed physical therapist who can evaluate the applicant's potential as a student in the physical therapy program. The remaining letter can be from a former professor or employer.

b. An autobiographical statement of approximately 300 words describing the student's professional goals and reasons for seeking graduate education in physical therapy.
c. Knowledge of the field through actual work or volunteer experience (a minimum of 100 hours or more divided among hospital and outpatient facilities). Additional hours in diversified settings are strongly recommended.

Information to be submitted to the Graduate College:

1. Complete and submit the Graduate College online application for admission, with appropriate fees.
2. Official transcripts from all previous college and professional schools.

The program is open to qualified applicants without regard to race, color, religion, sex, sexual orientation, age, national origin, marital status, or the presents of any physical, sensory, or mental disability.

Prerequisite Courses

In addition to completing the requirements of a baccalaureate degree, applicants must have completed or be able to complete the necessary specific hours of prerequisite course work with a grade of at least a C prior to admission to the program. Grades below a C in prerequisite courses will not be accepted. No more than two prerequisite science courses should be in progress or incomplete and all prerequisite science courses must be completed by the end of the spring semester (quarter) prior to commencing the program. Those students in the process of fulfilling the requirements of a prerequisite course must realize that their acceptance into the program is contingent upon satisfactory completion of that course during the application process.

Courses taken on a pass-fail basis may not fulfill prerequisite requirements. Prerequisite course work must have been completed within 10 years from application cycle to fulfill requirements, which are as follows:

1. One year of lecture-based biology courses
2. One year of laboratory and lecture-based anatomy and physiology courses
3. One year of laboratory and lecture-based inorganic chemistry
4. One year of laboratory and lecture-based physics
5. One year psychology (introduction to psychology and one semester of either child, adolescent, developmental or abnormal psychology)
6. One semester statistics

Advisement

All entering students will be assigned a specific faculty member for advisement.

Policies and Procedures

Policies and procedures for didactic and clinical work regarding course grades, probation, separation, and reapplication are detailed in the Department of Physical Therapy Student Manual and Clinical Education Manual.

Objectives

1. To prepare students to be the purveyors of physical therapy practice through clinical excellence, critical thinking, scientific inquiry, and social responsibility.
2. To prepare students to differentially diagnose enabling them to establish an appropriate plan of care and provide referral as necessary.
3. To prepare graduates who will be able to work autonomously in a wide variety of settings and roles as practitioners, clinical educators and researchers, supervisors, administrators and consultants.
4. To prepare students to adapt to changes in health care and society and be prepared to work in challenging environments with elderly, rural, and underserved populations.
5. To educate students in the design and implementation of culturally competent health care.
6. To develop scientific practitioners, who are able to demonstrate the ability to critically analyze literature, utilize evidence-based integrated treatment approaches, and value clinical based research.
7. To prepare graduates to educate and encourage patients to achieve functional independence so they may have an improved

quality of life and become more productive members of society.
8. To prepare graduates who will be able to organize and promote health awareness, wellness, and prevention education, and reintegrate populations with special needs into the community throughout-reach programs.
9. To prepare graduates to assume a leadership role in addressing critical issues that affect clinical practice, education, research, and public policy.
10. To prepare graduates to be committed to a lifetime of self-directed learning, professional development, integrity, community involvement, and to exemplify professional and personal ethics and values.
11. To prepare graduates to demonstrate understanding of medico-legal issues in physical therapy practice through active involvement in professional organization.
12. To educate students on the benefits of working interdependently with other health care professionals using a team approach to patient care.

Students are accepted into a degree program as described in the Graduate Catalog. The faculty and corresponding sub-disciplines and sub-plans within the described programs are subject to change at any time.

Plan Requirements

Total Credits Required: 112

Course Requirements

Summer Semester 1st Year Courses - Credits: 8

DPT 726 - Evidenced-Based Practice in Physical Therapy I
DPT 727 - Evidence-Based Practice in Physical Therapy II
DPT 744 - Gross Anatomy I
DPT 744L - Gross Human Anatomy Lab I
DPT 745 - Gross Anatomy II
DPT 745L - Gross Human Anatomy Lab II

Fall Semester 1st Year Courses - Credits: 19

DPT 730 - Foundations of Observation and Assessment
DPT 730L - Foundations of Observation and Assessment Lab
DPT 741 - Orthopaedic Principles
DPT 742 - Clinical and Pathological Physiology
DPT 746 - Neuroanatomy
DPT 746L - Neuroanatomy Lab
DPT 749 - Applied Exercise Physiology
DPT 749L - Applied Exercise Physiology Lab

Spring Semester 1st Year Courses - Credits: 21

DPT 732 - Therapeutic Exercise
DPT 732L - Therapeutic Exercise Lab
DPT 735 - Functional Training and Acute Care
DPT 735L - Functional Training and Acute Care Lab
DPT 748 - Pharmacology
DPT 754 - Orthopaedic Assessment in Physical Therapy
DPT 754L - Orthopaedic Assessment in Physical Therapy Lab
DPT 756 - Neurophysiology
DPT 790 - Clinical Research in Physical Therapy

Summer Semester 2nd Year Courses - Credits: 8

DPT 740 - Movement Science
DPT 752 - Physical Agents and Electrophysiology
DPT 752L - Physical Agents and Electrophysiology Lab
DPT 761 - Supervised Clinical Education I

Fall Semester 2nd Year Courses - Credits: 16

DPT 720 - Professional Development
DPT 757 - Wound Care
DPT 770 - Cardiopulmonary Rehabilitation
DPT 770L - Cardiopulmonary Rehabilitation Lab
DPT 785 - Orthopaedic Rehabilitation
DPT 785L - Orthopaedic Rehabilitation Lab
DPT 786 - Neurological Rehabilitation
DPT 786L - Neurologic Rehabilitation Laboratory Experience
DPT 791 - Applied Research Statistics

Spring Semester 2nd Year Courses - Credits: 15

DPT 747 - Geriatric Examination and Intervention
DPT 750 - Prosthetics and Orthotics
DPT 750L - Prosthetics and Orthotics Lab
DPT 758 - Diagnostic Testing and Imaging
DPT 759 - Pediatric Rehabilitation
DPT 759L - Pediatric Rehabilitation Laboratory Experience
DPT 780 - Balance and Vestibular Rehabilitation
DPT 788 - Spine Examination and Treatment

DPT 788L - Spine Examination and Intervention Lab
DPT 793 - Seminar

Summer Semester 3rd Year Courses - Credits: 6

DPT 751 - Women's Health in Physical Therapy
DPT 772 - Physical Therapy Administration
DPT 774 - Psychosocial Aspects of Physical Therapy

Fall Semester 3rd Year Courses - Credits: 10

DPT 762 - Supervised Clinical Education II
DPT 763 - Supervised Clinical Education III

Spring Semester 3rd Year Courses - Credits: 9

DPT 764 - Supervised Clinical Education IV
DPT 798 - Directed Research(3 credits) *Course Fee

Degree Requirements

1. Satisfactory completion of the 112 credits of the Physical Therapy program including the required period of clinical education with a grade point average of 3.00 or higher on a scale of 4.00.
2. Maintain a cumulative grade point average of 3.00 or above each semester enrolled.
3. Receive a grade of B- or above in all required physical therapy courses. Students who do not maintain a 3.00 average or who receive any grade less than a B- in any course at the end of the semester will be notified in writing and placed on probation at that time. A second grade of C+ or lower received in any course in the ensuing semester or failure to restore the cumulative average to 3.00 or above during the ensuing semester will bring about separation from the program. The student's status in the program will be determined the Chair/Director on the recommendation of the Academic Review Committee (ARC) regarding the student's separation or action plan for remediation.
4. The student will not progress in the program if any of the following occur:
    a. An earned F in any didactic course. This results in immediate separation without the option for reapplication.
    b. Failure of a third attempt of any clinical competency check-off with the exception of the final practical exam.
    c. A failure of a final practical exam (different than the competency check-off).
    d. A grade of C+ or below in more than one course in any semester.
    e. Inability to rectify probationary status within the time frame allotted by the ARC.
    f. A student on probation whose actions warrant probation in another category (academic, professional behavior, clinical) may also be separated.
5. A student may register for a Supervised Clinical Education course only two times if the option to reapply is approved by the ARC and a recommendation is made to the department chair/director. This option is only available to students who have failed a clinical rotation and have been separated from the program. This option is not available to students failing didactic course work. A student who is registered for the same course twice and has withdrawn or received a Fail is ineligible for readmission unless otherwise approved by the ARC, Department Chair, and Graduate Dean.
6. The students must follow the proposed curriculum in the specified time frames unless otherwise approved by the ARC, Department Chair, and Graduate Dean.
7. Credit by Challenge Examination: Graduate courses in the Department of Physical Therapy may not be challenged for credit.
8. The program must be completed within six years from the date of matriculation. The chair/director will evaluate potential exceptions.
9. In addition to the course requirements, the student must satisfactorily prepare a written document and oral presentation of a final research project, professional paper, or case report. The presentation will satisfy the requirements for a final capstone experience and will be open to the public.
10. Students must be in good standing with the Department of Physical Therapy and cannot be on a probations status at the time of graduation. Policies related to student probation, separation, and academic progress as stated in the current physical Therapy Student Manual are in compliance with the Graduate College.

Plan Graduation Requirements

1. The student must submit all required forms to the Graduate College and then apply for graduation up to two semesters prior to completing his/her degree requirements.
2. The student must submit and successfully present his/her final research project, professional paper, or case report by the posted deadline. The presentation must be advertised and is open to the public.
3. The student must submit his/her approved, properly formatted hard-copy research project, professional paper, or case report to the Graduate College, and submit the approved electronic version to ProQuest by the posted deadline.

Physical Therapy Faculty

Chair

Landers, Merrill - *Full Graduate Faculty*
Associate Professor; B.S., Brigham Young University; D.P.T., Creighton University; Ph.D., University of Nevada Las Vegas. *Rebel since 2001.*

Graduate Coordinators

Puentedura, Emilio - *Full Graduate Faculty*
Associate Professor; B.App.Sc. and G.D.M.T., Lincoln Institute of Health Sciences, La Trobe University, Australia; D.P.T., Northern Arizona University; Ph.D. Nova Southeastern University. *Rebel since* 2007.

Gillis, Carrie
Administrative Clinical Coordinator; B.S., Oklahoma City University; D.P.T., University of Nevada Las Vegas. *Rebel since 2012.*

Graduate Faculty

Hickman, Robbin - *Full Graduate Faculty*
Associate Professor; B.S., California State University, Long Beach; M.H.S., University of Indianapolis; D.Sc., Rock Mountain University of Health Professionals. *Rebel since 2007.*

Ho, Kai-Yu - *Full Graduate Faculty*
Assistant Professor; B.S. and M.S., National Chen Kung University, Taiwan; Ph.D., University of Southern California. *Rebel since 2013.*

Schuerman, Sue - *Full Graduate Faculty*
Faculty in Residence; B.S., University of Nebraska; M.B.A., University of Massachusetts, Ph.D., University of Nebraska. *Rebel since 2006.*

Young, Danny - *Full Graduate Faculty*
Associate Professor; B.S., Southern Utah University; D.P.T., Creighton University. *Rebel since 2007.*

Turner, Cassy- *Full Graduate Faculty*
Faculty in Residence; B.S. and D.P.T., University of Nevada Las Vegas. *Rebel since 2011.*

Lee, Szu-Ping- *Full Graduate Faculty*
Assistant Professor; B.S., National Yang-Ming University, Taiwan; M.S., University of Florida; Ph.D., University of Southern California. *Rebel since 2012.*

Physical Therapy Courses

DPT 703 - Admission to PhD in Interdisciplinary Health Sciences program
Credits 3
Theoretical and practical foundations for measurement in rehabilitation research. Concepts include importance and uses of outcomes research to measure body structures and functions, functional behaviors and activities, participation and quality of life, and consumer satisfaction. Challenges of designing and measuring outcomes in diverse populations across the lifespan will also be considered.
Prerequisites Admission to PhD in Interdisciplinary Health Sciences program.

DPT 710 - Selected Topics in Physical Therapy
Credits 1
Forum to disseminate information to students on current and professional issues in physical therapy.
Prerequisites Graduate standing in physical therapy.

DPT 711 - Medical Terminology
Credits 1
Introduction to medical terminology for the healthcare professional. Students expand their medical vocabulary via immersion in medical content and subjects from a broad spectrum of body systems.
Prerequisites Graduate standing in physical therapy.

DPT 714 - Neuroplasticity
Credits 3
Comprehensive overview of the neurobiological mechanisms and treatment principles of neuroplasticity and how to integrate and apply them to clinical practice.

DPT 715 - Pathobiomechanics
Credits 3
The course is designed to introduce the concepts of biomechanical research regarding musculoskeletal pathologies, including kinematics, kinetics, and electromyography at the whole body and joint level. How alterations of connective tissue and muscle mechanics contribute to musculoskeletal pathologies is also discussed.

DPT 720 - Professional Development
Credits 2
Theories and experiences designed to develop skills to accurately, sensitively and assertively communicate with patients, families, and colleagues. Principles of written and oral communication. Professional issues of changes in health care, state and local laws, standards of practice, code of ethics, quality assessment and quality assurance.
Prerequisites Graduate standing in physical therapy.

DPT 721 - Advanced Topics in Physical Therapy
Credits 1
Through in-class and web-assisted instruction, independent study, and mentored project development, prepares students for a variety of clinical competencies including health promotion/wellness, evaluation of alternative and complementary approaches, rural health, and other advanced aspects of clinical practice, ethics, and professional conduct related to physical therapy.
Prerequisites DPT 710

DPT 722 - Issues in Rural Health
Credits 1
Unique needs of frontier/rural and underserved populations addressed, emphasizing the eclectic nature of practice in these areas, the importance of networking with other disciplines, and special considerations of these populations including functional rehabilitation, time management, travel, emergencies, and involvement of families in treatment.
Prerequisites Graduate standing in physical therapy.

DPT 726 - Evidenced-Based Practice in Physical Therapy I
Credits 1
Designed to provide the student with knowledge and hands-on experience in skills required to engage evidence-based clinical practice of physical therapy. Students will learn how to write answerable questions, search the literature, and critically analyze evidence for application in clinical practice.
Prerequisites Graduate standing in Physical Therapy.

DPT 727 - Evidence-Based Practice in Physical Therapy II
Credits 1

This 1-credit course builds on DPT 726 and 790, providing students with knowledge skills to implement evidence-based practice in physical therapy. Students will critique special cases of evidence and psychometric properties of diagnostic tools and outcome measures, and create a minimal data set in order to integrate evidence into practice.
Grading Letter Grade

DPT 730 - Foundations of Observation and Assessment
Credits 2
Basic patient assessment skills with introduction to posture and gait evaluation through observation. Patient history and review of the medical record. Documentation in S.O.A.P. Note and functional outcome formats. Assessment skills emphasized include: anthropometric measures, reflex and sensation testing, goniometry, manual muscle testing, vital signs, and surface palpation.
Prerequisites Graduate standing in physical therapy.
Corequisite DPT 730L

DPT 730L - Foundations of Observation and Assessment Lab
Credits 2
Lab of basic patient assessment skills including posture, gait evaluation, anthropometric measures, reflex and sensation testing, goniometry, manual muscle testing, vital signs, and surface palpation. Patient history and review of medical records, documentation in SOAP format, and functional outcome formats.
Prerequisites Graduate standing in Physical Therapy.
Corequisite DPT 730

DPT 732 - Therapeutic Exercise
Credits 2
Holistic approach to evaluation and management of patients with various orthopaedic pathologies and other related movement dysfunction. Emphasis placed on theoretical basis of specific exercise physiology, therapeutic exercise and functional training skills interrelated with clinical decision-making methodology. Rationale for and implementation of treatments with safety awareness and proper body mechanics.
Prerequisites DPT 730, DPT 730L; DPT 741 ; DPT 744 DPT 744L; DPT 745 DPT 745L.
Corequisite DPT 732L.

DPT 732L - Therapeutic Exercise Lab
Credits 1
Laboratory sessions to practice the evaluation and management of patients (and patient scenarios) with various orthopaedic pathologies and other related movement dysfunctions. Emphasis on exercise prescription and demonstration, as well as progression.
Prerequisites DPT 730, DPT 730L; DPT 741 ; DPT 744 DPT 744L; DPT 745 DPT 745L.
Corequisite DPT 732.

DPT 735 - Functional Training and Acute Care
Credits 4
Performance and application of positioning skills, transfers techniques, and assistive devices. Advancement to clinical decision-making skills and incorporation of learned materials into therapy interventions. Clinical reasoning skills in assessment, treatment design and intervention, goal development and discharge planning for patients in the acute hospital environment.
Prerequisites Graduate standing in Physical Therapy. DPT 744, 745, 730.
Corequisite DPT 735L

DPT 735L - Functional Training and Acute Care Lab
Credits 1
Hands on performance and application of positioning skills, transfer techniques, and assistive devices. Advancement to clinical decision-making skills and incorporation of learned materials into therapy interventions. Clinical reasoning skills in assessment, treatment design and intervention, goal development and discharge planning for patients in the acute hospital environment.
Prerequisites Graduate standing in Physical Therapy. DPT 744, 745, 730.
Corequisite DPT 735

DPT 740 - Movement Science
Credits 2
This course will introduce students to principles and theories in movement science. Students will be introduced to concepts related to motor control, motor development, and motor learning. Students will also apply these principles to the clinical practice

of physical therapy and to observe and assess related phenomena in patients.
Prerequisites Enrollment in professional DPT curriculum.

DPT 741 - Orthopaedic Principles
Credits 3
Principles of orthopaedic physical therapy including biomechanics, applied anatomy, and osteokinematic and arthrokinematic concepts examined. Musculoskeletal system investigated from histological, structural, and functional perspectives.
Prerequisites Graduate standing in physical therapy.

DPT 742 - Clinical and Pathological Physiology
Credits 5
Fundamentals of physiology and pathology related to diseases causing abnormal movement patterns or capabilities. Processes and diseases most frequently encountered in physical therapy practice emphasized.
Prerequisites Graduate standing in physical therapy.

DPT 744 - Gross Anatomy I
Credits 2
Study of gross human anatomy as it applies to physical therapy. Materials to be covered include: muscle, tendon, ligament and nerve innervation of the trunk and upper extremity, structural identification and function of the spine, heart, lungs, abdominopelvic organs, circulatory and sensory systems. Emphasis on relevance of gross anatomy to physical therapy practice. Involves both lecture and laboratory dissection that will cover the upper half of the body.
Prerequisites Graduate standing in Physical Therapy.
Corequisite DPT 744L

DPT 744L - Gross Human Anatomy Lab I
Credits 1
Gross human anatomy cadaver lab with supervised dissection and exploration of muscle, tendon, ligament and nerve innervation of the trunk and upper extremity, structural identification and function of the spine, heart, lungs, abdominopelvic organs, circulatory and sensory systems.
Corequisite DPT 744 - Gross Anatomy I

DPT 745 - Gross Anatomy II
Credits 2
Study of gross human anatomy as it applies to physical therapy. Materials to be covered include: muscle, tendon, ligament and nerve innervation of the head, neck, and lower extremity, structural identification and function of the corresponding circulatory and sensory systems.
Prerequisites DPT 744 and DPT 744L
Corequisite DPT 745L

DPT 745L - Gross Human Anatomy Lab II
Credits 1
Gross human anatomy cadaver lab with supervised dissection and exploration of muscle, tendon, ligament and nerve innervation of the head, neck, and lower extremity, structural identification and function of the corresponding circulatory and sensory systems.
Prerequisites DPT 744 and DPT 744L
Corequisite DPT 745

DPT 746 - Neuroanatomy
Credits 3
High level immersion into the anatomy of the nervous system, emphasizing structure and functional relationships. Coursework will also relate the structural relationships of the central and peripheral nervous systems to brain dysfunction and pathology.
Prerequisites Graduate standing in physical therapy.
Corequisite DPT 746L

DPT 746L - Neuroanatomy Lab
Credits 1
Human cadaveric dissection of the central nervous system through a series of weekly laboratory experiences with an emphasis on its three-dimensional structure.
Prerequisites Graduate standing in Physical Therapy.
Corequisite DPT 746

DPT 747 - Geriatric Examination and Intervention
Credits 1
Examination, evaluation, plan of intervention, outcomes, patient education, and health promotion as applied to the geriatric client. Issues include factors affecting normal aging, pathological aging, common pathologies associated with aging, quality of life, successful aging, care settings, reimbursement, and public policy.
Prerequisites Graduate standing in physical therapy.

DPT 748 - Pharmacology
Credits 2
Actions and effects of pharmaceutical agents commonly encountered in physical therapy clinical practice.
Prerequisites Graduate standing in Physical Therapy.

DPT 749 - Applied Exercise Physiology
Credits 2
Review of systems responsible for the generation of energy. Overview of the physiologic responses of the human body to acute bouts of exercise and how training leads to chronic adaptation of selected systems. Course content focuses on principles of exercise, role of nutrients in body metabolism, human development and performances.
Prerequisites Graduate standing in physical therapy.
Corequisite DPT 749L - Applied Exercise Physiology Lab

DPT 749L - Applied Exercise Physiology Lab
Credits 1
Laboratory and active learning experiences to include major components of physical fitness such as aerobic fitness; muscular strength, power, and endurance; fatigue thresholds; body composition and body build; and flexiblility.
Prerequisites Graduate standing in Physical Therapy.
Corequisite DPT 749.

DPT 750 - Prosthetics and Orthotics
Credits 2
Evaluation of medical, surgical and prosthetic and rehabilitation management of amputations. Discussion of design, fabrication and fitting of prosthetic devices as well as general orthotic principles examined. Basic clinical problem solving skills integrated in the context of prosthetic and orthotic management of patients.
Prerequisites Graduate standing in Physical Therapy.
Corequisite DPT 750L

DPT 750L - Prosthetics and Orthotics Lab
Credits 1
Application of medical, surgical and prosthetic and rehabilitation management of amputations. Design, fabrication and fitting of prosthetic devices as well as general orthotic principles examined. Basic clinical problem solving skills integrated in the context of prosthetic and orthotic management of patients.
Prerequisites Graduate standing in Physical Therapy.
Corequisite DPT 750

DPT 751 - Women's Health in Physical Therapy
Credits 2
Overview of the anatomical, physiological, nutritional, psychological, and sociological influences throughout the woman's life span including: adolescence, the reproductive years, the middle years, the older age. Discussion of physical therapy management of musculoskeletal, integumentary, cardiopulmonary, and visceral pathologies common to women.
Prerequisites Graduate standing in physical therapy.

DPT 752 - Physical Agents and Electrophysiology
Credits 3
Biological processes of injury and repair, clinical application of soft tissue techniques, thermal agents, intermittent compression, continuous motion, electrical stimulation, and mechanical traction. Principles of electrophysics and neurophysiology as they pertain to the use of therapeutic electrical stimulation. Advancement to clinical decision-making skills in physical application.
Prerequisites Graduate standing in Physical Therapy. DPT 742, 730, 732.
Corequisite DPT 752L

DPT 752L - Physical Agents and Electrophysiology Lab
Credits 1
Hands on performance and clinical application of soft tissue techniques, thermal agents, intermittent compression, continuous motion, electrical stimulation, mechanical traction, therapeutic electrical stimulation.
Prerequisites Graduate standing in Physical Therapy. DPT 742, 730, 732.
Corequisite DPT 752

DPT 753 - Electrotherapy
Credits 2
Principles of a electrophysics and neurophysiology as they pertain to the use of therapeutic electrical stimulation. Application techniques of various

electrical stimulation devices also presented.
Prerequisites DPT 742, DPT 752, DPT 730, DPT 732.

DPT 754 - Orthopaedic Assessment in Physical Therapy
Credits 3
Evaluation and assessment of upper and lower extremity orthopaedic problems. Discussion and application of functional anatomy, biomechanics, and evaluative manual therapy skills used to differentially diagnose orthopaedic pathologies and disorders.
Prerequisites DPT 730, DPT 730L, DPT 741, DPT 744, DPT 744L, DPT 745, DPT 745L
Corequisite DPT 754L

DPT 754L - Orthopaedic Assessment in Physical Therapy Lab
Credits 1
Evaluation and assessment of upper and lower extremity orthopaedic problems. Practical application of functional anatomy, biomechanics, and evaluative manual therapy skills used to differentially diagnose orthopaedic pathologies and disorders.
Prerequisites DPT 730, DPT 730L, DPT 741, DPT 744, DPT 744L, DPT 745, DPT 745L
Corequisite DPT 754

DPT 755 - Geriatric and Pediatric Rehabilitation
Credits 3
Examination of factors affecting normal and pathologic systems from birth into aging. Issues include normal developmental sequences and common pathologies across the life span. Evaluation, wellness and leisure activities, and how basic rehabilitation procedures can be modified for the elderly.
Prerequisites Graduate standing in physical therapy.

DPT 756 - Neurophysiology
Credits 4
High level immersion into the function of the human central and peripheral nervous systems based on current research and theory. Topics include normal human motor and sensory neurophysiology, cognitive and learning neurophysiology, neuropathophysiology, neuroplasticity, neurodiagnostics and neurologic treatment options.
Prerequisites DPT 746

DPT 757 - Wound Care
Credits 2
Clinical practice of wound care including physiology of tissue healing, wound assessment tools, dressings and treatment approaches. Processes and diseases most frequently encountered in physical therapy practice specializing in wound care.
Prerequisites DPT 742, DPT 752

DPT 758 - Diagnostic Testing and Imaging
Credits 2
Presentation of diagnostic tests used by disciplines and specialties within and outside of the profession of physical therapy. Discussion of blood studies, nuclear medicine studies, and radiologic/X-ray studies. Interpretation of test results as it applies to physical therapy evaluation, intervention planning and treatment.
Prerequisites Graduate standing in physical therapy.

DPT 759 - Pediatric Rehabilitation
Credits 2
Provides foundational knowledge of development (typical and atypical) and an overview of pediatric physical therapy practice for children with atypical development. Presents examination, evaluation, and development of physical therapy plans of care for children with various disabilities within the frameworks of family-centered care and disablement/enablement models.
Prerequisites Graduate standing in Physical Therapy.
Corequisite DPT 759L

DPT 759L - Pediatric Rehabilitation Laboratory Experience
Credits 1
Focuses on application of developmental concepts and an overview of pediatric physical therapy practice for children with atypical development. Provides students with opportunities to observe/engage in examination, evaluation, and development of physical therapy plans of care for children with various disabilities within the frameworks of family-centered care and enablement models
Prerequisites Graduate standing in Physical Therapy.
Corequisite DPT 759

DPT 761 - Supervised Clinical Education I
Credits 3
The first clinical affiliation is a supervised full-time extended clinical learning experience six weeks in duration. The primary purpose is to provide students with the opportunity to actively engage in learning in order to develop introductory clinical competence in the delivery of services to persons with movement dysfunction.
Prerequisites Successful completion of all course work in the first year of the graduate physical therapy program.

DPT 762 - Supervised Clinical Education II
Credits 5
The second clinical affiliation is a supervised, full-time extended clinical learning experience 11 weeks in duration. The primary purpose is to provide students with the opportunity to actively engage in experiential learning in order to advance clinical competence in the delivery of services to persons with movement dysfunction.
Prerequisites DPT 761

DPT 763 - Supervised Clinical Education III
Credits 5
The third clinical affiliation is ten and one-half weeks and is a supervised full-time extended clinical learning experience. The primary purpose is to provide students with the opportunity to actively engage in experimental learning in order to advance clinical competence in the delivery of services to persons with movement dysfunction.
Prerequisites DPT 762

DPT 764 - Supervised Clinical Education IV
Credits 6
The fourth clinical affiliation is twelve weeks and is a supervised full-time extended clinical learning experience. The primary purpose is to provide students with the opportunity to actively engage in experiential learning in order to advance clinical competence in the delivery of services to persons with movement dysfunction.
Prerequisites DPT 763

DPT 765 - Clinical Education V
Credits 4
This nine-week clinical affiliation is an extended learning experience for students completing the transitional physical therapy doctorate. The primary purpose is to provide students the opportunity to advance clinical competence in the delivery of physical therapy services to persons with movement dysfunction.
Prerequisites Successful completion or concurrent work in all course work to date in the transitional doctorate physical therapy program.

DPT 770 - Cardiopulmonary Rehabilitation
Credits 1
Evaluation and treatment of patients with acute and chronic cardiopulmonary disease and dysfunction. Emphasis on regulation of cardiac, circulatory and pulmonary functions at rest and the responses of these systems to differing modes, intensities, and durations. Prerequisite: Graduate standing in physical therapy.
Prerequisites Graduate standing in physical therapy.
Corequisite/Prerequisite
DPT 770L

DPT 770L - Cardiopulmonary Rehabilitation Lab
Credits 1
Lab of basic patient skills including assessment of vital signs, breathing patterns, heart sounds, ECG interpretation, pulmonary function testing, blood gases, chest wall mobility, cough and sputum, ventilation, performance of bronchial drainage, prescribe exercises for patient with compromised cardiopulmonary function.
Corequisite DPT 770

DPT 772 - Physical Therapy Administration
Credits 2
General principles of organizations and administration that impact the ethical and legal aspects of physical therapy practice. Topics include budget development, cost accounting, supervision, communication skills, evaluative techniques, and methods of management and quality assurance.
Prerequisites Graduate standing in physical therapy.

DPT 774 - Psychosocial Aspects of Physical Therapy
Credits 2
Social and psychological issues which arise during illness examined and discussed in an open class discussion format. Emphasis on self-awareness as well as awareness of others with respect to cultural differences, religious beliefs, addictions, and coping

strategies during stress.
Prerequisites Graduate standing in physical therapy.

DPT 780 - Balance and Vestibular Rehabilitation
Credits 2
This course will introduce students to principles and theories of rehabilitation for the patient with balance dysfunction. There will be emphasis on sound clinical reasoning and assessment of balance impairment and disability. Students will be exposed to theoretical applications of different treatment modalities in balance and vestibular rehabilitation.
Prerequisites Enrollment in professional DPT curriculum.

DPT 785 - Orthopaedic Rehabilitation
Credits 2
Manual therapy and therapeutic exercise techniques for the extremities with emphasis on integrating these techniques into treatment regimes for specific orthopaedic pathologies/disorders. Includes pathogensis, clinical presentation, medical/surgical management and rehabilitation. Review, integrate, and enhance knowledge from previous course work as it pertains to appropriate entry-level application.
Prerequisites DPT 732, DPT 741, DPT 754
Corequisite DPT 785L

DPT 785L - Orthopaedic Rehabilitation Lab
Credits 1
Orthopaedic Rehabilitation lab with supervised integration of manual therapy and therapeutic exercise techniques for the extremities. Focus will be on developing and providing treatment regimes for specific orthopaedic pathologies/ disorders. Students will refine skills from previous course work as it pertains to appropriate entry-level application.
Prerequisites DPT 732, DPT 741, DPT 754.
Corequisite DPT 785

DPT 786 - Neurological Rehabilitation
Credits 3
Course fosters clinical reasoning and critical analysis skills across elements of patient client management for individuals with neurologically-based movement disorders. Students are exposed to theory and movement science as related to clinical reasoning. Students are expected to incorporate professional behavior, scientific and clinical knowledge and critical analysis to clinical applications.
Prerequisites DPT 730, DPT 732, DPT 744, DPT 745, DPT 746, DPT 756.
Corequisite DPT 786L

DPT 786L - Neurologic Rehabilitation Laboratory Experience
Credits 1
Course emphasizes hands-on skill development, clinical reasoning, and critical analysis skills for all elements of patient-client management for individuals with neurologically-based movement disorders across the lifespan. Students are expected to incorporate professional behavior, scientific and clinical knowledge, critical analysis and competent skill performance in laboratory and practical skill application.
Corequisite DPT 786

DPT 787 - Integrated Rehabilitation
Credits 2
Assessment and treatment of advanced orthopedics, advanced neurological, and spinal cord injured patients utilizing comprehensive techniques for spinal cord injury (SCI), orthopedics, and neurological treatment. Through dynamic patient case problems, students evaluate, plan, and implement course of treatment.
Prerequisites Graduate standing in Physical Therapy and DPT 785 and DPT 786.
Corequisite DPT 787L

DPT 787L - Integrated Rehabilitation Lab
Credits 1
Hands on assessment and treatment of advanced orthopedics, advanced neurological, and spinal cord injured patients utilizing comprehensive techniques for spinal cord injury (SCI), orthopedics, and neurological treatment. Through dynamic patient case problems, students will be able to evaluate, plan, and implement a course of treatment.
Prerequisites Graduate standing in Physical Therapy and DPT 785 and DPT 786.
Corequisite DPT 787

DPT 788 - Spine Examination and Treatment
Credits 2
Spine examination including biomechanics, observation, range of motion, muscle strength, joint play and special tests. Inclusion of examination

schema, clinical reasoning skills and differential diagnosis of commonly seen spine pathology. Emphasis on hands-on examination, assessment, and treatment including manual therapy, spinal mobilization and spinal manipulation skills.
Prerequisites Graduate standing in physical therapy.
Corequisite DPT 788L

DPT 788L - Spine Examination and Intervention Lab
Credits 1
Lab sessions focusing on hands-on examination, assessment, and treatment of spine dysfunction, including manual therapy, spinal mobilization and spinal manipulation skills.
Prerequisites Graduate standing in Physical Therapy or consent of instructor.
Corequisite DPT 788

DPT 790 - Clinical Research in Physical Therapy
Credits 3
Introduction to principles and concepts of clinical research in physical therapy. Covers development of the research question, measurement issues, statistical analysis, literature review, and writing of results.
Prerequisites Graduate standing in physical therapy.

DPT 791 - Applied Research Statistics
Credits 3
Review of foundations, concepts of measurement, and design in clinical research. Emphasis on hands-on data analysis of clinically relevant physical therapy research designs including descriptive statistics, statistical inference, analysis of differences, and analysis of relationships.
Prerequisites Graduate standing in physical therapy.

DPT 793 - Seminar
Credits 1
Preparation and presentation of seminars on topics of current interest in physical therapy and rehabilitation. Topic changes by semester and by course instructor; see class schedule for details.
Prerequisites Enrollment in professional DPT curriculum.

DPT 795 - Independent Study
Credits 1 – 6
Students pursue a topic related to physical therapy beyond that covered in the graduate curriculum. Satisfactory completion accomplished through individualized, self-directed study. Topics based on student preference and faculty approval. Faculty and student jointly determine goals, objective and evaluation methods.
Notes
May be repeated to a maximum of six credits.
Prerequisites Graduate standing in physical therapy.

DPT 798 - Directed Research
Credits 1 – 6
Critical inquiry by participating in new or ongoing research with faculty who serve as project advisors. Students summarize research by a written report and present each project orally to the faculty and area clinicians.
Notes
May be repeated to a maximum of six credits.
Prerequisites DPT 790

PTS 744 - Gross Human Anatomy
Credits 3
Gross anatomy studied regionally stressing relationships of major structures, organs, vessels and nerves. Prosected human cadaver observation by students included in laboratory session (PTS 744L). All major areas of the body covered. Reference to the relationship of anatomical structures to pathology, traumatic injury and medicine stressed.
Prerequisites Undergraduate Anatomy, Physiology or Biology lab course.
Corequisite PTS 744L

PTS 744L - Gross Human Anatomy Lab
Credits 1
Gross human anatomy cadaver lab with supervised examination and exploration of prosected human cadavers. All major areas of the body are covered. References to the relationship of anatomical structures to pathology, traumatic injury and medicine stressed.
Prerequisites Undergraduate Anatomy, Physiology or Biology lab course or equivalent.
Corequisite PTS 744

PTS 747 - Human Neuroanatomy
Credits 3
High level immersion, including cadaveric prosection, into the anatomy of the central nervous system, emphasizing structure and functional relationships. Coursework will also relate these

structural relationships to brain dysfunction and pathology.
Prerequisites Graduate standing.

School of Community Health Sciences

The purpose of the School of Community Health Sciences (SCHS) is to prepare individuals to become effective public health practitioners, health care managers and administrators, and other health professionals who will competently identify public health problems and needs, develop effective mechanisms to address those needs, and promote appropriate services for the protection of human health. The SCHS is actively involved in educational, research, and outreach programs in public health with the expectation to be nationally recognized as innovative, comprehensive in nature and scope, cooperative in character, and ensure that graduates can serve as catalysts to promote population health in Nevada, the nation and the world.

Shawn Gerstenberger, Ph.D., Dean

Community Health Sciences Faculty

Founding Dean

Mary Guinan - *Full Graduate Faculty*
Professor of Epidemiology and Community Health; M.D., Johns Hopkins University; Ph.D., University of Texas. *Rebel since 2004.*

Dean

Shawn Gerstenberger - *Full Graduate Faculty*
Professor of Environmental and Occupational Health; B.S., University of Wisconsin-Platteville University; M. S., Ph.D., University of Illinois. *Rebel since 1997.*

Graduate Coordinators

Chino, Michelle (MPH, M.Ed, & Ph.D. Programs) - *Full Graduate Faculty*
Associate Professor of Environmental and Occupational Health, B.S., M.S., Ph.D. University of New Mexico. *Rebel since 2000.*

Shen, Jie - *Full Graduate Faculty*
Associate Professor and Chair of Health Care Administration and Policy; Ph.D. Virginia Commonwealth University. *Rebel since 2006.*

SCHS Graduate Faculty

Abella, Scott
Associate Research Professor of Environmental and Occupational Health; B.S. Grand Valley State University; M.S. Clemson University; Ph.D. Northern Arizona University. *Rebel since 2011.*

Bungum, Timothy - *Full Graduate Faculty*
Associate Professor of Biostatistics and Epidemiology; B.A. Luther College; M.S., D.P.H University of South Carolina. *Rebel since 2001.*

Buttner, Mark P. - *Full Graduate Faculty*
Associate Professor of Environmental and Occupational Health; B.S. University of Wisconsin; M.S. University of Nevada Las Vegas; Ph.D University of Nevada Reno. *Rebel since 1989.*

Chino, Michelle - *Full Graduate Faculty*
Associate Professor of Environmental and

Occupational Health; B.S., M.S., Ph.D. University of New Mexico. *Rebel since 2000.*

Cochran, Christopher - *Full Graduate Faculty*
Associate Professor of Health Care Administration and Policy; B.A. University of Texas, El Paso; M.PA.; Ph.D. University of South Carolina. *Rebel since 1997.*

Cruz, Patricia - *Full Graduate Faculty*
Associate Professor of Environmental and Occupational Health; B.S. University of Puerto Rico; M.S. University of Central Florida; Ph.D. University of Nevada Reno. *Rebel since 1995.*

Dodge Francis, Carolee - *Full Graduate Faculty*
Assistant Professor of Environmental and Occupational Health; B.S., M.A., Ed.D., University of St. Thomas. *Rebel since 2007.*

Gerstenberger, Shawn - *Full Graduate Faculty*
Professor of Environmental and Occupational Health; B.S., University of Wisconsin- Platteville University; M. S., Ph.D., University of Illinois. *Rebel since 1997.*

Ginn, Gregory - *Full Graduate Faculty*
Associate Professor of Health Care Administration and Policy; B.A., M.Ed., MBA, Ph.D. University of Texas, Austin. *Rebel since 2000.*

Liu, Darren - *Full Graduate Faculty*
Assistant Professor of Health Care Administration and Policy; B.S. Kaohsiung Medical University, Taiwan; M.H.A. China Medical University, Taiwan; M.S. University of Pittsburgh; Dr. P.H. University of Pittsburgh. *Rebel since 2011.*

Moonie, Sheniz
Associate Professor of Biostatistics and Epidemiology; B.S., University of California San Diego; M.S., California Polytechnic University, Pomona; Ph.D. Saint Louis University. *Rebel since 2006.*

Pinheiro, Paulo - *Full Graduate Faculty*
Assistant Professor of Epidemiology.

Regin, Charles - *Full Graduate Faculty*
Assistant Professor of Health Promotion, B.S., M.S. University of Wisconsin-La Crosse; Ph.D. Southern Illinois University.*Rebel since 1987.*

Shen, Jie - *Full Graduate Faculty*
Associate Professor and Chair of Health Care Administration and Policy; Ph.D. Virginia Commonwealth University. *Rebel since 2006.*

Stetzenbach, Linda - *Full Graduate Faculty*
Profesor Emerita of Environmental and Occupational Health; B.S., M.S., Ph.D., University of Arizona. *Rebel since 2005.*

Thompson-Robinson, Melva - *Full Graduate Faculty*
Associate Professor of Health Promotion; B.S., University of Michigan; M.S. Ohio University; D.P.H., University of South Carolina. *Rebel since 2004.*

Wong, David - *Full Graduate Faculty*
Associate Research Professor; B.Sc., M.Sc., Ocean University of Quingdao; Ph.D. City University of Hong Kong. *Rebel since 2008.*

Master of Education in Health Promotion

The goal of the 36-semester credit hour Health Promotion graduate program is to provide students with the theory, knowledge, and skills needed to integrate the principles of health promotion into a variety of community, research, clinical, business or school settings and/or to pursue advanced study. Specifically, the Health Promotion degree program will prepare students to: 1) assess and communicate individual, family, and community needs, 2) plan, implement, evaluate, and administer programs, 3) act as a resource person by coordinating provisions for services and applying appropriate research principles and methods, and 4) advance the goals of job-related professional organizations. To this end, eight concentrations in the Health Promotion degree are offered.

The **Administration** concentration is designed for those interested in assuming leadership roles in their organization such as health program planners, health care project specialists, or health officers. The Communication concentration is designed for individuals interested in the dissemination of health promoting information and skills through varied strategies leading to health media specialist or health communication expert occupations.

The **Counseling** concentration is designed for anyone wishing to assist others one on one or in small groups regarding effective and positive strategies dealing with critical health issues. Such professionals include, but are not limited to, employee assistance program educators, patient educators, or mental health counselors.

The **Education** concentration is designed to improve the delivery skills of any educator at any teaching level, at varied sites such as school health teachers, public health educators, and employee wellness associates.

The **Environmental Health** concentration is designed for those individuals seeking occupations such as health and safety specialists or environmental health consultants due to an interest in the relationship that exists between the physical environment and the health of individuals and groups in that environment.

The **Gerontology** concentration is designed for individuals who are interested in health promotion strategies geared specifically for older adults delivered through professional roles such as gerontology outreach workers or program planners for seniors.

The **Nutrition and Fitness** concentration is designed for those interested in the fields of corporate health promotion or personal wellness training who desire to advise individuals and groups regarding eating choices and activity regimens to enhance performance and health.

The **Interdisciplinary** concentration, clearly the most flexible, is designed for those students with specific needs who would be best served by selecting a myriad of graduate courses from across campus. Individuals such as school nurses, epidemiologists, and industrial hygienists could benefit from the individualized approach offered in this concentration.

Admission Requirements

(This program is no longer offering admission.)

Degree Requirements

The Master in Education in Health Promotion requires a minimum of 36 semester hours.

1. A student must maintain a 3.00 GPA.
2. A student may take courses full or part time, with day and evening classes available.
3. Students must either take a comprehensive exam and successfully complete an additional three credits of advisor approved course work or successfully complete HED 750 Graduate Project in Health Promotion to fulfill the requirement of a capstone experience in the degree program.
4. Master's degrees must be completed within a six-year period, and continuous enrollment must be maintained throughout the six years.

Curriculum

The curriculum for the M.Ed. in Health Promotion consists of the following:

Health Promotion Core Requirements - Total Credits: 12

HED 705 - Theoretical Foundations in Health Promotion
HED 720 - Program Planning and Grant Writing in Health Promotion
HED 730 - Program Evaluation in Health Promotion
HED 735 - Practical Applications in Health Promotions

Health Promotion Research Core Requirements - Total Credits: 9

HED 725 - Epidemiology and Public Health
or
EAB 705 - Epidemiology and Public Health
or

COM 603 - Public Communication

EPY 702 - Research Methods
or
EAB 700 - Research Methods for Public Health
EPY 718 - Qualitative Research Methodologies
or
EOH 715 - Qualitative & Field Methods for Public Health
or
EPY 721 - Descriptive and Inferential Statistics: An Introduction
or
EAB 703 - Biostatistical Methods for the Health Sciences

Health Promotion Capstone Experience - Total Credits: 3

HED 750 - Graduate Project in Health Promotion
or
Comprehensive Exam and advisor approved course(s)
or
HED 755 - Thesis Research

Selected Concentrations - Total Credits: 12

Administration Concentration

HCA 701 - U.S. Health Care System: Programs and Policies
HCA 703 - Management of Health Service Organizations and Systems
HCA 718 - Health Care Economics
HCA 716 - Health Care Accounting and Finance
HCA 719 - Operations and Quality Management of Health Services
HCA 720 - Information Systems in Health Services Management
HCA 717 - Human Resources Management of Health Care Organizations
HCA 761 - Health Care Law and Ethics for Managers
PUA 701 - Governance and the Urban Community
PUA 705 - Public Goods and Public Finance
PUA 708 - Organizations and Organizational Behavior
PUA 719 - Personnel Assessment and Selection
PUA 740 - Urban Administration
PUA 792 - Current Issues in Public Administration

See the Department of Health Promotion for additional curricular information.

Communication Concentration

COM 604 - Principles of Persuasion
COM 607 - Communication Between the Sexes
COM 634 - Conflict Management
COM 684 - Political Communication
COM 706 - Seminar in Intercultural Communication
COM 710 - Survey of Communication Studies
COM 712 - Empirical Research Methods
COM 725 - College Teaching in Communication
COM 730 - Theories of Communication
COM 741 - Social Movements as Rhetorical Form
COM 780 - Persuasion
COM 781 - Seminar in Argumentation
COM 784 - Political Communication
COM 789 - Selected Topics in Communication

See the Department of Health Promotion for additional curricular information.

Counseling Concentration

COU 610 - Eating Disorders: Etiology and Treatment
CED 639 - Problem Gambling Counseling I
CED 640 - Problem Gambling Counseling II
CED 645 - Trauma and Addiction
CED 661 - Use and Application of Technology in Counseling
CED 699 - Special Topics
CED 700 - Special Problems: Counseling and Educational Psychology
CED 701 - Introduction to Counseling
CED 703 - Counseling with Expressive Arts and

Activities
CED 710 - Relationships Through the Lifespan
CED 711 - Counseling Appraisal and Inquiry
CED 713 - Introduction to School Counseling
CED 715 - Counseling and Consultation Theories
CED 721 - Career Theories and Practices
CED 727 - Counseling Process and Procedures
CED 733 - Introduction to Group Counseling
CED 735 - Substance Abuse Prevention and Treatment
CED 738 - Introduction to Community Mental Health Counseling
CED 739 - Vocational Placement and Community Resources
CED 742 - Introduction to Community Counseling
CED 743 - Ethical and Legal Issues in Counseling
CED 745 - Assessment, Treatment, and Case Management in Addictions
CED 755 - Planning, Management, and Evaluation of Addictions and Mental Health Programs
CED 766 - Psychopathology and Wellness Models in Counseling
CED 772 - Counseling and Spirituality
CED 781 - Problem Gambling Counseling
CED 782 - Counseling with Potential Suicides
CED 785 - Eating Disorders Counseling
CED 789 - The Student in Higher Education

See the Department of Health Promotion for additional curricular information.

Education Concentration

EDW 746 - History and Development of Two Year Postsecondary Institution
EDW 747 - Workforce Education Teaching
CIG 660 - Multicultural Education
CIG 662 - Theory and Research Multicultural Education
CIT 602 - Technology Applications Secondary Curriculum
CIT 608 - Integrating Technology in Teaching and Learning
CIG 601 - Curriculum and Instruction Urban Settings
HED 607 - Stress Management
SW 622 - AIDS: An Interdisciplinary Perspective

See the Department of Health Promotion for additional curricular information.

An Interdisciplinary Perspective

HED 629 - Education for Sexuality
HED 630 - Nutrition
HED 635 - Health Studies on Dangerous Drugs
HED 640 - Health Promotion and Wellness
ECE 709 - Investigations in Early Childhood Education
ESP 701 - Introduction to Special Education and Legal Issues

See the Department of Health Promotion for additional curricular information.

Environmental Health Concentration

EOH 702 - Community Based Participatory Research Methods
EOH 711 - Diseases that Changed the World
EOH 713 - Public Health Law
EOH 732 - Children, Development, Health, and the Environment
EOH 740 - Fundamentals of Environmental Health
EOH 747 - Transmission of Infectious Disease
EOH 757 - Parasitology and Public Health
EOH 760 - Racial and Ethnic Disparities in Health
EOH 765 - Seminar in Environmental Justice and Public Health
EOH 767 - Airborne Pathogens and Human Health
EOH 769 - Advanced Pollution Ecology
EOH 777 - Emerging Infectious Disease
EOH 601 - Advanced Environmental Toxicology

See the Department of Health Promotion for additional curricular information.

Gerontology Concentration

Students may select one (3 credits) of the remaining courses

THTR 793 - Special Topics in Theatre
SOC 684 - Sociology of Death and Dying (Spring and sometimes Summer)
SOC 682 - Aging and Social Policy

See the Department of Health Promotion for additional curricular information.

For those students wishing to complete the coursework for a Certificate in Gerontology, the following must be completed:

PSY 442 - Psychology of Aging (prerequisite PSY 101) usually offered every semester and the Summer
KIN 461 - Physical Activity in Aging-(usually offered every year, varies between Fall and Spring)
KIN 462 - Adult Development in Aging (usually

offered every year varies Between Fall and Spring)
NUR 486 - Aging and Social Policy (every Spring)

Nutrition and Fitness Concentration
KIN 605 - Sports Nutrition
KIN 685 - Physical Activity and the Law
KIN 691 - Exercise Physiology
KIN 737 - Biomechanics of Strength
KIN 739 - Evaluation of Physical Working Capacity
KIN 740 - Advanced Exercise Physiology
KIN 745 - Human Energy Metabolism

See the department for additional curricular information.

Interdisciplinary Concentration

In addition to the courses listed above, students may select, with guidance and approval from their advisor, any graduate-level course that meets individual and professional needs identified by students. The core courses in health promotion also provide substantive contributions to other graduate programs offered across campus. These programs include, but are not limited to, those programs offered by the College of Business and the departments of Communication Studies, counseling, Curriculum and Instruction, Economics, Educational Leadership, Kinesiology, Political Science, Psychology, Public Administration, Sociology, Special Education and the Schools of Journalism and Media Studies and Social Work.

The design of the concentration component must revolve around a consistent theme and be relevant to the goals and objectives of the program and of the student. Design is to ensure a breadth and depth in a supportive area of concentration such as curriculum and instruction, special education, health promotion, school athletic administration, educational leadership, education administration, sport and recreational management, and psychology of sport.

Master of Public Health

Plan Description

The Master of Public Health Degree Program is designed to prepare students to be Public Health professionals in the private and public sectors with the overall goal of promoting and protecting the health of individuals in our society.

Educational Objectives
The purpose of the MPH Program is to prepare individuals to become effective health care practitioners, researchers and teachers who will competently identify public health problems and needs, develop effective strategies to address those needs, and promote appropriate services to be available for the protection of human health.

At a minimum, the following criteria should be met to assure each student a) develops an understanding of the areas of knowledge that are basic to public health, b) acquires skills and experience in the application of basic public health concepts and of specialty knowledge to the solution of community health problems, and c) demonstrates integration of knowledge through a capstone experience.

For more information about your program, including your graduate program handbook and learning outcomes please visit the Degree Directory.

Plan Admission Requirements

Application deadlines

Applications available on the UNLV Graduate College website.

To be considered for admission to the MPH, an applicant must:

1. Hold a bachelor's degree or recognized equivalent from a regionally accredited institution and have adequate preparation in the biological, physical, or social sciences. A criterion for admission is at least a B (3.0) grade-point average or the equivalent in work completed after the first two years of a

bachelor's degree program and in all post-baccalaureate course work.
2. Completion of the school's application process.
3. Submit a personal essay describing what you perceive to be pressing public health issues, why a career in the field appeals to you, and how it will use your strengths and commitment.
4. Three letters of recommendation.
5. Take and submit scores for the Personal Potential Index (PPI) exam.
6. All applicants to the MPH program who do not have a master's degree or higher will be required to submit GRE or equivalent (e.g., MCAT, LSAT) test scores no more than 5 years old.
7. All applicants will submit the ETS Personal Potential Index (PPI) exam.
8. Unofficial copies to the School of Public Health.
9. All domestic and international applicants must review and follow the Graduate College Admission and Registration Requirements.

Dental Fast Track Program
The Doctorate of Dental Medicine-Fast Track Masters of Public Health program is designed for those who seek a deeper understanding of disease prevention, medical delivery, and health promotion at both an individual and population level within the field of dentistry. The program enables students who graduate with both the Masters of Public Health and the Doctorate of Dental Medicine to become leaders in oral health research, education, and community dental health promotion. After completing the program, graduates will be eligible to apply for a position within a dental public health residency program.

Students interested in applying for the DMD-Fast Track MPH program should begin by applying for admissions to the UNLV School of Dental Medicine. Please see the School of Dental Medicine website for specific requirements and deadlines.

Current dental students interested in the Fast Track MPH program are encouraged to submit an application for permission to enter the program to the UNLV School of Dental Medicine Assistant Dean for Admissions and Student Affairs. This request form must accompany the Graduate College application for admissions into the MPH program. Completed packets will be submitted to the Graduate College for admissions to the Masters of Public Health program.

Students must indicate on their Graduate College application form that they are registering for the DMD-Fast Track MPH program and present evidence of being a current dental student in good standing by submitting a signed SDM application for permission to enter the program. While a dental student may apply for the fast track program at any time, they may not register for classes within the College of Community Health Sciences until the Fall semester of their sophomore year. Students will also be limited in the number of MPH classes they are allowed to pursue during their sophomore year of dental school. A cap of one MPH class a semester will be enforced. The junior and senior year of dental school, students in the fast track program will be allowed to take heavier course loads unless specifically stated otherwise by the Assistant Dean for Admissions and Student Affairs at the School of Dental Medicine.

MD Fast Track Program
The MD Fast Track is designed for physicians and residents who seek professional development in the area of public health and public health research.

1. Applicants for the Medical Professional Fast Track must have an M.D., O.D., DMD, DDS or equivalent professional medical degree from an accredited Institution and/or be a practicing physician or dentist at an area hospital or Medical Facility.
2. Applicants will apply through the current Graduate College application system.
3. In addition to Graduate College Requirements applicants will submit a resume/CV and a statement of purpose.

Students are accepted into a degree program as described in the Graduate Catalog. The faculty and corresponding sub-disciplines and sub-plans within the described programs are subject to change at any time.

Plan Requirements

See Subplan Requirements below.

Subplan 1 Requirements: Social and Behavioral Health Track

Total Credits Required: 45

Course Requirements

Required Courses – Credits: 18

EOH 710/HED 710 - Fundamentals of Public Health
EOH 740 - Fundamentals of Environmental Health
EAB 705 - Epidemiology and Public Health
HCA 701 - U.S. Health Care System: Programs and Policies
HED 720 - Program Planning and Grant Writing in Health Promotion
EAB 703 - Biostatistical Methods for the Health Sciences

Social and Behavioral Health Courses – Credits: 6

HED 705 - Theoretical Foundations in Health Promotion
HED 730 - Program Evaluation in Health Promotion

Methods Courses – Credits: 3

Complete one of the following courses:

EAB 700 - Research Methods for Public Health
EOH 715 - Qualitative & Field Methods for Public Health

Social Health Courses – Credits: 3

Complete one of the following courses:

EOH 705 - Social Epidemiology
EOH 760 - Racial and Ethnic Disparities in Health

Internship – Credits: 3

EOH 793 - Internship in Environmental Health

An additional 3 credits of internship may be taken as an elective for a total of 6 credits of internship.

Elective Courses – Credits: 6-9

Students completing a thesis must complete six credits of elective coursework, and students completing a project must complete nine credits of elective coursework. Select from the following list:

HED 607 - Stress Management
HED 627 - Methods in Health Education
HED 629 - Education for Sexuality
HED 630 - Nutrition
HED 635 - Health Studies on Dangerous Drugs
HED 760 - Technology in Health Promotion
EOH 793 - Internship in Environmental Health

Culminating Experience – Credits: 3-6

Complete one of the following:

HED 750 - Graduate Project in Health Promotion
HED 755 - Thesis Research

Degree Requirements

1. Completion of a minimum of 45 credit hours with a minimum GPA of 3.00.
2. In consultation with his/her advisor, a student will organize a committee of at least three departmental members. In addition, a fourth member from outside the department, known as the Graduate College Representative, must be appointed. An additional committee member may be added at the student and department's discretion. Please see Graduate College policy for committee appointment guidelines.

Graduation Requirements

1. The student must submit all required forms to the Graduate College and then apply for graduation up to two semesters prior to completing his/her degree requirements.
2. Successfully complete the graduate project or successfully complete and defend a thesis by the posted deadline. The defense must be advertised and is open to the public.
3. If a thesis is completed, the student must submit his/her approved, properly formatted document to the Graduate College, and submit the approved electronic version to ProQuest by the posted deadline.

Subplan 2 Requirements: Environmental and Occupational Health Track

Total Required Credits: 45

Course Requirements

Required Courses – Credits: 18

EOH 710/HED 710 - Fundamentals of Public Health
EOH 740 - Fundamentals of Environmental Health
EAB 705 - Epidemiology and Public Health
HCA 701 - U.S. Health Care System: Programs and Policies
HED 720 - Program Planning and Grant Writing in Health Promotion
EAB 703 - Biostatistical Methods for the Health Sciences

Environmental and Occupational Health Courses – Credits: 3

EOH 601 - Advanced Environmental Toxicology

Health and Safety Courses – Credits: 6

EOH 717 - Food Safety and Public Health
EOH 747 - Transmission of Infectious Disease

Environmental Courses – Credits: 3

EOH 765 - Seminar in Environmental Justice and Public Health

Skill Development Courses – Credits: 6

EAB 700 - Research Methods for Public Health
EOH 709 - Scientific/Technical Writing for the Health and Life Sciences

Internship – Credits: 3

EOH 793 - Internship in Environmental Health

An additional 3 credits of internship may be taken as an elective for a total of 6 credits of internship.

Elective Courses – Credits: 0-3

Students completing a project must complete three credits of elective coursework. Select from the following list:

EOH 705 - Social Epidemiology
EOH 713 - Public Health Law
EOH 715 - Qualitative & Field Methods for Public Health
EOH 732 - Children, Development, Health, and the Environment
EOH 757 - Parasitology and Public Health
EOH 760 - Racial and Ethnic Disparities in Health
EOH 765 - Seminar in Environmental Justice and Public Health
EOH 767 - Airborne Pathogens and Human Health
EOH 769 - Advanced Pollution Ecology
EAB 716 - The Epidemiology of Obesity
EOH 777 - Emerging Infectious Disease
EOH 795 - Special Topics in Public Health
EOH 796 - Independent Study in Environmental Health
HED 705 - Theoretical Foundations in Health Promotion

Culminating Experience – 3-6

Complete one of the following:

EOH 794 - Professional Paper in Environmental Health
EOH 798 - Thesis Research (6 credits)

Degree Requirements

1. Completion of a minimum of 45 credit hours with a minimum GPA of 3.00.
2. In consultation with his/her advisor, a student will organize a committee of at least three departmental members. In addition, a fourth member from outside the department, known as the Graduate College Representative, must be appointed. An additional committee member may be added at the student and department's discretion. Please see Graduate College policy for committee appointment guidelines.

Graduation Requirements

1. The student must submit all required forms to the Graduate College and then apply for graduation from up to two semesters prior to completing his/her degree requirements.
2. Successfully complete the professional paper or successfully complete and defend a

thesis by the posted deadline. The defense must be advertised and is open to the public.
3. If a thesis is completed, the student must submit his/her approved, properly formatted document to the Graduate College, and submit the approved electronic version to ProQuest by the posted deadline.

Subplan 3 Requirements: Health Care Administration and Policy Track

Total Required Credits: 45

Course Requirements

Required Courses – Credits: 18

EOH 710 /HED 710 - Fundamentals of Public Health
EOH 740 - Fundamentals of Environmental Health
EAB 705 - Epidemiology and Public Health
HCA 701 - U.S. Health Care System: Programs and Policies
HED 720 - Program Planning and Grant Writing in Health Promotion
EAB 703 - Biostatistical Methods for the Health Sciences

Health Care Admin & Policy Courses – Credits: 15

HCA 703 - Management of Health Service Organizations and Systems
HCA 716 - Health Care Accounting and Finance
HCA 730 - Strategic Management of Health Services
HCA 719 - Operations and Quality Management of Health Services
HCA 720 - Information Systems in Health Services Management

Internship – Credits: 3

HCA 793 - Internship in Health Care Administration

An additional 3 credits of internship may be taken as an elective for a total of 6 credits of internship.

Elective Courses – Credits: 3-6

Students completing a thesis must complete three credits of elective coursework, and students completing a project must complete six credits of elective coursework. Select from the following list or choose from other advisor approved courses from the pool of university approved graduate level courses:

HCA 718 - Health Care Economics
HCA 721 - Advanced Health Care Finance
HCA 652 - Health Politics and Policy
HCA 761 - Health Care Law and Ethics for Managers
HCA 680 - Organization and Management of Long-Term Care Services
HCA 793 - Internship in Health Care Administration
HED 705 - Theoretical Foundations in Health Promotion

Culminating Experience – Credits: 3-6

Complete one of the following:

HCA 779 - Health Care Administration Capstone Course (3 credits)
HCA 799 - Thesis Research (6 credits)

Degree Requirements

1. Completion of a minimum of 45 credit hours with a minimum GPA of 3.00.
2. If the thesis option is chosen, in consultation with his/her advisor, a student will organize a thesis committee of at least three departmental members. In addition, a fourth member from outside the department, known as the Graduate College Representative, must be appointed. An additional committee member may be added at the student and department's discretion. Please see Graduate College policy for committee appointment guidelines.

Graduation Requirements

1. The student must submit all required forms to the Graduate College and then apply for graduation up to two semesters prior to completing his/her degree requirements.
2. Students must receive prior approval from their committee before registering for any capstone experience.

3. Successfully pass the capstone course or successfully complete and defend a thesis by the posted deadline. The defense must be advertised and is open to the public.
4. If a thesis is completed, the student must submit his/her approved, properly formatted document to the Graduate College, and submit the approved electronic version to ProQuest by the posted deadline.

Subplan 4 Requirements: Biostatistics and Epidemiology Track

Total Required Credits: 45

Course Requirements

Required Courses – Credits: 18

EOH 710 /HED 710 - Fundamentals of Public Health
EOH 740 - Fundamentals of Environmental Health
EAB 705 - Epidemiology and Public Health
HCA 701 - U.S. Health Care System: Programs and Policies
HED 720 - Program Planning and Grant Writing in Health Promotion
EAB 703 - Biostatistical Methods for the Health Sciences

Biostatistics and Epidemiology Courses – Credits: 12

EAB 700 - Research Methods for Public Health
EAB 715 - Chronic Disease Epidemiology
EAB 725 - Epidemiology of Infectious Diseases
EAB 763 - Linear Statistical Models

Internship – Credits: 3

EAB 793 - Internship in Epidemiology and Biostatistics

An additional 3 credits of internship may be taken as an elective for a total of 6 credits of internship.

Elective Courses – Credits: 6-9

Students completing a thesis must complete six credits of elective coursework, and students completing a professional paper must complete nine credits of elective coursework. Select from the following list:

EOH 705 - Social Epidemiology
EAB 720 - Grant Writing for Epidemiology and Public Health Research
EAB 795 - Special Topics in Epidemiolog and Biostatistics
EAB 796 - Independent Study in Epidemiology and Biostatistics
EAB 716 - The Epidemiology of Obesity
EAB 733 - Survey Sampling for the Health Sciences
EAB 735 - Outbreak Investigation
EAB 743 - Experimental Design for the Health Sciences
EAB 753 - Nonparametric Statistics for Public Health
EAB 773 - Survival Analysis for Public Health
EAB 793 - Internship in Epidemiology and Biostatistics
HED 705 - Theoretical Foundations in Health Promotion

Culminating Experience – Credits: 3-6

Complete one of the following:

EAB 794 - Professional Paper in Epidemiology and Biostatistics (3 credits)
EAB 798 - Thesis Research in Epidemiology and Biostatistics (6 credits)

Degree Requirements

1. Completion of a minimum of 45 credit hours with a minimum GPA of 3.00.
2. In consultation with his/her advisor, a student will organize a committee of at least three departmental members. In addition, a fourth member from outside the department, known as the Graduate College Representative, must be appointed. An additional committee member may be added at the student and department's discretion. Please see Graduate College policy for committee appointment guidelines.

Graduation Requirements

1. The student must submit all required forms to the Graduate College and then apply for

graduation up to two semesters prior to completing his/her degree requirements.
2. Students must receive prior approval from their committee before registering for any capstone experience.
3. Successfully complete the professional paper or successfully complete and defend a thesis by the posted deadline. The defense must be advertised and is open to the public.
4. If a thesis is completed, the student must submit his/her approved, properly formatted document to the Graduate College, and submit the approved electronic version to ProQuest by the posted deadline.

Subplan 5 Requirements: Dental Fast Track - Social and Behavioral Health

Total Credits Required: 45

Course Requirements

Required Courses – Credits: 18

EOH 710 /HED 710 - Fundamentals of Public Health
EOH 740 - Fundamentals of Environmental Health
EAB 705 - Epidemiology and Public Health
HCA 701 - U.S. Health Care System: Programs and Policies
HED 720 - Program Planning and Grant Writing in Health Promotion
EAB 703 - Biostatistical Methods for the Health Sciences

Social and Behavioral Health Courses – Credits: 6

HED 705 - Theoretical Foundations in Health Promotion
HED 730 - Program Evaluation in Health Promotion

Methods Courses – Credits: 3

Complete one of the following courses:

EAB 700 - Research Methods for Public Health
EAB 785 – Qualitative Methods

Social Health Courses – Credits: 3

Complete one of the following courses:

EOH 705 - Social Epidemiology
EOH 760 - Racial and Ethnic Disparities in Health

Internship – Credits: 3

EOH 793 - Internship in Environmental Health

An additional 3 credits of internship may be taken as an elective for a total of 6 credits of internship.

Elective Courses – Credits: 6-9

Students completing a thesis must complete six credits of elective coursework, and students completing a project must complete nine credits of elective coursework. Select from the following list:

Den 7151 – Healthcare Finance and Public Health (1 credit)
Den 7154 – Healthcare Delivery: Patient Record and HIPAA Regulations (1.5 credits)
Den 7160 – Research and Professional Development I (1 credit)
Den 7161 – Research and Professional Development II (1.5 credits)
Den 7162 – Biochemical Basis of Clinical Nutrition (3 credits)
Den 7252 – Community Outreach/Geriatric Population (3 credits)
Den 7253 – Research and Analysis Methodology (1.5 credits)

Culminating Experience – Credits: 3-6

Complete one of the following:

HED 750 - Graduate Project in Health Promotion (3 credits)
HED 755 - Thesis Research (6 credits)

Degree Requirements

1. Completion of a minimum of 45 credit hours with a minimum GPA of 3.00.
2. Students enrolled in the DMD-Fast Track MPH program must remain in good academic/ethical standing in both the individual DMD and MPH programs or may be subject to dismissal.
3. Students in the DMD-Fast Track MPH program are subject to the same rules and

regulations that apply to all students at the School of Dental Medicine and the School of Community Health Sciences.

4. Upon date of entry into the MPH program, students will be given a maximum time frame of five years in which they must satisfy the degree requirements for the Masters in Public Health degree.
5. In consultation with his/her advisor, a student will organize a committee of at least three departmental members. In addition, a fourth member from outside the department, known as the Graduate College Representative, must be appointed. An additional committee member may be added at the student and department's discretion. Please see Graduate College policy for committee appointment guidelines.

Graduation Requirements

1. The student must submit all required forms to the Graduate College and then apply for graduation up to two semesters prior to completing his/her degree requirements.
2. Successfully complete the graduate project or successfully complete and defend a thesis by the posted deadline. The defense must be advertised and is open to the public.
3. If a thesis is completed, the student must submit his/her approved, properly formatted document to the Graduate College, and submit the approved electronic version to ProQuest by the posted deadline.

Subplan 6 Requirements: Dental Fast Track - Environmental and Occupational Health

Total Required Credits: 45

Course Requirements

Required Courses – Credits: 18

EOH 710 /HED 710 - Fundamentals of Public Health
EOH 740 - Fundamentals of Environmental Health
EAB 705 - Epidemiology and Public Health
HCA 701 - U.S. Health Care System: Programs and Policies
HED 720 - Program Planning and Grant Writing in Health Promotion
EAB 703 - Biostatistical Methods for the Health Sciences

Environmental and Occupational Health Courses – Credits: 3

EOH 601 - Advanced Environmental Toxicology

Health and Safety Courses – Credits: 3

Complete one of the following courses:

EOH 717 - Food Safety and Public Health
EOH 747 - Transmission of Infectious Disease

Environmental Courses – Credits: 3

Complete one of the following courses:

EOH 765 - Seminar in Environmental Justice and Public Health
EOH 732 - Children, Development, Health, and the Environment

Skill Development Courses – Credits: 3

Complete one of the following courses:

EAB 700 - Research Methods for Public Health
EOH 709 - Scientific/Technical Writing for the Health and Life Sciences

Internship – Credits: 3

EOH 793 - Internship in Environmental Health

An additional 3 credits of internship may be taken as an elective for a total of 6 credits of internship.

Elective Courses – Credits: 6-9

Students completing a thesis must complete six credits of elective coursework, and students completing a project must complete nine credits of elective coursework. Select from the following list:

Den 7151 – Healthcare Finance and Public Health (1 credit)
Den 7154 – Healthcare Delivery: Patient Record and HIPAA Regulations (1.5 credits)
Den 7160 – Research and Professional Development I (1 credit)

Den 7161 – Research and Professional Development II (1.5 credits)
Den 7162 – Biochemical Basis of Clinical Nutrition (3 credits)
Den 7253 – Research and Analysis Methodology (1.5 credits)

Culminating Experience – Credits: 3-6

Complete one of the following:

EOH 794 - Professional Paper in Environmental Health (3 credits)

EOH 798 - Thesis Research (6 credits)

Degree Requirements

1. Completion of a minimum of 45 credit hours with a minimum GPA of 3.00.
2. Students enrolled in the DMD-Fast Track MPH program must remain in good academic/ethical standing in both the individual DMD and MPH programs or may be subject to dismissal.
3. Students in the DMD-Fast Track MPH program are subject to the same rules and regulations that apply to all students at the School of Dental Medicine and the School of Community Health Sciences.
4. Upon date of entry into the MPH program, students will be given a maximum time frame of five years in which they must satisfy the degree requirements for the Masters in Public Health degree.
5. In consultation with his/her advisor, a student will organize a committee of at least three departmental members. In addition, a fourth member from outside the department, known as the Graduate College Representative, must be appointed. An additional committee member may be added at the student and department's discretion. Please see Graduate College policy for committee appointment guidelines.

Graduation Requirements

1. The student must submit all required forms to the Graduate College and then apply for graduation from up to two semesters prior to completing his/her degree requirements.
2. Successfully complete the professional paper or successfully complete and defend a thesis by the posted deadline. The defense must be advertised and is open to the public.
3. If a thesis is completed, the student must submit his/her approved, properly formatted document to the Graduate College, and submit the approved electronic version to ProQuest by the posted deadline.

Subplan 7 Requirements: Dental Fast Track - Health Care Administration and Policy

Total Required Credits: 45

Course Requirements

Required Courses – Credits: 18

EOH 710 /HED 710 - Fundamentals of Public Health
EOH 740 - Fundamentals of Environmental Health
EAB 705 - Epidemiology and Public Health
HCA 701 - U.S. Health Care System: Programs and Policies
HED 720 - Program Planning and Grant Writing in Health Promotion
EAB 703 - Biostatistical Methods for the Health Sciences

Health Care Admin & Policy Courses – Credits: 15

HCA 703 - Management of Health Service Organizations and Systems
HCA 716 - Health Care Accounting and Finance
HCA 730 - Strategic Management of Health Services
HCA 719 - Operations and Quality Management of Health Services
HCA 720 - Information Systems in Health Services Management

Internship – Credits: 3

HCA 793 - Internship in Health Care Administration

An additional 3 credits of internship may be taken as an elective for a total of 6 credits of internship.

Elective Courses – Credits: 3-6

Students completing a thesis must complete three credits of elective coursework, and students completing a project must complete six credits of elective coursework. Select from the following list:

Den 7151 – Healthcare Finance and Public Health (1 credit)
Den 7154 – Healthcare Delivery: Patient Record and HIPAA Regulations (1.5 credits)
Den 7160 – Research and Professional Development I (1 credit)
Den 7161 – Research and Professional Development II (1.5 credits)
Den 7162 – Biochemical Basis of Clinical Nutrition (3 credits)
Den 7253 – Research and Analysis Methodology (1.5 credits)

Culminating Experience – Credits: 3-6

Complete one of the following:

HCA 779 - Health Care Administration Capstone Course (3 credits)
HCA 799 - Thesis Research (6 credits)

Degree Requirements

1. Completion of a minimum of 45 credit hours with a minimum GPA of 3.00.
2. Students enrolled in the DMD-Fast Track MPH program must remain in good academic/ethical standing in both the individual DMD and MPH programs or may be subject to dismissal.
3. Students in the DMD-Fast Track MPH program are subject to the same rules and regulations that apply to all students at the School of Dental Medicine and the School of Community Health Sciences.
4. Upon date of entry into the MPH program, students will be given a maximum time frame of five years in which they must satisfy the degree requirements for the Masters in Public Health degree.
5. If the thesis option is chosen, in consultation with his/her advisor, a student will organize a thesis committee of at least three departmental members. In addition, a fourth member from outside the department, known as the Graduate College Representative, must be appointed. An additional committee member may be added at the student and department's discretion. Please see Graduate College policy for committee appointment guidelines.

Graduation Requirements

1. The student must submit all required forms to the Graduate College and then apply for graduation up to two semesters prior to completing his/her degree requirements.
2. Students must receive prior approval from their committee before registering for any capstone experience.
3. Successfully pass the capstone course or successfully complete and defend a thesis by the posted deadline. The defense must be advertised and is open to the public.
4. If a thesis is completed, the student must submit his/her approved, properly formatted document to the Graduate College, and submit the approved electronic version to ProQuest by the posted deadline.

Subplan 8 Requirements: Dental Fast Track - Biostatistics and Epidemiology

Total Required Credits: 45

Course Requirements

Required Courses – Credits: 18

EOH 710 /HED 710 - Fundamentals of Public Health
EOH 740 - Fundamentals of Environmental Health
EAB 705 - Epidemiology and Public Health
HCA 701 - U.S. Health Care System: Programs and Policies
HED 720 - Program Planning and Grant Writing in Health Promotion
EAB 703 - Biostatistical Methods for the Health Sciences

Biostatistics and Epidemiology Courses – Credits: 12

EAB 700 - Research Methods for Public Health
EAB 715 - Chronic Disease Epidemiology
EAB 725 - Epidemiology of Infectious Diseases
EAB 763 - Linear Statistical Models

Internship – Credits: 3

EAB 793 - Internship in Epidemiology and Biostatistics

An additional 3 credits of internship may be taken as an elective for a total of 6 credits of internship.

Elective Courses – Credits: 6-9

Students completing a thesis must complete six credits of elective coursework, and students completing a project must complete nine credits of elective coursework. Select from the following list:

Den 7151 – Healthcare Finance and Public Health (1 credit)
Den 7154 – Healthcare Delivery: Patient Record and HIPAA Regulations (1.5 credits)
Den 7160 – Research and Professional Development I (1 credit)
Den 7161 – Research and Professional Development II (1.5 credits)
Den 7162 – Biochemical Basis of Clinical Nutrition (3 credits)
Den 7253 – Research and Analysis Methodology (1.5 credits)

Culminating Experience – Credits: 3-6

Complete one of the following:

EAB 794 - Professional Paper in Epidemiology and Biostatistics (3 credits)
EAB 798 - Thesis Research in Epidemiology and Biostatistics (6 credits)

Degree Requirements

1. Completion of a minimum of 45 credit hours with a minimum GPA of 3.00.
2. Students enrolled in the DMD-Fast Track MPH program must remain in good academic/ethical standing in both the individual DMD and MPH programs or may be subject to dismissal.
3. Students in the DMD-Fast Track MPH program are subject to the same rules and regulations that apply to all students at the School of Dental Medicine and the School of Community Health Sciences.
4. Upon date of entry into the MPH program, students will be given a maximum time frame of five years in which they must satisfy the degree requirements for the Masters in Public Health degree.
5. In consultation with his/her advisor, a student will organize a committee of at least three departmental members. In addition, a fourth member from outside the department, known as the Graduate College Representative, must be appointed. An additional committee member may be added at the student and department's discretion. Please see Graduate College policy for committee appointment guidelines.

Graduation Requirements

1. The student must submit all required forms to the Graduate College and then apply for graduation up to two semesters prior to completing his/her degree requirements.
2. Students must receive prior approval from their committee before registering for any capstone experience.
3. Successfully complete the professional paper or successfully complete and defend a thesis by the posted deadline. The defense must be advertised and is open to the public.
4. If a thesis is completed, the student must submit his/her approved, properly formatted document to the Graduate College, and submit the approved electronic version to ProQuest by the posted deadline.

Subplan 9 Requirements: MD Fast Track - Social and Behavioral Health

Total Credits Required: 30

Course Requirements

Required Courses – Credits: 15

Choose five classes from the following courses:

EOH 710 /HED 710 - Fundamentals of Public Health
EOH 740 - Fundamentals of Environmental Health
EAB 705 - Epidemiology and Public Health
HCA 701 - U.S. Health Care System: Programs and Policies
HED 720 - Program Planning and Grant Writing in Health Promotion
EAB 703 - Biostatistical Methods for the Health Sciences

Social and Behavioral Health Courses – Credits: 6

HED 705 - Theoretical Foundations in Health Promotion
and one of the following courses:
EOH 705 - Social Epidemiology
EOH 760 - Racial and Ethnic Disparities in Health

Social Behavioral Health Elective – Credits: 3

Advisor approved Elective in Social Behavioral Health.

Methods Courses – Credits: 3

Complete one of the following courses:

EAB 700 - Research Methods for Public Health
EOH 715 - Qualitative & Field Methods for Public Health
EOH XXX - Mixed Methods

Degree Requirements

1. Medical Professional Fast Track students will complete 30 hours of coursework and sit for the national CPH exam.
2. Students enrolled in the DMD-Fast Track MPH program must remain in good academic/ethical standing in the MPH programs or may be subject to dismissal.
3. Students in the MD Fast Track MPH program are subject to the same rules and regulations that apply to all students at the School of Community Health Sciences.
4. Upon date of entry into the MPH program, students will be given a maximum time frame of five years in which they must satisfy the degree requirements for the Masters in Public Health degree.

Graduation Requirements

1. The student must submit all required forms to the Graduate College and then apply for graduation up to two semesters prior to completing his/her degree requirements.
2. The student must sit for the CPH exam.

Subplan 10 Requirements: MD Fast Track - Epidemiology and Biostatistics

Total Credits Required: 30

Course Requirements

Required Courses – Credits: 15

Choose five classes from the following courses:

EOH 710 /HED 710 - Fundamentals of Public Health
EOH 740 - Fundamentals of Environmental Health
EAB 705 - Epidemiology and Public Health
HCA 701 - U.S. Health Care System: Programs and Policies
HED 720 - Program Planning and Grant Writing in Health Promotion
EAB 703 - Biostatistical Methods for the Health Sciences

Epidemiology and Biostatistics – Credits: 6

EAB 715 - Chronic Disease Epidemiology
EOH 747 - Transmission of Infectious Disease

Epidemiology Elective – Credits: 3

Advisor approved Elective in Epidemiology.

Methods Courses – Credits: 3

Complete one of the following courses:

EAB 700 - Research Methods for Public Health
EOH 715 - Qualitative & Field Methods for Public Health
EOH XXX - Mixed Methods

Degree Requirements

1. Medical Professional Fast Track students will complete 30 hours of coursework and sit for the national CPH exam.
2. Students enrolled in the DMD-Fast Track MPH program must remain in good

academic/ethical standing in the MPH programs or may be subject to dismissal.
3. Students in the MD Fast Track MPH program are subject to the same rules and regulations that apply to all students at the School of Community Health Sciences.
4. Upon date of entry into the MPH program, students will be given a maximum time frame of five years in which they must satisfy the degree requirements for the Masters in Public Health degree.

Graduation Requirements

1. The student must submit all required forms to the Graduate College and then apply for graduation up to two semesters prior to completing his/her degree requirements.
2. The student must sit for the CPH exam.

Subplan 11 Requirements: MD Fast Track - Environmental and Occupational Health

Total Credits Required: 30

Course Requirements

Required Courses – Credits: 15

Choose five classes from the following courses:

EOH 710 /HED 710 - Fundamentals of Public Health
EOH 740 - Fundamentals of Environmental Health
EAB 705 - Epidemiology and Public Health
HCA 701 - U.S. Health Care System: Programs and Policies
HED 720 - Program Planning and Grant Writing in Health Promotion
EAB 703 - Biostatistical Methods for the Health Sciences

Environmental and Occupational Health Courses – Credits: 6

EOH 601 - Advanced Environmental Toxicology and one of the following courses:
EOH 717 - Food Safety and Public Health
EOH 747 - Transmission of Infectious Disease

Environmental Health Elective – Credits: 3

Advisor approved Elective in Environmental Health.

Methods Courses – Credits: 3

Complete one of the following courses:

EAB 700 - Research Methods for Public Health
EOH 715 - Qualitative & Field Methods for Public Health
EOH XXX - Mixed Methods

Degree Requirements

1. Medical Professional Fast Track students will complete 30 hours of coursework and sit for the national CPH exam.
2. Students enrolled in the DMD-Fast Track MPH program must remain in good academic/ethical standing in the MPH programs or may be subject to dismissal.
3. Students in the MD Fast Track MPH program are subject to the same rules and regulations that apply to all students at the School of Community Health Sciences.
4. Upon date of entry into the MPH program, students will be given a maximum time frame of five years in which they must satisfy the degree requirements for the Masters in Public Health degree.

Graduation Requirements

1. The student must submit all required forms to the Graduate College and then apply for graduation up to two semesters prior to completing his/her degree requirements.
2. The student must sit for the CPH exam.

Subplan 12 Requirements: MD Fast Track - Healthcare Administration and Policy

Total Credits Required: 30

Course Requirements

Required Courses – Credits: 15

Choose five classes from the following courses:

EOH 710 /HED 710 - Fundamentals of Public Health
EOH 740 - Fundamentals of Environmental Health
EAB 705 - Epidemiology and Public Health

HCA 701 - U.S. Health Care System: Programs and Policies
HED 720 - Program Planning and Grant Writing in Health Promotion
EAB 703 - Biostatistical Methods for the Health Sciences

Healthcare Administration and Policy Courses – Credits: 6

HCA 718 - Health Care Economics
HCA 703 - Management of Health Service Organizations and Systems

Healthcare Administration and Policy Elective – Credits: 3

Advisor approved Elective in Healthcare Administration and Policy.

Methods Courses – Credits: 3

Complete one of the following courses:

EAB 700 - Research Methods for Public Health
EOH 715 - Qualitative & Field Methods for Public Health
EOH XXX - Mixed Methods

Degree Requirements

1. Medical Professional Fast Track students will complete 30 hours of coursework and sit for the national CPH exam.
2. Students enrolled in the DMD-Fast Track MPH program must remain in good academic/ethical standing in the MPH programs or may be subject to dismissal.
3. Students in the MD Fast Track MPH program are subject to the same rules and regulations that apply to all students at the School of Community Health Sciences.
4. Upon date of entry into the MPH program, students will be given a maximum time frame of five years in which they must satisfy the degree requirements for the Masters in Public Health degree.

Graduation Requirements

1. The student must submit all required forms to the Graduate College and then apply for graduation up to two semesters prior to completing his/her degree requirements.
2. The student must sit for the CPH exam.

Plan Graduation Requirements

Refer to your subplan for Graduation Requirements.

Doctor of Philosophy - Public Health

Plan Description

The Schools of Community Health Sciences (SCHS) at UNLV and UNR are pleased to offer a collaborative doctoral program (Ph.D.) in Public Health. The collaboration between the two schools represents a unique, statewide approach to public health training and research, drawing on complementary expertise and opportunities at both universities to create a high-quality academic program that maximizes resources and flexibility.

Students with an MPH from the UNLV SCHS must complete 48 credits beyond the Master of Public Health (MPH). Students with an MPH from another institution must complete 48 credits beyond the master's plus an additional 6 credits of deficiency. Students with a master's degree in a related field must complete 48 credits beyond the master's degree plus an additional 15 credits of deficiency.

Educational Objectives

The Ph.D. – Public Health is designed to prepare students for careers in which advanced analytical and conceptual capabilities are required, such as university teaching, research, consulting, policy development or other high-level positions.

The curriculum was developed jointly by faculty from the Schools of Community Health Sciences at the University of Nevada, Reno, and the University of Nevada, Las Vegas, with input from representatives of academia and the public health community. The curriculum provides a comprehensive and interdisciplinary examination of topics and experiences necessary to produce graduates who are ready to secure employment in the public health arena.

Students in the program are admitted to either UNLV or UNR and follow the course requirements from their home institution. Courses may be taken at either institution. A Chair from the admitting institution supervises and the dissertation but the doctoral committee may include members from either or both institutions.

This program is competitive and space is limited. More students will apply than will be admitted. The most competitive students will have a strong academic record and a clear plan for their proposed research.

Completion of the Ph.D. demonstrates that the graduate has the advanced research skills and competencies necessary to succeed in high level research careers.

Upon admission each student will be assigned an academic (not dissertation) advisor who will help the student begin planning a program of study. Students are expected to identify a dissertation committee before the end of their second semester in the program.

For more information about your program, including your graduate program handbook and learning outcomes, please visit the Degree Directory.

Plan Admission Requirements

Applications available on the UNLV Graduate College website.

Admission into the Public Health PhD Program at UNLV will require applicants to meet the standard criteria of the UNLV Graduate College, applicable to all graduate students, both domestic and international, and contingent upon the qualifications of the applicant and the availability of openings for new students. Doctoral students are admitted as a cohort, once a year, for the fall semester. Applicants must have submitted all required materials by the April 1 deadline for admission in the following fall semester. Students will be admitted directly into the doctoral program and all admissions will require the final approval of the Dean of the UNLV Graduate College. In addition to the generic requirements of the UNLV Graduate College applicants will be expected to meet the following criteria:

1. Earned a bachelor's and Master's of Public Health (MPH) or a master's degree in an appropriate field from an accredited university. Applicants educated outside of the United States will need to demonstrate

proof of equivalent education and advanced degrees.

2. A minimum grade point average of 3.0 (4.0=A) earned in a masters' program of study. The most competitive students will have a master's level GPA of 3.5 or higher.
3. Applicants must present competitive Graduate Record Exam (GRE) scores on verbal, quantitative and analytical measures. GRE scores will be assessed relative to other applicants in the pool, as well as relative to other graduate programs at UNLV. The exam must have been taken with the institutions' graduate school/college requirements. The most competitive students will have a combined verbal/quantitative GRE score of 1200 (old test) /300 (new test) or higher. The GRE is required for all applicants.
4. All domestic and international applicants must review and follow the Graduate College Admission and Registration Requirements.
5. Letters of Recommendation- Three (3) letters of recommendation are required from faculty and other individuals who can evaluate the applicant's motivation, academic capability, scholarship potential, and personal goals for doctoral study.
6. Written Self-Presentation- Applicants must submit for review a written statement of personal career, educational and scholarship goals including identification of research interests. The most competitive students will clearly identify their plan for dissertation research and its contribution to the field of public health.
7. Interview-Applicants may be asked to participate in an interview with member(s) of the Admissions Committee, either in person or by telephone. Applicants may also be asked to submit a writing sample.
8. Applicants must identify an Area of Emphasis (sub plan) at the time of application.
9. All students are required to take or have taken at the Master's level the following 27 credit hours or their approved equivalent:

UNLV Courses

EOH 740 - Fundamentals of Environmental Health
EAB 703 - Biostatistical Methods for the Health Sciences
HED 705 - Theoretical Foundations in Health Promotion
EOH 747 - Transmission of Infectious Disease
EAB 705 - Epidemiology and Public Health
HCA 701 - U.S. Health Care System: Programs and Policies
EOH 704 - Research Integrity & Ethics

UNR Courses

PUBH 725 – Health and the Environment
PUBH 780 – Biostatistics in Public Health
PUBH 701 – Social and Behavioral Health
PUBH 620 – Biological Basis of Health & Disease
PUBH 712 – Epidemiology in Public Health
PUBH 755 – Policy and Health Administration
PUBH 785 – Public Health Ethics

Students are accepted into a degree program as described in the Graduate Catalog. The faculty and corresponding sub-disciplines and sub-plans within the described programs are subject to change at any time.

Plan Requirements

See Subplan Requirements below.

Subplan 1 Requirements: Environmental and Occupational Health Track

Total Credits Required: 48

Course Requirements

Required Courses – Credits: 15

Complete five courses from the following lists from either UNLV or UNR:

UNLV Courses:

EOH 709 - Scientific/Technical Writing for the Health and Life Sciences
EOH 717 - Food Safety and Public Health
EOH 737 – Public Health Microbiology
EOH 757 - Parasitology and Public Health

EOH 767 - Airborne Pathogens and Human Health
EOH 765 - Seminar in Environmental Justice and Public Health
EOH 769 - Advanced Pollution Ecology
EOH 777 - Emerging Infectious Disease
HPS 680 - Industrial Hygiene
EAB 715 - Chronic Disease Epidemiology

ENV 711 - Risk Assessment and Risk Management
Or
ENV 712 - Environmental Risk Decision Making

UNR Courses:

ATMS 612 – Introduction to Air Pollution
CEE 617 – Intro to Env Quality and Analysis
CEE 653 – Environmental Microbiology
CEE 658 – Fundamentals of Env Chemistry
HE 695 – Toxic Communities and Public Health
NRES 612 – Environmental Law
NRES 633 – Env Chemicals: Exp, Trans & Fate
NRES 672 – Environmental Health and Safety
NUTR 723 – Food and Nutritional Toxicology
PCS 603D – Global Environmental Policy
PUBH 695 – Biochemical and Molec Mech of Toxicity
PUBH 730 – Biomarkers of Human Disease
PUBH 735 – Intro to Exposure Assessment and Control
PUBH 753 – Health Informatics
PUBH 776 – Essentials of Occupational Health
PUBH 777 – Fundamental of Industrial Hygiene
PUBH 781 – Env-Occup Health Risk Assessment

Methods Course – Credits: 3

EAB 700 - Research Methods for Public Health

Research Courses – Credits: 6

Complete two of the following courses:

EAB 733 - Survey Sampling for the Health Sciences
EAB 753 - Nonparametric Statistics for Public Health
EAB 763 - Linear Statistical Models
EAB 773 - Survival Analysis for Public Health
EAB 783 - Multivariate Methods for the Health Sciences

Elective Courses – Credits: 3

Complete 3 credits of advisor-approved coursework.

Dissertation – Credits: 21

Complete either 3 credits of prospectus and 18 credits of dissertation, or 21 credits of dissertation.

EOH 797 - Dissertation Prospectus
EOH 799 - Dissertation

Degree Requirements

See Plan Degree Requirements below.

Graduation Requirements

See Plan Graduation Requirements below.

Subplan 2 Requirements: Social Behavioral Health Track

Total Credits Required: 48

Course Requirements

Required Courses – Credits: 6

EOH 705 - Social Epidemiology
EOH 760 - Racial and Ethnic Disparities in Health

Elective Courses – Credits: 12

Complete 12 credits of additional advisor-approved elective courses.

Methods Courses – Credits: 3

Complete one of the following courses:

EAB 700 - Research Methods for Public Health
EOH 715 - Qualitative & Field Methods for Public Health

Research Courses – Credits 6

Complete two of the following courses:

EAB 733 - Survey Sampling for the Health Sciences
EAB 743 - Experimental Design for the Health Sciences
EAB 753 - Nonparametric Statistics for Public Health
EAB 763 - Linear Statistical Models
EAB 773 - Survival Analysis for Public Health

EAB 783 - Multivariate Methods for the Health Sciences

Dissertation – Credits: 21

Complete either 3 credits of prospectus and 18 credits of dissertation, or 21 credits of dissertation.

EOH 797 - Dissertation Prospectus
EOH 799 - Dissertation

Degree Requirements

See Plan Degree Requirements below.

Graduation Requirements

See Plan Graduation Requirements below.

Subplan 3 Requirements: Epidemiology and Biostatistics Track

Total Credits Required: 48

Course Requirements

Required Courses – Credits: 6

EAB 756 - Epidemiology and Research
EAB 715 - Chronic Disease Epidemiology

Epidemiology Courses – Credits 6

Complete two of the following courses:

EAB 755 - Cancer Epidemiology
EAB 716 - The Epidemiology of Obesity
EOH 705 - Social Epidemiology

Methods Course – Credits: 3

Complete one of the following courses:

EAB 700 - Research Methods for Public Health
EOH 715 - Qualitative & Field Methods for Public Health

Research Courses – Credits: 6

Complete two of the following courses:

EAB 733 - Survey Sampling for the Health Sciences
EAB 743 - Experimental Design for the Health Sciences
EAB 753 - Nonparametric Statistics for Public Health
EAB 763 - Linear Statistical Models
EAB 773 - Survival Analysis for Public Health
EAB 783 - Multivariate Methods for the Health Sciences

Elective Courses – Credits: 6

Complete 6 credits of advisor-approved coursework.

Dissertation – Credits: 21

Complete either 3 credits of prospectus and 18 credits of dissertation, or 21 credits of dissertation.

EOH 797 - Dissertation Prospectus
EOH 799 - Dissertation

Degree Requirements

See Plan Degree Requirements below.

Graduation Requirements

See Plan Graduation Requirements below.

Subplan 4 Requirements: Health Service Management and Policy Track

Total Credits Required: 48

Course Requirements

Required Courses – Credits: 12

Complete four of the following courses:

HCA 703 - Management of Health Service Organizations and Systems
HCA 652 - Health Politics and Policy
HCA 718 - Health Care Economics
HCA 716 - Health Care Accounting and Finance
HCA 730 - Strategic Management of Health Services
HCA 719 - Operations and Quality Management of Health Services
HCA 720 - Information Systems in Health Services Management
HCA 717 - Human Resources Management of Health Care Organizations
HCA 721 - Advanced Health Care Finance

Methods Courses – Credits: 6

HCA 715 - Health Services Research Methods
EOH 715 - Qualitative & Field Methods for Public Health

Research Courses – Credits: 6

Complete two of the following courses:

EAB 733 - Survey Sampling for the Health Sciences
EAB 753 - Nonparametric Statistics for Public Health
EAB 763 - Linear Statistical Models
EAB 773 - Survival Analysis for Public Health
EAB 783 - Multivariate Methods for the Health Sciences
ECO 772 - Econometrics II
MBA 767 - Market Opportunity Analysis

Elective Courses – Credits: 3

Complete 3 credits of advisor-approved coursework.

Dissertation – Credits: 21

Complete either 3 credits of prospectus and 18 credits of dissertation, or 21 credits of dissertation.

EOH 797 - Dissertation Prospectus
EOH 799 - Dissertation

Degree Requirements

See Plan Degree Requirements below.

Graduation Requirements

See Plan Graduation Requirements below.

Plan Degree Requirements

1. A grade point average of at least a 3.0 must be maintained in all courses required for the degree; no grade less than a B in any course is acceptable for curricular completion of the program.
2. All students are required to complete a written Comprehensive Examination upon completion of the core courses of the program. The examination is designed to assess the student's ability to synthesize knowledge, as demonstrated by the selection and integration of information from several doctoral courses and is evaluated by written discussion in response to examination questions. The Comprehensive Examination may only be repeated once and must be repeated within one semester of the initial attempt. Students unable to pass the Comprehensive Examination after a second attempt will be separated from the program.
3. After successful completion of the Comprehensive Exam the student must establish a Dissertation committee. The committee will include at minimum, a Chairperson with expertise in the student's Area of Emphasis; two additional committee members from the School of Community Health Sciences; and, a Graduate College Representative. Students may also elect to add approved, external committee member with expertise in the student's selected area of emphasis.
4. Upon completion of all required course work other than dissertation, each student must take oral Qualifying Examination that will focus on those areas of knowledge most relevant to the student's dissertation topic. Qualifying examinations may only be repeated once and must be repeated within one semester of the initial attempt. If a student fails a second attempt, the student will be separated from the program.
5. Upon successful completion of the Qualifying examination, the student will present a dissertation prospectus to his/her committee and an oral presentation to peers and faculty. The prospectus is a written and oral presentation of the students dissertation research plan. The written prospectus should be the equivalent of the first three chapters of the dissertation. The oral presentation is a public presentation of the research plan. The prospectus becomes the agreement for the student's dissertation research. Upon approval of the prospectus, the student advances to candidacy, can register for dissertation credits, and begin their independent research.
6. Upon completion of the dissertation, the student must pass a final oral examination

that involves the public presentation and successful defense of their dissertation study. All advisory committee members must be present for the final defense and may question the student following presentation of the study. The defense will be scheduled and conducted in accordance with the Graduate College/ School's policies for dissertation completion. It is the student's responsibility to file all required forms and written materials with the Graduate College in a timely manner.

Plan Graduation Requirements

1. The student must submit all required forms to the Graduate College and then apply for graduation up to two semesters prior to completing his/her degree requirements.
2. The student must submit and successfully defend his/her dissertation by the posted deadline. The defense must be advertised and is open to the public.
3. Student must submit his/her approved, properly formatted dissertation to the Graduate College, and submit the approved electronic version to ProQuest by the posted deadline.

School of Community Health Sciences Courses

EAB 700 - Research Methods for Public Health
Credits 3
Provides a foundation in research methodology for public health professionals. Topics include basic sampling and experimental designs, quantitative and qualitative methods in research, mathematical and economic models in research, and multidisciplinary approaches to designing research programs.
Prerequisites EAB 703 or consent of instructor.

EAB 703 - Biostatistical Methods for the Health Sciences
Credits 3
Designed to provide a foundation in biostatistics for graduate students in the health sciences. Topics include probability, distributions, estimation, hypothesis testing, ANOVA, simple and multiple regression, vital statistics, and nonparametric methods.
Prerequisites Undergraduate mathematics through calculus, comparable graduate coursework, or consent of instructor.

EAB 704 - Research Integrity & Ethics
Credits 3
Designed to provide students with an understanding of how to conduct responsible research. Covers the concepts of scientific ethics and integrity broadly in order to provide a foundation for future research professionals. Topics include ethical principles, peer review, mentoring, IRB, collaborative research, and scientific record keeping.

EAB 705 - Epidemiology and Public Health
Credits 3
Explores principles related to the distribution and causality of disease. Focuses on etiology, prevention and control of communicable and chronic human disease. Participants trained in basic epidemiological methodology, featuring case-series, case-control, experimental and cohort study designs.

EAB 709 - Scientific/Technical Writing for the Health and Life Sciences
Credits 3

Technical writing skills are critical to success in publication of scientific journal articles, approval of research grant submissions, and acceptance of thesis/dissertation requirements. In this course students will study techniques and develop skills in technical writing useful to professionals in health care and life sciences.

EAB 710 - Fundamentals of Public Health
Credits 3
Introduces students to public health concepts and practice. Provides broad overview of the field of public health and focused look at core areas of health promotion and education, environmental health, epidemiology and bio statistics, and health care administration in the public health arena.

EAB 715 - Chronic Disease Epidemiology
Credits 3
Surveys the major chronic diseases with an emphasis on recent epidemiological research and findings, demographic and populations aspects of chronic illness, causation and risk factors, prevention, and control.
Prerequisites HED 725 or consent of instructor.

EAB 716 - The Epidemiology of Obesity
Credits 3
Describes the epidemiology and prevention of obesity and associated complications. Discusses methodological issues associated with evaluating epidemiologic studies that target obesity. Designed to cover the global epidemic of obesity, the environmental and behavioral risk factors, as well as interventions to reduce and prevent obesity.

EAB 720 - Grant Writing for Epidemiology and Public Health Research
Credits 3
Covers the process of designing competitive research grant proposals from conceptualization to grant management.
Prerequisites Core epidemiology class, research methods.

EAB 725 - Epidemiology of Infectious Diseases
Credits 3
Introduces the basic concepts in infectious disease epidemiology. Students develop a basic conceptual understanding and analytic skills in the investigation and control of infectious diseases in human populations. Students describe the most common infectious diseases, including their transmission, pathogenesis, treatment, prevention, and control.
Prerequisites: Admission to the School of Community Health Sciences or consent of instructor.

EAB 730 - Introduction to Statistical Computing with SAS
Credits 3
PC-based statistical computing applications with SAS 9.3 for public health. Develop basic skills in the use of a statistical package through classroom demonstrations and independent lab assignments that will complement the material covered in EAB 703 or equivalent. Emphasize data definition, verification, descriptive and inferential statistics and graphical presentation.
Prerequisites EAB 703.

EAB 733 - Survey Sampling for the Health Sciences
Credits 3
Introduces the basics of sampling theory and application in the health sciences. Several popular designs will be covered in depth. Other topics include sources of error in sampling, design of surveys, and population size determination.
Prerequisites EAB 703 or consent of instructor.

EAB 735 - Outbreak Investigation
Credits 3
Students will work through simulated outbreak situations, culminating in a lengthy simulation of an outbreak. Students will be responsible for all aspects of the investigation including report writing. Through partnership with community health agencies, students will have the opportunity to assist in actual outbreak investigations occurring during the semester.
Prerequisites HED 725/EAB 705 or equivalent

EAB 743 - Experimental Design for the Health Sciences
Credits 3
Provides thorough coverage of experimental design for student in the health sciences. Topics include single factor designs, factorial experiments, within-factor designs, nested designs, analysis of trend, and general linear models.
Prerequisites EAB 703 or consent of instructor.

EAB 745 - Epidemiological Surveillance
Credits 3
Students will explore systems currently in place, both in the United States and internationally, and will learn the methodology used to analyze surveillance data. Students will learn about effective surveillance systems through lecture and case studies of existing surveillance systems.

EAB 753 - Nonparametric Statistics for Public Health
Credits 3
Designed to provide a strong foundation in nonparametric statistical methods commonly used in public health. Topics explored in the course include ranked data, transformation of ranks, methods for paired and independent samples, nonparametric regression and correlation, categorical data analysis, and robust estimation.
Prerequisites Graduate level biostatistics.

EAB 755 - Cancer Epidemiology
Credits 3
This course is an introduction to cancer epidemiology. The objective is to make the student use, learn and consolidate basic analytic skills in developing research projects in cancer. It includes among others the following topics: trends, biology of cancer, issues in prostate, breast, colorectal, lung, and cervical cancer, cancer screening, GIS and spatial analysis in cancer, survival, and migrant studies.

EAB 756 - Epidemiology and Research
Credits 3
Topics in Epidemiology II include analytic reasoning in public health and in disease surveillance, descriptive epidemiology and causal inference with a special emphasis on study design. This course will largely make use of scientific articles to provide students with a solid basis to critically analyze and develop medical/public health research. May be repeated to a maximum of three credits.
Prerequisites EAB 703 and EAB 705

EAB 763 - Linear Statistical Models
Credits 3
Explores the foundations and applications of linear statistical models. Applications include simple, multivariate, and logistic regression; time series analysis; single -/multiple-factor ANOVA; random and mixed effects models; and ANCOVA. Several experimental designs will also be explored.
Prerequisites Graduate level biostatistics.

EAB 773 - Survival Analysis for Public Health
Credits 3
Explores the broad area of survival analysis for analyzing data derived from laboratory, clinical, and epidemiological studies. Methods explored in this course include survival functions, data censoring, hazard models, regression models, and parametric/nonparametric methods for comparing survival models.
Prerequisites EAB 753 and EAB 763.

EAB 783 - Multivariate Methods for the Health Sciences
Credits 3
Provides an in- depth coverage of common multivariate methods. Topics include multivariate correlation and regression, multivariate ANOVA, logistic regression, factor analysis, time series analysis, and principle component analysis. Emphasis placed on application of techniques useful for students in the health sciences.
Prerequisites EAB 773 or consent of instructor.

EAB 790 - Current Topics in Environmental Health and Epidemiology
Credits 1-3
This is an advanced seminar course directed by members of the Department of Environmental and Occupational Health and the Epidemiology and Biostatistics Program. Seminars will be facilitated by faculty members based on their particular areas of research interest and expertise.

EAB 793 - Internship in Epidemiology and Biostatistics
Credits 1 – 3
Capstone experiences for the MPH degree and is intended to provide students with applied work experience in a local agency, organization, center or institute.
Notes May be repeated to a maximum of six credits.
Prerequisites Admission to the School of Community Health Sciences or consent of instructor.

EAB 794 - Professional Paper in Epidemiology and Biostatistics
Credits 3

Provides the opportunity for a graduate degree candidate to be involved in an in-depth project. A formal paper and presentation describing the project culminate this experience.
Notes May be repeated to a maximum of six credits.
Prerequisites Admission to the School of Community Health Sciences or consent of instructor.

EAB 795 - Special Topics in Epidemiolog and Biostatistics
Credits 1 – 3
Selected topic of current interest in epidemiology and biostatistics.
Notes May be repeated to a maximum of six credits.
Prerequisites Admission to the School of Community Health Sciences or consent of instructor.

EAB 796 - Independent Study in Epidemiology and Biostatistics
Credits 1 – 3
Independent study of a selected topic in Epidemiology or Biostatistics.
Prerequisites Admission to the School of Community Health Sciences or consent of instructor.

EAB 798 - Thesis Research in Epidemiology and Biostatistics
Credits 1 – 6
Notes May be repeated, but a maximum of six credits will apply towards the student's degree program.

EOH 601 - Advanced Environmental Toxicology
Credits 3
The following course has been approved for graduate credit. A full description of this course may be found in the Undergraduate Catalog under the corresponding 400 number.

EOH 660 - Health Ecology and Sustainability
Credits 3
This course will examine ways human populations are using land, energy, food and water resources and the related impacts on global climates, ecosystem degradation and biodiversity. This course will provide students with an understanding of how human consumption and standards of living are exceeding the carrying capacity of the planet.
Same as Crosslisted with PBH 460.
Grading Letter grade.

EOH 793 - Internship in Environmental Health
Credits 1 – 3
The environmental internships is one of the capstone experiences for the MPH degree and is intended to provide students with applied work experience in a local agency, organization, center or institute.
Notes May be repeated to a maximum of six credits.
Prerequisites Admission to the School of Community Health Sciences or consent of instructor.

HCA 652 - Health Politics and Policy
Credits 3
Role of politics and policy-making as an external environmental impact on health care. Describes the political process in health care policy-making at all government levels. Interest group politics introduced in the context of the roles that these groups play in health care policy development and how these forces and health care organizations react to shape health care policy. Prerequisites: HIST 100, PSC 100, or PSC 101. 3 credits.

HCA 680 - Organization and Management of Long-Term Care Services
Credits 3
Examination of health and social services for the elderly with emphasis on structure and function of the long-term care industry. Focuses on management of nursing home services. Includes analysis of reimbursement, regulatory, and other social, economic, political and legal factors affecting health and social services for the elderly.
Notes This course is crosslisted with HCA 480. Credit at the 600-level requires additional work.

HED 629 - Education for Sexuality
Credits 3
Physical, mental-emotional, and social aspects of sexuality including sexual communication, relationships, gender, decision making and sexual pleasure and function. Structured to prepare individuals to conduct meaningful learning experiences in personal and family life sex education.
Notes This course is crosslisted with PBH 429. Credit at the 600-level requires additional work.

Environmental & Occupational Health

The mission of the Department of Environmental and Occupational Health is to advance the health of all people in the United States and around the world through research and training in environmental health. The department emphasizes the role of air, water, the home environment, and the workplace as critical determinants of health.

Michelle Chino, Ph.D., Chair
Sheniz Mooney, Graduate Coordinator

Environmental and Occupational Health Faculty

Chair

Chino, Michelle - *Full Graduate Faculty*
Associate Professor of Environmental and Occupational Health, B.S., M.S., PhD. University of New Mexico. *Rebel since 2000.*

Graduate Faculty

Bungum, Timothy- *Full Graduate Faculty*
Associate Professor of Biostatistics and Epidemiology; B.A. Luther College; M.S., DPH University of South Carolina. *Rebel since 2001*.

Buttner, Mark P.- *Full Graduate Faculty*
Associate Professor of Environmental and Occupational Health; B.S. University of Wisconsin; M.S. University of Nevada Las Vegas, PhD University of Nevada Reno. *Rebel since 1989.*

Cross, Chad - *Associate Graduate Faculty*
Associate Professor of Biostatistics and Epidemiology; B.S., Purdue University; M.S., PhD. Old Dominion University. *Rebel since 2005.*

Cruz, Patricia - *Full Graduate Faculty*
Associate Professor of Environmental and Occupational Health, B.S. University of Puerto Rico, M.S. University of Central Florida, PhD. University of Nevada Reno. *Rebel since 1995.*

Dodge Francis, Carolee - *Full Graduate Faculty*
Assistant Professor of Environmental and Occupational Health; B.S., M.A., Ed.D., University of St. Thomas. *Rebel since 2007.*

Gerstenberger, Shawn - *Full Graduate Faculty*
Professor and Chair of Environmental and Occupational Health; B.S. University of Wisconsin-Platteville; M.S., PhD. University of Illinois. *Rebel since 1997.*

Moonie, Sheniz - *Full Graduate Faculty*
Assistant Professor of Biostatistics and Epidemiology, BS University of California San Diego; MS California Polytechnic University,

Pomona; PhD Saint Louis University. *Rebel since 2006.*

Stetzenbach, Linda - *Full Graduate Faculty*
Professor Emeritus of Environmental and Occupational Health; B.S., M.S., PhD. University of Arizona. *Rebel since 2005.*

Thompson-Robinson, Melva - *Full Graduate Faculty*
Associate Professor of Environmental and Occupational Health, B.S. Univeristy of Michigan, M.S., Ohio University, D.P.H. University of South Carolina. *Rebel since 2004.*

Wong, David - *Full Graduate Faculty*
Associate Research Professor. B.Sc., M.Sc. Ocean University of Qingdao, PhD. City University of Hong Kong. *Rebel since 2008.*

Environmental & Occupational Health

EOH 645 - Food access and health
Credits 3
This course will provide students with the knowledge and skills to understand and navigate the built environment and industrial food complex with regard to the availability of healthy food and clean water. Topics will include the concept of food deserts, access to safe and healthy foods, obesity, malnutrition, and critical public health problems associated with food, water consumption, and sustainable solutions.
Same as PBH 445
Notes Course may not be repeated for credit.
Grading Letter Grade

EOH 655 - Active Transport, Physical Activity and Health
Credits 3
This course will examine the public health benefits of active transport and physical activity and concepts relevant to the built environment that facilitate or hinder participation in active transport and physical activity. Class topics will include: land use and travel behavior; the built environment and public health; transportation demand management; bicycle and pedestrian planning; design of bicycle and pedestrian facilities; retrofitting existing urban areas; safety issues for pedestrians and bicyclists; the transportation needs of special populations (elderly, children, disabled and immigrants); and innovative solutions.
Same as PBH 455

EOH 702 - Community Based Participatory Research Methods
Credits 3
Teaches the philosophy and methods of community based participatory research. Focus on traditional research methods and their application to community health research as well as strategies for developing research partnerships, community consent, and essential competencies for research with diverse communities.

EOH 704 - Research Integrity & Ethics
Credits 3
RESEARCH INTEGRITY & ETHICS

EOH 705 - Social Epidemiology
Credits 3
Focuses on the social determinants of health and the health implications of social phenomena such as class, discrimination, and work. Students will examine life course hypotheses and the impact of early exposure to disease in later life as well as intervention strategies that incorporate social change elements. Prerequisite: Core epidemiology class.

EOH 709 - Scientific/Technical Writing for the Health and Life Sciences
Credits 3
Technical writing skills are critical to success in publication of scientific journal articles, approval of research grant submissions, and acceptance of thesis/dissertation requirements. In this course students will study techniques and develop skills in technical writing useful to professionals in health care and life sciences.

EOH 710 - Fundamentals of Public Health
Credits 3
Introduces students to public health concepts and practice. Provides broad overview of the field of public health and focused look at core areas of health promotion and education, environmental health, epidemiology and bio statistics, and health care administration in the public health arena.

EOH 711 - Diseases that Changed the World
Credits 3
Human disease has played a significant role in social and political changes worldwide. In this course students will study the impact of people and disease on historical events, and present written and oral discussions of selected topics including how these events impact public health.

EOH 713 - Public Health Law
Credits 3
Examines the history of public health law and the role, authority and limitations of government to enact and enforce such laws. Students will examine the development of public health laws and the relationship between government entities in carrying out the laws.

EOH 715 - Qualitative & Field Methods for Public Health
Credits 3
This course will provide students with the content/skills needed to conduct community-based participatory field research. This course will explore several topics related to qualitative research: theoretical aspects of qualitative research, negotiating community, designing the study, ethnographic observations, triangulating data, and writing a field study report.

EOH 717 - Food Safety and Public Health
Credits 3
Foodborne illness has a significant impact on public health. In this course students will study microbiological and chemical aspects of food safety including factors that affect growth or organisms in food and production of toxins that can result in foodborne illness.

EOH 732 - Children, Development, Health, and the Environment
Credits 3
Focuses on health issues specific to children age 0-18, such as abuse and neglect, insurance, nutrition, immunization, mental health, substance abuse, sexuality and chronic disease. Students will examine the unique status of children in the public health system as well as systemic approaches to improving services and policies.
Prerequisites MPH core classes.

EOH 735 - Outbreak Investigation
Credits 3
Students will work through simulated outbreak situations, culminating in a lengthy simulation of an outbreak. Students will be responsible for all aspects of the investigation including report writing. Through partnership with community health agencies, students will have the opportunity to assist in actual outbreak investigations occurring during the semester.

EOH 740 - Fundamentals of Environmental Health
Credits 3
This course will address chemical, physical and

biological factors in the environment and their relationship to the health of the human population.

EOH 745 - Epidemiology & Biostatistics
Credits 3
Students will explore systems currently in place, both in the United States and internationally, and will learn methodology used to analyze surveillance data. Students will learn about the effective surveillance systems through lecture and case studies of existing surveillance systems.
Same as EAB 745
Prerequisites HED 725/EAB 705 or equivalent

EOH 747 - Transmission of Infectious Disease
Credits 3
Exposure to disease causing microorganisms occurs via inhalation, ingestion, and dermal contact. Students will study transmission of selected microorganisms via the air, water, food, vectors, and person-to-person contact.

EOH 757 - Parasitology and Public Health
Credits 3
Parasitic infections resulting from exposure to parasites that invade the intestine, blood, or tissues of humans can result in serious disease. This course will discuss a variety of human parasites, resulting disease, and treatment and control strategies to minimize exposure and health impacts.

EOH 760 - Racial and Ethnic Disparities in Health
Credits 3
Explore the causes of health disparities and potential remedies for health-related inequities that associate with race, ethnicity, social class and culture. Students will develop skills necessary to recognize personal and institutionalized bias which interferes with clinical decision-making, health policy, and health system structural development.

EOH 765 - Seminar in Environmental Justice and Public Health
Credits 3
Explores the impact of environmental hazards on community health and examine strategies for developing justice resources and effective policy change. Students will examine actual cases and their health and policy outcomes. Focus on community based strategies for research, advocacy, and environmental change. Prerequisites: EOH and MPH core classes.

EOH 766 - Biological Invasions and Environmental Health
Credits 3
This class covers topics with regard to the human introduction, impacts, and prevention of invasive species to environmental health, such as invasion theory, species distinction, ecosystem health, social and economic impacts, invasive species control and management.

EOH 767 - Airborne Pathogens and Human Health
Credits 3
Airborne pathogens are microorganisms that can cause disease or adverse health effects when humans are exposed to them in indoor and outdoor environments. This course will describe the physical and environmental parameters that affect the dispersal, transport and survival of airborne pathogens and discuss the human health impacts of exposure.

EOH 769 - Advanced Pollution Ecology
Credits 3
This course will address the major effects of pollution on aquatic organisms and ecosystems.
Prerequisites EOH 740 or permission of instructor.

EOH 775 - Injury Epidemiology
Credits 3
This course will teach students about the epidemiology of intentional and unintentional injury. The course will include the basic concepts of injury prevention, injury surveillance, strategies for injury control, developing injury prevention programs, and designing injury research and evaluation.
Prerequisites Core Epidemiology and Research Methods.

EOH 777 - Emerging Infectious Disease
Credits 3
Re-emerging and newly recognized/emerging infections diseases are having a significant on public health world-wide. This course will present a variety of new diseases resulting from exposure to emerging and re-emerging microbial pathogens and suggested treatment and control strategies to minimize exposure and health impacts.

EOH 790 - Doctoral Seminar
Credits 3
This is an advanced seminar course directed by members of the Department of Environmental and Occupational Health and the Epidemiology and Biostatistics Program. Seminars will be facilitated by faculty members based on their particular areas of research interest and expertise.
Same as EAB 790
Notes S/U grading only.

EOH 794 - Professional Paper in Environmental Health
Credits 3
This capstone experience provides the opportunity for a graduate degree candidate to be involved in an in-depth project either written or experimental in nature. A formal paper and presentation describing the project culminate this experience.
Notes May be repeated to a maximum of six credits.
Prerequisites Admission to the School of Community Health Sciences or consent of instructor.

EOH 795 - Special Topics in Public Health
Credits 3
Selected topic of current interest not covered in any existing courses in environmental and occupational health.
Notes May be repeated to a maximum of three credits.
Prerequisites Admission to the School of Community Health Sciences or consent of instructor.

EOH 796 - Independent Study in Environmental Health
Credits 1 – 3
Independent study of a selected topic in Environmental and Occupational Health.
Notes May be repeated to a maximum of six credits.
Prerequisites Admission to the School of Community Health Sciences or consent of instructor.

EOH 797 - Dissertation Prospectus
Credits 3
This course is designed to guide students in the development of their dissertation prospectus.

EOH 798 - Thesis Research
Credits 1 – 6
Notes May be repeated, but a maximum of six credits will apply towards the student's degree program.
Grading S/F grading only.

EOH 799 - Dissertation
Credits 3-6
Dissertation in Environmental and Occupational Health
Notes May be repeated to a maximum of 21 credits
Prerequisites PhD standing

Health Care Administration & Policy

The Health Care Industry is one of the three largest industries in the United States based on revenues, total assets or number of employees. Opportunities for employment in health care organizations are abundant in the Las Vegas Valley, other parts of Nevada, as well as in other areas of the U.S.A.

Job opportunities occur in the following types of organizations:

- Hospitals
- Ambulatory care facilities
- Sub-acute care facilities
- Rehabilitation facilities
- Long-term care facilities
- Medical practices or physician organizations
- Insurance companies
- Public health agencies
- Managed care and Accountable Care Organizations
- Mental health programs
- Community health programs
- Consulting firms
- Government health care agencies
- Health and healthcare research facilities

Students in the Health Care Administration M.H.A. gain a broad view of the health care delivery system and develop an understanding of health and disease. They develop analytical skills through the curriculum including internships to prepare them for leadership positions in the organization, financing, delivery, and improvement of health care services.

Chris Cochran, Ph.D., Chair
Jay Shen, Ph.D., Graduate Coordinator

Health Care Administration and Policy Faculty

Chair

Cochran, Christopher - *Full Graduate Faculty*
Professor of Health Care Administration; B.A. University of Texas, El Paso; M.P.A., Ph.D., University of South Carolina. *Rebel since 1997.*

Graduate Coordinator

Shen, Jay - *Full Graduate Faculty*
Professor of Health Care Administration and Policy; M.S., Harvard University, Ph.D., Virginia Commonwealth University. *Rebel since 2006.*

Graduate Faculty

Epane, Josue - Full Graduate Faculty
Assistant Professor of Health Care Administration; MBA, Ph.D., University of Alabama, Birmingham. Rebel since 2013.

Liu, Darren - Full Graduate Faculty
Assistant Professor of Health Care Administration; Dr.PH., University of Pittsburgh. Rebel since 2011.

Rebeira, Mayvis - Full Graduate Faculty
Assistant Professor of Health Care Administration; Ph.D., University of Toronto . Rebel since 2015.

Sotero, Michelle - Full Graduate Faculty
Assistant Professor of Health Care Administration; Ph.D., University of Nevada Las Vegas. Rebel since 2015.

Moseley, Charles - Full Graduate Faculty
Professor Emeritus of Health Care Administration and Policy; Ph.D., Virginia Commonwealth University. Rebel since1991.

Other Full-Time Faculty

Burston, Betty – Faculty in Residence
Ph.D., American University, 1984

Hillegass, Bonnie – Internship Coordinator
MHA, St. Francis University; BSN, University of Nevada Las Vegas

Master of Health Care Administration

Plan Description

The Master of Health Care Administration degree program is the only graduate health care administration program in the Nevada System of Higher Education (NSHE). The MHA will prepare students to assume leadership roles in health care organizations. The degree is recognized in the health care field as an important credential that allows graduates to assume health care management positions. The curriculum is developed to include all the critical competencies for health care leadership, including issues of health care delivery, health care finance, ethical and legal issues in health care administration and management topics. Students and faculty will contribute though research and service to the knowledge and applications of management in health care; and they will use their education and expertise to help meet the health care management needs of the State of Nevada and beyond.

For more information about your program, including your graduate program handbook and learning outcomes please visit the Degree Directory.

Plan Admission Requirements

Applications available on the UNLV Graduate College website.

To be considered for admission, an applicant must meet Graduate College standards and:

1. Hold a bachelor's degree or recognized equivalent from a regionally accredited institution. A criterion for admission is at least a B (3.0) grade point average, or equivalent in work completed after the first two years of a bachelor's degree program, and in all post-baccalaureate course work. An applicant who does not meet this academic criterion may request special consideration.
2. Submit the following documents as part of your online application for admission:

1. A one to two page personal essay describing why they want to pursue a career in health care management.
2. A resume.
3. Unofficial transcripts from all post-secondary institutions attended.
4. Contact information for three recommendation providers who will upload letters of recommendation on your behalf.

3. Submit official GMAT or GRE scores.
4. All domestic and international applicants must review and follow the Graduate College Admission and Registration Requirements.

Students are accepted into a degree program as described in the Graduate Catalog. The faculty and corresponding sub-disciplines and sub-plans within the described programs are subject to change at any time.

Plan Requirements

See Subplan Requirements below.

Subplan 1 Requirements: Thesis Track

Total Credits Required: 48
Course Requirements

Required Courses – Credits: 42

HCA 701 - U.S. Health Care System: Programs and Policies
HCA 702 - Epidemiology in Health Services Management
HCA 703 - Management of Health Service Organizations and Systems
HCA 715 - Health Services Research Methods
HCA 716 - Health Care Accounting and Finance
HCA 717 - Human Resources Management of Health Care Organizations
HCA 718 - Health Care Economics
HCA 719 - Operations and Quality Management of Health Services
HCA 720 - Information Systems in Health Services Management
HCA 721 - Advanced Health Care Finance
HCA 730 - Strategic Management of Health Services
HCA 761 - Health Care Law and Ethics for Managers
HCA 793 - Internship in Health Care Administration
EAB 703 - Biostatistical Methods for the Health Sciences

Thesis – Credits: 6

HCA 799 - Thesis Research

Degree Requirements

1. Completion of a minimum of 48 credit hours with a minimum GPA of 3.00.
2. In consultation with his/her advisor, a student will organize a thesis committee of at least three departmental members. In addition, a fourth member from outside the department, known as the Graduate College Representative, must be appointed. An additional committee member may be added at the student and department's discretion. Please see Graduate College policy for committee appointment guidelines.

Graduation Requirements

1. The student must submit all required forms to the Graduate College and then apply for graduation from both degrees up to two semesters prior to completing his/her degree requirements.
2. The student must submit and successfully defend his/her thesis by the posted deadline. The defense must be advertised and is open to the public.
3. Students must submit his/her approved, properly formatted thesis to the Graduate College , and submit the approved electronic version to ProQuest by the posted deadline.

Subplan 2 Requirements: Non-Thesis Track

Total Credits Required: 45

Course Requirements

Required Courses – Credits: 42

HCA 701 - U.S. Health Care System: Programs and Policies

HCA 702 - Epidemiology in Health Services Management
HCA 703 - Management of Health Service Organizations and Systems
HCA 715 - Health Services Research Methods
HCA 716 - Health Care Accounting and Finance
HCA 717 - Human Resources Management of Health Care Organizations
HCA 718 - Health Care Economics
HCA 719 - Operations and Quality Management of Health Services
HCA 720 - Information Systems in Health Services Management
HCA 721 - Advanced Health Care Finance
HCA 730 - Strategic Management of Health Services
HCA 761 - Health Care Law and Ethics for Managers
HCA 793 - Internship in Health Care Administration
EAB 703 - Biostatistical Methods for the Health Sciences

Capstone Course – Credits: 3

HCA 779 - Health Care Administration Capstone Course **

**Students that choose to write a comprehensive exam to meet their Capstone Course requirement do not have to complete the Appointment of Advisory Committee Approval Form and the Culminating Experience Form.

Degree Requirements

Completion of a minimum of 45 credit hours with a minimum GPA of 3.00.

Graduation Requirements

1. The student must submit all required forms to the Graduate College and then apply for graduation from both degrees up to two semesters prior to completing his/her degree requirements.
2. The student must successfully complete the capstone course.

Plan Graduation Requirements

Refer to your subplan for Graduation Requirements.

Health Care Administration & Policy Courses

HCA 701 - U.S. Health Care System: Programs and Policies
Credits 3
Examines the manpower, financing and major service components of the US health care system. Addresses major issues of health care access, costs, and quality of care. Special emphasis on the role of government regulation and public policy in the system.
Prerequisites Graduate standing.

HCA 702 - Epidemiology in Health Services Management
Credits 3
Examination and synthesis of concepts and an application of methods appropriate to epidemiology from a managerial perspective.

HCA 703 - Management of Health Service Organizations and Systems
Credits 3
Theories and practice of the management of health services. Analysis and evaluation of the management functions and roles, organizational theories and behavioral perspectives and health care policy issues as they apply to health services management.

HCA 715 - Health Services Research Methods
Credits 3
Course examines health services research concepts and methods. Topics include: health services research relevance; research study conceptualization; research design, operationalization and analysis; and the review of the health services research literature. Emphasis on research relevant to the practice of health care management.
Prerequisites EAB 703

HCA 716 - Health Care Accounting and Finance
Credits 3
Introduction to financial and managerial accounting in the context of the health care industry. Also introduces concepts from finance for use in the decision making process.
Prerequisites ACC 201 or equivalent, 3 hours of undergraduate accounting.

HCA 717 - Human Resources Management of Health Care Organizations
Credits 3
Covers structural and behavioral systems and human resources process systems. Taught from the perspective of strategic management and in the context of the legal environment for health care organizations.

HCA 718 - Health Care Economics
Credits 3
Application of economic theory to study of health markets and institutions. Impact of insurance on demand for and supply of health care analyzed. Competition and regulation as forces in health care industry discussed from an economic perspective.
Prerequisites ECON 102 or equivalent, 3 hours of undergraduate microeconomics.

HCA 719 - Operations and Quality Management of Health Services
Credits 3
Introduces concepts of operations management in the context of the health care industry. Covers analytical techniques in the context of quality management.
Prerequisites Graduate standing.

HCA 720 - Information Systems in Health Services Management
Credits 3
Understanding of computerized needs of health services managers. Examines decision making process, information needs of various decisions and how "decision support systems" meet these needs. Major types of information systems examined, include financial, patient care & strategic management systems.

HCA 721 - Advanced Health Care Finance
Credits 3
Further study of financial management in the context of the health care industry.
Prerequisites HCA 705 or the equivalent.

HCA 730 - Strategic Management of Health Services
Credits 3
Emphasis on concepts of strategic and operational management for health care organizations. Also covers managerial epidemiology and marketing.

Utilizes case studies.
Prerequisites HCA 705

HCA 761 - Health Care Law and Ethics for Managers
Credits 3
Course examines legal and ethical issues that impact health care management. Topics include: liability, contract and antitrust law; employee and labor law, professional relations, and ethical issues regarding; beginning and end of life, patient rights, medical research, access to care; conflict of interest, and confidentiality.

HCA 779 - Health Care Administration Capstone Course
Credits 3
Capstone experience provides the Health Care Administration graduate degree candidate the option to select one of the following: an indepth project or a comprehensive examination.
Same as HED 710/EAB 710/EOH 710
Notes The project option requires a formal paper and a presentation.
Grading S/F grading only
Prerequisites Last semester in program or consent of instructor.

HCA 793 - Internship in Health Care Administration
Credits 3 – 6
Provides students with an applied work experience in a local health services organization. Course is faculty supervised and requires written reports and other structured assignments.
Formerly HCA 713
Notes May be repeated to a maximum of six credits.
Prerequisites Consent of instructor.

HCA 794 - Professional Paper in Health Care Administration
Credits 3
Provides the opportunity for a graduate degree candidate to be involved in an in-depth project either written or experimental in nature. A formal paper and presentation describing the project culminate this experience.
Notes May be repeated for a maximum of six credits.
Prerequisites Department approval.

HCA 798 - Independent Study
Credits 1 – 3
Independent study in a specific area of student interest under the direction of a faculty member.
Notes May be repeated to a maximum of six credits.
Grading S/F grading only.
Prerequisites Consent of instructor.

HCA 799 - Thesis Research
Credits 3
Notes May be repeated, but a maximum of six credits will apply towards the student's degree program.
Grading S/F grading only.
Prerequisites Consent of HCA& P Department Chair, graduate courses in research methodology and in statistics.

School of Dental Medicine

The UNLV School of Dental Medicine, which accepted its Inaugural Class in August of 2002, has been designed to serve our local community and the state of Nevada in oral health care, health services, research and scholarly activities. Education of dental students will be accomplished through a competency based curriculum with a special emphasis on biomedical sciences, professional studies and an innovative vertically integrated team approach for clinical instruction and delivery of patient care. The School of Dental Medicine is recruiting and employing a diverse and distinguished faculty to facilitate the program. The competency-based education program has at its core a student and patient entered environment designed to maximize learning and patient care delivery. Beginning dentists will be exposed to in depth studies of biological and clinical sciences as well as biomedical and bio-ethical disciplines. Students will encounter a broad spectrum of clinical experiences to prepare them for entry into the profession. These experiences will begin in year one of the curriculum, and clinical responsibilities will expand in scope and depth throughout the four years. During year four, students will have the opportunity to select placement in a variety of clinically supervised community settings. They will also have extensive exposure to business and financial management designed to meet the challenges of dental practice. Furthermore, they will be introduced to principles of research, will have an opportunity to conduct independent research and will be encouraged to pursue scholarly activities with the possibility of creating a career in academic dentistry. Training will occur in state of the art facilities designed to achieve the goals of the dental academic program. Today's dental professional needs a learning environment that offers interaction with other medical professionals and facilitates diagnosis and treatment to improve the patient's overall health. The dental school is adopting this new reality and keeping it at the forefront as it designs the teaching facility at the UNLV Shadow Lane campus. The building is part of a regional campus that is expected to house the university's biotech research center, including the UNLV Cancer Institute. Students will have access to the latest technology with other health care professionals in diagnosing disease and treating patients. By the time of graduation, students will be competent and confident to begin a rewarding career as a provider of comprehensive oral health care. For additional information, visit http://dentalschool.unlv.edu.

Karen P. West, D.M.D, Dean, School of Dental Medicine
Christine C. Ancajas, D.D.S, Assistant Dean for Admission and Student Affairs
William D. Davenport, Jr., Ph.D., Associate Dean for Academic Affairs
Ellen V. Herrick, Assistant Dean of Finance and Administration
Ronald R. Lemon, D.M.D., Associate Dean, Advanced Education
Connie C. Mobley, Ph.D., Associate Dean for Research
Judith Skelton, Ph.D., Assistant Dean for Outreach and Engagement
Rick B. Thiriot, D.D.S., Co-Associate Dean for Clinical Services
Wendy S. Woodall, D.D.S, Co-Associate Dean for Clinical Services
James Mah, DMSc, Graduate Coordinator

School of Dental Medicine Faculty

Dean

West, Karen - *Full Graduate Faculty*
Professor; D.M.D., University of Louisville School of Dentistry; M.P.H., University of South Carolina School of Public Health.

Associate Dean

Lemon, Ronald - *Full Graduate Faculty*
Professor; D.M.D., University of Kentucky, School of Dental Medicine.

Co-Associate Dean for Clinical Services

Thiriot, Rick
Assistant Professor-in-Residence; B.S., University of Nevada, Las Vegas; D.D.S., University of the Pacific School of Dentistry.

Assistant Dean

Herrick, Ellen
B.S., University of Nevada, Las Vegas.

Assistant Dean for Admissions and Student Affairs

Ancajas, Christine - *Assistant Graduate Faculty*
B.A., California State University; D.D.S., Northwestern University Dental School.

Assistant Dean for Outreach and Engagement

Skelton, Judith - *Full Graduate Faculty*
Professor; B.S., University of Louisville; M.E.D., University of Florida; Ph.D., University of Florida.

Graduate Faculty

Bethea, Lorenzo
B.S., University of Phoenix.

Capurro, Antonina
Visiting Professor; B.S., University of Nevada, Las Vegas; D.M.D., University of Nevada, Las Vegas; M.P.H., University of Nevada, Las Vegas.

Cole, Dean
Associate Professor; A.A., Pasadena City College; D.D.S., Loyola University.

Danforth, Robert
Associate Professor; D.D.S., Loma Linda University.

Davenport Jr., William - *Full Graduate Faculty*
Professor; B.S., University of Mississippi; M.S., University of Mississippi; Ph.D., Medical College of Georgia.

Demopoulos, Christina
Assistant Professor-in-Residence; B.S., University of Nevada, Las Vegas; D.D.S., University of Southern California School of Dentistry; M.P.H., University of Nevada, Las Vegas.

Dounis, Georgia
Associate Professor; D.D.S., Marquette University, School of Dentistry; M.S., Marquette University School of Dentistry.

Evans, Laurie
B.S.B.A., Univeristy of Phoenix; M.B.A, University of Phoenix.

Everett, Rhonda - *Full Graduate Faculty*
Assistant Professor in Residence; B.A., University of California; D.D.S., University of Southern California, School of Dentistry; M.P.H., University of Nevada, Las Vegas.

Farfel, Elena
Visiting Assistant Professor; B.A., University of Colorada; D.M.D., University of Nevada, Las Vegas.

Faulkner, Davin
Visiting Assistant Professo; B.S., Brigham Young University; D.M.D., University of Nevada, Las Vegas.

Fox, Gerald
Visiting Assistant Professor; B.S., Brooklyn College; D.D.S., Temple University School of Dentistry.

Galbraith, Gillian - *Full Graduate Faculty*
Professor, M.D., University of London, King's College Hospital Medical School.

Gallob, John
Assistant Professor-in-Residence; B.S., University of Arizona-Tucson; D.D.S., Nova Southeastern University.

Gerrard, Curtis
B.A., University of Nevada, Las Vegas; M.A., Regis University.

Haskin, Christine
Associate Professor; B.A., University of Texis at Austin; M.S., Southwest Texas State University; D.D.S., University of Texas; Ph.D., University of Texas.

Herschaft, Edward - *Full Graduate Faculty*
Professor; B.A., Queens College of the City University of New York; D.D.S., West Virginia University School of Dentistry; M.A., University of New Orleans.

Hillyard, Stanley - *Full Graduate Faculty*
Professor; B.A., University of California, Riverside; Ph.D., University of California, Los Angeles.

Howard, Katherine - *Full Graduate Faculty*
Assistant Professor; B.Sc., Texas A & M University; Ph.D., University of Texas.

Hughes, **Cody** - *Full Graduate Faculty*
Assistant Professor-in-Residence; D.M.D., University of Nevada, Las Vegas, School of Dental Medicine; M.S., Indiana University.

Hurlbut, Bernard - *Full Graduate Faculty*
Assistant Professor-in-Residence; B.A., Arizona State University; D.D.S., Baylor College of Dentistry.

Ingel, Andrew
Visiting Assistant Professor-in-Residence; B.S., Villanova University; M.S., Bryn Mawr College; D.M.D., University of Pittsburgh School of Dental Medicine.

Jones, Francis
Assistant Professor-in-Residence; B.A., California State University; D.D.S., Meharry Medical College.

Joyner-Tucker, Arlene
Assistant Professor-in-Residence; B.S., North Carolina University; D.D.S., Howard University College of Dentistry; M.P.H., University of California, Los Angeles.

Kingsley, Karl - *Full Graduate Faculty*
Associate Professor; B.A., New Mexico State University; B.B.A., New Mexico State University; Ph.D., University of Nevada, Las Vegas; M.P.H., University of Nevada, Las Vegas.

Kirit, Theodore
Associate Professor-in-Residence; M.D., University of Bucharest, School of Medicine; D.D.S., University of Bucharest, Romania, School of Dentistry; M.S., New York University.

Kuprienko, Kirstina
Visiting Assistant Professor; B.S., University of Nevada, Las Vegas; D.M.D., University of Nevada, Las Vegas School of Dental Medicine.

Leavitt, William
Visiting Professor-in-Residence; B.A., Brigham Young University; M.P.A., University of Southern California; D.D.S., University of the Pacific.

Lockhart, Robert
Associate Professor-in-Residence; D.D.S., Indiana University of Dentistry; M.S., University of Missouri, Kansas City.

Mack, Michael
B.S., University of Nevada, Las Vegas.

Mah, James - *Full Graduate Faculty*
Professor in Residence. B.S., University of Alberta, Edmonton; D.D.S., University of Alberta, Edmonton; M.S., University of Alberta, Edmonton; D.M.Sc., Harvard University.

Martin, Bob- *Assistant Graduate Faculty*
Assistant Professor-in-Residence; B.S., Bridgewater College; D.D.S., Medical College of Virginia.

McAlpine, George
B.A., University of Illinois; D.D.S., Loyola University; M.S., University of Texas, Health Sciences Center, Dental Branch and Wilford-Hall medical Center.

McClain, Mildred - *Full Graduate Faculty*
Assistant Professor; A.S., University of Nevada, Las Vegas; B.S., University of Nevada, Las Vegas; M.Ed., University of Nevada, Las Vegas; Ph.D., University of Nevada, Las Vegas.

Mobley, Connie - *Full Graduate Faculty*
Professor; B.S., University of Southern Louisiana; M.S., Florida International University; Ph.D., Texas A & M.

Nelson, Stanley
Professor; B.S., Albion College; D.D.S., University of Michigan School of Dentistry; M.S., University of Michigan School of Dentistry.

Neubauer, Michael
Associate Professor-in-Residence; B.S., University of California; D.D.S., University of California; M.S., University of Iowa.

O'Grady, Cynthia
B.A., University of Oregon; M.A., King's College.

Ord, David
Assistant Professor-in-Residence; B.S., Brigham Young University; D.D.S., University of Southern California.

Orr II, Daniel
Professor-in-Residence; B.S., Brigham Young University; D.D.S., University of Southern California School of Dentistry; M.S., University of Utah School of Medicine, Department of Anesthesiology; Ph.D., Columbia Pacific University; J.D., William Howard Taft University School of Law; M.D., University of Health Sciences, Antigua School of Medicine.

Phillips, Randy
Assistant Professor-in-Residence; B.A., University of California at Los Angeles; D.D.S., University of Southern California School of Dentistry.

Phipps, Flora Monique
Assistant Professor-in-Residence; B.S., Hampton University; D.D.S., Virginia Commonwealth University.

Reinke, Robin
Assistant Professor-in-Residence; B.S., University of Puget Sound; D.D.S., University of Washington School of Dentistry; M.P.A., Keller Business School of Management of Devry University.

Rothbart, Jonathan
Associate Professor-in-Residence; A.B., Brandeis University; D.M.D., Boston University Goldman School of Graduate Dentistry.

Sanders, R. Michael
Professor; D.M.D., College of Medicine and Dentistry; Ed.M., Rutgers University; M.P.H., Robert Woods Johnson Medical School.

Scherer, Michael
Assistant Professor-in-Residence; B.S., University of Miami; D.M.D., Nova Southeastern University; M.S., Ohio State University.

Self, McKinley
Assistant Professor-in-Residence; B.S., University of Utah; D.M.D., Case Western Reserve University.

Seran, Clifford - *Full Graduate Faculty*
Assistant Professor; B.S., Bucknell University; D.M.D., University of Pennsylvania.

Tham, Foeng (Bill)
Visiting Assistant Professor; B.A., Union College; D.D.S., University of Missouri; J.D., Concord University School of Law.

Tozzi, Raymond
Assistant Professor-in-Residence; B.S., St. Francis College; D.D.S., Georgetown University School of Dentistry.

Walker Jr., Richard
Professor; B.A., Westminster College; D.D.S., University of Missouri at Kansas City.

Wasden, Jason
B.S., University of Nevada, Las Vegas; M.P.A., University of Nevada, Las Vegas; Ph.D., University of Nevada, Las Vegas.

Webberson, Michael
Assistant Professor-in-Residence; B.S., University of Nevada, Las Vegas; D.D.S., Creighton University School of Dentistry.

Woo, Victoria
Associate Professor-in-Residence; D.D.S., University of Western Ontario.

Woodall, Wendy
Assistant Professor; B.A.S.S., Stephen F. Austin State University; D.D.S., University of Texas.

Zhou, Wenlian
Assistant Professor; D.D.S., Beijing Medical University School of Stomatology General Dentistry; Ph.D., Peking University Health Science Center, School of Stomatology Orthodontics; D.M.D., University of Nevada, Las Vegas, School of Dental Medicine.

Zoller, Lawrence
Professor-in-Residence; M.A., Rutgers University; Ph.D., University of Pennsylvania.

Master of Science - Oral Biology

Plan Description

The future of oral health medicine is dependent upon significant orthodontic and craniofacial research. Masters of Science – Oral Biology emphasizes orthodontic and craniofacial research and aims to aid developing orthodontic residents in becoming successful researchers, educators and/or clinicians. It does this by providing a diverse clinical experience with a strong integration of basic sciences. This program will equip residents with the clinical, the analytical and the managerial skills that are necessary to provide oral healthcare to the community.

For more information about your program, including your graduate program handbook and learning outcomes please visit the Degree Directory.

Plan Admission Requirements

Applications available on the UNLV Graduate College website.

In addition to being accepted to the UNLV Graduate College, prospective students must meet the following criteria.

1. Must have passed Parts I and II, National Dental Board Examination.
2. Must have earned a DMD/DDS degree from a program in the US or Canada that is fully accredited by the Commission on Dental Accreditation
3. Must be eligible for a Nevada state dental license and receive a full or limited dental license from the Nevada State Board of Dental Examiners prior to engaging in any clinical activity.
4. Application through the Postdoctoral Application Support Service (PASS) including specified letters of recommendations.
5. Background and criminal checks as required.
6. Medical history, immunizations and physicals as required.

All domestic and international applicants must review and follow the Graduate College Admission and Registration Requirements.

Students are accepted into a degree program as described in the Graduate Catalog. The faculty and corresponding sub-disciplines and sub-plans within the described programs are subject to change at any time.

Plan Requirements

Total Credits Required: 147

Course Requirements

Required Courses – Credits: 141

ORTH 8001 - Introduction to Orthodontics (4 Credits)
ORTH 8011 - Cephalometrics (2 Credits)
ORTH 8102 - Clinical Specialty Seminars I (2 Credits)
ORTH 8103 - Clinical Specialty Seminars II (3 Credits)
ORTH 8104 - Clinical Specialty Seminars III (3 Credits)
ORTH 8201 - Introduction to Clinic Orthodontics (4 Credits)
ORTH 8202 - Clinic Orthodontics (6 Credits)
ORTH 8203 - Clinic Orthodontics (6 Credits)
ORTH 8204 - Clinic Orthodontics (6 Credits)
ORTH 8205 - Clinic Orthodontics (6 Credits)
ORTH 8206 - Clinic Orthodontics (12 Credits)
ORTH 8207 - Clinic Orthodontics (2 x 6 Credits)
ORTH 8512 - Biomechanical Principles (2 Credits)
ORTH 8513 - Growth and Developmentes (2 Credits)
ORTH 8518 - Orthodontic Materials (2 Credits)
ORTH 8602 - Diagnosis, Treatment Planning and Case Presentation (4 Credits)
ORTH 8603 - Diagnosis & Treatment Plan (4 Credits)
ORTH 8604 - Diagnosis & Treatment Plan (4 Credits)
ORTH 8605 - Diagnosis, Treatment Planning and Case Presentation (4 Credits)
ORTH 8606 - Diagnosis, Treatment Plan and Case Presentation (8 Credits)
ORTH 8607 - Diagnosis & Treatment Plan (2 x 2 Credits)
ORTH 8803 - Literature Review/Journal Club (2 Credits)
ORTH 8804 - Literature Review/Journal Club (2 Credits)
ORTH 8808 - Literature Review IV (1 Credit)
ORTH 8910 - Craniofacial Anomalies (2 Credits)
PGDE 8312 - Independent Research I (3 Credits)
PGDE 8313 - Independent Research II (3 Credits)
ORTH 8314 - Advanced Research (1 Credits)
PGDE 8315 - Independent Research III (3 Credits)
PGDE 8316 - Independent Research (3 Credits)
PGDE 8402 - Biomedical Sciences Core I (2 Credits)
PGDE 8403 - Biomedical Sciences Core II (4 Credits)
PGDE 8415 - Advanced Biomedical Sciences (2 Credits)
PGDE 8503 - Interdisciplinary Diagnosis and Treatment Planning (2 Credits)
PGDE 8516 - Advanced Clinical Sciences: Radiology (2 Credits) 4 cr
PGDE 8517 - Temporomandibular Disorders and Occlusion (2 Credits)
PGDE 8701 - Methods of Literature Review/Scientific Writing (2 Credits)
PGDE 8702 - Research Methodology, Biostatistics & Epidemiology (2 Credits)
PGDE 8703 - Research Methods II (2 Credits)
PGDE 8715 - Professional Studies Core: Practice Management (2 Credits)

Thesis – Credits: 6

PGDE 8901 - Thesis

Degree Requirements

1. The Master of Science – Oral Biology program is designed to be a three year program (divided as follows: Year 1: 3 trimesters (summer, fall, spring); Year 2: 2 semesters (Fall July-Dec, and Spring Jan-June); and Year 3: fall semester).
2. The advanced program in Orthodontics and Dentofacial Othopedicas is accredited by the Commission on Dental Accreditation; as such graduates of UNLV School of Dental Medicine's Oral Biology program will also receive a certificate in Orthodontics and

Dentofacial Orthopedics which is required for licensure.

3. In consultation with his/her advisor, a student will organize a thesis committee of at least three departmental members. In addition, a fourth member from outside the department, known as the Graduate College Representative, must be appointed. An additional committee member may be added at the student and department's discretion. Please see Graduate College policy for committee appointment guidelines.

Plan Graduation Requirements

1. The student must submit all required forms to the Graduate College and then apply for graduation up to two semesters prior to completing his/her degree requirements.
2. A master's thesis, which carries six credits, is required for the Oral Biology M.S. It must conform to the guidelines set forth by the Graduate College in this catalog and in its Thesis and Dissertation Manual. The M.A. thesis should be an original contribution to academic knowledge. Thesis projects must be designed, developed, and written in close consultation with an appropriate thesis advisor and with the student's thesis committee.
3. The student must submit and successfully defend his/her thesis by the posted deadline. The defense must be advertised and is open to the public.

ORTH 8001 - Introduction to Orthodontics
Credits 4

ORTH 8011 - Cephalometrics
Credits 2
To discuss the history, development and the use of cephalometrics in clinical orthodontic practice. This course will cover the basic principles of Cephalometric analysis and describe developing as well as established skeletal Class I, II & III discrepancies.

ORTH 8102 - Clinical Specialty Seminars I
Credits 2
Clinical Specialty Seminars I

ORTH 8103 - Clinical Specialty Seminars II
Credits 3
A continuation and progressing advanced level of the one-hour clinical seminars that will proceed all clinical sessions. The purpose of these seminars is for the faculty to preview the daily clinic schedule and prepare the residents for the proceedures to be performed during that clinic session.

ORTH 8104 - Clinical Specialty Seminars III
Credits 3

ORTH 8201 - Introduction to Clinic Orthodontics
Credits 4
An introduction and overview of the three-hour clinical sessions during which the residents will screen, diagnose, treatment plan and treat and/or manage the orthodontic malocclusions of their patients, under the supervision of the attending orthodontic clinical faculty. Clinical attire, policies, procedures and professionalism will be discussed.

ORTH 8202 - Clinic Orthodontics
Credits 6

ORTH 8203 - Clinic Orthodontics
Credits 6
A continuation and progressing advanced level of the three-hour clinical sessions during which the residents will screen, diagnose, treatment plan and treat and/or manage the orthodontic maloclusions of their patients under the supervision of the attending orthodontic clinical faculty.

ORTH 8204 - Clinic Orthodontics
Credits 6

ORTH 8205 - Clinic Orthodontics
Credits 6
A continuation and progressively-advanced level of three-hour clinical sessions during which the residents will screen, diagnose, treatment plan and treat and/or manage the orthodontic malocclusions of their patients under the supervision of the attending orthodontic clinical faculty.

ORTH 8206 - Clinic Orthodontics
Credits 12
A continuation and progressively-advanced level of three-hour clinical sessions during which the residents will screen, diagnose, treatment plan and treat and/or manage the orthodontic malocclusions of their patients, under the supervision of the attending orthodontic clinical faculty.

ORTH 8207 - Clinic Orthodontics
Credits 6
This course provides Orthodontics Residents a more advanced level of material regarding orthodontic diagnosis, treatment planning and treatment. Residents build on their previous knowledge and experience. Residents are taught various finishing techniques and how to choose the proper retention per individual cases. Actual progress is compared to pretreatment projections. If progress is not on schedule, causes and solutions are discussed and changes are implemented as needed. Residents must prepare ABO written presentations for their 6 finished cases.

ORTH 8314 - Advanced Research
Credits 1
ADVANCED RESEARCH

ORTH 8415 - Advanced Biomedical Sciences
Credits 2
This advanced continuum provides an in-depth update in clinically related topics in growth and development, oral and maxillofacial pathology, oral medicine, and systemic diseases that affect the oral cavity.
Prerequisites ORTH 8414

ORTH 8512 - Biomechanical Principles
Credits 2
The biomechanics course aims to teach the first year orthodontic residents basic principles of tooth movement. It will include definitions of force vectors, force application and various biological responses based on mechanical principles.

ORTH 8513 - Growth and Developmentes
Credits 2
GROWTH AND DEVELOPMENTES

ORTH 8518 - Orthodontic Materials
Credits 2
This course is comprised of seminar discussions of materials used in the practice of orthodontics. Students will demonstrate an understanding of: the characterization of contemporary materials, methods of testing, clinical use, and health and safety concerns with the use of common materials. This course will also provide the foundation for developing a research project involving orthodontic materials.

ORTH 8602 - Diagnosis, Treatment Planning and Case Presentation
Credits 4
A comprehensive in depth study of orthodontic diagnosis, treatment planning and ABO case reports of patients treated by orthodontic residents in our clinic. This will be accomplished in a seminar format where residents will present their case reports to fellow residents and faculty.

ORTH 8603 - Diagnosis & Treatment Plan
Credits 4
A comprehensive in depth study of orthodontic diagnosis, treatment planning and ABO case reports of patients treated by orthodontic residents in our clinic. This will be accomplished in a seminar format where residents will present their case reports to fellow residents and faculty

ORTH 8604 - Diagnosis & Treatment Plan
Credits 4

ORTH 8605 - Diagnosis, Treatment Planning and Case Presentation
Credits 4
A comprehensive in depth study of orthodontic diagnosis, treatment planning and American Board of

Orthodontics (ABO) case reports of patients treated by orthodontic residents in our clinic. This will be accomplished in a seminar format where residents will present their case reports to fellow residents and faculty, followed by a comprehensive discussion of every case.

ORTH 8606 - Diagnosis, Treatment Plan and Case Presentation
Credits 8
DIAGNOSIS,
TREATMENT PLAN AND CASE PRESENTATIO
N

ORTH 8607 - Diagnosis & Treatment Plan
Credits 2
A comprehensive in depth study, diagnosis, treatment planning and ABO case reports of patients treated by orthodontic residents in our clinic. This will be accomplished in a seminar format where residents will present their case reports to fellow residents and faculty

ORTH 8803 - Literature Review/Journal Club
Credits 2
Introduction to analyzing and understanding literature in orthodontics, including classification of study designs, hypothesis testing, scientific writing, analysis and interpretation of data, and critical evaluation of the literature. Residents participate in critical review of research in orthodontics and craniofacial biology throughout their education and in preparation for the ABO examination.

ORTH 8804 - Literature Review/Journal Club
Credits 2

ORTH 8808 - Literature Review IV
Credits 1
A continuation and progressively-advanced level of analyzing and understanding literature in orthodontics including, classification of study design, hypothesis testing, scientific writing, analysis and interpretation of data, and critical evaluation of the literature.

ORTH 8910 - Craniofacial Anomalies
Credits 2
Introduce diagnostic and treatment planning principles of interdisciplinary team aproach, as well as, provide a sound basis for clinical examination, diagnosis and team management of patients with severe malocclusion associated with birth defects and craniofacial anomalies.

PGDE 8312 - Independent Research I
Credits 3

PGDE 8313 - Independent Research II
Credits 3
A continuation and progressing advanced level of the research requirements, facilities and direction necessary for the orthodontic residents to successfully complete their advanced education in orthodontics and dentofacial orthopedics.

PGDE 8315 - Independent Research III
Credits 3
This course continues with advanced levels of research and scientific methodology. Topics include literature analysis, institutional review board (IRB), informed consent, experimental design, basic statistics, method development, data analysis and reporting.

PGDE 8316 - Independent Research
Credits 3
At the conclusion of this course, the Orthodontic Resident will be able to:
1. Understand the scientific method as it applies to critical review of the literature and research design
2. Understand literature search techniques and strategies as well as the different levels of research publications ranging from opinions, case reports, blinded studies, prospective research, randomized controlled clinical studies to systematic reviews.
3. Complete an independent research project to include an abstract, proposal, data collection, analysis and write up for submission to an appropriate peer-reviewed scientific journal
4. Complete Master's Thesis

PGDE 8402 - Biomedical Sciences Core I
Credits 4

PGDE 8403 - Biomedical Sciences Core II
Credits 4

PGDE 8415 - Advanced Biomedical Sciences
Credits 2

PGDE 8503 - Interdisciplinary Diagnosis and Treatment Planning
Credits 2
This course provides Graduate Residents a background in the current state of the art for the major clinical disciplines. The course is conducted as a literature review of current research with summary papers to be written in each of the topics.

PGDE 8516 - Adv Clin Sci: Radiology
Credits 4
Provide residents with digital maxillofacial radiolgy procedures and protocols. Introduce residents to advanced maxillofacil radiology technology, i.e.; ConeBeam CT

PGDE 8517 - TMD
Credits 2
This course reviews appropriate literature of stomatognathic function, diagnosis and treatment of TM Disorders. The student will review the multi-factorial theory of TM Disorders and will distinguish simple TM Disorders vs. complex TM Disorders. A plan for management of TM disorders within their clinical discipline will be developed.

PGDE 8701 - PSC: Lit Review
Credits 2

PGDE 8702 - Res Design
Credits 2

PGDE 8703 - Research Methods II
Credits 2
This course will present relevant topics in the areas of practice management, ethics, nutrition and cultural diversity. The application of these topics to the practice of orthodontics will be emphasized.

PGDE 8715 - PSC: Practice Management
Credits 2

PGDE 8901 - Thesis
Credits 6
This course guides students through the process of writing their proposal and thesis, following the guidelines/practices for oral biology/orthodontics.

School of Nursing

Welcome to the School of Nursing at UNLV. Our nursing program is the oldest in southern Nevada and the only one in Nevada to offer a Ph.D. program. All of our graduate programs are web-based to allow for "anytime, anyplace" education, but may involve occasional visits to campus.

In our Master of Science program, there are currently three tracks, the Family Nurse Practitioner Track, the Pediatric Nurse Practitioner, and the Nurse Educator Track. We also offer post-masters certificates in these areas. Family Nurse Practitioners provide primary care for individuals across the lifespan and many provide care to the indigent and uninsured populations. Pediatric Nurse Practitioners provide care to children from birth through young adult in pediatric primary health care including well child care and prevention/management of common pediatric acute illnesses and chronic conditions. The Nurse Educator program prepares nursing students to teach nursing. This provides more qualified faculty so that all of the area nursing schools may increase their enrollment. The MS program is growing rapidly because of the great need for advanced practice nurses and nurse educators in Nevada. The master's program has full accreditation by the Commission on Collegiate Nursing Education (CCNE). The Master of Science in Nursing graduate program is designed to provide students pursuing a career in nursing the opportunity to acquire the knowledge, skills and abilities requisite to the safe, effective and efficient practice of nursing.

The School of Nursing also offers a Doctorate of Nursing Practice (DNP) for both post-bachelor's degree and post-master's degree students. This program is also on-line, but requires occasional trips to campus for orientation, skills training and testing. The DNP degree is a terminal professional practice degree and prepares graduates for advanced clinical practice and leadership roles to serve the health care needs of the people of Nevada, the nation, and the professional community. The DNP program is accredited by the Commission on Collegiate Nursing Education (CCNE).

We also offer an on line Ph.D. in Nursing program. This program is research-focused and will help meet the need for more highly qualified faculty in Nevada and the surrounding states. If you are considering becoming a doctorally prepared nurse educator scholar, this web-based program will meet your needs. You will be educated to advance the scientific discipline through research, innovation in the classroom, and dynamic leadership. We are rapidly expanding our research activities and have a number of well-funded graduate assistant positions available for full time students. In this role, graduate students work closely with faculty on their research, or teach undergraduate classes, or supervise students in the clinical setting. It is a wonderful opportunity to enhance your education.

Finally, we have recently opened an Interdisciplinary Health Sciences PhD, in collaboration with Kinesiology, Nutrition, Health Physics, and Physical Therapy. This program is focused on biobehavioral issues and prepares advanced nurses to work collaboratively with other health care professionals to advance education and research.

I encourage you to read the catalog and explore our website to find out more about all of these programs and to visit us when you are in the Las Vegas area.

Carolyn Yucha, Ph.D., RN, CNE, Dean
Jillian Inouye, Ph.D., RN, Associate Dean for Research
Rebecca Benfield, Ph.D., C.N.M, R.N., Associate Dean for Academic Affairs
Mary Bondmass, Ph.D., R.N., C.N.E., Associate Dean for FacultyAffairs

Nursing Faculty

Dean

Yucha, Carolyn - *Full Graduate Faculty*
Professor; BS SUNY Albany; MS SUNY Buffalo; Ph.D. SUNY, Health Sciences Center, Syracuse, NY.

Associate Dean for Academic Affairs

Menzel, Nancy - *Full Graduate Faculty*
Associate Professor; BS Cornell University; MS Boston University; Ph.D. University of South Florida. *Rebel since 2006.*

Associate Dean for Research

Inouye, Jillian - *Full Graduate Faculty*
Professor; BS, University of Hawaii; MS, University of California; MA, University of Hawaii; PhD, University of Hawaii. *Rebel since 2013.*

Psychosocial Nursing Department Chair

Clark, Michele - *Full Graduate Faculty*
Associate Professor; B.S. University of California, San Francisco; M.S., Ph.D. University of Arizona. *Rebel since 2006.*

Physiological Nursing Department Chair

Alpert, Patricia - *Full Graduate Faculty*
Associate Professor; B.S., M.S., M.P.H. University of Hawaii; D.P.H. Loma Linda University. *Rebel since 1991.*

MSN Coordinator

VanBeuge, Susan - *Full Graduate Faculty*
Assistant Professor; B.S.N., Pacific Lutheran University; M.S.N., University of Nevada Las Vegas; D.N.P. University of Utah. *Rebel since 2006.*

Ph.D. Coordinator

Clark, Michele - *Full Graduate Faculty*
Associate Professor; B.S.N. University of California, San Francisco; M.S., Ph.D. University of Arizona. *Rebel since 2006.*

DNP Coordinator

Sabo, Carolyn - *Full Graduate Faculty*
Professor; B.S.N., M.S. University of Utah; Ed.D. Brigham Young University. *Rebel since 1984.*

Graduate Faculty

Angosta, Alona - *Full Graduate Faculty*
Assistant Professor; B.S.N, M.S.N. University of Nevada, Las Vegas; Ph.D. University of Hawaii. *Rebel since 2005.*

Black, Ipuna - *Full Graduate Faculty*
Assistant Professor, B.S.N. University of Nevada, Las Vegas; M.S.N. SUNY Center Stony Brook; Ph.D. University of Nevada, Las Vegas. *Rebel since 2014*

Candela, Lori - *Full Graduate Faculty*
Associate Professor; BS Metropolitan State College; MS, University of Colorado; Ed.D. University of Southern California. *Rebel since 1999.*

Doolen, Jessica - *Full Graduate Faculty*
Assistant Professor; B.S.N., M.S.N., University of Nevada, Las Vegas; Ph.D., University of Northern Colorado. *Rebel since 1994.*

Feng, Du - *Full Graduate Faculty*
Professor; B.S., Peking University; M.S., University of Southern California; Ph.D., University of Southern California. *Rebel since 2013.*

Gatlin, Tricia - *Full Graduate Faculty*
Assistant Professor; B.S.N, University of Memphis; M.S., University of Portland; PhD, University of Arizona. *Rebel since 2011.*

Kawi, Jennifer - *Full Graduate Faculty*
Assistant Professor; B.S.N., Saint Louis University; M.S.N., University of Nevada, Las Vegas; Ph.D. University of Colorado, Denver. *Rebel since 2007.*

Lee, Hyunhwa - Full Graduate Faculty
Assistant Professor; B.S.N., M.S.N., Yonsei University, Seoul, Republic of Korea; Ph.D.,

University of Michigan, Ann Arbor. *Rebel since 2014*

Lukkahatai, Nada - *Full Graduate Faculty*
Assistant Professor; B.S.N. Faculty of Nursing, University, Chiang Mai, Thailand; M.S.N., Old Dominion University; Ph.D., University of North Carolina at Chapel Hill. *Rebel since 2014*

Maes, Cheryl - *Associate Graduate Faculty*
Lecturer; B.S.N., M.S.N., University of Nevada, Las Vegas. *Rebel since 2004.*

Serafica, Reimund - *Full Graduate Faculty*
Assistant Professor; A.A., M.S.N., Gardner-Webb University; Ph.D., University of Hawaii at Manoa. *Rebel since 2014*

St. Pierre Schneider, Barbara - *Full Graduate Faculty*
Associate Professor; B.S.N., LSUMC; M.S., University of Washington; DNSc, UCLA. *Rebel since 2006.*

Tan, Rhigel - *Full Graduate Faculty*
Assistant Professor; B.S.N., Cebu City Medical Center College of Nursing; MN, Cebu Normal University; DNP Rocky Mountain University of Health Professions. *Rebel since 2005.*

Thomason, Diane - *Full Graduate Faculty*
Assistant Professor; B.S.N., M.S.N., Ph.D., University of Washington. *Rebel since 2013.*

Yu, Valerie - *Full Graduate Faculty*
Assistant Professor; B.S.N., M.S.N., University of Texas at Arlington; DNP, University of Iowa. *Rebel since 2014*

Advanced Graduate Certificate in Family Nurse Practitioner

Plan Description

Individuals who already have a master's degree in nursing, and meet the admission qualifications will be allowed to take courses as a non-degree student. No degree will be awarded, but a certificate documenting completion of the course work will be provided and transcripts showing completion of the courses will be available. Each individual applicant will be evaluated to determine the courses required in order to complete the specific certificate program. Additional courses beyond the minimum courses needed for the certificate program may be required if the applicant's earned MS in nursing lack courses required by the UNLV School of Nursing.

For more information about your program, including your graduate program handbook and learning outcomes, please visit the Degree Directory.

Plan Admission Requirements

Applications available on the UNLV Graduate College website.

Students must apply and submit all admission materials via the ApplyYourself system available through the Graduate College. The following items are required:

1. Transcripts of all course work for both baccalaureate and masters degrees must be sent to the School of Nursing and Graduate College. Transcripts must show coursework in Advanced Physical Assessment, Advanced Pathophysiology, and Advanced Pharmacology. Additionally, if unofficial transcripts are available to the student, please upload to the Apply Yourself application. Nursing course work must have been completed at a nursing program accredited by the National League for Nursing Accrediting Commission or Commission on Collegiate Nursing Education.

2. Two letters of recommendation from either instructors or employers that speak to the applicant's potential to complete the Post-Master's FNP Certificate Program.
3. Statement of 300 words describing the students' professional goals and reason for seeking a nurse practitioner certificate.
4. Current resume or vita.
5. Current valid RN license in state of residence.

All domestic and international applicants must review and follow the Graduate College Admission and Registration Requirements.

Students are accepted into a degree program as described in the Graduate Catalog. The faculty and corresponding sub-disciplines and sub-plans within the described programs are subject to change at any time.

Plan Requirements

Total Credits Required: 25

Course Requirements

Required Courses – Credits: 25

NURS 701 - Diagnostic Reasoning and Clinical Decision Making for the FNP
NURS 714 - Family Theory and Health Promotion
NURS 740R - FNP Adult and Women's Health
NURS 750R - FNP Children and OB
NURS 752 - Nurse Practitioner Business and Roles
NURS 760R - FNP Geriatric and Chronic Illness

Certificate Requirements

Completion of a minimum of 25 credit hours with a minimum GPA of 3.00.

Plan Certificate Completion Requirements

The student must submit all required forms to the Graduate College and then apply for graduation in MyUNLV by the appropriate deadline.

Advanced Graduate Certificate in Nursing Education

Plan Description

Individuals who already hold a master's degree in nursing and meet the admission qualifications, may take courses leading to the Nursing Education Post-Masters Certificate. Admitted students take courses as a non-degree student and are awarded a certificate documenting completion of the required course work. The Nursing Education Post-Masters Certificate prepares individuals for teaching positions within a program of nursing or a nurse educator position in a clinical setting. Additional courses beyond the minimum courses needed for the certificate program may be required if the applicants earned M.S. in Nursing lack courses required by the UNLV School of Nursing.

For more information about your program, including your graduate program handbook and learning outcomes, please visit the Degree Directory.

Plan Admission Requirements

Applications available on the UNLV Graduate College website.

Students must apply and submit all admission materials via the ApplyYourself system available through the Graduate College. The following items are required:

1. Transcripts of all course work for both baccalaureate and masters degrees must be sent to the School of Nursing and Graduate College. Transcripts must show coursework in Advanced Physical Assessment, Advanced Pathophysiology, and Advanced Pharmacology. Additionally, if unofficial transcripts are available to the student, please upload to the Apply Yourself application. Nursing course work must have been completed at a nursing program accredited by the National League for Nursing Accrediting Commission or

Commission on Collegiate Nursing Education.
2. Two letters of recommendation from either instructors or employers that speak to the applicant's potential to complete the Post-Master's FNP Certificate Program.
3. Statement of 300 words describing the students' professional goals and reason for seeking a nurse practitioner certificate.
4. Current resume or vita.
5. Current valid RN license in state of residence.

All domestic and international applicants must review and follow the Graduate College Admission and Registration Requirements.

Students are accepted into a degree program as described in the Graduate Catalog. The faculty and corresponding sub-disciplines and sub-plans within the described programs are subject to change at any time.

Plan Requirements

Total Credits Required: 12

Course Requirements

Required Courses – Credits: 12

NURS 709 - Teaching and Learning in Nursing Education NURS 710 - Course Level Evaluation Strategies for Nurse Educators
NURS 710 - Course Level Evaluation Strategies for Nurse Educators
NURS 724 - Developing & Evaluating Curriculum for Nursing Education
NURS 733 - Nursing Education Practicum I

Certificate Requirements

Completion of a minimum of 12 credit hours with a minimum GPA of 3.00.

Plan Certificate Completion Requirements

The student must submit all required forms to the Graduate College and then apply for graduation in MyUNLV by the appropriate deadline.

Advanced Graduate Certificate in Pediatric Nurse Practitioner

Plan Description

Individuals who already have a master's degree in nursing, and meet the admission qualifications will be allowed to take courses as a non-degree student. No degree will be awarded, but a certificate documenting completion of the course work will be provided and transcripts showing completion of the courses will be available. Each individual applicant will be evaluated to determine the courses required in order to complete the specific certificate program. Additional courses beyond the minimum courses needed for the certificate program may be required if the applicant's earned MS in nursing lack courses required by the UNLV School of Nursing.

This pediatric nurse practitioner (PNP) post-master's certificate program will allow those who already hold a master's degree in nursing to return to UNLV to obtain specialization as a pediatric nurse practitioner.

For more information about your program, including your graduate program handbook and learning outcomes, please visit the Degree Directory.

Plan Admission Requirements

Applications available on the UNLV Graduate College website.

1. Completed online Graduate College application.
2. Two copies of official transcripts of all course work taken for both baccalaureate and master's degrees sent directly from the granting institutions to the School of Nursing (SON) and to the Graduate College.
3. Upload into the online application:
    1. Two letters of recommendation.
    2. 300 word statement of goals and reasons for seeking a PNP post-master's certificate.
    3. Current resume or vitae.

4. Current valid Nevada RN license or eligibility to obtain a Nevada RN license.
5. Health and malpractice insurance, Hepatitis B vaccination, negative drug screen, background check & a current BLS certificate.

4. Students are expected to have basic computer skills, including word processing.

All domestic and international applicants must review and follow the Graduate College Admission and Registration Requirements.

Students are accepted into a degree program as described in the Graduate Catalog. The faculty and corresponding sub-disciplines and sub-plans within the described programs are subject to change at any time.

Plan Requirements

Total Credits Required: 34

Course Requirements

Required Courses – Credits: 34

NURS 702 - Diagnostic Reasoning and Clinical Decision Making for the PNP
NURS 703 - Advanced Health Assessment
NURS 704 - Advanced Pathophysiology and Genetics I
NURS 714 - Family Theory and Health Promotion
NURS 730 - Advanced Pharmacology and Genetics II
NURS 734 - Primary Prevention in Pediatrics: The Well Child & Adolescent
NURS 734L - Primary Prevention in Pediatrics: The Well Child & Adolescent Clinical
NURS 744 - Primary Care in Pediatrics: Common Problems
NURS 744L - Primary Prevention in Pediatrics: Common Problems
NURS 752 - Nurse Practitioner Business and Roles
NURS 764 - Primary Prevention in Pediatrics: Chronic Illness
NURS 764L - Primary Prevention in Pediatrics: Chronic Illness Clinical

Certificate Requirements

Completion of a minimum of 34 credit hours with a minimum GPA of 3.00.

Plan Certificate Completion Requirements

- The student must submit all required forms to the Graduate College and then apply for graduation in MyUNLV by the appropriate deadline.
- The student must successfully complete the culminating experience.

Doctor of Nursing Practice

Plan Description

The Doctor of Nursing Practice (DNP) is a terminal professional practice degree. The goal of the DNP program is to prepare nurses to assume leadership roles in clinical practice, administration, clinical teaching, and clinical research. The DNP differs from the PhD in Nursing or Doctor of Nursing Science degrees, emphasizing advanced clinical practice, implementation of best practices, furthering excellence in nursing (clinical) education and evaluation of practice and care delivery models rather than individually initiated research. The DNP program prepares graduates for advanced clinical practice and leadership roles to serve the health care needs of the people of Nevada, the nation, and the professional community. DNP graduates are equipped to assume a wide range of leadership roles in both direct and indirect health care settings and nursing education programs. DNP graduates may function as specialists in their advanced practice clinical roles, nursing faculty, or as healthcare executives, program and policy analysts.

DNP Program Objectives:
The goal of the DNP degree is to prepare nurses to assume leadership roles in clinical practice, clinical teaching, and health care analysis. At the conclusion of the University of Nevada DNP program, graduates will:

1. Provide advanced nursing care to improve patient and population health care outcomes in various direct and indirect settings.
2. Take leadership roles in the analysis, delivery and management of nursing care and health care systems.
3. Provide evidence-based practice through the application of analytical methods, information systems technology, and clinical research.
4. Collaborate with interprofessional teams to meet the healthcare needs of culturally and ethnically diverse individuals and populations.
5. Act as change agent, leader, and advocate in the design, implementation, and evaluation of health care policy as it affects populations and the nursing profession.

For more information about your program, including your graduate program handbook and learning outcomes please visit the Degree Directory.

Plan Admission Requirements

Post-Masters Tracks:

Applications available on the UNLV Graduate College website.

All domestic and international applicants must review and follow the Graduate College Admission and Registration Requirements .

Nurse Practioner Track:

1. Hold a baccalaureate in nursing from an accredited NLNAC or CCNE nursing program.
2. Hold a master's degree in nursing (MSN or MN). Exceptions to this will be made on a case-by-case basis and only for those students who hold a Bachelor of Science in Nursing with a master's degree in another health-related field (e.g., MPH, MHA, etc.). Coursework from non-nursing master's degree must have significant content from nursing or a nursing focus. At a minimum, graduate level coursework must demonstrate a substantial study of Nursing Theory, Research, and Health Policy.
3. Have completed graduate-level course work with a grade of B or better in advanced pathophysiology, pharmacology, physical assessment, nursing theory, research, and healthcare policy.
4. Have a cumulative grade point average (GPA) of 3.5 or higher at the graduate level.
5. Have completed graduate-level course work with a grade of B or better in nursing theory, research and healthcare policy.
6. Hold an unencumbered license as a registered nurse and as an advanced practice nurse commensurate with state licensure.

7. Hold national certification in an advanced practice role from a nationally recognized certification/credentialing organization.

Academic Leadership Track:

1. Hold a baccalaureate in nursing from an accredited NLNAC or CCNE nursing program.
2. Students must hold a master's degree in nursing (MSN or MN). Exceptions to this will be made on a case-by-case basis and only for those students who hold a Bachelor of Science in Nursing with a master's degree in another health-related field (i.e. MBA, MHA, MPH etc.). Coursework from non-nursing master's degree must have significant content from nursing or a nursing focus. At a minimum, graduate level coursework must demonstrate a substantial study of Nursing Theory, Research, and Health Policy.
3. Have a cumulative grade point average (GPA) of 3.5 or higher at the graduate level.
4. Have completed graduate-level course work with a grade of B or better in nursing theory, research and healthcare policy.
5. Hold an unencumbered license as a registered nurse.
6. Hold national certification (or eligibile for certification) in an advanced practice role or an area of specialization or expertise.
7. Provide documentation of at least 500 hours of practice in a leadership role from educational experience, practice experience or equivalent course work in the area of administration (e.g., MBA, MHA, MPH, etc. or education).

Students are accepted into a degree program as described in the Graduate Catalog. The faculty and corresponding sub-disciplines and sub-plans within the described programs are subject to change at any time.

BSN to DNP Tracks:

Applications available on the UNLV Graduate College website.

All domestic and international applicants must review and follow the Graduate College Admission and Registration Requirements .

Nurse Practitioner and Academic Leadership Tracks:

1. Hold a baccalaureate in nursing from an accredited NLNAC or CCNE nursing program.
2. Have a cumulative grade point average (GPA) of 3.2 or higher (on a 4.0 scale) in the baccalaureate in nursing degree.
3. Hold an unencumbered license as a registered nurse.
4. Have practiced as a baccalaureate prepared registered nurse for a minimum of one calendar year prior to beginning coursework in the BSN to DNP program.
5. Interviews may be required.

Plan Requirements

See Subplan Requirements below.

Subplan 1 Requirements: Post-Masters Nurse Practitioner Track

Total Credits Required: 31

Course Requirements

Required Courses – Credits: 25

NURS 708 - Analysis and Economics of Healthcare Systems and Delivery
NURS 712 - Strategies for Management of Healthcare Systems and Performance Improvement
NURS 715 - Business Management for Nurse Practitioners
NURS 716 - Population Health: Analysis and Evaluation
NURS 719R - Health & Public Policy for Advanced Practice of Nursing
NURS 729R - Translational Evidence for Healthcare Systems
NURS 765 - DNP Residency
NURS 767 - Collaboration, Communication & Negotiation for the Nurse Leader
NURS 768 - DNP Forum & Role Transformation

DNP Project – Credits: 6

NURS 788 - DNP Project

Degree Requirements

1. Complete 31 credits with a minimum GPA of 3.00.
2. Maintain a cumulative grade point average of 3.00 or above each semester enrolled.
3. Receive a grade of "B" (3.00) or above in all required cognate and nursing courses. If less than a "B", for example a B- (2.7) is earned, the course must be repeated. The student must be in good standing to repeat a course and any required course may be repeated only one time.
4. A student may register for a course only two times. A student who has registered for the same course twice and has withdrawn or received a grade less than "B" is ineligible for readmission unless approved by the Graduate College.
5. If a student fails two courses or has withdrawn from two courses or received a grade less than "B" in two courses he/she is ineligible for readmission unless approved by the Graduate College.
6. Complete a minimum of six (6) semester hours in each calendar year.
7. Each student, upon admission, will be assigned an advisor. The advisor (and later the Advisory Committee including the chair of the Advisory committee if in place) will plan the student's entire degree program of study and submit it to the Graduate College by the end of the second semester of enrollment. The degree program requires the approvals of the student, advisor, and the DNP Coordinator, the appropriate academic dean, and the Graduate Dean.
8. The Advisor monitors the student's progress through the program of study. In addition, the DNP Coordinator will monitor the student's progress, including adherence to all established policies of the Graduate College. At any given time, the student can request a change of advisor or chair of Advisory Committee. However, it is the student's responsibility to secure approval of an individual faculty member who agrees to serve as his or her advisor before changing the original advisor, subject to Graduate College approval. Also, it is the student's responsibility to make sure that his or her chosen advisor or chair has current full graduate faculty status at UNLV, which can be checked at: http://graduatecollege.unlv.edu/facstaff/status.html.
9. Students will select a chair for their DNP Project committee in the first semester and be required to file the Committee Appointment Form with the DNP coordinator when this is completed. More specific information about the DNP Project will be discussed in the courses it is embedded in the program.
10. In consultation with his/her advisor, a student will organize an advisory committee of at least two departmental members. In addition, a third member from outside the department, known as the Graduate College Representative, must be appointed. An additional committee member may be added at the student and department's discretion. Please see Graduate College policy for committee appointment guidelines.
11. Continuously register for three (3) semester hours of credit each semester while working on a DNP Project.
12. Once admitted to the DNP program, students will need to continue to take a minimum of 3 credits per semester for both fall and spring semesters to maintain their place in the program until graduation. A leave of absence may be requested by students. The DNP Project is a culmination project based on guidelines from the American Association of Colleges of Nursing (AACN) DNP essentials. This is a project completed over three semesters in the program.
13. Students in the DNP program are required to abide by the policies for UNLV School of Nursing. Students in the DNP program are also required to abide by the policies of the UNLV Graduate College.

Graduation Requirements

See Plan Graduation Requirements below.

Subplan 2 Requirements:BSN to DNP Nurse Practitioner Track

Total Credits Required: 68

Course Requirements

Required Courses – Credits: 62

NURS 701 - Diagnostic Reasoning and Clinical Decision Making for the FNP
NURS 702 - Diagnostic Reasoning and Clinical Decision Making for the PNP
NURS 703 - Advanced Health Assessment
NURS 704 - Advanced Pathophysiology and Genetics I
NURS 706 - Nursing Theory and Research
NURS 708 - Analysis and Economics of Healthcare Systems and Delivery
NURS 711 - Informatics and Quality Improvement
NURS 712 - Strategies for Management of Healthcare Systems and Performance Improvement
NURS 714 - Family Theory and Health Promotion
NURS 715 - Business Management for Nurse Practitioners
NURS 716 - Population Health: Analysis and Evaluation
NURS 719R - Health & Public Policy for Advanced Practice of Nursing
NURS 729R - Translational Evidence for Healthcare Systems
NURS 730 - Advanced Pharmacology and Genetics II
NURS 734 - Primary Prevention in Pediatrics: The Well Child & Adolescent
NURS 740R - FNP Adult and Women's Health
NURS 744 - Primary Care in Pediatrics: Common Problems
NURS 750R - FNP Children and OB
NURS 760R - FNP Geriatric and Chronic Illness
NURS 764 - Primary Prevention in Pediatrics: Chronic Illness
NURS 765 - DNP Residency
NURS 768 - DNP Forum & Role Transformation

DNP Project – Credits: 6

NURS 788 - DNP Project

Students who wish to step out of the DNP program and receive a master's degree will be required to complete NURS 761. Clinicial Synthesis and some courses identified above as required will not be completed.

Degree Requirements

1. Complete 68 credits with a minimum Grade Point Average (GPA) of 3.00.
2. Maintain a cumulative grade point average of 3.00 or above each semester enrolled.
3. Receive a grade of "B" (3.00) or above in all required cognate and nursing courses. If less than a "B", for example a B- (2.7) is earned, the course must be repeated. The student must be in good standing to repeat a course and any required course may be repeated only one time.
4. A student may register for a course only two times. A student who has registered for the same course twice and has withdrawn or received a grade less than "B" is ineligible for readmission unless approved by the Graduate College.
5. If a student fails two courses or has withdrawn from two courses or received a grade less than "B" in two courses he/she is ineligible for readmission unless approved by the Graduate College.
6. Complete a minimum of six (6) semester hours in each calendar year.
7. Each student, upon admission, will be assigned an advisor. The advisor (and later the Advisory Committee including the chair of the Advisory committee if in place) will plan the student's entire degree program of study and submit it to the Graduate College by the end of the second semester of enrollment. The degree program requires the approvals of the student, advisor, and the DNP Coordinator, the appropriate academic dean, and the Graduate Dean.
8. The Advisor monitors the student's progress through the program of study. In addition, the DNP Coordinator will monitor the student's progress, including adherence to all

established policies of the Graduate College. At any given time, the student can request a change of advisor or chair of Advisory Committee. However, it is the student's responsibility to secure approval of an individual faculty member who agrees to serve as his or her advisor before changing the original advisor, subject to Graduate College approval. Also, it is the student's responsibility to make sure that his or her chosen advisor or chair has current full graduate faculty status at UNLV, which can be checked at: http://graduatecollege.unlv.edu/facstaff/status.html.

9. Students will select a chair for their DNP Project committee in the first semester and be required to file the Committee Appointment Form with the DNP coordinator when this is completed. More specific information about the DNP Project will be discussed in the courses it is embedded in the program.
10. In consultation with his/her advisor, a student will organize an advisory committee of at least two departmental members. In addition, a third member from outside the department, known as the Graduate College Representative, must be appointed. An additional committee member may be added at the student and department's discretion. Please see Graduate College policy for committee appointment guidelines.
11. Continuously register for three (3) semester hours of credit each semester while working on a DNP Project.
12. Once admitted to the DNP program, students will need to continue to take a minimum of 3 credits per semester for both fall and spring semesters to maintain their place in the program until graduation. A leave of absence may be requested by students.
13. The DNP Project is a culmination project based on guidelines from the American Association of Colleges of Nursing (AACN) DNP essentials. This is a project completed over three semesters in the program.
14. Students in the DNP program are required to abide by the policies for UNLV School of Nursing. Students in the DNP program are also required to abide by the policies of the UNLV Graduate College.

Graduation Requirements

See Plan Graduation Requirements below.

Subplan 3 Requirements: Academic Leadership Track

Total Credits Required: 33

Course Requirements

Required Courses – Credits: 27

NURS 708 - Analysis and Economics of Healthcare Systems and Delivery
NURS 717 - The Accreditation Process
NURS 718 - Organizational Management for the Advanced Practice Nurse
NURS 719R - Health & Public Policy for Advanced Practice of Nursing
NURS 721 - Principles and Strategies for Clinical Supervision in Nursing
NURS 729R - Translational Evidence for Healthcare Systems
NURS 765 - DNP Residency
NURS 767 - Collaboration, Communication & Negotiation for the Nurse Leader
NURS 768 - DNP Forum & Role Transformation
NURS 772 - The Nurse as Leader

DNP Project – Credits: 6

NURS 788 - DNP Project

Degree Requirements

1. Complete 33 credits with a minimum GPA of 3.00.
2. Maintain a cumulative grade point average of 3.00 or above each semester enrolled.
3. Receive a grade of "B" (3.00) or above in all required cognate and nursing courses. If less than a "B", for example a B- (2.7) is earned, the course must be repeated. The student must be in good standing to repeat a course

and any required course may be repeated only one time.

4. A student may register for a course only two times. A student who has registered for the same course twice and has withdrawn or received a grade less than "B" is ineligible for readmission unless approved by the Graduate College.
5. If a student fails two courses or has withdrawn from two courses or received a grade less than "B" in two courses he/she is ineligible for readmission unless approved by the Graduate College.
6. Complete a minimum of six (6) semester hours in each calendar year.
7. Each student, upon admission, will be assigned an advisor. The advisor (and later the Advisory Committee including the chair of the Advisory committee if in place) will plan the student's entire degree program of study and submit it to the Graduate College by the end of the second semester of enrollment. The degree program requires the approvals of the student, advisor, and the DNP Coordinator, the appropriate academic dean, and the Graduate Dean.
8. The Advisor monitors the student's progress through the program of study. In addition, the DNP Coordinator will monitor the student's progress, including adherence to all established policies of the Graduate College. At any given time, the student can request a change of advisor or chair of Advisory Committee. However, it is the student's responsibility to secure approval of an individual faculty member who agrees to serve as his or her advisor before changing the original advisor, subject to Graduate College approval. Also, it is the student's responsibility to make sure that his or her chosen advisor or chair has current full graduate faculty status at UNLV, which can be checked at: http://graduatecollege.unlv.edu/facstaff/status.html.
9. Students will select a chair for their DNP Project committee in the first semester and be required to file the Committee Appointment Form with the DNP coordinator when this is completed. More specific information about the DNP Project will be discussed in the courses it is embedded in the program.
10. In consultation with his/her advisor, a student will organize an advisory committee of at least two departmental members. In addition, a third member from outside the department, known as the Graduate College Representative, must be appointed. An additional committee member may be added at the student and department's discretion. Please see Graduate College policy for committee appointment guidelines.
11. Continuously register for three (3) semester hours of credit each semester while working on a DNP Project.
12. Once admitted, students will need to continue to take a minimum of 3 credits per semester for both fall and spring semesters to maintain their place in the program until graduation. A leave of absence may be requested by students.The DNP Project is a culmination project based on guidelines from the American Association of Colleges of Nursing (AACN) DNP essentials. This is a project completed over 3 semesters in the program.
13. Students in the DNP program are required to abide by the policies for UNLV School of Nursing and are also required to abide by the policies of the UNLV Graduate College and University.

Graduation Requirements

See Plan Graduation Requirements below.

Subplan 4 Requirements: BSN to DNP Academic Leadership Track

Total Credits Required: 60

Course Requirements

Required Courses – Credits: 54

NURS 703 - Advanced Health Assessment
NURS 704 - Advanced Pathophysiology and Genetics I

NURS 706 - Nursing Theory and Research
NURS 708 - Analysis and Economics of Healthcare Systems and Delivery
NURS 709 - Teaching and Learning in Nursing Education
NURS 710 - Course Level Evaluation Strategies for Nurse Educators
NURS 711 - Informatics and Quality Improvement
NURS 717 - The Accreditation Process
NURS 718 - Organizational Management for the Advanced Practice Nurse
NURS 719R - Health & Public Policy for Advanced Practice of Nursing
NURS 721 - Principles and Strategies for Clinical Supervision in Nursing
NURS 724 - Developing & Evaluating Curriculum for Nursing Education
NURS 729R - Translational Evidence for Healthcare Systems
NURS 730 - Advanced Pharmacology and Genetics II
NURS 733 - Nursing Education Practicum I
NURS 765 - DNP Residency
NURS 767 - Collaboration, Communication & Negotiation for the Nurse Leader
NURS 768 - DNP Forum & Role Transformation
NURS 772 - The Nurse as Leader

DNP Project – Credits: 6

NURS 788 - DNP Project

Students who wish to step out of the DNP program and receive a master's degree will be required to complete NURS 743, Nursing Education Practicum II nd NURS 753, Scholarly Project.

Degree Requirements

1. Complete 60 credits with a minimum Grade Point Average (GPA) of 3.00.
2. Maintain a cumulative grade point average of 3.00 or above each semester enrolled.
3. Receive a grade of "B" (3.00) or above in all required cognate and nursing courses. If less than a "B", for example a B- (2.7) is earned, the course must be repeated. The student must be in good standing to repeat a course and any required course may be repeated only one time.
4. A student may register for a course only two times. A student who has registered for the same course twice and has withdrawn or received a grade less than "B" is ineligible for readmission unless approved by the Graduate College.
5. If a student fails two courses or has withdrawn from two courses or received a grade less than "B" in two courses he/she is ineligible for readmission unless approved by the Graduate College.
6. Complete a minimum of six (6) semester hours in each calendar year.
7. Each student, upon admission, will be assigned an advisor. The advisor (and later the Advisory Committee including the chair of the Advisory committee if in place) will plan the student's entire degree program of study and submit it to the Graduate College by the end of the second semester of enrollment. The degree program requires the approvals of the student, advisor, and the DNP Coordinator, the appropriate academic dean, and the Graduate Dean.
8. The Advisor monitors the student's progress through the program of study. In addition, the DNP Coordinator will monitor the student's progress, including adherence to all established policies of the Graduate College. At any given time, the student can request a change of advisor or chair of Advisory Committee. However, it is the student's responsibility to secure approval of an individual faculty member who agrees to serve as his or her advisor before changing the original advisor, subject to Graduate College approval. Also, it is the student's responsibility to make sure that his or her chosen advisor or chair has current full graduate faculty status at UNLV, which can be checked at: http://graduatecollege.unlv.edu/facstaff/status.html.
9. Students will select a chair for their DNP Project committee in the first semester and be required to file the Committee Appointment Form with the DNP coordinator when this is completed. More specific information about the DNP Project

will be discussed in the courses it is embedded in the program.

10. In consultation with his/her advisor, a student will organize an advisory committee of at least two departmental members. In addition, a third member from outside the department, known as the Graduate College Representative, must be appointed. An additional committee member may be added at the student and department's discretion. Please see Graduate College policy for committee appointment guidelines.
11. Continuously register for three (3) semester hours of credit each semester while working on a DNP Project.
12. Once admitted to the DNP program, students will need to continue to take a minimum of 3 credits per semester for both fall and spring semesters to maintain their place in the program until graduation. A leave of absence may be requested by students.
13. The DNP Project is a culmination project based on guidelines from the American Association of Colleges of Nursing (AACN) DNP essentials. This is a project completed over three semesters in the program.
14. Students in the DNP program are required to abide by the policies for UNLV School of Nursing. Students in the DNP program are also required to abide by the policies of the UNLV Graduate College.

Graduation Requirements

See Plan Graduation Requirements below.

Plan Graduation Requirements

1. Submit all required forms to the Graduate College and then apply for graduation up to two semesters prior to completing his/her degree requirements.
2. The student must submit and successfully defend his/her DNP Project by the posted deadline. The defense must be advertised and is open to the public.
3. Student must submit his/her approved, properly formatted hard-copy project to the Graduate College, and submit the approved electronic version to ProQuest by the posted deadline.

Doctor of Philosophy - Nursing

Plan Description

Individuals who complete the Ph.D. in Nursing Program will be prepared for roles as leader, scholar/researcher, and educator in academia, the health care industry, or government and private organizations focused on health care. Graduates will demonstrate the following program outcomes:

1. Provide leadership in the advancement of nursing as a scientific and practice discipline through the conduct of culturally competent scholarship and identification of implications for policy, the discipline, and the profession.
2. Conduct and communicate original research that generates new knowledge.
3. Develop, implement and evaluate innovative approaches to teaching and learning.

Course Offerings

Doctoral courses offered by the School of Nursing are web-based. However, students are required to be on campus three days at the beginning of the first semester of enrollment. These meeting times and dates are set in advance to allow students adequate time to plan their schedules and most likely occur on Friday and/or Saturday. Students are also required to be on campus for their oral comprehensive exams, proposal defense, and final dissertation defense.

Programs of Study

There are three options in the current Ph.D. in Nursing Program: Nursing Education Track, Sustainable Health Track, and the Post-D.N.P. to Ph.D. Track. The UNLV School of Nursing (SON) Ph.D. in Nursing Curriculum Framework outlines the shared required core courses in the Ph.D. Nursing Program.

For more information about your program, including your graduate program handbook and learning outcomes please visit the Degree Directory.

Learning outcomes for specific subplan tracks can be found below:

- Doctor of Philosophy - Nursing; Nursing Education
- Doctor of Philosophy - Nursing; Post Doctor of Nursing Practice

Plan Admission Requirements

Applications available on the UNLV Graduate College website.

1. Admission into the nursing doctoral program is contingent upon the qualifications of the applicant and the availability of open positions. Students are admitted once a year in the fall. Applicants must have submitted all required materials by the deadline posted on the School of Nursing website.
2. For the Post-D.N.P. to Ph.D. Track an earned Doctorate in Nursing Practice degree from a program accredited by the National League for Nursing Accrediting Commission or the Commission on Collegiate Nursing Education is required. In addition to the required courses below, students must have 17 units from an accredited DNP program.
3. Earned master's degrees in nursing (MSN) from programs accredited by the National League for Nursing Accrediting Commission or the Commission on Collegiate Nursing Education; persons educated outside the United States need to demonstrate proof of equivalent education and advanced degrees.
4. Persons holding a bachelor's degree in nursing and master's degree in a health-related discipline from an accredited institution are eligible for admission but will need to successfully complete the following courses, or their equivalents, from the MSN program prior to taking doctoral courses:
    1. NURS 705 or NURS 755
    2. NURS 706
    3. NURS 707
    4. NURS 713
5. A minimal grade point average of 3.5 (4.0 = A) earned in a nursing or health-related master's program of study.

6. Successful completion of graduate course work in statistics and research with a B or better prior to admission.
7. Licensed as a Registered Nurse in at least one state or territory of the US.
8. Applicants must present GRE scores on verbal, quantitative and analytic measures. The exam must have been taken within the last five years.
9. Three letters of recommendation are required from individuals who can evaluate the applicant's motivation, academic capability, scholarship potential, and personal integrity for doctoral study in nursing.
10. Evidence of current health and malpractice insurance. Accepted applicants must, prior to enrollment, show proof of completion of the Hepatitis B vaccine series, a titer indicating presumptive immunity, or a statement from a health care provider indicating that vaccination is contraindicated for health reasons and validation of a negative drug screen. Other immunization and health data requirements are identified in the student handbook.
11. Applicants must submit the following written materials for review:
    1. Two representative samples of scholarly work (e.g., thesis, demonstration project, publications, etc.).
    2. Written statement of personal career, educational and scholarship goals including identification of research interests. The applicant's research interests must be within the realm of our faculty expertise in order to pursue a doctoral degree in this program.
    3. Curriculum Vita or resume.
12. Applicants are required to participate in an interview with members of the Admissions Committee, either in person or by telephone.
13. All domestic and international applicants must review and follow the Graduate College Admission and Registration Requirements.

Students are accepted into a degree program as described in the Graduate Catalog. The faculty and corresponding sub-disciplines and sub-plans within the described programs are subject to change at any time.

Plan Requirements

See Subplan Requirements below

Subplan 1 Requirements: Nursing Education Track

Total Credits Required: 62

Course Requirements

Core Courses – Credits: 32

NURS 709 - Teaching and Learning in Nursing Education
NURS 770 - Knowledge Development in Nursing
NURS 771 - Theory Development in Nursing
NURS 772 - The Nurse as Leader
NURS 775 - Statistical Methods for Nursing Research I: Univariate Methods
NURS 776 - Statistical Methods for Nursing Research II: Multivariate Methods
NURS 779 - Writing a Research Grant Application
NURS 780 - Quantitative Methods in Nursing
NURS 781 - Qualitative Research Methods in Nursing
NURS 785 - Special Topics in Nursing Research
NURS 789 - Independent Study

Nursing Education Courses – Credits: 18

NURS 710 - Course Level Evaluation Strategies for Nurse Educators
NURS 724 - Developing & Evaluating Curriculum for Nursing Education
NURS 733 - Nursing Education Practicum I
NURS 774 - Educational Theory and Philosophy for Nursing
NURS 790 - Independent Teaching Practicum Seminar
NURS 791 - Independent Teaching Practicum

Dissertation – Credits: 12

NURS 797 - Dissertation

Degree Requirements

See Plan Degree Requirements below.

Graduation Requirements

See Plan Graduation Requirements below.

Subplan 2 Requirements: Sustainable Health Track

Total Credits Required: 62

Course Requirements

Core Courses – Credits: 32

NURS 709 - Teaching and Learning in Nursing Education
NURS 770 - Knowledge Development in Nursing
NURS 771 - Theory Development in Nursing
NURS 772 - The Nurse as Leader
NURS 775 - Statistical Methods for Nursing Research I: Univariate Methods
NURS 776 - Statistical Methods for Nursing Research II: Multivariate Methods
NURS 779 - Writing a Research Grant Application
NURS 780 - Quantitative Methods in Nursing
NURS 781 - Qualitative Research Methods in Nursing
NURS 785 - Special Topics in Nursing Research
NURS 789 - Independent Study

Sustainable Health Courses – Credits: 18

NURS 778 - Geographic Information Systems for Health
NURS 782 - Sustainable Health: Clinical Perspectives
NURS 783 - Economics of Sustaining Health
NURS 784 - Sustainable Health and Public Policy
NURS 777 - Individualized Study/Dissertation Seminar

Dissertation – Credits: 12

NURS 797 - Dissertation

Degree Requirements

See Plan Degree Requirements below.

Graduation Requirements

See Plan Graduation Requirements below.

Subplan 3 Requirements: Post-D.N.P. to Ph.D. Track

Total Credits Required: 45

Course Requirements

Core Courses – Credits: 33

NURS 770 - Knowledge Development in Nursing
NURS 771 - Theory Development in Nursing
NURS 775 - Statistical Methods for Nursing Research I: Univariate Methods
NURS 776 - Statistical Methods for Nursing Research II: Multivariate Methods
NURS 779 - Writing a Research Grant Application
NURS 780 - Quantitative Methods in Nursing
NURS 781 - Qualitative Research Methods in Nursing
NURS 785 - Special Topics in Nursing Research
NURS 789 - Independent Study

Dissertation – Credits: 12

NURS 797 - Dissertation

Degree Requirements

See Plan Degree Requirements below.

Graduation Requirements

See Plan Graduation Requirements below.

Plan Degree Requirements

1. Complete the minimum credits required.
2. Upon approval of the Graduate Coordinator, students in the Nursing Education Track who completed NURS 709, 710, 724, and 733 or equivalent course work during either their masters' or postmasters' education are required to complete a minimum of 50 credits of required course work.

3. A grade point average of 3.0 must be maintained in all courses required for the degree; no grade less than B is acceptable for curricular completion of the program.
4. Upon admission, each student will be assigned to the Ph.D. coordinator as their initial academic advisor who will plan the student's entire program of study. Approved courses will include those taught in other disciplines but must relate to the student's area of research.
5. After the student has selected a research topic, the student will select an advisor based on research focus and needs. Upon student recommendation, faculty acceptance, and approval from both the Ph.D. Coordinator and the Graduate College, the advisor will be changed.
6. In consultation with his/her advisor, a student will organize a dissertation committee of at least three departmental members. In addition, a fourth member from outside the department, known as the Graduate College Representative, must be appointed. An additional committee member may be added at the student and department's discretion. Please see Graduate College policy for committee appointment guidelines.
7. Upon completion of all required course work other than dissertation and research seminar, each student must take a written Comprehensive Examination that will assess a doctoral student's readiness to begin the doctoral dissertation. Specifically, the examination will evaluate a student's written and oral articulation of a possible dissertation research focus or problem. Upon successful completion of the comprehensive exam, the student achieves candidacy and may register for dissertation credits and begin dissertation proposal development followed by independent dissertation study.
    a. Students who do not successfully complete the exam will be placed on academic probation.
    b. Failure to successfully complete the exam or meet the requirements of academic probation will result in separation.
8. Upon successfully completing the comprehensive examination and proposal defense, the student submits a dissertation prospectus to his/her committee for approval. After approval, the student submits a "Prospectus Approval Form" to the Graduate College. The student's major advisor and dissertation committee are responsible for the student's progression through the dissertation.
9. Upon completion of the dissertation, the student must pass a final oral examination which involves the successful defense of the dissertation study. All dissertation committee members must be present for this examination and may question the student following presentation of the study. The defense will be scheduled and conducted in accordance with the Graduate College's policies for dissertation completion.

Plan Graduation Requirements

1. The student must submit all required forms to the Graduate College and then apply for graduation up to two semesters prior to completing his/her degree requirements.
2. The student must submit and successfully defend his/her dissertation by the posted deadline. The defense must be advertised and is open to the public.
3. Student must submit his/her approved, properly formatted hard-copy dissertation to the Graduate College, and submit the approved electronic version to ProQuest by the posted deadline.

Master of Science - Nursing

Plan Description

The M.S.N. program currently offers two tracks: the Family Nurse Practitioner (NP) Track and the Nurse Educator (NE) Track. The role of the nurse practitioner (NP) is that of direct care provider. NPs practice in clinics, long-term care facilities, hospitals, physician offices, managed care corporations and private industries. NPs perform health histories and physical examinations, order and interpret diagnostic tests, diagnose and manage acute and chronic diseases, prescribe medication and treatments, provide patient and family counseling and education regarding lifestyle behaviors and self-care skills and participate in research projects and integrate research findings. The NP blends some aspects of medicine with nursing, using a nursing perspective. When required by state law, as it is in Nevada, NPs have collaborative relationships with physicians. Credentialing examinations, designed by specialty area, are available and required prior to practice in most states. The nurse practitioner track offers courses with the option for full-time and part-time study.

The nurse educator track prepares the graduate for a faculty position within a program of nursing or a nurse educator position in a clinical setting. The student will increase mastery related to teaching and learning and evaluation strategies, curriculum design, and the use of educational technologies. Via directed study and mentorship with experienced faculty, students will enhance clinical expertise in a selected specialty area. Graduate students will have the opportunity to supervise basic nursing students in clinical practice areas and/or work with nurse educators in clinical settings in the preparation, delivery and evaluation of educational programs for nurses. The nurse educator track is a year round program featuring full time and part time options for program completion.

Program Outcomes of the Master of Science Degree

Upon completion of the program the graduate will complete the following core outcomes:

1. Evaluate the principles, personal values, and beliefs that influence ethical decision making, which provides a framework for nursing practice.
2. Communicate effectively as a health care professional, creating collaborative interdependent relationships and act as advocates for the nursing profession and client population.
3. Incorporate nursing theory and evidence based practice in advanced nursing roles.
4. Understand the influences of human diversity and social issues in providing culturally sensitive health promotion and disease prevention strategies in a global society.
5. Assume a leadership role in the management of human, fiscal and physical health care resources to improve nursing practice and health care delivery.

Program Outcomes: Nurse Practitioner Track

1. Competently assess, diagnose, prescribe, evaluate and create a holistic plan of treatment.
2. Articulate the professional role, which includes the ethical code of conduct and scope of advanced practice.
3. Develop and monitor comprehensive, holistic plans of care that address the health promotion and disease prevention needs of diverse client populations.
4. Assess and monitor teaching/learning needs in a diverse client population. Practice ethically in the conduct of research, management and clinical professional practice.

Program Outcomes: Nurse Educator Track

1. Utilize education research to continually improve teaching strategies/skills.
2. Develop a teaching-learning style that facilitates learner development that meets the educational outcomes of the learner.
3. Assess and evaluate at both the course and program level
4. Function as a leader and change agent in nursing education settings.

5. Participate in scholarship to further knowledge and abilities in nursing education.

Master of Science in Nursing

- *Family Nurse Practitioner*
- *Nurse Educator*
- *Pediatric Nurse Practioner*

For more information about your program, including your graduate program handbook and learning outcomes please visit the Degree Directory.

Plan Admission Requirements

Applications available on the UNLV Graduate College website.

Students are admitted to the program in the fall semester of each year based upon competitive selection. Students may enroll in selected (NURS 705, 706, and 713) classes as a non-degree student, but no more than seven credits of course work as a non-degree student will be accepted toward the degree.

Students make simultaneous application to the Graduate College and the School of Nursing.

1. Cumulative Grade Point Average (GPA) of 3.00 or a GPA of 3.00 in the last two years of undergraduate work. (Submit one copy of official transcripts from all previous college and professional schools to the Graduate College and one copy to the School of Nursing). The undergraduate nursing course work must have been completed at a nursing program accredited by the National League for Nursing Accrediting Commission or Commission on Collegiate Nursing Education.
2. Completion of undergraduate courses in nursing research, physical assessment (as currently taught in the undergraduate program of nursing at UNLV), and a course in introductory statistics. All prerequisite courses must be completed with a grade of C (2.00) or better. It is expected that students possess basic computer word processing skills. If not, the student should seek that content prior to enrollment.
3. Completion of a graduate level statistics course with a grade of "B" or better within five years prior to matriculation into the MSN program. (Example EPY 721 or KIN 751.)
4. Two letters of recommendation from former instructors or employers that speak to the applicant's potential to complete the graduate program must be submitted to the school. The evaluators should speak to the student's professional nursing competency, including application of theory, quality of patient care, independent judgment when appropriate; relationship with team members such as nurses, physicians, and others; leadership skills; and personal responsibility and accountability.
5. A current resumé or curriculum vita.
6. Current valid RN license in state of residence. Students should submit a copy of their Nursing License with the word "copy" printed over the top.
7. Accepted applicants must, prior to enrollment, show evidence of current health and malpractice insurance, proof of completion of the Hepatitis B Vaccine series, or a titer indicating presumptive immunity, proof of varicella or a titer indicating presumptive immunity, or a statement from a health care provider indicating that vaccination is contraindicated for health reasons and validation of a negative drug screen and background check. Other immunization and health data requirements are identified in the student handbook.
8. A statement of approximately 300 words describing the student's professional goals and reason for seeking graduate education.
9. Students seeking admission to the FNP track must submit a resume or vita that demonstrates a minimum of one year clinical experience as a registered nurse.
10. Students seeking admission into the Nursing Education Pathway are required to have completed one year of clinical practice prior

to enrollment in the first nursing education practicum course (NURS 733).

11. Selection into one of the approved pathways is based upon the applicant's qualifications (academic and professional), applicant's strengths as compared to other applicants, and upon the number of available openings.
12. All domestic and international applicants must review and follow the Graduate College Admission and Registration Requirements.

Students are accepted into a degree program as described in the Graduate Catalog. The faculty and corresponding sub-disciplines and sub-plans within the described programs are subject to change at any time.

Plan Requirements

See Subplan Requirements below.

Subplan 1 Requirements: Family Nurse Practitioner Track

Total Credits Required: 46

Course Requirements

MSN Core – Credits: 18

NURS 703 - Advanced Health Assessment
NURS 704 - Advanced Pathophysiology and Genetics I
NURS 706 - Nursing Theory and Research
NURS 711 - Informatics and Quality Improvement
NURS 713 - Health Policy and Population Health
NURS 730 - Advanced Pharmacology and Genetics II

MSN FNP Required Courses – Credits: 25

NURS 701 - Diagnostic Reasoning and Clinical Decision Making for the FNP
NURS 714 - Family Theory and Health Promotion
NURS 740R - FNP Adult and Women's Health
NURS 750R - FNP Children and OB
NURS 752 - Nurse Practitioner Business and Roles
NURS 760R - FNP Geriatric and Chronic Illness

Culminating Experience - Credits: 3

NURS 761 - Clinical Synthesis

Degree Requirements

1. Maintain a cumulative grade point average of 3.00 or above each semester enrolled.
2. Receive a grade of B (3.00) or above in all required cognate and nursing courses. If less than a B, for example a B- (2.70), is earned, the course must be repeated. The student must be in good standing to repeat a course and any required course may be repeated only one time.
3. A student may register for a course only two times. A student who has registered for the same course twice and has withdrawn or received a grade less than B is ineligible for readmission unless approved by the UNLV Graduate College.
4. If a student fails two courses or has withdrawn from two courses or received a grad less than B in two courses he/she is ineligible for readmission unless approved by the Graduate College.
5. Complete a minimum of six semester hours in each calendar year.
6. Continuously register for a minimum of three (3) semester hours of credit each semester while working on the thesis or capstone project.
7. In order to maintain clinical competency the FNP student must continuously register for at least three (3) semester hours of NURS 773 (clinical practicum) each semester while working on the thesis or capstone project if all required clinical courses are complete.
8. Residency Credits: No more than three courses (maximum 7 credits) may be transferred into the program. The MSN Coordinator and the Graduate College must approve transfer credit.
9. Credit by Challenge Examination: Graduate courses with a 700 number or above may not be challenged for credit.
10. Six-Year Completion Rule: All degree requirements must be completed within six calendar years from the date of matriculation. No credit may be used in an advanced degree program for course work

completed more than six calendar years immediately preceding the term in which all degree requirements are completed.

11. Graduation Requirements: Students have a choice of the catalog under which they wish to graduate. They may choose between: 1) the year of official matriculation, or 2) the year of graduation. Students are encouraged to meet the requirements of the current catalog.

Graduation Requirements

1. The student must submit all required forms to the Graduate College and then apply for graduation up to two semesters prior to completing his/her degree requirements.
2. Comprehensive Examination: Students in all tracks will be formally evaluated by an Examination Committee for their thesis or capstone project. (More detailed information is provided in the MSN Handbook.)
3. Complete a thesis or capstone project.
4. If completing a thesis:
    1. The student must submit and successfully defend his/her thesis by the posted deadline. The defense must be advertised and is open to the public.
    2. The student must submit his/her approved, properly formatted thesis to the Graduate College, and submit the approved electronic version to ProQuest by the posted deadline.

Subplan 2 Requirements: Nursing Education Track

Total Credits Required: 33

Course Requirements

MSN Core – Credits: 18

NURS 703 - Advanced Health Assessment
NURS 704 - Advanced Pathophysiology and Genetics I
NURS 706 - Nursing Theory and Research
NURS 711 - Informatics and Quality Improvement
NURS 713 - Health Policy and Population Health
NURS 730 - Advanced Pharmacology and Genetics II

MSN EDU Required Courses – Credits: 14

NURS 709 - Teaching and Learning in Nursing Education
NURS 710 - Course Level Evaluation Strategies for Nurse Educators
NURS 724 - Developing & Evaluating Curriculum for Nursing Education
NURS 733 - Nursing Education Practicum I
NURS 743 - Nursing Education Practicum 2

Culminating Experience – Credits: 1

NURS 753 - Nurse Educator Scholarship Project

Degree Requirements

1. Maintain a cumulative grade point average of 3.00 or above each semester enrolled.
2. Receive a grade of B (3.00) or above in all required cognate and nursing courses. If less than a B, for example a B- (2.70), is earned, the course must be repeated. The student must be in good standing to repeat a course and any required course may be repeated only one time.
3. A student may register for a course only two times. A student who has registered for the same course twice and has withdrawn or received a grade less than B is ineligible for readmission unless approved by the UNLV Graduate College.
4. If a student fails two courses or has withdrawn from two courses or received a grad less than B in two courses he/she is ineligible for readmission unless approved by the Graduate College.
5. Complete a minimum of six semester hours in each calendar year.
6. Continuously register for a minimum of three (3) semester hours of credit each semester while working on the thesis, professional paper, or research utilization project.
7. In order to maintain clinical competency the FNP student must continuously register for

at least three (3) semester hours of NURS 773 (clinical practicum) each semester while working on the thesis or capstone project if all required clinical courses are complete

8. Residency Credits: No more than three courses (maximum 7 credits) may be transferred into the program. The MSN Coordinator and the Graduate College must approve transfer credit.
9. Credit by Challenge Examination: Graduate courses with a 700 number or above may not be challenged for credit.
10. Six-Year Completion Rule: All degree requirements must be completed within six calendar years from the date of matriculation. No credit may be used in an advanced degree program for course work completed more than six calendar years immediately preceding the term in which all degree requirements are completed.
11. Graduation Requirements: Students have a choice of the catalog under which they wish to graduate. They may choose between: 1) the year of official matriculation, or 2) the year of graduation. Students are encouraged to meet the requirements of the current catalog.

Graduation Requirements

1. The student must submit all required forms to the Graduate College and then apply for graduation up to two semesters prior to completing his/her degree requirements.
2. Comprehensive Examination: Students in all tracks will be formally evaluated by an Examination Committee for their thesis, research utilization project, or professional paper. (More detailed information is provided in the MSN Handbook.)
3. Complete a thesis, research utilization project, or professional paper.
4. If completing a thesis:
    1. The student must submit and successfully defend his/her thesis by the posted deadline. The defense must be advertised and is open to the public.
    2. The student must submit his/her approved, properly formatted thesis to the Graduate College, and submit the approved electronic version to ProQuest by the posted deadline.

Subplan 3 Requirements: Pediatric Nurse Practitioner

Total Credits Required: 46

Course Requirements

MSN Core – Credits: 18

NURS 703 - Advanced Health Assessment
NURS 704 - Advanced Pathophysiology and Genetics I
NURS 706 - Nursing Theory and Research
NURS 711 - Informatics and Quality Improvement
NURS 713 - Health Policy and Population Health
NURS 730 - Advanced Pharmacology and Genetics II

MSN PNP Required Courses – Credits: 25

NURS 702 - Diagnostic Reasoning and Clinical Decision Making for the PNP
NURS 714 - Family Theory and Health Promotion
NURS 734 - Primary Prevention in Pediatrics: The Well Child & Adolescent
NURS 744 - Primary Care in Pediatrics: Common Problems
NURS 752 - Nurse Practitioner Business and Roles
NURS 764 - Primary Prevention in Pediatrics: Chronic Illness

Culminating Experience - Credits: 3

NURS 761 - Clinical Synthesis

Degree Requirements

1. Maintain a cumulative grade point average of 3.00 or above each semester enrolled.
2. Receive a grade of B (3.00) or above in all required cognate and nursing courses. If less than a B, for example a B- (2.70), is earned, the course must be repeated. The student must be in good standing to repeat a course and any required course may be repeated only one time.

3. A student may register for a course only two times. A student who has registered for the same course twice and has withdrawn or received a grade less than B is ineligible for readmission unless approved by the UNLV Graduate College.
4. If a student fails two courses or has withdrawn from two courses or received a grad less than B in two courses he/she is ineligible for readmission unless approved by the Graduate College.
5. Complete a minimum of six semester hours in each calendar year.
6. Continuously register for a minimum of three (3) semester hours of credit each semester while working on the thesis or capstone project.
7. In order to maintain clinical competency the PNP student must continuously register for at least three (3) semester hours of NURS 773 (clinical practicum) each semester while working on the thesis or capstone project if all required clinical courses are complete.
8. Residency Credits: No more than three courses (maximum 7 credits) may be transferred into the program. The MSN Coordinator and the Graduate College must approve transfer credit.
9. Credit by Challenge Examination: Graduate courses with a 700 number or above may not be challenged for credit.
10. Six-Year Completion Rule: All degree requirements must be completed within six calendar years from the date of matriculation. No credit may be used in an advanced degree program for course work completed more than six calendar years immediately preceding the term in which all degree requirements are completed.
11. Graduation Requirements: Students have a choice of the catalog under which they wish to graduate. They may choose between: 1) the year of official matriculation, or 2) the year of graduation. Students are encouraged to meet the requirements of the current catalog.

Graduation Requirements

1. The student must submit all required forms to the Graduate College and then apply for graduation up to two semesters prior to completing his/her degree requirements.
2. Comprehensive Examination: Students in all tracks will be formally evaluated by an Examination Committee for their thesis or capstone project. (More detailed information is provided in the MSN Handbook.)
3. Complete a thesis or capstone project.
4. If completing a thesis:
    1. The student must submit and successfully defend his/her thesis by the posted deadline. The defense must be advertised and is open to the public.
    2. The student must submit his/her approved, properly formatted thesis to the Graduate College, and submit the approved electronic version to ProQuest by the posted deadline.

Plan Graduation Requirements

Refer to your subplan for Graduation Requirements.

School of Nursing Courses

NURS 501 - Critical Care Nursing
Credits 6
This course provides RNs a beginning understanding of Critical Care Nursing and the knowledge required within this role. The student will be prepared to work in critical care settings, including ICU, CCU, Recovery Room or the Emergency Room. The course is composed of online didactic content, laboratory skills practice, simulation experience and clinical internship.

NURS 622 - AIDS: An Interdisciplinary Perspective
Credits 3
Interdisciplinary survey of various issues surrounding AIDS (Acquired Immune Deficiency Syndrome) as viewed from several conceptual, professional, and experiential disciplines. Offers the most current cognitive information about AIDS and provides an affective awareness of major issues related to the disease.

NURS 654 - Introduction to Forensic Nursing
Credits 3
This course has been approved for graduate credit. A full description of this course may be found in the Undergraduate Catalog under the corresponding 400 number.

NURS 675 - Nursing Systems Management
Credits 3
This course has been approved for graduate credit. A full description of this course may be found in the Undergraduate Catalog under the corresponding 400 number.

NURS 676 - Introduction to Nursing Case Management
Credits 3
This course has been approved for graduate credit. A full description of this course may be found in the Undergraduate Catalog under the corresponding 400 number.

NURS 677 - Nursing Case Management Systems
Credits 3
This course has been approved for graduate credit. A full description of this course may be found in the Undergraduate Catalog under the corresponding 400 number.

NURS 701 - Diagnostic Reasoning and Clinical Decision Making for the FNP
Credits 2
Student applies principles learned in advanced health assessment by reinforcing diagnostic reasoning skills needed to assess and manage acute and chronically ill patients across the lifespan. Theory will include evaluation of case studies to develop differential diagnoses. 45 hours of clinical practice in simulation lab for practical application.
Corequisite NURS 703 or Department consent

NURS 702 - Diagnostic Reasoning and Clinical Decision Making for the PNP
Credits 2
This course applies the principles learned in advance health assessment by reinforcing diagnostic reasoning skills to assess and manage acute and chronically ill children and adolescents. Theoretical components include evaluation of case studies to develop differential diagnosis. 45 clinical hours are incorporated for hands on clinical practice for safe patient care.
Corequisite NURS 703 or Department Consent.

NURS 703 - Advanced Health Assessment
Credits 3
This course will build upon health assessment skills developed in the nursing undergraduate program. Emphasis will include developing advanced techniques in history taking and physical examination to prepare students for roles having components of direct care practices.
Prerequisites Admission to Graduate Program or consent of MSN Program Coordinator.

NURS 704 - Advanced Pathophysiology and Genetics I
Credits 3
Emphasis on physiologic mechanisms and pathophysiology of disease from a cellular perspective to include growth and development through the life span. Focus on genomics in basic and molecular concepts in biology, human diversity and variation, genetic disorders, influences on chromosome, gene action and inheritance modes.

Prerequisites Admission to Graduate Program or consent of MSN Program Coordinator.

NURS 706 - Nursing Theory and Research
Credits 3
This course is designed to explore historical, philosophical, and bio-psychosocial foundations of advanced nursing practice. Nursing philosophy, theory, research, and practice will be analyzed. Evidence Based Practice will be explored; concept analysis, qualitative and quantitative research, and application of evidence based practice in theoretical and clinical application.
Prerequisites Admission to Graduate Program or consent of MSN Program Coordinator.

NURS 708 - Analysis and Economics of Healthcare Systems and Delivery
Credits 3
Focus on the role of advanced practice nurses in the analysis and economics of healthcare systems and healthcare delivery. Emphasis will be placed on research and knowledge of the impact of economic, socio-political, ethical, and other forces on the economics and delivery of and access to healthcare.
Prerequisites Admission to DNP program and consent of instructor.

NURS 709 - Teaching and Learning in Nursing Education
Credits 3
Analyzes traditional and alternative teaching and learning concepts in the context of the role of nurse educator. Development of a personal philosophy of education and how it connects to teaching/learning expectations. Focus on development of self within the role of nurse educator.
Prerequisites Admission into graduate program or consent of appropriate program coordinator (MSN or PhD)

NURS 710 - Course Level Evaluation Strategies for Nurse Educators
Credits 3
Develops formative/process and summative/outcome evaluations for learning within classroom, clinical, and laboratory settings for use with students, patients or clinical staff. Attention to legal/ethical issues related to evaluation, including cultural bias and accommodation for students with disabilities.
Prerequisites Admission to Graduate Program or permission of appropriate program coordinator (MSN or PhD)

NURS 711 - Informatics and Quality Improvement
Credits 3
Introduces informatics theory and application of quality and safety practices focusing on the impact of informatics on nursing education, healthcare, improving outcomes, and providing cost-effective health care.
Prerequisites NURS 706

NURS 712 - Strategies for Management of Healthcare Systems and Performance Improvement
Credits 3
Focus will be on the analysis of theories and research on individual and organizational change, including incremental and transformational change. Utilization and integration of information and communication theories and technology to improve human performance will also be discussed.
Prerequisites Admission to DNP program, consent of instructor and NURS 708, NURS 711, NURS 719R.

NURS 713 - Health Policy and Population Health
Credits 3
Examines selected health problems for specific populations from a political, cultural, social, educational, educational, environmental, economic and ethical perspective. Analysis of research and public policy relevant to the prevention, treatment and amelioration of the problems, initiate change strategies to impact public policy related to the selected problems.
Prerequisites Admission to Graduate Program or consent of MSN Program Coordinator.

NURS 714 - Family Theory and Health Promotion
Credits 2
Focus on family systems, theories in the context of society and culture. Emphasis on family as a client in holistic assessment and health promotion across the lifespan.
Prerequisites Admission to Graduate Program or consent of MSN Program Coordinator.

NURS 715 - Business Management for Nurse Practitioners

Credits 2
Focus is on issues surrounding human and material resource management in an advanced practice setting. The student applies knowledge of health care delivery environments and institutional requirements to explore issues regarding personnel and budgetary management.

Prerequisites Admission to DNP Program and consent of instructor.

NURS 716 - Population Health: Analysis and Evaluation
Credits 3
Prepares students to utilize epidemiology and advanced practice nursing concepts and strategies in the analysis and evaluation of health problems of groups that may be encountered by the nurse practitioner.
Prerequisites Admission to DNP Program, consent of instructor, and NURS 706, NURS 719R, NURS 729R.

NURS 717 - The Accreditation Process
Credits 1
Prepares the student to recognize assessment, data collection, and documentation requirements in preparation for a nursing education program's accreditation and contribute to writing a self-study report for an accreditation site visit.
Prerequisites Admission to DNP Program, consent of instructor, and NURS 706, NURS 724

NURS 718 - Organizational Management for the Advanced Practice Nurse
Credits 3
Focuses on quality care by advanced practice nurses in a variety of health institutions. Explores advanced nursing practice issues for their organizational factors, reviews methods of assessing clinical outcomes, and explores the relationship of quality care with values, ethics, and models of care.
Prerequisites Admission to DNP Program, consent of instructor, NURS 706 and NURS 708.

NURS 719R - Health & Public Policy for Advanced Practice of Nursing
Credits 3
Prepares nursing leaders to analyze and influence health policy. Defines problems, critiques potential solutions, assesses political influences, designs interventions for policy-making, and evaluates outcomes.
Prerequisites Admission to the DNP Program or permission of instructor.

NURS 721 - Principles and Strategies for Clinical Supervision in Nursing
Credits 3
Prepares the student to apply nursing education and clinical supervision concepts and strategies to the clinical supervision of undergraduate and graduate nursing students in a variety of healthcare settings.
Prerequisites Admission to DNP Program, consent of instructor and NURS 703, NURS 706, NURS 709, NURS 724, NURS 729R, NURS 730.

NURS 724 - Developing & Evaluating Curriculum for Nursing Education
Credits 4
Develop curriculum for educational programs within the context of academic or clinical settings. Design curriculum level evaluation of the program that is developed. Focus on connection to larger unit mission, program and level outcomes, use of evaluative theories to guide process and inclusion of stakeholders throughout.
Prerequisites NURS 710 or admission to graduate program or consent of appropriate program coordinator (MSN/PhD).

NURS 725 - Scientific Underpinnings of the DNP in Advanced Practice Nursing
Credits 2
Articulates and supports a role for the nursing doctorate to prepare nurse leaders within the discipline of nursing.
Prerequisites Admission to the DNP Program.

NURS 728R - Analysis of Health Organizations
Credits 2
An introduction to the analysis of the health/human service organization as a particular type of complex organization.
Prerequisites Admission to the DNP Program or permission of instructor.

NURS 729R - Translational Evidence for Healthcare Systems
Credits 3

Critical analysis and synthesis of the literature and available data to determine and implement evidence-based science into healthcare practice.
Prerequisites Admission to the DNP Program or permission of instructor.

NURS 730 - Advanced Pharmacology and Genetics II
Credits 3
Focuses on the clinical application of pharmacologic and pharmacy kinetics principles in the management of selected health problems of adults and children. Focus on drugs commonly used for adults and children in primary care settings. Focus on application of pharmacogenomics and pharmacogenetics to pharmacology.
Prerequisites NURS 704

NURS 732 - Economics of Healthcare Delivery
Credits 3
Addresses basic concepts and techniques for financial management as it relates to clinical practice, clinical teaching, and research in healthcare programs and organizations.
Prerequisites Completion of the first term courses in the DNP program or permission of the instructor.

NURS 733 - Nursing Education Practicum I
Credits 2
Applies strategies and concepts of the nurse educator role in clinical or classroom setting in area of clinical specialty.
Prerequisites NURS 709, NURS 710, and NURS 724.

NURS 734 - Primary Prevention in Pediatrics: The Well Child & Adolescent
Credits 2
Primary care of children and adolescents, specifically, advanced nursing assessment and interventions designed to promote the wellness of children, are emphasized. Includes screening anticipatory guidance and health promotion strategies. Financial, legal and ethical issues related to practice with children and adolescents are addressed.
Notes Twelve hours of precepted practium per week.
Prerequisites NURS 703, NURS 730 and NURS
Corequisite NURS 734L

NURS 734L - Primary Prevention in Pediatrics: The Well Child & Adolescent Clinical
Credits 4
This course provides the PNP student with the knowledge and skills necessary to promote the wellness of children, birth through adolescence. Includes screening, anticipatory guidance and health promotion strategies.
Notes May not be repeated for credit.
Grading S/F
Prerequisites NURS 702, NURS 703, NURS 730
Corequisite NURS 734

NURS 739 - Biobehavioral Approaches in Nursing Research
Credits 3
Presents an overview of the common theories and research methodologies necessary to conduct biobehavioral research. The emphasis of the course is on identifying the student's phenomenon of interest, identifying an appropriate theory and developing research strategies to test the biological and behavioral components of this identified phenomenon.

NURS 740R - FNP Adult and Women's Health
Credits 6
This course provides the FNP student with the knowledge and skills necessary to manage patients in the primary care setting. Specific content relates to primary care needs of adults, including adolescent through older adults, in screening for, preventing, and/or managing common acute and chronic conditions.
Notes This course has a non-credit clinical component. For more information, please refer to the course syllabus. **Prerequisites** NURS 701, NURS 703 and NURS 730

NURS 741 - Biobehavioral Mechanisms, Pathways, and Measurements
Credits 3
An overview of behavioral genetics, the basics of cell biology and genetics, and examples of common molecular pathways related to human diseases and symptoms. The course will highlight: (1) biological markers, including genetic and behavioral markers, and biological pathways associated with illnesses;

and (2) biological and behavioral measurements.
Prerequisites NURS 739

NURS 742 - Advanced Nursing Informatics
Credits 2
Analyze the use of computer and information science and systems to manage and process data, information and knowledge in nursing education.
Notes Nursing specialty serves as the context for course assignments.
Prerequisites Admission to the Graduate Nursing Program or Certificate Program for Nurse Educators.

NURS 743 - Nursing Education Practicum 2
Credits 2
Second practicum to apply strategies and concepts of the nurse educator role in clinical or classroom setting in area of practice specialty.
Prerequisites NURS 733.

NURS 744 - Primary Care in Pediatrics: Common Problems
Credits 2
This course is developmentally organized to provide knowledge and experience to care for acute episodic illnesses of children, adolescents and young adults in primary health care settings. Students will synthesize knowledge of developmental, physiological, psychological, and sociocultural factors in the assessment and management of acute illness.
Notes Nine hours per week of precepted practicum.
Prerequisites NURS 734 and NURS 734L
Corequisite NURS 744L

NURS 744L - Primary Prevention in Pediatrics: Common Problems
Credits 2 to 4
This course provides the PNP student the working knowledge and skills necessary to care for assessment, diagnosis, management and evaluation of common acute health problems affecting children from infancy through adolescence. It puts into practice didactic content from NURS 744.
Notes Can be repeated up to 4 credits.
Grading S/F
Prerequisites NURS 734, NURS 734L
Corequisite NURS 744

NURS 745 - Healthcare Information Systems & Technology
Credits 3
Leadership models for nurse educator, advanced practice, or management roles. Mentorship, service, knowledge dissemination and impact of diversity on ethical leadership practices are included.
Prerequisites Completion of the second term of the DNP Program or permission of the instructor.

NURS 746 - Scholarly Project Applying Biobehavioral Concepts
Credits 4
Builds upon student's knowledge and skills in biobehavioral approaches in nursing research as well as biological mechanisms, pathways, and measurements. Theoretical application of concepts evaluating a common patient symptom and corresponding biological markers and behavioral measures. Students will critique current literature to synthesize and formulate an integrative review.
Prerequisites NURS 739 and NURS 741

NURS 750R - FNP Children and OB
Credits 6
Theoretical and clinical concepts of primary and secondary prevention for children and pregnant women. Focus is on health maintenance, teaching, screening, and clinical management of common acute health problems. Emphasis is on wellness management, differential diagnoses, and pharmacologic/non-pharmacologic treatment options (15 hours of clinical per week).
Notes This course has a non-credit clinical component. For more information, please refer to the course syllabus.
Prerequisites NURS 740R

NURS 752 - Nurse Practitioner Business and Roles
Credits 3
Explores transitioning into role of nurse practitioner as individual and part of interprofessional care team. Focuses on ethical decision making, legal issues, various practice plans, billing, credentialing, and legal certification requirements for practice.
Prerequisites NURS 704 , NURS 730

NURS 753 - Nurse Educator Scholarship Project
Credits 1
Examines literature and best practices to identify a gap in the nursing education setting, provides a plan to address the gap based on change theory,

recommends implementation strategies, and creates an evaluation plan.
Prerequisites NURS 706, NURS 711 and NURS 733

NURS 755 - Nursing Educator Role Development
Credits 2
Explores the role of the nurse educator including development in the areas of teaching, research, and service. Examines interpersonal dynamics and team-work in academic and practice settings, functioning within institutional expectations, developing a teaching portfolio, legal issues, and future directions in nursing education.

NURS 760R - FNP Geriatric and Chronic Illness
Credits 6
Culminating course focusing on clinical experiences to develop skill and knowledge in providing care to families in primary care settings. Students practice with increasing independence under the supervision of preceptors and clinical instructors. Students will study complex, multiple co-morbidities in all levels of primary, secondary, and tertiary care.
Notes This course has a non-credit clinical component. For more information, please refer to the course syllabus.
Prerequisites NURS 714 and NURS 750R

NURS 761 - Clinical Synthesis
Credits 3
This clinical course serves as a culminating experience. Students will work with their clinical preceptor(s) to integrate and apply previously acquired knowledge and skills and will demonstrate achievement of expected program outcomes.
Notes This course has a non-credit clinical component. For more information, please refer to the course syllabus.
Prerequisites NURS 744 or NURS 750R

NURS 763 - Management Strategies for Nursing & Healthcare Systems
Credits 3
Analysis and application of human resource management, public relations, and marketing strategies for effective and efficient use of human talent to accomplish organizational goals.
Prerequisites Completion of term 3 of DNP Program.

NURS 764 - Primary Prevention in Pediatrics: Chronic Illness
Credits 2
Builds upon student's knowledge and skills in biobehavioral approaches in nursing research as well as biological mechanisms, pathways, and measurements. Theoretical application of concepts evaluating a common patient symptom and corresponding biological markers and behavioral measures. Students will critique current literature to synthesize and formulate an integrative review.
Notes Nine hours of precepted clinical experience in primary care per week.
Prerequisites NURS 734, NURS 744
Corequisite NURS 764L

NURS 764L - Primary Prevention in Pediatrics: Chronic Illness Clinical
Credits 4
This course provides the PNP student the working knowledge and skills necessary to care for assessment, diagnosis, management and evaluation of chronic health problems affecting children from infancy through adolescence. It applies didactic content from NURS 764.
Notes Nonrepeatable for credit.
Grading S/F
Prerequisites NURS 734 and NURS 744
Corequisite NURS 764

NURS 765 - DNP Residency
Credits 4
Residency to apply program concepts and develop and implement strategies for practice-level and/or system-wide practice initiatives to improve the quality of care.
Prerequisites Admission to the DNP Program and NURS 719R, NURS 725, NURS 728R, NURS 729R, NURS 732 and NURS 767.

NURS 767 - Collaboration, Communication & Negotiation for the Nurse Leader
Credits 2
The utilization of collaboration, communication and negotiation for implementation of practice models, peer review, practice guidelines, health policy, standards of care, and other scholarly products.
Prerequisites Admission to the DNP Program and NURS 729R and NURS 772.

NURS 768 - DNP Forum & Role Transformation
Credits 2
Examination of issues and challenges in the DNP role and skills and strategies to conceptualize, articulate, plan, and actualize a career as a nurse leader.
Prerequisites NURS 719R ,NURS 725, NURS 728R, NURS 729R , NURS 767 , and NURS 772

NURS 770 - Knowledge Development in Nursing
Credits 3
Offers a disciplinary context for doctoral study in nursing. The history and evolution of nursing knowledge is examined. Emphasis is on debates regarding what is known and how it is known.
Prerequisites Enrollment in nursing doctoral program.

NURS 771 - Theory Development in Nursing
Credits 3
Theoretical frameworks that guide the development of nursing knowledge. The methods and processes of theory development are analyzed.
Prerequisites Enrollment in doctoral program.

NURS 772 - The Nurse as Leader
Credits 3
Leadership models as templates for nurse leader. Factors that influence leadership will be explored.
Prerequisites Admission into doctoral (DNP or PhD) program or permission of the instructor.

NURS 773 - Clinical Practicum
Credits 3 - 6
Designed for students continuing a clinical practicum while completing other program requirements. Students enrolled in this clinical practicum course must register for at least 3 credits (this translates to at least nine hours of clinical per week) but no more than six credits in any one semester.
Notes May be repeated up to three consecutive semesters but a student may not take more than a total of nine credits.
Prerequisites NURS 764

NURS 774 - Educational Theory and Philosophy for Nursing
Credits 3
Explores traditional and contemporary philosophies and theories of education within the context of societal development. Examines the role of educational theory and philosophy within nursing education.
Prerequisites Enrollment in the nursing doctoral program.

NURS 775 - Statistical Methods for Nursing Research I: Univariate Methods
Credits 3
Designed to provide students with skills necessary to understand, interpret, and conduct descriptive and univariate analysis relevant to the field of nursing. Students will gain practical experience examining real-world data sets using SPSS software.
Prerequisites Enrollment in the nursing doctoral program; successful completion of introductory graduate level statistics course.

NURS 776 - Statistical Methods for Nursing Research II: Multivariate Methods
Credits 3
Focuses on multivariate methods useful for the field of nursing research. Students will be expected to complete a capstone project to explore and implement statistical methods likely to be part of their dissertation projects.
Prerequisites NURS 775 or equivalent; enrollment in the nursing doctoral program.

NURS 777 - Individualized Study/Dissertation Seminar
Credits 1 - 5
Individualized study or seminar to facilitate dissertation research.
Notes May be repeated to a maximum of five credits.
Prerequisites Admission into doctoral program or permission of instructor.

NURS 778 - Geographic Information Systems for Health
Credits 3
This course introduces the use of epidemiologic methods and modern geographic information systems to analyze the relationships between socioeconomic, physical, geopolitical, and demographic factors and sustainable health. These techniques form the basis of assessment of urban health problems to inform, plan, deliver, and evaluate appropriate interventions to ensure sustainability.
Prerequisites Admission into Doctoral (DNP or PhD) program or permission of instructor.

NURS 779 - Writing a Research Grant Application
Credits 2
Involves preparing and writing a research grant application. Students will learn how to prepare a research budget and budget justification; write a resources and environment section, a biosketch, and project timeline; and propose an innovative and significant research proposal.
Prerequisites NURS 780 or permission of instructor.

NURS 780 - Quantitative Methods in Nursing
Credits 3
Examines, quantitative and mixed-method approaches used in nursing research.
Prerequisites Admitted to nursing doctoral program.

NURS 781 - Qualitative Research Methods in Nursing
Credits 3
Examines qualitative approaches used in nursing research.
Prerequisites NURS 780, Enrollment in the Nursing Ph.D. Program.

NURS 782 - Sustainable Health: Clinical Perspectives
Credits 4
This course focuses on air quality, potable water, waste disposal, disasters, and other potentially health-threatening environmental problems that affect health in developing and developed countries. The impact of environmental practices on sustainable health will be examined.
Prerequisites NURS 778, admission into doctoral program or permission of instructor.

NURS 783 - Economics of Sustainable Health
Credits 3
Uses an economic sustainability approach to examine health effects of such issues as health insurance and health care financing, acute and chronic disease, and psychosocial issues. The economics of sustainable health in developing and developed countries will be compared.
Prerequisites Admission into doctoral program or permission of instructor.

NURS 784 - Sustainable Health and Public Policy
Credits 3
Examines urban health promotion in terms of primary, secondary, and tertiary prevention, with an emphasis on the policy issues and critical processes that shape them. Apply theories to identify urban health promotion issues that are linked to sustainability and identify policy strategies for upstream interventions.
Prerequisites Admission into doctoral program or permission of instructor.

NURS 785 - Special Topics in Nursing Research
Credits 2-8
Provides the student with an opportunity for an in-depth exploration of specific aspects of nursing research issues and approaches.
Prerequisites NURS 780 and admission to doctoral program.

NURS 788 - DNP Project
Credits 1-6
The student will complete the DNP Project design and implementation. The results will be evaluated culminating with a final written and oral defense. The course may be repeated, but only six credits may be applied to the student's program.
Notes The course may be repeated, but only six credits may be applied to the student's program.
Prerequisites Admission to DNP Program and consent of instructor.

NURS 789 - Independent Study
Credits 3
Supervised student designed study project done in consultation with instructor; must be submitted in writing to student advisor and graduate program coordinator for approval. May be repeated to a maximum of 10 credits.
Prerequisites NURS 770, NURS 771, NURS 772, NURS 780, enrollment in nursing doctoral program.

NURS 790 - Independent Teaching Practicum Seminar
Credits 1
Exploration in group settings of actual experiences and outcomes of independent teaching practicum. Options for enhanced personal performance as nurse educator will be discussed.
Notes Must be taken concurrently with NURS 791.
Prerequisites NURS 724, NURS 733 and enrollment in nursing doctoral program.

NURS 791 - Independent Teaching Practicum
Credits 5
Integrate knowledge and competencies of nurse educator through application in independently taught undergraduate nursing course; systematic exploration of roles, responsibilities, and opportunities inherent in practice of nursing education. May be repeated to a maximum of five credits.
Prerequisites NURS 724, NURS 733 and enrollment in nursing doctoral program.

NURS 792 - Outcomes Management & Performance Improvement in Nursing
Credits 3
Application of concepts of quality improvement and safety to the management of outcomes in healthcare and nursing systems to ensure delivery of quality interprofessional care.
Prerequisites Completion of Term 3 of DNP program.

NURS 793 - Nursing Education Professional Paper
Credits 3
Focuses on a key area of nursing education requiring exploration and development. Students will select a committee to provide review and guidance. The final paper will be adapted and submitted for publication to a professional, peer-reviewed journal.
Prerequisites NURS 706 and NURS 733.

NURS 797 - Dissertation
Credits 3-6
Research analysis and writing toward completion of dissertation and subsequent defense.
Formerly (NURS 798)
Notes Repeatable for up to 12 credits.
Grading S/F grading only.
Prerequisites Enrollment in nursing doctoral program and consent of instructor.

NURS 798 - Independent Study
Credits 1 – 3
Graduate seminar focusing on current developments in nursing practice.
Formerly (NURS 797)
Notes Topics vary each semester.
Prerequisites Admission to graduate program and consent of instructor.

NURS 799 - Thesis
Credits 3
May be repeated, but only six credits may be applied to the student's program.
Grading S/F grading only.
Prerequisites NURS 706