

## 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

Application deadlines available on the Graduate College website.

Applications available on the UNLV Graduate College website.

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.

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.

### **Admission 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.

### **Admission 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.

### **Admission 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).

### **Admission 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 747 - Introduction to Laboratory Procedures for Biobehavioral Studies

NURS 741 - Biobehavioral Mechanisms, Pathways, and Measurements

NURS 747 - Introduction to Laboratory Procedures for Biobehavioral Studies

### **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**

PTS 712 - Physiological Bases of Rehabilitation

DPT 713 - Genomic and Regenerative Rehabilitation Concepts

PTS 714 - Neuroplasticity

PTS 715 - Pathobiomechanics

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

#### **Rehabilitation Research Core - Credits 12**

PTS 702 - Critical Appraisal and Synthesis of Research in Rehabilitation

PTS 703 - Measurement Theory and Outcomes in Rehabilitation

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

#### **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**

PTS 712 - Physiological Bases of Rehabilitation

DPT 713 - Genomic and Regenerative Rehabilitation Concepts

PTS 714 - Neuroplasticity

PTS 715 - Pathobiomechanics

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

##### **Rehabilitation Research Core - Credits: 12**

PTS 702 - Critical Appraisal and Synthesis of Research in Rehabilitation

PTS 703 - Measurement Theory and Outcomes in Rehabilitation

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

PTS 715 - Pathobiomechanics

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

EKG 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.



**HSC 701 - Interdisciplinary Team Science Credits 3**

This course explains the basic components of team science and the types of problems appropriate for interdisciplinary teams. Included in the course are the core components of team science, assembling an interdisciplinary team, working effectively with interdisciplinary team members, and evaluating team performance.

**HSC 702 - Translational Research Design Credits 3**

Clinical and translational research concepts and design elements in the context of interdisciplinary health care with an emphasis on contemporary issues and best practice approaches.

**HSC 703 - Interdisciplinary Grant Writing for Health Sciences Credits 3**

This course involves preparing and writing an interdisciplinary grant proposal for health sciences. Students from different health science disciplines will work together to develop an innovative and significant grant proposal. Prerequisite(s): Graduate-level research course that covers the research process (research problem, literature review, methods, and statistical/data analysis).

**HSC 704 - Selected Applications in Statistics 2 Credits 3**

This course is designed to provide students with the statistical tools necessary for analyzing data from experimental designs such as those found in the Health Sciences and related disciplines. This course is intended to be taken following the introductory statistics course, KIN 751. Prerequisite(s): KIN 751

**HSC 705 - Clinical Trial Design And Analysis Credits 3**

Comprehensive and in depth review of the principles and methodologies utilized in designing and conducting clinical trials in health care research. Statistical principles specific to clinical trial design and data analyses will also be covered. Prerequisite(s): HSC 704

**HSC 710 - Seminar Credits 1**

Preparation and presentation of seminars on topics of current interest in healthcare research. Note(s): May be repeated to a maximum of three credits.

**HSC 777 - Advanced Applied Statistics for the Health Sciences Credits 3**

Application of advanced statistical procedures to the investigation of research problems in the health science professions. Emphasis on a conceptual understanding of selected advanced statistical techniques with application to the investigation and analysis of problems in the health sciences area. Prerequisite(s): Introductory course in statistics and introduction to research methodology course or consent of instructor.

## 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.

*Ronald T. Brown, Ph.D., Dean, School of Allied Health Sciences*

## 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. and DMP programs provide 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 medical applications of radiation and radioactive materials. It incorporates the principles and technical skills from many disciplines including physics, chemistry, biochemistry, biology, mathematics, and ecology. The wide spectra of knowledge required of both health and medical physicists make these professions 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 & Graduate Coordinator*

### Health Physics and Diagnostic Sciences Faculty

#### Chair

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

#### Graduate Coordinator

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

#### Graduate Faculty

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

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.

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.

## 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

Application deadlines available on the UNLV Graduate College website.

Applications available on the UNLV Graduate College website.

Applications for admission must be completed through the Graduate College Grad Rebel Gateway 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 admitted to the program, however, this prerequisite deficiency must be completed during either the first or second semester of study.
5. All applicants must review and follow the Graduate College Admission and Registration Requirements.

Students are accepted into a certificate 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.

### Plan Admission Requirements

Application deadlines

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: 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

#### **Seminar Course – Credits: 3**

HPS 611 - Health Physics Seminar

#### **Core Courses – Credits: 10**

HPS 616 - Advanced Health Physics

HPS 670 - Environmental 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. Select a thesis advisor from the full graduate faculty in the program by the end of the student's first semester in the program. Failure to select a thesis advisor may result in probation or eventual termination from the program.
4. 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.
5. 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 prior to the start 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.
6. Continuously register for three credit hours of thesis or professional paper each semester while working on the thesis or professional paper until completion.
7. Credit by Challenge Examination: Graduate courses in the Health Physics program may not be challenged for credit.
8. 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.



9. 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: 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

##### **Seminar Course –Credits: 3**

HPS 611 - Health Physics Seminar

HPS 792 - Ethics for Medical Physicists

##### **Core Courses — Credits: 13**

HPS 740 - Medical Imaging Physics

HPS 676 - Sectional Anatomy

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. Select a thesis advisor from the full graduate faculty in the program by the end of the student's first semester in the program. Failure to select a thesis advisor may result in probation or eventual termination from the program.
4. 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.
5. 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 prior to the start 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.

6. Continuously register for three credit hours of thesis or professional paper each semester while working on the thesis or professional paper until completion.
7. Credit by Challenge Examination: Graduate courses in the Health Physics program may not be challenged for credit.
8. 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.
9. 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

Application deadlines available on the UNLV Graduate College website.

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.

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: 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: Clinical 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 satisfy the 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: Clinical 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) or thesis (HPS 797) in order to satisfy the 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.

#### **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 types of spectroscopy, electronics, and instrumentation involved in radiation detection. Statistics, errors, and interpretation encountered in data collection. Note(s): 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(s): 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(s): 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. Prerequisite(s): Graduate standing.

#### **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(s): 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 modalities 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. Prerequisite(s): 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 Prerequisite(s): 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. Prerequisite(s): Consent of instructor. Corequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): 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). Prerequisite(s): HPS 701 Corequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): HPS 742.

**HPS 750 - Radiation Risk Assessment Credits 3**

Descriptive and mathematical treatment of radionuclide transport, bioaccumulation, and human uptake. Note(s): Risk analyses based on recent epidemiological studies reviewed. Prerequisite(s): 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. Prerequisite(s): HPS 701 or consent of instructor.

**HPS 770 - Radiation Therapy Physics: External Beam Credits 6**

The clinical course introduces basic concepts in external beam radiation therapy including dosimetry systems, accelerator acceptance

testing and commissioning, quality assurance procedures, calibration protocols and monitor unit calculations. Grading: S/F grading only. Prerequisite(s): Consent of department.

**HPS 771 - Dosimetric Aspects of Radiation Therapy I Credits 6**

Clinical training in the fundamentals of external beam dosimetry. Includes treatment planning, record and verify systems, image fusion, and immobilization and positioning techniques used in patient simulations. Grading: S/F grading only. Prerequisite(s): HPS 770

**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-ray spectrometry, data interpretation and laboratory quality control. Note(s): One hour lecture and three hours laboratory. Prerequisite(s): HPS 670 and HPS 718 or consent of instructor.

**HPS 772R - Radiation Therapy Physics: Brachytherapy Credits 3**

Clinical training in high and low dose rate brachytherapy. Includes treatment planning, applicators and quality assurance procedures. Grading: S/F grading only. Prerequisite(s): HPS 771

**HPS 773 - Radiation Protection, Radiation Safety and Quality Assurance Credits 3**

Radiation surveys, safety policies and procedures, state and federal regulations, shielding calculations, and quality assurance procedures of imaging systems in a clinical environment. Grading: S/F grading only. Prerequisite(s): HPS 772R

**HPS 774 - Dosimetric Aspects of Radiation Therapy II Credits 6**  
Grading: S/F grading only. Prerequisite(s): HPS 773**HPS 775 - Clinical Medical Physics I Credits 6**

Survey of topics of importance to medical physicists in the radiation therapy clinic. Topics include treatment planning, computer commissioning, IGRT, process/practice (FMEA and TQM) and informatics. Note(s): S/F grading only. Prerequisite(s): HPS 774

**HPS 776 - Clinical Medical Physics II: Special Procedures Credits 6**

Experience with special procedure techniques such as tomotherapy, total body irradiation, GammaKnife, CyberKnife and eye plaques. Grading: S/F grading only. Prerequisite(s): HPS 775

**HPS 777 - Clinical Physics Research Credits 2**

Clinical research under the direct supervision of clinical preceptors. Note(s): May be repeated to a maximum of 4 credits. Grading: TDX grading only. Prerequisite(s): Consent of department.

**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(s): 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(s): 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 794 - Directed Research****Credits 1 - 6**

Supervised research in the department's graduate programs. Note(s): May be repeated to a maximum of 12 credits. Grading: S/F grading only. Prerequisite(s): Consent of department and graduate standing in one of the department's programs.

**HPS 795 - Independent Study****Credits 1 - 3**

Individual directed study of a topic in health physics not covered in depth in other courses. Note(s): May be repeated to a maximum of nine credits. Grading: S/F grading only. Prerequisite(s): 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(s): May be repeated but only six credits applied to the student's program. Grading: S/F grading only. Prerequisite(s): Consent of department.

**HPS 797 - Thesis****Credits 1-3**

Research, analysis, and writing towards completion of thesis and subsequent defense. Note(s): May be repeated but only 6 credits applied to the student's program. Grading: S/F grading only. Prerequisite(s): Consent of department.

**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 members 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 Doctor of Philosophy degree in Kinesiology or Interdisciplinary Health Sciences and 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.

*Brian Schilling, Ph.D., Chair*

*Janet Dufek, Ph.D., Graduate Coordinator (Ph.D. program)*

*James W. Navalta, Ph.D., Graduate Coordinator (M.S. Exercise Physiology & M.S. Kinesiology programs)*

*Laura Kruskall, Ph.D., Graduate Coordinator (M.S. Nutrition Sciences program)*

## **Kinesiology and Nutrition Sciences Faculty**

### **Chair**

Schilling, Brian. - Full Graduate Faculty Professor; B.S., Winona State University; M.S., Appalachian State University; Ph.D., University of Memphis. Rebel since 2016.

### **Ph.D. Graduate Coordinator**

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

### **M.S. Graduate Coordinator**

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 Faculty**

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

Knurick, Jessica R. - Full Graduate Faculty Assistant Professor; B.A., Florida Atlantic University; M.S., East Stroudsburg University; Ph.D., Arizona State University. Rebel since 2015.

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

Mercer, John - Full Graduate Faculty Professor; B.S., Buffalo State College of New York; M.S., University of North Texas; Ph.D., University of Oregon. Rebel since 1999.

Navalta, James W. - Full Graduate Faculty Associate Professor; B.S., Brigham Young University, Hawaii; M.S., University of Nevada, Las Vegas; Ph.D., Purdue University. Rebel since 2012.

Poston, Bracher - Full Graduate Faculty Assistant Professor; B.S., Southwest Missouri State University; M.S., University of Nevada, Las Vegas; Ph.D., University of Colorado. Rebel since 2014.

Radzak, Kara M. - Full Graduate Faculty Assistant Professor; B.S., University of Texas, Austin; M.S., University of Colorado, Colorado Springs; Ph.D., University of Hawaii, Manoa. Rebel since 2015.

Silvernail, Julia F. - Full Graduate Faculty Assistant Professor; B.S., University of Maryland; M.S., University of Nevada, Las Vegas; Ph.D., University of Tennessee. Rebel since 2014.

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

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

## **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**

Application deadlines available on the UNLV Graduate College website.

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**

See Subplan Requirements below.

#### **Subplan 1 Requirements: Biomechanics Track**

**Total Required Credits: 66**

#### **Course Requirements**

##### **Program Core Courses – Credits: 12**

KIN 743 - Research Techniques in Biomechanics

KIN 747 - Graduate Seminar

KIN 765 - Neurophysiology

HSC 703 - Interdisciplinary Grant Writing for Health Sciences

##### **Concentration Courses – Credits: 9**

Complete 9 credits from the following list of courses or other advisor-approved courses:

KIN 615 - Introduction to Forensic Kinesiology

KIN 656 - Biomechanics of Endurance Performance

KIN 736 - Biomechanical Applications in Kinesiology

KIN 737 - Biomechanics of Strength

KIN 746 - Computational Methods for Biomechanics

KIN 788 - Independent Study

##### **Non-Specialization Core Course — Credits: 3**

KIN 760 - Motor Skill Learning and Performance

##### **Additional Non-Specialization Core Course — Credits: 3**

Complete 3 credits from the following list of courses:

KIN 738 - Human Physiology

KIN 739 - Evaluation of Physical Working Capacity

KIN 740 - Advanced Exercise Physiology

##### **Cognate Area Courses — Credits: 9**

Complete 9 credits of advisor-approved cognate area coursework. Examples include:

Cognate Ia – Exercise Physiology

KIN 738 - Human Physiology

KIN 740 - Advanced Exercise Physiology

KIN 737 - Biomechanics of Strength

KIN 744 - Thermoregulation During Physical Work

KIN 745 - Human Energy Metabolism

Cognate Ib – Neurological Mechanisms

KIN 760 - Motor Skill Learning and Performance

KIN 762 - Motor Learning Applications

PSY 701 - Biological Bases of Behavior

PSY 719 - Behavioral Neuroscience

Cognate Ic – Engineering; Mathematics

MAT 687 - Introduction to Partial Differential Equations

PHYS 702 - Classical Mechanics I

PHYS 703 - Classical Mechanics II

EGG 750 - Analysis of Human Movement

EGG 747 - Orthopedic Biomechanics - Lower Extremities and Spine

EGG 748 - Prosthetic Systems Engineering or EGG 651 - Ergonomics

##### **Research Methodology Courses — Credits: 15**

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

KIN 751 - Selected Application of Statistical Techniques I

KIN 752 - Selected Application of Statistical Techniques II

##### **Prospectus Course — Credits: 3**

KIN 789 - Dissertation Prospectus

##### **Dissertation — Credits: 12**

KIN 799 - Dissertation

#### **Subplan 2 Requirements: Motor Behavior Track**

**Total Required Credits: 66**

#### **Course Requirements**

##### **Program Core Courses — Credits: 12**

KIN 743 - Research Techniques in Biomechanics

KIN 747 - Graduate Seminar

KIN 765 - Neurophysiology

HSC 703 - Interdisciplinary Grant Writing for Health Sciences

##### **Concentration Courses — Credits: 9**

Complete 9 credits from the following list of courses or other advisor-approved courses:

KIN 760 - Motor Skill Learning and Performance

KIN 761 - Human Motor Control

KIN 762 - Motor Learning Applications

KIN 788 - Independent Study

##### **Non-Specialization Core Course — Credits: 3**

KIN 736 - Biomechanical Applications in Kinesiology

##### **Additional Non-Specialization Core Course — Credits: 3**

Complete 3 credits from the following list of courses:

KIN 738 - Human Physiology

KIN 739 - Evaluation of Physical Working Capacity

KIN 740 - Advanced Exercise Physiology

**Cognate Area Courses — Credits: 9**

Complete 9 credits from the following list of courses or other advisor-approved courses:

PSY 701 - Biological Bases of Behavior

PSY 703 - Cognitive Psychology

PSY 704 - Social Psychology

PSY 719 - Behavioral Neuroscience

KIN 788 - Independent Study

**Research Methodology Courses — Credits: 15**

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

KIN 751 - Selected Application of Statistical Techniques I

KIN 752 - Selected Application of Statistical Techniques II

**Prospectus Course — Credits: 3**

KIN 789 - Dissertation Prospectus

**Dissertation — Credits: 12**

KIN 799 - Dissertation

**Subplan 3 Requirements: Exercise Physiology Track****Total Required Credits: 66****Course Requirements****Program Core Courses — Credits: 12**

KIN 743 - Research Techniques in Biomechanics or KIN 700 - Special Problems in Kinesiology

KIN 747 - Graduate Seminar

KIN 765 Neurophysiology

HSC 703 - Interdisciplinary Grant Writing for Health Sciences

**Concentration Courses — Credits: 9**

Complete 9 credits from the following list of courses or other advisor-approved courses:

KIN 720 - Issues and Trends in Exercise Physiology

KIN 738 - Human Physiology

KIN 740 - Advanced Exercise Physiology

KIN 744 - Thermoregulation During Physical Work

KIN 788 - Independent Study

**Non-Specialization Core Course — Credits: 6**

KIN 736 - Biomechanical Applications in Kinesiology

KIN 760 - Motor Skill Learning and Performance

**Cognate Area Courses — Credits: 9**

Complete 9 credits from the following list of courses or other advisor-approved courses:

KIN 745 - Human Energy Metabolism

KIN 788 - Independent Study

**Research Methodology Courses — Credits: 15**

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

KIN 751 - Selected Application of Statistical Techniques I

KIN 752 - Selected Application of Statistical Techniques II

**Prospectus Course — Credits: 3**

KIN 789 - Dissertation Prospectus

**Dissertation — Credits: 12**

KIN 799 - Dissertation

**Plan 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:
  1. Students may submit a research study to a refereed journal for publication.
  2. 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.
  1. 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.
  2. The chair of the advisory committee must be a graduate faculty member in the Department of Kinesiology.
  3. Advisory committees should be informed prior to the student's completion of 16 credit hours.
  4. The committee oversees the student's progress, including the comprehensive exams.
  5. 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.
  1. 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.
  2. 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.
  3. 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.
  4. 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

1. 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.
2. Upon approval of the prospectus, the student must obtain approval for the study from the Institutional Review Board for the Protection of Human Subjects.
3. 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.

## 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

Application deadlines available on the UNLV Graduate College website.

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 Grad Rebel Gateway 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**

NUTR 605 - Advanced 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**

The 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**

Application deadlines available on the UNLV Graduate College website.

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 Grad Rebel Gateway 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:

NUTR 605 - Advanced 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:

NUTR 605 - Advanced 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.

## Master of Science - Nutrition Sciences

### Plan Description

The mission of the Master of Science (M.S) – Nutrition Sciences program is to provide graduates with the skills and knowledge to be competent nutrition and dietetics professionals capable of providing excellent nutrition and dietetic services in numerous community, food service, management, and clinical settings. The program will provide an evidence-based curriculum with a translation to clinical/professional practice. This degree will satisfy the possession of a master's degree in order to sit for the National Registration Examination for Dietitians.

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

### Plan Admission Requirements

Application deadlines

Applications available on the UNLV Graduate College website.

Students are admitted in the fall and spring semesters. Applicants for admission must have an undergraduate major in nutrition, or a closely 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 will 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

Applicants must apply online through the Grad Rebel Gateway system. In addition to all documents required by the Graduate College, applicants must upload the following information into the Grad Rebel Gateway system:

1. Official GRE scores.
2. A letter of intent that addresses: 1) Reason(s) for wishing to earn a M.S. in Nutrition Sciences; 2) motivation for attending this program at UNLV; 3) Summary of

educational goals; 4) Summary of research activities and/or clinical interests; 5) Possible faculty mentors the applicant would be interested in working with.

3. Three letters of recommendation from persons familiar with the applicant's academic record and potential for graduate study.

An applicant who is a non-native English speaker must provide proof of English language proficiency. A non-native speaker is an individual whose primary language in the home was a language other than English (or a non-English language) or who received K-12 (or equivalent) education in schools where English was not the medium of instruction. Prospective students must take the TOEFL iBT (Internet) exam and earn a minimum score of 100 to be eligible for this program. No other exam will be accepted.

Undergraduate Prerequisites (UNLV courses or equivalent). Preference given to students completing an ACEND accredited Didactic Program in Nutrition and Dietetics (DPND). This is the undergraduate program that provides all of the pre-requisite courses.

CHEM 108 or CHEM 121/122/241

BIOL 223/L/224/L BIOL 241

MATH 124

NUTR 301

NUTR 223

NUTR 370

NUTR 451

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: Non-Thesis Track

**Total Credits Required: 33**

#### Course Requirements

##### Research Methods - Credits: 6

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

##### Core - Credits: 15

- KIN 740 - Advanced Exercise Physiology
- KIN 745 - Human Energy Metabolism
- NUTR 753 - Experimental Techniques in Nutrition and Metabolism
- NUTR 705 - Advanced Sports Nutrition Seminar
- NUTR 727 - Advanced Clinical Nutrition and Dietetics

##### Electives - Credits: 9

Complete 9 credits from the following list of courses:

- KIN 691 - Exercise Physiology



- NUTR 605 - Advanced Sports Nutrition
- NUTR 607 - Complimentary and Integrative MNT
- NUTR 652 - Advanced Nutrition
- NUTR 720 - Lifestyle Modification for Chronic Disease
- NUTR 700 - Special Topics in Nutrition Sciences
- NUTR 791 - Independent Study in Nutrition Sciences
- NUTR 796 - Supervised Practice: Community Nutrition and Dietetics
- NUTR 797 - Supervised Practice: Food Service Management
- NUTR 798 - Supervised Practice: Clinical Nutrition and Dietetics

#### **Culminating Experience - Credits: 3**

- NUTR 748 - Professional Paper- Clinical Case Study or Community Intervention Project

#### **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 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.

#### **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 a professional paper and submit a Culminating Experience Results form to the Graduate College by the posted deadline.

#### **Subplan 2 Requirements: Thesis Track**

##### **Total Credits Required: 33**

##### **Course Requirements**

##### **Research Methods - Credits: 6**

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

##### **Core - Credits: 15**

- KIN 740 - Advanced Exercise Physiology
- KIN 745 - Human Energy Metabolism
- NUTR 753 - Experimental Techniques in Nutrition and Metabolism
- NUTR 705 - Advanced Sports Nutrition Seminar
- NUTR 727 - Advanced Clinical Nutrition and Dietetics

##### **Electives - Credits: 6**

Complete 6 credits from the following list of courses:

- KIN 691 - Exercise Physiology
- NUTR 605 - Advanced Sports Nutrition
- NUTR 607 - Complimentary and Integrative MNT
- NUTR 652 - Advanced Nutrition
- NUTR 720 - Lifestyle Modification for Chronic Disease
- NUTR 700 - Special Topics in Nutrition Sciences
- NUTR 791 - Independent Study in Nutrition Sciences
- NUTR 796 - Supervised Practice: Community Nutrition and Dietetics

- NUTR 797 - Supervised Practice: Food Service Management
- NUTR 798 - Supervised Practice: Clinical Nutrition and Dietetics

#### **Culminating Experience - Credits: 6**

- NUTR 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 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. Plan Graduation Requirements

#### **Plan Graduation Requirements**

Refer to your subplan for Graduation Requirements.

**CLS 615 - Transfusion Medicine Immunoematology Laboratory Credits 3**

Simulated clinical immunoematology 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. Note(s): 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. Note(s): 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. Note(s): 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 pathophysiology. 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. Note(s): 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. Note(s): 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. Note(s): 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, spirochetes, Rickettsia and Chlamydia. Includes conventional microscopic, culture, molecular and immunological techniques as well as susceptibility testing methods. Note(s): 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 microorganisms 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. Note(s): 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. Note(s): 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. Note(s): 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. Note(s): 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. Note(s): 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. Note(s): 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 Note(s): 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 competencies and to assist the student in making the transition to clinical practitioner. Supervision by clinical/university faculty. Note(s): 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. Note(s): 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. Note(s): 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. Note(s): 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. Note(s): 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. Note(s): This course is crosslisted with KIN 401. Credit at the 600-level requires additional work.

**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. Note(s): 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. Note(s): 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. Note(s): 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. Note(s): 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. Note(s): 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. Note(s): May be repeated to a maximum of six credits. Prerequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): 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) Prerequisite(s): 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. Prerequisite(s): KIN 739 or consent of instructor.

**KIN 746 - Computational Methods for Biomechanics Credits 3**

The primary objective of this course is to learn to create and use programs to analyze collected data using current biomechanical software. Prerequisite(s): KIN 736

**KIN 747 - Graduate Seminar Credits 1**

Oral presentations of proposed and completed research by graduate students, graduate faculty, and guests. Note(s): May be taken for credit to a maximum of four credits.

**KIN 748 - Professional Paper Credits 1 – 6**

Professional paper preparation and subsequent defense. Note(s): 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**

Research, analysis, and writing towards completion of thesis and subsequent defense. Note(s): 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. Prerequisite(s): KIN 751 or consent of instructor.

**KIN 753 - Health Science Writing and Communication Credits 3**

Effective oral and written communication is essential to the science and practice of health. Learn and apply communication techniques for oral and poster presentations, scientific articles, white papers, and lay summaries. Prerequisite(s): KIN 750

**KIN 754 - Health Science Writing and Communication Credits 3**

Effective oral and written communication is essential to the science and practice of health. Learn and apply communication techniques for oral and poster presentations, scientific articles, white papers, and lay summaries. Prerequisite(s): KIN 750

**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. Note(s): 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. Note(s): Repeatable up to 6 credits.

**KIN 789 - Dissertation Prospectus Credits 3**

Acquaints students with resources available to assist in the conceptualization of research design and literature review in preparation of the formal dissertation proposal. *Formerly* PED 796  
Prerequisite(s): Admission to doctoral program.

**KIN 790 - Guided Research in Health Sciences Credits 3**

immersive research experience where learners participate in all aspects of research from planning, IRB/IACUC, data collection, data analysis, and dissemination. Note(s): May be repeated to a maximum of nine credits. Prerequisite(s): KIN 750

**KIN 799 - Dissertation Credits 1 – 12**

Culminating research analysis and writing toward completion of dissertation and subsequent defense.

**NUTR 605 - Advanced Sports Nutrition Credits 3**

Sports Nutrition practices and guidelines utilized by competitive and recreational athletes. The role of nutrient utilization and metabolism during exercise. Emphasis on evidence-based practice. Note(s): This course is crosslisted with NUTR 405. Coursework at the 600-level requires additional work.

**NUTR 607 - Complimentary and Integrative MNT Credits 3**

Emphasis on research methods and science-based literature to evaluate the safety, standardization and efficacy of popular therapies, including herbals, botanicals, and dietary supplements for preventive and nontraditional medical nutrition therapies. Note(s): This course is crosslisted with NUTR 407. Coursework at the 600-level requires additional work. Prerequisite(s): Admission into the M.S. Nutrition Sciences program or consent of instructor.

**NUTR 652 - Advanced Nutrition Credits 3**

Investigation of common human metabolic disorders. Develop an understanding of the role of nutrition in the etiology and treatment of these disorders through examination of case studies. Prerequisite(s): Admission into the M.S. Nutrition Sciences program.

**NUTR 700 - Special Topics in Nutrition Sciences Credits 1-6**

Examines current or controversial topics in nutrition sciences. Topic chosen based on current or evolving practices in the field and student interest. Note(s): May be repeated to a maximum of six credits. Prerequisite(s): Admission into the M.S. Nutrition Sciences program.

**NUTR 705 - Advanced Sports Nutrition Seminar Credits 3**

Evaluation of current sports nutrition guidelines. Examination of the relevant research used to establish these recommendations. Prerequisite(s): NUTR 605

**NUTR 720 - Lifestyle Modification for Chronic Disease Credits 3**

The impact of nutrition, physical activity, and behavior modification on the chronic disease process, focusing primarily on cardiovascular disease, type 2 diabetes, neurodegenerative disease, and cancer. Emphasis on the causes and associated risk factors, and on modification of risk factors through lifestyle changes. Prerequisite(s): Admission into the M.S. Nutrition Sciences program.

**NUTR 727 - Advanced Clinical Nutrition and Dietetics Credits 3**

Explore the in-depth research used to establish the current medical nutrition therapy practice guidelines. Current hot topics within nutrition related conditions or diseases will be evaluated. Prerequisite(s): Admission into the M.S. Nutrition Sciences program.

**NUTR 748 - Professional Paper- Clinical Case Study or Community Intervention Project Credits 3**

Experience will include a clinical case study or community intervention project, analysis and writing toward completion and subsequent defense. Prerequisite(s): Admission into the M.S. Nutrition Sciences program.

**NUTR 749 - Thesis Credits 3-6**

Culminating research analysis and writing toward completion of thesis and subsequent defense. Note(s): May be repeated to a maximum of six credits. Prerequisite(s): Admission into the M.S. Nutrition Sciences program.

**NUTR 753 - Experimental Techniques in Nutrition and Metabolism Credits 3**

Examination of laboratory methods used in nutrition research through experiments requiring variations in diet, and techniques for obtaining and analyzing samples. Emphasis on data collection, analysis, and presentation of results.

**NUTR 791 - Independent Study in Nutrition Sciences Credits 1-3**

Independent study of a selected topic in nutrition sciences Note(s): May be repeated to a maximum of six credits. Prerequisite(s): Admission into the M.S. Nutrition Sciences program.

**NUTR 796 - Supervised Practice: Community Nutrition and Dietetics 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(s): KIN 797 and KIN 798.

**NUTR 797 - Supervised Practice: Food Service Management Credits 2**

For students accepted into the Nutrition Sciences Dietetic Internship. Supervised experience in managing the diet office, tray line production and supervision, food service production, cafeteria management, and hospital catering. Corequisite(s): KIN 796 and KIN 798.

**NUTR 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(s): KIN 797 and KIN 798.

## 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 manual therapy interventions and therapeutic exercises to increase range of motion, 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 coursework 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 national 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, Ph.D., Chair*

*Emilio Puentedura, PT, DPT, Ph.D., Graduate Coordinator*

*Keoni Kins, PT, DPT, Graduate Coordinator*

## Physical Therapy Faculty

### Chair

Landers, Merrill - Full Graduate Faculty 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.

Kins, Keoni Administrative Clinical Coordinator; B.S., University of Montana; D.P.T., University of Nevada Las Vegas. Rebel since 2014.

### Graduate Faculty

Barrett, Tiffany Assistant Professor; B.S., University of Nevada, Reno; D.P.T., University of Colorado.

Gillis, Carrie - Full Graduate Faculty Assistant Professor; B.S., Oklahoma City University; D.P.T., University of Nevada Las Vegas. Rebel since 2012.

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.

Young, Danny - Full Graduate Faculty Associate Professor; B.S., Southern Utah University; D.P.T., Creighton University; Ph.D., University of Nevada Las Vegas. 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.

Liang, Jing Nong- Full Graduate Faculty Assistant Professor; B.S. and M.S., Chang Gung University, Taiwan; Ph.D., Northwestern University, Illinois. Rebel since 2016.

## 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

Application deadlines available on the UNLV Graduate College website.

Applications available on the UNLV Graduate College website.

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.

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. 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.
4. 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](http://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.
5. An interview will be required.

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: 19**

DPT 732 - Therapeutic Exercise

DPT 732L - Therapeutic Exercise Lab

DPT 748 - Pharmacology

DPT 754 - Orthopaedic Assessment in Physical Therapy

DPT 754L - Orthopaedic Assessment in Physical Therapy Lab

DPT 756 - Neurophysiology

DPT 788 - Spine Examination and Treatment

DPT 788L - Spine Examination and Intervention Lab

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: 17**

DPT 735 - Functional Training and Acute Care

DPT 735L - Functional Training and Acute Care Lab

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 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 probation 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.

**DPT 710 - Selected Topics in Physical Therapy Credits 1**  
Forum to disseminate information to students on current and professional issues in physical therapy. Prerequisite(s): 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. Prerequisite(s): Graduate standing in physical therapy.

**DPT 713 - Genomic and Regenerative Rehabilitation Concepts Credits 3**  
Current perspectives on the emerging impact of regenerative medicine and genomic technologies that have potential to drive progress in the prevention and treatment of acute and chronic condition resulting from injury, disease or aging.

**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. Prerequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): Graduate standing in physical therapy. Corequisite(s): 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. Prerequisite(s): Graduate standing in Physical Therapy. Corequisite(s): 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. Prerequisite(s): DPT 730, DPT 730L; DPT 741 ; DPT 744 DPT 744L; DPT 745 DPT 745L. Corequisite(s): 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. Prerequisite(s): DPT 730, DPT 730L; DPT 741 ; DPT 744 DPT 744L; DPT 745 DPT 745L. Corequisite(s): 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. Prerequisite(s): Graduate standing in Physical Therapy. DPT 744, 745, 730. Corequisite(s): 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. Prerequisite(s): Graduate standing in Physical Therapy. DPT 744, 745, 730. Corequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): Graduate standing in Physical Therapy. Corequisite(s): 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(s): 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. Prerequisite(s): DPT 744 and DPT 744L Corequisite(s): 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. Prerequisite(s): DPT 744 and DPT 744L Corequisite(s): 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. Prerequisite(s): Graduate standing in physical therapy. Corequisite(s): 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. Prerequisite(s): Graduate standing in Physical Therapy. Corequisite(s): 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. Prerequisite(s): Graduate standing in physical therapy.

**DPT 748 - Pharmacology Credits 2**

Actions and effects of pharmaceutical agents commonly encountered in physical therapy clinical practice. Prerequisite(s): 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. Prerequisite(s): Graduate standing in physical therapy. Corequisite(s): 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 flexibility. Prerequisite(s): Graduate standing in Physical Therapy. Corequisite(s): 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. Prerequisite(s): Graduate standing in Physical Therapy. Corequisite(s): 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. Prerequisite(s): Graduate standing in Physical Therapy. Corequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): Graduate standing in Physical Therapy. DPT 742, 730, 732. Corequisite(s): 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. Prerequisite(s): Graduate standing in Physical Therapy. DPT 742, 730, 732. Corequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): DPT 730, DPT 730L, DPT 741, DPT 744, DPT 744L, DPT 745, DPT 745L Corequisite(s): 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. Prerequisite(s): DPT 730, DPT 730L, DPT 741, DPT 744, DPT 744L, DPT 745, DPT 745L Corequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): Graduate standing in Physical Therapy. Corequisite(s): 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 Prerequisite(s): Graduate standing in Physical Therapy. Corequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): 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(s): 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. Prerequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): 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 pathogenesis, clinical presentation, medical/surgical management and rehabilitation. Review, integrate, and enhance knowledge from previous course work as it pertains to appropriate entry-level application. Prerequisite(s): DPT 732, DPT 741, DPT 754 Corequisite(s): 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. Prerequisite(s): DPT 732, DPT 741, DPT 754. Corequisite(s): 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. Prerequisite(s): DPT 730, DPT 732, DPT 744, DPT 745, DPT 746, DPT 756. Corequisite(s): 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(s): 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. Prerequisite(s): Graduate standing in Physical Therapy and DPT 785 and DPT 786. Corequisite(s): 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. Prerequisite(s): Graduate standing in Physical Therapy and DPT 785 and DPT 786. Corequisite(s): 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. Prerequisite(s): Graduate standing in physical therapy. Corequisite(s): 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. Prerequisite(s): Graduate standing in Physical Therapy or consent of instructor. Corequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): 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. Note(s): May be repeated to a maximum of six credits. Prerequisite(s): 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. Note(s): May be repeated to a maximum of six credits. Prerequisite(s): DPT 790

**PTS 702 - Critical Appraisal and Synthesis of Research in Rehabilitation Credits 3**

This course provides students with knowledge and skills to critically appraise and synthesize research in rehabilitation. Students will learn how to write answerable questions, search the literature, and critically analyze evidence for application. Students will critique special cases of evidence and psychometric properties of diagnostic tools and outcome measures.

**PTS 703 - Measurement Theory and Outcomes in Rehabilitation 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. Prerequisite(s): Admission to PhD in Interdisciplinary Health Sciences program.

**PTS 712 - Physiological Bases of Rehabilitation Credits 3**

This course will provide an overview of the physiology underlying movement generation. Emphasis on the neuromuscular and musculoskeletal physiology components related to rehabilitation. Focus on tissue physiology of the neuromuscular and musculoskeletal systems, an applied approach and examination of physiological adaptations to exercise and its influence on a macro level.

**PTS 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.

**PTS 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.

**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. Prerequisite(s): Undergraduate Anatomy, Physiology or Biology lab course. Corequisite(s): 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. Prerequisite(s): Undergraduate Anatomy, Physiology or Biology lab course or equivalent. Corequisite(s): 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. Prerequisite(s): 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 to ensure that graduates can serve as catalysts to promote population health in Nevada, the nation and the world.

*Shawn Gerstenberger, Ph.D., Dean*

### 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.

*Francisco Sy, MD, DrPH, Chair*

*Mark Buttner, Ph.D., Graduate Coordinator*

#### Environmental and Occupational Health Faculty Chair

Sy, Francisco S. - Full Graduate Faculty Professor of Environmental and Occupational Health, MD, DRPH, Johns Hopkins University School of Public Health. Rebel since 2016.

#### Graduate Coordinator

Buttner, Mark P.- Full Graduate Faculty 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.

#### Graduate Faculty

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

Buttner, Mark P.- Full Graduate Faculty 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.

Chen, Lung-Wen - Full Graduate Faculty Assistant Professor of Biostatistics and Epidemiology, B.S., M.S. National Taiwan University; Ph.D. University of Maryland, College Park. Rebel since 2015.

Chien, Lung-Chang - Full Graduate Faculty Assistant Professor of Biostatistics and Epidemiology, B.S. National Taipei University; M.S. National Tsing-Hua University; Ph.D. University of North Carolina at Chapel Hill. Rebel since 2017.

Coughenour, Courtney - Full Graduate Faculty Assistant Professor of Environmental and Occupational Health, B.S. Pennsylvania State University; M.S., Ph.D. University of Nevada, Las Vegas. Rebel since 2007.

Cruz, Patricia - Full Graduate Faculty 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 Associate Professor of Environmental and Occupational Health; B.S., M.A., Ed.D., University of St. Thomas. Rebel since 2007.

Ezeanolue, Echezona - Full Graduate Faculty Professor of Environmental and Occupational Health, B.S. University of Nigeria; M.S. University of Medicine and Dentistry of New Jersey; M.D. University of Nigeria. Rebel since 2015.

Gakh, Maxim - Full Graduate Faculty Assistant Professor of Environmental and Occupational Health, A.B. Washington University of St. Louis; M.S. John Hopkins University; J.D. Ohio State University. Rebel since 2014.

Kan, Ge Lin - Full Graduate Faculty Professor of Biostatistics and Epidemiology, B.S. Peking University; M.A. The University of Akron; Ph.D. State University of New York at Buffalo. Rebel since 2015.

Labus, Brian - Full Graduate Faculty Visiting Professor of Environmental and Occupational Health, B.S. Purdue University; M.S. University of California, Berkeley; Ph.D. University of Nevada, Las Vegas. Rebel since 2015.

Moonie, Sheniz - Full Graduate Faculty 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.

Pharr, Jennifer - Full Graduate Faculty Assistant Professor of Environmental and Occupational Health, B.S. Stephen F Austin State University; M.S. Texas A&M University; Ph.D. University of Nevada, Las Vegas. Rebel since 2010.

Pineiro, Paulo - Full Graduate Faculty Associate Professor of Biostatistics and Epidemiology, M.Sc. Netherlands Institute for Health Sciences, Erasmus University of Rotterdam; M.D. University of Coimbra; Ph.D. University of Miami, Florida. Rebel since 2009.

Rodriguez, Rachele - Full Graduate Faculty Assistant Professor of Biostatistics and Epidemiology, B.S., M.S., Ph.D. University of California, Los Angeles. Rebel since 2016.

Shan, Guogen - Full Graduate Faculty Assistant Professor of Biostatistics and Epidemiology, B.S., M.S. Nankai University; M.A., Ph.D. The State University of New York at Buffalo. Rebel since 2012.

Shegog, Marya - Full Graduate Faculty Assistant Professor of Environmental and Occupational Health, B.S. Hampton University; M.S., Ph.D. University of South Carolina. Rebel since 2012.

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

Wu, Qing - Full Graduate Faculty Associate Professor of Environmental and Occupational Health, M.S. Sun Yat-sen University of Medical Sciences; M.D. Wannan Medical College; Sc.D. Tulane University. Rebel since 2015.

## 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 must complete 54 credits beyond the Master of Public Health (MPH). Students with a master's degree in a related field must complete 54 credits beyond the master's degree and up to 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

Application deadlines available on the UNLV Graduate College website.

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 (subplan) at the time of application.
9. All students are required to take or have taken at the Master's level the following 15 credit hours or their approved equivalent:

### UNLV Courses

EOH 740 - Fundamentals of Environmental Health or HED 705 - Theoretical Foundations in Health Promotion

EAB 703 - Biostatistical Methods for the Health Sciences



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

#### **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: Global and Environmental Health Track**

**Total Credits Required: 54**

#### **Course Requirements**

##### **Doctoral Seminar Course – Credits: 3**

EOH 790 - Doctoral Seminar

##### **Research Methods and Design Courses – Credits: 6**

Complete at least two of the following courses:

EAB 700 - Research Methods for Public Health

EAB 756 - Epidemiology and Research

EOH 702 - Community Based Participatory Research Methods

EOH 715 - Qualitative & Field Methods for Public Health

EOH 744 - Mixed Methods Research for Public Health

EOH 796 - Independent Study in Environmental Health

HCA 715 - Health Services Research Methods

EPY 730 - Advanced Research Methods

EAB 743 - Experimental Design for the Health Sciences

HSC 702 - Translational Research Design

HSC 705 - Clinical Trial Design And Analysis

NURS 729R - Translational Evidence for Healthcare Systems

EOH 795 - Special Topics in Public Health

EOH 796 - Independent Study in Environmental Health

##### **Analysis Course – Credits: 3**

Complete at least one 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

EOH 795 - Special Topics in Public Health

EOH 796 - Independent Study in Environmental Health

#### **Proposal Writing Course – Credits: 3**

Complete at least one of the following courses:

EAB 720 - Grant Writing for Epidemiology and Public Health Research

HED 720 - Program Planning and Grant Writing in Health Promotion

HSC 703 - Interdisciplinary Grant Writing for Health Sciences

NURS 779 - Writing a Research Grant Application

#### **Elective Courses – Credits: 15**

Complete 15 credits of advisor-approved coursework. A list of potential courses is below, however, additional relevant courses offered through the university may be approved by your advisor.

#### **UNLV Courses:**

EOH 704 - Research Integrity & Ethics

EOH 709 - Scientific/Technical Writing for the Health and Life Sciences

EOH 717 - Food Safety and Public Health

EOH 747 - Transmission of Infectious Disease

EOH 757 - Parasitology and Public Health

EOH 765 - Seminar in Environmental Justice and Public Health

EOH 767 - Airborne Pathogens and Human Health

EOH 769 - Pollution and Health

EOH 777 - Emerging Infectious Disease

HPS 680 - Industrial Hygiene

EAB 715 - Chronic Disease Epidemiology

ENV 711 - Risk Assessment and Risk Management

ENV 712 - Environmental Risk Decision Making

EOH 704 - Research Integrity & Ethics

EOH 705 - Social Epidemiology

EOH 711 - Diseases that Changed the World

EOH 713 - Public Health Law

EOH 732 - Children, Development, Health, and the Environment

EOH 747 - Transmission of Infectious Disease

EOH 760 - Racial and Ethnic Disparities in Health

EOH 765 - Seminar in Environmental Justice and Public Health

EOH 777 - Emerging Infectious Disease

HCA 718 - Health Care Economics

HED 730 - Program Evaluation in Health Promotion

**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

**Dissertation – Credits: 24**

Complete 3 credits of prospectus and 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: 54****Course Requirements****Doctoral Seminar – Credits: 3**

EOH 790 - Doctoral Seminar

**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: 24**

Complete 3 credits of prospectus and 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: 54****Course Requirements****Required Courses – Credits: 6**

EAB 756 - Epidemiology and Research

EAB 715 - Chronic Disease Epidemiology

**Doctoral Seminar – Credits: 3**

EOH 790 - Doctoral Seminar

**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: 24**

Complete 3 credits of prospectus and 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: 54**

### **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

#### **Doctoral Seminar – Credits: 3**

EOH 790 - Doctoral Seminar

#### **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: 24**

Complete 3 credits of prospectus and 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 student's 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.

## Master of Public Health

### Plan Description

The Master of Public Health (MPH) 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 available on the UNLV Graduate College website.

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. Complete the school's application process.
3. Submit a resume and 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. Submit three letters of recommendation.
5. Submit competitive Graduate Record Exam (GRE) scores (or equivalent e.g., MCAT, LSAT) 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 GRE is required for all applicants and must be current within 5 years.
6. All domestic and international applicants must review and follow the Graduate College Admission and Registration Requirements.

### Dental MPH Program

The Doctorate of Dental Medicine-Masters of Public Health program is designed for those who seek a deeper understanding of disease prevention, health promotion, and health care administration and policy 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 (DMD) 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-MPH program should begin by applying for admissions to the UNLV School of Dental Medicine. Please see the School of Dental Medicine (SDM) website for specific requirements and deadlines.

Current dental students interested in the DMD-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-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 program at any time, they may not register for classes within the School 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 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.

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 - 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 professional paper 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

**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 and defend 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 - 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 767 - Airborne Pathogens and Human Health

EOH 769 - Pollution and Health

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 and defend 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 - 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 719 - Operations and Quality Management of Health Services

HCA 720 - Information Systems in Health Services Management

HCA 730 - Strategic Management of Health Services

#### **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

HED 705 - Theoretical Foundations in Health Promotion

### **Culminating Experience – Credits: 3-6**

Complete one of the following:

HCA 794 - Professional Paper in Health Care Administration (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.
3. Students choosing to do the capstone course do not need to complete advisor or culminating experience forms.

### **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 and defend a thesis or professional paper 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 - 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**

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 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 Epidemiology 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

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 and defend 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-MPH Track - Social and Behavioral Health**

**Total Credits Required: 45**

**Course Requirements**

**Required Courses – Credits: 18**

EOH 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:

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-MPH Track 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-MPH Track 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 and defend 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-MPH Track - Environmental and Occupational Health**

**Total Required Credits: 45**

#### **Course Requirements**

**Required Courses – Credits: 18**

EOH 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-MPH Track 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-MPH Track 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 and defend 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-MPH Track - Health Care Administration and Policy**

#### **Total Required Credits: 45**

#### **Course Requirements**

#### **Required Courses – Credits: 18**

EOH 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 794 - Professional Paper in Health Care Administration (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-MPH Track 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-MPH Track 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.
6. Students choosing to do the capstone course do not need to complete advisor or culminating experience forms.

## **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 and defend a thesis or professional paper 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-MPH Track - Biostatistics and Epidemiology**

### **Total Required Credits: 45**

### **Course Requirements**

#### **Required Courses – Credits: 18**

EOH 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**

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:

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-MPH Track 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-MPH Track 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 and defend 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.

## **Plan Graduation Requirements**

Refer to your subplan for Graduation Requirements.

## **Graduate Certificate in Public Health**

### **Plan Description**

The Certificate in Public Health will provide students with a foundation in the four core subdisciplines of public health. Knowledge and skills obtained can be applied to protecting and improving the health and quality of life of populations, locally and globally. The certificate is aimed at individuals with a Bachelor's degree or recognized equivalent from a regionally accredited institution and have adequate preparation in the biological, physical, or social sciences and who are public health professionals in the private and public sectors.

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

### **Plan Admission Requirements**

Application deadlines available on the UNLV Graduate College website.

Applications available on the UNLV Graduate College website.

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

Students are accepted into a certificate 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**

EOH 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

Certificate Requirements

Completion of the required coursework.

### **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.

## **Graduate Certificate in Infection Prevention**

### **Plan Description**

The Certificate in Infection Prevention is designed to provide a foundation in the development, management, and execution of a program for healthcare facilities, including advanced studies in epidemiology, statistics, disease transmission, and the hospital and healthcare environment. The Certificate is aimed at individuals with a Bachelor's degree who are currently practicing in infection prevention.

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

### **Plan Admission Requirements**

Application deadlines available on the UNLV Graduate College website.

Applications available on the UNLV Graduate College website.

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

Students are accepted into a certificate 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: 9**

EOH 730 - Overview Of The Healthcare Infection Prevention Program

EOH 701 - Measurement Techniques in Infection Prevention

EOH 750 - Healthcare Facility Infection Prevention Programs

#### **Infectious Disease Courses – Credits: 3**

Complete one of the following:

EAB 725 - Epidemiology of Infectious Diseases

EOH 747 - Transmission of Infectious Disease

### **Certificate Requirements**

Completion of required coursework. Each course must be completed with a minimum grade of "B", should a lower grade be earned the student will be placed on probation.

### **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.

**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. Note(s): May be repeated to a maximum of six credits. Prerequisite(s): Admission to the School of Community Health Sciences or consent of instructor.

**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. Prerequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): EAB 705 and EOH 710 Corequisite(s): Must be enrolled in the certificate program for online section.

**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. Prerequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): 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. Note(s): May be repeated to a maximum of six credits. Prerequisite(s): 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. Note(s): May be repeated to a maximum of six credits. Prerequisite(s): Admission to the School of Community Health Sciences or consent of instructor.

**EAB 795 - Special Topics in Epidemiology and Biostatistics Credits 1 – 3**

Selected topic of current interest in epidemiology and biostatistics. Note(s): May be repeated to a maximum of six credits. Prerequisite(s): 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. Prerequisite(s): Admission to the School of Community Health Sciences or consent of instructor.

**EAB 798 - Thesis Research in Epidemiology and Biostatistics Credits 1 – 6**

Research, analysis, and development work towards completion of an approved project. Note(s): 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.

**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. Note(s): This course is crosslisted with HCA 480. Credit at the 600-level requires additional work.

**HCA 700 - Fundamentals of Health Care Financial Management Credits 3**

Exploration of accounting and financial management principles and concepts for decision-making in health care organizations. Grading: Letter Grade

**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. Note(s): This course is crosslisted with PBH 429. Credit at the 600-level requires additional work.

**HED 720 - Program Planning and Grant Writing in Health Promotion Credits 3**

Principles of program planning based on assessing individual and community needs and techniques to evaluate the effectiveness of health promotion programs. Also designed to analyze the process to obtain fiscal resources through grants, contracts, and other internal and external sources. Prerequisite(s): HED 700, 705

**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 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 Note(s): 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 701 - Measurement Techniques in****Infection Prevention****Credits 3**

Provides the essential training in fundamental epidemiology and biostatistics used in healthcare infection prevention programs.

**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****RESEARCH INTEGRITY & ETHICS****Credits 3****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 730 - Overview Of The Healthcare****Infection Prevention Program****Credits 3**

Provides an overview to the critical elements and functions of healthcare facilities' infection prevention programs as required by the multiple of regulatory agencies. Also serves as a guide and review for the Certification in Infection Control examination.

**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. Prerequisite(s): 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 744 - Mixed Methods Research for Public Health****Credits 3**

An overview of mixed methods research. Defines and describes the history of mixed quantitative and qualitative methods research. An examination of the types of designs and a discussion of the process of research as it relates to each of these designs. Prerequisite(s): Consent of instructor

**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* Prerequisite(s): 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 750 - Healthcare Facility Infection****Prevention Programs****Credits 3**

Develops an understanding of the problems and potential solutions to infection prevention issues in healthcare facilities.

**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 - Pollution and Health Credits 3**

This course will address the major effects of pollution on human health and ecosystems.

**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. Prerequisite(s): 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 781 - Public Health Policy: Integrating Theory and Practice Credits 3**

How policy is used as a tool of public health through theory, case studies, and application through collaboration with community partners. Topics include the policy process; the roles of science, law, ethics, economics, and politics in policy; policy analysis; public health advocacy. Prerequisite(s): Graduate standing

**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* Note(s): 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. Note(s): May be repeated to a maximum of six credits. Prerequisite(s): 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. Note(s): May be repeated to a maximum of three credits. Prerequisite(s): 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. Note(s): May be repeated to a maximum of six credits. Prerequisite(s): 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**

Note(s): 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 Note(s): May be repeated to a maximum of 21 credits Prerequisite(s): PhD standing

**EAB 788 - Meta-Analysis in Public Health**

Logic and application of meta-analysis in public health. Computing effect size and summary effects, conduct sensitivity and subgroup analysis, assess heterogeneity, and potential biases. Prerequisite(s): EAB 703 and EAB 705



## 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 health care 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*

*Josue Epane, Ph.D., Graduate Coordinator*

### Health Care Administration and Policy Faculty

#### Program Director

Bonilla, Jennifer Professor of Health Care Administration; M.H.I., Arizona State University; M.B.A., University of Phoenix. Rebel since 2016.

#### 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

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

#### Graduate Faculty

Bhandari, Neeraj Assistant Professor of Health Care Administration; Ph.D. Pennsylvania State University. Rebel since 2016.

Moseley, Charles - Full Graduate Faculty Professor Emeritus of Health Care Administration and Policy; Ph.D., Virginia Commonwealth University. Rebel since 1991.

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

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

#### 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

## Executive Master of Health Care Administration

### Plan Description

The Executive MHA is designed for people with a minimum of 3 years of experience in administrative or managerial health care positions (e.g, risk management department director, burn unit director), 5 years of professional experience, or health care professionals with terminal degrees (e.g., MD, DDS, DNP)in health care and practice experience. EMHA students have a deep understanding of health care functions, but are looking to broaden their knowledge base as a way of moving up the organization into positions with cross-functional responsibilities. The EMHA is more strategic than operational and seeks to make students leaders in their organizations and knowledgeable consumers of the various types of health administration information that may come across their desk.

This program is delivered in primarily an online setting. However, students are expected to attend two immersion sessions prior to the first and fourth semesters of the program.

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

### Plan Admission Requirements

Application deadlines available on the UNLV Graduate College website.

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. Official transcripts from all post-secondary institutions attended.
  4. Contact information for three recommendation providers who will upload letters of recommendation on your behalf.
3. 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: 36**

### **Course Requirements**

#### **Required Courses - Credits: 33**

EMHA 701 - Survey of U.S. Health Care System: Programs, Policies and Politics

EMHA 702 - Epidemiology in Health Services Management

EMHA 703 - Management of Health Services Organizations and Systems

EMHA 716 - Health Care Financial Management I/Health Care Accounting

EMHA 717 - Human Resources Management of Health Care Organizations

EMHA 718 - Health Care Economics

EMHA 719 - Operations and Quality Management of Health Services

EMHA 720 - Information Systems in Health Services Management

EMHA 721 - Advanced Health Care Finance

EMHA 730 - Strategic Management of Health Services

EMHA 761 - Health Care Law and Ethics for Managers

#### **Capstone Course - Credits: 3**

EMHA 779 - Health Care Administration Capstone Course

### **Degree Requirements**

The culminating experience will be the completion of EMHA 779, Health Care Administration Capstone course. During their first semester and in each subsequent semester, students will conduct a self-assessment of their leadership competencies to help identify a project that will help them attain their career goal. The project can be related to their current work environment or to a health care need at the local, regional, state or national level. Exercises conducted by the students during their academic curriculum should follow theme related to that project. The culminating experience will be based on developing a project related to that career goal. Assignments throughout the program will be included in a final portfolio for students to present in the capstone and relate those assignments to meeting their career or project goal.

### **Plan Graduation Requirements**

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.

## **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 through 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**

Application deadlines available on the UNLV Graduate College website.

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:
  - a. A one to two page personal essay describing why they want to pursue a career in health care management.
  - b. A resume.
  - c. Unofficial transcripts from all post-secondary institutions attended.
  - d. 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: 39**

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 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

**Elective Course – Credits: 3**

Choose one of the following courses:

HCA 631 - Quality Management in Health Services Organizations

HCA 652 - Health Politics and Policy

HCA 680 - Organization and Management of Long-Term Care Services

HCA 715 - Health Services Research Methods

**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. Students do not need to complete advisor or culminating experience forms.

**Plan Graduation Requirements**

Refer to your subplan for Graduation Requirements.

**EMHA 701 - Survey of U.S. Health Care System: Programs, Policies and Politics 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. Prerequisite(s): Graduate standing or IBS major.

**EMHA 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.

**EMHA 703 - Management of Health Services 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.

**EMHA 716 - Health Care Financial Management I/Health Care Accounting 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.

**EMHA 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.

**EMHA 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.

**EMHA 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. Prerequisite(s): Graduate standing.

**EMHA 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.

**EMHA 721 - Advanced Health Care Finance Credits 3**  
Further study of financial management in the context of the health care industry. Prerequisite(s): EMHA 716

**EMHA 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.

**EMHA 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.

**EMHA 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. Grading: S/F grading only Prerequisite(s): Consent of instructor.

**HCA 631 - Quality Management in Health Services Organizations Credits 3**  
Quality outcome measurement in healthcare and the patient experience influences reporting and reimbursement. Focus on quality metric measurement, analyzing, managing and improving population health outcomes. Prerequisite(s): HCA 701

**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. Prerequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): 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 Note(s): The project option requires a formal paper and a presentation. Grading: S/F grading only Prerequisite(s): 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 Note(s): May be repeated to a maximum of six credits. Prerequisite(s): 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. Note(s): May be repeated for a maximum of six credits. Prerequisite(s): 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. Note(s): May be repeated to a maximum of six credits. Grading: S/F grading only. Prerequisite(s): Consent of instructor.

**HCA 799 - Thesis Research****Credits 3**

Note(s): May be repeated, but a maximum of six credits will apply towards the student’s degree program. Grading: S/F grading only. Prerequisite(s): 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 centered 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.

*Karen P. West, D.M.D., Dean, School of Dental Medicine*

*Christine C. Ancajas, D.D.S., Assistant Dean for Admission and Student Affairs*

*Christopher Kypuros, Ph.D., Director of Financial Aid & Scholarship and Academic Endeavors*

*William D. Davenport, Jr., Ph.D., Associate Dean for Academic Affairs*

*Ronald R. Lemon, D.M.D., Associate Dean, Advanced Education*

*James Mah, DMSc, Graduate Coordinator*

*Connie C. Mobley, Ph.D., Associate Dean for Research*

*Judith Skelton, Ph.D., Assistant Dean for Outreach and Engagement*

*Rick B. Thiriote, D.D.S., Co-Associate Dean for Clinical Services*

*Wendy S. Woodall, D.D.S., Co-Associate Dean for Clinical Services*

## 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 and Chair of Clinical Sciences

Woodall, Wendy Assistant Professor; B.A.S.S., Stephen F. Austin State University; D.D.S., University of Texas.

### Co-Associate Dean for Clinical Services

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

### Director of Financial Aid & Scholarship and Academic Endeavors

Kypuros, Christopher B.A., University of Nevada, Las Vegas; M.A., St. Mary's University, Ph.D., 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

Al-Talib, Tanya Associate Professor in Residence Clinical Sciences; D.D.S., Louisiana State University School of Dentistry; M.S., University of North Carolina School of Dentistry.

Baca, Kristen Visiting Assistant Professor; B.S., University of Nevada, Las Vegas; D.M.D., University of Nevada, Las Vegas.

Brandon Abbatangelo, Tina Visiting Assistant Professor of Clinical Sciences and Director of SDM on Main Campus Clinic; B.S., University of Nevada, Las Vegas; D.D.S., University of Iowa College of Dentistry

Braun, Gary Visiting Associate Professor in Residence, General Practice Residency Program; B.A., Drew University; D.M.D., University of Pennsylvania School of Dental Medicine; M.S., University of Texas.

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

Chrzan, Brian Visiting Associate Professor; B.S., Utica College of Syracuse University; D.D.S., School of Dental Medicine State University of New York at Buffalo; Ph.D., School of Dental Medicine State University of New York at Buffalo.

Chung, Eve Visiting Assistant Professor; B.S., University of Nevada, Reno; D.M.D., University of Nevada, Las Vegas.

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; Diplomate-American Board of Dental Public Health; 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.

Devore, Phillip Visiting Associate Professor; D.D.S., University of California, Los Angeles

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., University 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 Colorado; D.M.D., University of Nevada, Las Vegas.
- Faulkner, Davin Visiting Assistant Professor; 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.
- Gewelber, Ciron Visiting Assistant Professor; B.A., Fordham University; D.M.D., University of the Pacific School of Dentistry.
- Haskin, Christine Associate Professor; B.A., University of Texas at Austin; M.S., Southwest Texas State University; D.D.S., University of Texas; Ph.D., University of Texas.
- Hernandez, Scarlett Visiting Assistant Professor; D.D.S., New York University College of Dentistry, New York, NY.
- 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.
- 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.
- 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.
- Mai, Kim Visiting Assistant Professor-in-Residence; B.S., University of California, Los Angeles; D.D.S., University of Southern California School of Dentistry.
- 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.
- 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.
- 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.
- Polanski, Joshua Assistant Professor-in-Residence; B.A., Washington University in St. Louis; M.A., University of Iowa, Ph.D., University of Iowa.
- 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 Wood Johnson Medical School.
- Sanders, Owen Associate Professor-in-Residence; B.S., Brigham Young University, D.M.D., Temple University.
- Seran, Clifford - Full Graduate Faculty Assistant Professor; B.S., Bucknell University; D.M.D., University of Pennsylvania.
- Schoen, Richard Visiting Assistant Professor; B.A., University of California, Los Angeles; D.D.S., Loyola University.
- 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.
- 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

Application deadlines available on the UNLV Graduate College website.

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 Orthopedics 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**

An introduction and overview of the specialty of orthodontics and dentofacial orthopedics to prepare the orthodontic resident for advanced education in this dental specialty.

### **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 procedures to be performed during that clinic session.

### **ORTH 8104 - Clinical Specialty Seminars III 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 procedures to be performed during that clinic session.

### **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**

A continuation and progressing advanced level of the three-hour clinical sessions during which the resident 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 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 malocclusions of their patients under the supervision of the attending orthodontic clinical faculty.

### **ORTH 8204 - Clinic Orthodontics Credits 6**

A continuation and progressing advanced level of the clinical sessions which provides the resident a more advanced level of material regarding orthodontic diagnosis, treatment planning and treatment. These clinical sessions are used to further evaluate residents diagnostic and treatment planning skills as well as their execution of the treatment plan. Progress is measured by interaction with attending faculty.

### **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. Prerequisite(s): 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**

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 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 PRESENTATION**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**

A continuation and progressively advanced level of 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 American Board of Orthodontics certification examination.

**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 approach, 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

<b>PGDE 8402 - Biomedical Sciences Core I</b>	<b>Credits 4</b>
<b>PGDE 8403 - Biomedical Sciences Core II</b>	<b>Credits 4</b>
<b>PGDE 8415 - Advanced Biomedical Sciences</b>	<b>Credits 2</b>
<b>PGDE 8503 - Interdisciplinary Diagnosis and Treatment Planning</b>	<b>Credits 2</b>
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.	
<b>PGDE 8516 - Adv Clin Sci: Radiology</b>	<b>Credits 4</b>
Provide residents with digital maxillofacial radiology procedures and protocols. Introduce residents to advanced maxillofacial radiology technology, i.e.; ConeBeam CT	
<b>PGDE 8517 - TMD</b>	<b>Credits 2</b>
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.	
<b>PGDE 8701 - PSC: Lit Review</b>	<b>Credits 2</b>
<b>PGDE 8702 - Res Design</b>	<b>Credits 2</b>
<b>PGDE 8703 - Research Methods II</b>	<b>Credits 2</b>
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.	
<b>PGDE 8715 - PSC: Practice Management</b>	<b>Credits 2</b>
<b>PGDE 8901 - Thesis</b>	<b>Credits 6</b>
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 School of Nursing in Nevada to offer a Doctor of Philosophy in Nursing (Ph.D.) Degree.

All of our graduate programs are all web-based to allow for “anytime, anyplace” education but may involve occasional visits to campus.

Our Master of Science in Nursing Degree (MSN), offers two tracks, Family Nurse Practitioner (FNP) and Nurse Educator (NE). We also offer an Advanced Graduate Certificate FNP and NE post-masters certificate.

FNPs provide primary care for individuals across the lifespan and often provide care to indigent and uninsured populations. The NE prepares graduates to teach nursing. Thus, increasing qualified faculty so that area nursing schools may increase their enrollment. The MSN degree 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) and is designed to provide students the requisite knowledge and skills for safe and effective nursing practice.

A new Doctorate of Nursing Practice (DNP) degree program is now available at UNLV to educate both post-bachelor’s degree and post-master’s degree students. The DNP degree is a terminal professional practice degree and prepares graduates in the tracks of advanced clinical practice as a Family Nurse Practitioner, Academic Leadership or Nurse Executive. The DNP program is online but requires occasional trips to campus for orientation, skills training, and testing.

Our Ph.D. in Nursing degree program is research-focused with an emphasis on education. A bridge program, Post Doctor of Nursing Practice (DNP) to Doctor of Philosophy in Nursing (Ph.D.) is also available. Our goal is to prepare scholars to advance nursing science and practice through rigorous research, evidence-based education, and dynamic leadership.

Our new Interdisciplinary Health Sciences (IHS) Ph.D. is offered in collaboration with Kinesiology, Nutrition, Health Physics, and Physical Therapy. This program is focused on biobehavioral issues and prepares nurses to work collaboratively with other health care professionals to advance research and education. There is a subtrack in the IHS Program for Nursing.

Expansion of our research activities includes a number of well-funded graduate assistant positions available for full-time students. Graduate assistants work closely with faculty on their research and/or teaching and this may include teaching in the clinical setting. It is a wonderful opportunity to gain additional knowledge and skills and foster professional relationships with faculty.

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*

*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 Faculty Affairs*

*Du Feng, Ph.D., Interim Associate Dean for Research*

## Nursing Faculty

### Dean

Yucha, Carolyn - Full Graduate Faculty Professor; BS SUNY Albany; MS SUNY Buffalo; PhD SUNY, Health Sciences Center, Syracuse, NY. Associate Dean for Academic Affairs

Benfield, Rebecca - Full Graduate Faculty Associate Professor; BSN University of North Carolina; MSN University of Kentucky; PhD University of South Carolina. Rebel since 2015. Associate Dean for Faculty Affairs

Bondmass, Mary - Full Graduate Faculty Associate Professor; BSN Loyola University; MSN Loyola; PhD University of Illinois. Rebel since 2015.

### Ph.D. Program Coordinator

Dingley, Catherine- Full Graduate Faculty Associate Professor; BSN University of West Florida; MSN Midwestern State University; PhD University of Colorado. Rebel since 2015.

### DNP Program Coordinator

Sabo, Carolyn - Full Graduate Faculty Professor; BSN, MS, University of Utah; EdD Brigham Young University. Rebel since 1984.

**MSN Program Coordinator** Angosta, Alona - Full Graduate Faculty Associate Professor; BSN, MSN University of Nevada, Las Vegas; PhD University of Hawaii. Rebel since 2005.

### Graduate Faculty

Candela, Lori - Full Graduate Faculty Associate Professor; BS Metropolitan State College; MS, University of Colorado; EdD University of Southern California. Rebel since 1999.

Clark, Michele - Full Graduate Faculty Associate Professor Emeritus; BSN University of California; MS, PhD University of Arizona. Rebel since 2006.

Clevesy, Marcia - Associate Graduate Faculty Lecturer; BSN University of Phoenix; MSN North Eastern University. Rebel since 2006.

Colosimo, Roseann - Full Graduate Faculty Assistant Professor; BSN Saint John College, Cleveland Ohio; MSN Catholic University, Washington DC; PhD The Ohio State University, Columbus, Ohio. Rebel since 2016.

Cyrkiel, Dianne - Associate Graduate Faculty Lecturer; BSN Indiana University, MSN, University of Texas. Rebel since 2000.

Doolen, Jessica - Full Graduate Faculty Assistant Professor; BSN, MSN, University of Nevada, Las Vegas; PhD, University of Northern Colorado. Rebel since 1994.

Eisenberg, Karen - Associate Graduate Faculty Lecturer; BSN, MSN Regis University. Rebel since 2012.

Ekroos, Rachell - Full Graduate Faculty Assistant Professor; BSN UAMS, MSN, Clarkston College; Ph.D., University of Washington, Seattle. Rebel since 2017.

Feng, Du - Full Graduate Faculty Professor; BS Peking University; MS University of Southern California; PhD University of Southern California. Rebel since 2013.

Gatlin, Tricia - Full Graduate Faculty Assistant Professor; BSN University of Memphis; MS University of Portland; PhD University of Arizona. Rebel since 2011.

George, Carmen - Full Graduate Faculty Assistant Professor in Residence; BSN Northern Arizona University; MSN, DNP University of South Alabama. Rebel since 2016.

Kawi, Jennifer - Full Graduate Faculty Assistant Professor; BSN Saint Louis University; MSN University of Nevada, Las Vegas; PhD University of Colorado, Denver. Rebel since 2007.

Lee, Hyunhwa - Full Graduate Faculty Assistant Professor; BSN, MSN, Yonsei University, Seoul, Republic of Korea; PhD, University of Michigan, Ann Arbor. Rebel since 2014

Leland, Nicole - Associate Graduate Faculty Lecturer; BSN, MSN University of Nevada, Las Vegas. Rebel since 2010.

Lukkahatai, Nada - Full Graduate Faculty Assistant Professor; BSN Faculty of Nursing, University, Chiang Mai, Thailand; MSN Old Dominion University; PhD, University of North Carolina. Rebel since 2014

Maes, Cheryl - Associate Graduate Faculty Lecturer; BSN, MSN, University of Nevada, Las Vegas. Rebel since 2004.

Menzel, Nancy - Full Graduate Faculty Associate Professor; BS Cornell University; MS Boston University; PhD University of South Florida. Rebel since 2006.

Miller, Sally - Associate Graduate Faculty Lecturer; BSN, MSN Rutgers, The State University; PhD Walden University. Rebel since 2014.

Morrow, Kelly - Associate Graduate Faculty Lecturer; BS Florida Hospital College of Health Sciences; MSN University of Nevada, Las Vegas. Rebel since 2014.

Serafica, Reimund - Full Graduate Faculty Assistant Professor; A.A., MSN, Gardner-Webb University; PhD University of Hawaii at Manoa. Rebel since 2014

Reyes, Andrew - Full Graduate Faculty Assistant Professor; BSN Remedios T. Romualdez College of Nursing; MSN D'Youville College; PhD University of Western Ontario, London Ontario, Canada. Rebel since 2016.

Rue, Shona - Associate Graduate Faculty Lecturer; BSN, Virginia Commonwealth University; MSN Oregon Health Sciences University. Rebel since 2007.

Silvestri-Elmore, Angela - Full Graduate Faculty Visiting Professor; BSN, Salve Regina University; MSN, PhD University of Nevada, Las Vegas. Rebel since 2016.

St. Pierre Schneider, Barbara - Full Graduate Faculty Research Professor; BSN LSUMC; MS University of Washington; DNSc, UCLA. Rebel since 2006.

Tan, Rhigel - Full Graduate Faculty Assistant Professor in Residence; BSN, Cebu City Medical Center College of Nursing; MN, Cebu Normal University; DNP Rocky Mountain University of Health Professions. Rebel since 2005.

Tejada, Marianne - Associate Graduate Faculty Assistant Professor in Residence; BSN, California State University; MSN California State University; DNP Western University of Health Sciences. Rebel since 2013.

Thomason, Diane - Full Graduate Faculty Assistant Professor; BSN, MSN, PhD University of Washington. Rebel since 2013.

Tran, Dieu-My - Full Graduate Faculty Assistant Professor; BSN, PhD University of Nebraska Medical Center. Rebel since 2016.

VanBeuge, Susan - Full Graduate Faculty Assistant Professor; BSN Pacific Lutheran University; MS University of Nevada Las Vegas; DNP University of Utah. Rebel since 2006.

Willis, Janelle - Associate Graduate Faculty Lecturer; BSN, MSN University of Nevada, Las Vegas. Rebel since 2009.

Wood, Min - Associate Graduate Faculty Lecturer; BSN, State University of New York; MSN University of California. Rebel since 2016.

## **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**

Application deadlines available on the UNLV Graduate College website.

Applications available on the UNLV Graduate College website.

Students must apply and submit all admission materials via the Grad Rebel Gateway system available through the Graduate College. The following items are required:

1. Official transcripts of all course work for both baccalaureate and master's 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 Advanced Graduate Certificate in Family Nurse Practitioner Program.
3. Statement of 300 words describing the students' professional goals and reason for seeking a nurse practitioner certificate.
4. Current resume or curriculum vitae (CV).
5. Current valid unencumbered and unrestricted RN license in state of residence.

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

Students are accepted into a certificate 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: 28****Course Requirements****Required Courses – Credits: 28**

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

NURS 761 - Clinical Synthesis

**Certificate Requirements**

Completion of a minimum of 28 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**

Application deadlines available on the UNLV Graduate College website.

Applications available on the UNLV Graduate College website.

Students must apply and submit all admission materials via the Grad Rebel Gateway 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 applicants must review and follow the Graduate College Admission and Registration Requirements.

Students are accepted into a certificate 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 &amp; 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.

**Post Graduate Certificate in Biobehavioral Nursing****Plan Description**

The certificate in Biobehavioral Nursing will provide students with a foundation in biobehavioral research approaches and team science. Courses will prepare students using biological, behavioral, and associated factors which influence health and illness.

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

**Plan Admission Requirements**

Application deadlines available on the UNLV Graduate College website.

Applications available on the UNLV Graduate College website.

A terminal research degree in nursing or related field is required.

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

Students are accepted into a certificate 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**

HSC 701 - Interdisciplinary Team Science

NURS 739 - Biobehavioral Approaches in Nursing Research

NURS 741 - Biobehavioral Mechanisms, Pathways, and Measurements

NURS 747 - Introduction to Laboratory Procedures for Biobehavioral Studies

NURS 798 - Independent Study

**Plan Certificate Completion Requirements**

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

## 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 Learning Outcomes:

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:

Application deadlines available on the UNLV Graduate College website.

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 Track:

1. Hold a baccalaureate degree in nursing from an accredited CNEA 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. Hold an unencumbered license as a registered nurse and as an advanced practice nurse commensurate with state licensure.
6. Interviews may be required.
7. Hold national certification in an advanced practice role from a nationally recognized certification/credentialing organization.

### Academic Leadership Track:

1. Hold a baccalaureate degree in nursing from an accredited CNEA 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. Interviews may be required.
7. Hold national certification (or eligible for certification) in an advanced practice role or an area of specialization or expertise.
8. 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).

**Nurse Executive Track:**

1. Hold a baccalaureate degree in nursing from an accredited CNEA 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 (i.e. MBA, MHA, MPH, etc.). Coursework from non-nursing majors 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 Healthcare policy. Students who have not completed a graduate level course in healthcare policy must complete NURS 719R within the first year of study in the DNP program.
3. Have a cumulative grade point average (GPA) of 3.5 or higher (on a 4.0 scale) in the master's degree program.
4. Hold an unencumbered license as a registered nurse.
5. Interviews may be required.
6. Hold national certification (or be eligible 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 (i.e. MHA, MPH, MBA, etc.).

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:**

Application deadlines available on the UNLV Graduate College website.

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, Academic Leadership, and Nurse Executive Tracks:**

1. Hold a baccalaureate degree in nursing from an accredited CNEA 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.

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: 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. Clinical 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 and 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.

#### **Subplan 5 Requirements: Post-Masters Nurse Executive Track**

#### **Total Credits Required: 32**

#### **Course Requirements**

#### **Required Courses – Credits: 26**

NURS 718 - Organizational Management for the Advanced Practice Nurse

NURS 726 - Healthcare Issues And The Law

NURS 729R - Translational Evidence for Healthcare Systems

NURS 735 - Healthcare Outcomes Management

NURS 737 - Leadership in Organizations and Systems

NURS 738 - Financial Theory and Budget Management in the Healthcare Setting

NURS 765 - DNP Residency

NURS 767 - Collaboration, Communication & Negotiation for the Nurse Leader

NURS 768 - DNP Forum & Role Transformation

XXXX - Cognate Elective (Focus depends on master's degree coursework)

#### **DNP Project – Credits: 6**

NURS 788 - DNP Project

### **Degree Requirements**

1. Complete 32 credits with a minimum GPA of 3.0.
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 a 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 School of Nursing members. In addition, a third member from outside the School of Nursing, known as the Graduate College Representative, must be appointed. An additional committee member may be added at the student or School of Nursing's discretion. Please see Graduate College policy for committee appointment guidelines.
11. Continuously register for three 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 three 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 and are also required to abide by the policies of the UNLV Graduate College and University.

**Subplan 6 Requirements: BSN to DNP Nurse Executive Track**

**Total Credits Required: 60**

**Course Requirements**

**Required Courses – Credits: 45**

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 716 - Population Health: Analysis and Evaluation

NURS 718 - Organizational Management for the Advanced Practice Nurse

NURS 719R - Health & Public Policy for Advanced Practice of Nursing

NURS 726 - Healthcare Issues And The Law

NURS 729R - Translational Evidence for Healthcare Systems

NURS 735 - Healthcare Outcomes Management

NURS 736 - Innovations in Communication: Scholarly Writing

NURS 737 - Leadership in Organizations and Systems

NURS 738 - Financial Theory and Budget Management in the Healthcare Setting

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

**Cognate (Elective) Courses – Credits: 9**

XXXX - Elective, Open focus

XXXX - Elective, Open focus

XXXX - Elective, Leadership focus

**DNP Project – Credits: 6**

NURS 788 - DNP Project

**Degree Requirements**

1. Complete 60 credits with a minimum Grade Point Average (GPA) of 3.00.
2. Maintain a cumulative GPA 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 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.
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 3 semesters in the program.
14. 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.

### **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 to advance nursing science and practice through rigorous research, evidence-based education, and dynamic leadership.

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 attend an on-campus orientation prior to the first semester of enrollment. These meeting times and dates are set in advance to allow students adequate time to make appropriate plans. Students are also required to be on campus for their oral comprehensive exams, proposal defense, and final dissertation defense.

### **Programs of Study**

There are two options in the current Ph.D. in Nursing Program: Nursing Education 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**

Application deadlines available on the UNLV Graduate College website.

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:
  - a. NURS 705 or NURS 755
  - b. NURS 706
  - c. NURS 707
  - d. 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:
- Two representative samples of scholarly work (e.g., thesis, demonstration project, publications, etc.).
  - 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.
  - 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: 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**

- Complete the minimum credits required.
- 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.
- 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.
- 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, the 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. Integrate scientific findings from health and educational fields to include but not limited to nursing, social sciences, and humanities.
2. Assimilate leadership at the organizational and systems level to advance safe high quality outcomes in clinical or educational settings.
3. Apply continuous quality improvement measures to achieve positive outcomes in clinical or educational settings.
4. Utilize a systematic, scholarly approach to translate, apply, and disseminate evidence based research in clinical or educational settings.
5. Incorporate health related technologies to deliver, coordinate care, and analyze data to improve outcomes.
6. Practice advocacy to improve education, the health of the public, and the profession of nursing.
7. Employ culturally appropriate skills in communicating and collaborating with interdisciplinary teams to achieve positive outcomes in clinical or educational settings.
8. Synthesize social, cultural, financial, legal, ethical, and political influences to advance nursing practice, healthcare, and education.



9. Model the professional role of an advanced practice nurse or nurse educator in daily practice.

#### **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

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

#### **Plan Admission Requirements**

Application deadlines available on the UNLV Graduate College website.

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: 27**

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: 1**

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 grade 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:
  - a. 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.
  - b. 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 grade 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:
  - a. 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.
  - b. 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.

### **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(s): 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(s): 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. Prerequisite(s): 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. Prerequisite(s): 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 biopsychosocial 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. Prerequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): 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, 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. Prerequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): Admission to the DNP Program.



**NURS 726 - Healthcare Issues And The Law Credits 2**

This course will focus on healthcare, governmental, and legal issues and principles as applicable to the role of the nurse executive in complex healthcare environments. Topics of emphasis include patient and employee rights, labor relations, HIPAA, and documentation and reporting requirements for nurses. Prerequisite(s): Admission to the DNP Program or consent of instructor.

**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. Prerequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): 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. Note(s): Twelve hours of precepted practicum per week. Prerequisite(s): NURS 703, NURS 730 and NURS 702 Corequisite(s): 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. Note(s): May not be repeated for credit. Grading: S/F Prerequisite(s): NURS 702, NURS 703, NURS 730 Corequisite(s): NURS 734

**NURS 735 - Healthcare Outcomes Management Credits 2**

Nurse Executive's management principles directed at improving direct and indirect patient care outcomes are explored. Emphases will include principles of strategic planning and quality improvement, costs, access and quality, information technology, and management of human resources. Emerging issues in healthcare management and best practice guidelines will also be addressed. Prerequisite(s): Admission to the DNP Program or consent of instructor.

**NURS 736 - Innovations in Communication: Scholarly Writing Credits 1**

Apply principles of scholarly and technical writing to document preparation required of nurse executives for use in healthcare, governmental, policy, accreditation, and educational agencies and situations. Prerequisite(s): Admission to the DNP Program or consent of instructor.

**NURS 737 - Leadership in Organizations and Systems Credits 2**

Principles of organizational behavior for the nurse executive are emphasized. Topics include attitudes and perceptions, workplace communication, theories and strategies of motivation, trait and behavioral theories of leadership, group dynamics, team building, and organizational development. Prerequisite(s): Admission to the DNP Program or consent of instructor.

**NURS 738 - Financial Theory and Budget Management in the Healthcare Setting Credits 3**

Focus on the analysis and application of theories of budget and financial management by nurse executives in healthcare systems. Emphasis will be placed on analysis of healthcare and the economy, provision of value-based service, workload management, budget principles and strategies, and finance and accounting issues. Prerequisite(s): Admission to the DNP Program or consent of instructor.

**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. Note(s): This course has a non-credit clinical component. For more information, please refer to the course syllabus. Prerequisite(s): 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. Prerequisite(s): 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. Note(s): Nursing specialty serves as the context for course assignments. Prerequisite(s): 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. Prerequisite(s): 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. Note(s): Nine hours per week of precepted practicum. Prerequisite(s): NURS 734 and NURS 734L Corequisite(s): 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. Note(s): Can be repeated up to 4 credits. Grading: S/F Prerequisite(s): NURS 734, NURS 734L Corequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): NURS 739 and NURS 741

**NURS 747 - Introduction to Laboratory Procedures for****Biobehavioral Studies****Credits 2**

Use of laboratory equipment and performing laboratory procedures to generate biological data to contribute to the advancement of nursing knowledge. Laboratory safety protocols. Prerequisite(s): NURS 739 and NURS 741 or permission of instructor.

**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). Note(s): This course has a non-credit clinical component. For more information, please refer to the course syllabus. Prerequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): 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 (6-8)**

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. Note(s): This course has a non-credit clinical component. For more information, please refer to the course syllabus. Prerequisite(s): NURS 714 and NURS 750R

**NURS 761 - Clinical Synthesis****Credits 1**

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. Note(s): This course has a non-credit clinical component. For more information, please refer to the course syllabus. Prerequisite(s): 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. Prerequisite(s): 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. Note(s): Nine hours of precepted clinical experience in primary care per week. Prerequisite(s): NURS 734, NURS 744 Corequisite(s): NURS 764L

**NURS 764L - Primary Prevention in Pediatrics:****Chronic Illness Clinical****Credits (4-6)**

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. Note(s): Nonrepeatable for credit. Grading: S/F Prerequisite(s): NURS 734 and NURS 744 Corequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): 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. Note(s): May be repeated up to three consecutive semesters but a student may not take more than a total of nine credits. Prerequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): 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. Note(s): May be repeated to a maximum of five credits. Prerequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): NURS 780 or permission of instructor.

**NURS 780 - Quantitative Methods in Nursing Credits 3**

Examines, quantitative and mixed-method approaches used in nursing research. Prerequisite(s): Admitted to nursing doctoral program.

**NURS 781 - Qualitative Research Methods in Nursing Credits 3**

Examines qualitative approaches used in nursing research. Prerequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): 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. Note(s): The course may be repeated, but only six credits may be applied to the student's program. Prerequisite(s): 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. Prerequisite(s): 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. Note(s): Must be taken concurrently with NURS 791. Prerequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): 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. Prerequisite(s): 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) Note(s): Repeatable for up to 12 credits. Grading: S/F grading only. Prerequisite(s): 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) Note(s): Topics vary each semester. Prerequisite(s): 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. Prerequisite(s): NURS 706,