



PhD in Interdisciplinary Health Sciences:
Nursing

STUDENT HANDBOOK

Fall 2016 – Summer 2017

"Nurse Leaders Begin Here"

PhD in Interdisciplinary Health Sciences Program Handbook

Welcome

This Ph.D. in Interdisciplinary Health Sciences (IHS) is an innovative approach to healthcare research and is in response to the growing demand from federal funding agencies (e.g., National Institutes of Health (NIH), Patient-Centered Outcomes Research Institute (PCORI), Agency for Healthcare Research and Quality (AHRQ)) to have an interdisciplinary research approach to complex healthcare problems. Current discipline-specific Ph.D. programs in health are not adequately preparing graduates to identify and utilize the expertise of other disciplines in synergistic collaborations that are best able to handle these complex problems. Because the demand for an interdisciplinary approach is emerging, it is important to develop team science, which refers to conceptual and methodological strategies of collaborative research inquiry, to keep pace with the ever changing global healthcare milieu. This Ph.D. program will address this emerging need and is not only innovative but propitious.

This Ph.D. in IHS will provide students from different disciplines an opportunity to learn how to approach complex healthcare problems by using the expertise from other disciplines. 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, or 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.

Interdisciplinary research has been the recent focus of federal health funding agencies; however, there are very few programs that offer an interdisciplinary educational approach like this proposed program. This program is innovative in that it would be one of the first interdisciplinary Ph.D. programs in Health Sciences in the Western U.S. (discussed in more detail later). Since there are so few programs, this represents a great opportunity for UNLV to be a leader in healthcare innovation. Additionally, this program is coming at an important time as growth in the health sector is expected to expand exponentially in the next decade and beyond. This growth will require a whole new cadre of health research educators who will help meet the needs of society by training the next generation of healthcare professionals.

Mission Statement

The mission of the Doctor of Philosophy (Ph.D.) in Interdisciplinary Health Sciences at the University of Nevada, Las Vegas is to advance the science and practice of healthcare for society through the development of individuals with expertise in interdisciplinary research and scientific knowledge translation, built on strong backgrounds in basic sciences and health.

Vision Statement

The vision of the Interdisciplinary Health Sciences Ph.D. program is to produce independent and innovative researchers who will lead interdisciplinary research collaborations, exhibit expertise in specialized areas of health sciences, and whose experience will lead them to become expert translational researchers, educators, and communicators of research findings.

Program Outcomes

Upon completion of the program, all Ph.D. in IHS students will meet the outcomes detailed below.

1. Research outcome: Independently produce sound translational research by generating innovative research questions, casting appropriate designs, implementing study protocols, analyzing data, and critiquing the results in written form.

Deliverable 1: Submit a 3 article dissertation as primary author from data generated during the Ph.D. program or submit a large scale study resulting in a traditional dissertation.

2. Interdisciplinary outcome: Identify external funding sources that are relevant to the research focus area and generate an interdisciplinary grant proposal that is appropriate for that funding announcement.

Deliverable 2: Submit one external interdisciplinary grant proposal to the committee as part of the comprehensive examination.

3. Expertise outcome: Disseminate translational research findings orally and critique the scientific literature in area of specialty with sufficient depth to be considered an expert.

Deliverable 3: Orally defend dissertation.

Deliverable 4: Present at least one national/international presentation as a podium (oral) or a poster from research generated during Ph.D. program.

Purpose

The purpose of this handbook is to provide program specific information that is not found in the UNLV Graduate Catalog. Students are responsible for understanding and following the policies and procedures delineated in this document and the UNLV Graduate Catalog, as well as the NSHE Code, UNLV Bylaws, and the UNLV Student Conduct Code. Questions about policies should be directed to the Graduate College: valarie.burke@unlv.edu or kendall.hartley@unlv.edu.

Department Graduate Faculty

A current listing of the graduate faculty can be found in the UNLV Graduate Catalog. Faculty must hold either associate or full graduate faculty status to be involved in graduate education at UNLV. For up to date information regarding graduate faculty status in your department, visit the [Graduate Faculty status web page](#).

Program Information

Name of Degree: PhD in Interdisciplinary Health Sciences

Sub-Plan(s): Nursing, Rehabilitation Sciences, Health Physics, Kinesiology
catalog.unlv.edu (select 2016-2017 Graduate Catalog)

Contact Information

Please contact sub-plan Graduate Coordinators directly for information.

Sub-Plan Department Chairs

Nursing: Rebecca Benfield, PhD rebecca.benfield@unlv.edu

Rehabilitation Sciences: Merrill Landers, PT, DPT, PhD, OCS, merrill.landiers@unlv.edu

Health Physics: Steen Madsen, PhD, steen.madsen@unlv.edu

Kinesiology: Brian Schilling, PhD, brian.schilling@unlv.edu

Sub-Plan Graduate Coordinators (PhD in IHS Program Committee (PIPC))

Nursing: Catherine Dingley, PhD, catherine.dingley@unlv.edu, 702-895-4807

Rehabilitation Sciences: Louie Puentedura, PT, DPT, PhD, OCS, FAAOMPT, louie.puentedura@unlv.edu, 702-895-1621

Health Physics: Gary Cerefice, PhD, gary.cerefice@unlv.edu, 702-895-2612

Kinesiology: Janet Dufek, PhD, janet.dufek@unlv.edu, 702-895-0702

Program Requirements

Program requirements regarding [admission](#), [coursework](#) and [culminating experience](#) are found in the graduate catalog.

catalog.unlv.edu (select 2016-2017 Graduate Catalog)

Degree Program Benchmarks

The sub-plan directors (Graduate Program Director or Graduate College Coordinator) will be in charge of assessment of student learning outcomes in their respective sub-plans. Student learning outcomes that will be evaluated in addition to the items in Section C. above include the following:

1. Course grades. Must maintain a B or better in all coursework.
2. Comprehensive examination. Must complete satisfactorily.
3. Dissertation defense. Must complete satisfactorily.
4. Student publications, grants, and presentations at graduation.
5. Current student surveys. Satisfactory responses or better (on Likert scale responses) for learning objectives questions.
6. Graduation exit survey. Satisfactory responses or better (on Likert scale responses) for learning objectives questions.
7. Alumni survey (2 years from graduation). Satisfactory responses or better on learning objectives.

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. 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. Grades below B will not be acceptable. If a grade less than a B 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.

Students will complete a comprehensive examination which will be an interdisciplinary grant application, which will also be defended orally. 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.

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.

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

Program Timeline

PhD – Interdisciplinary Health Sciences core classes – 24 total credits	
Interdisciplinary research core (must take 3)	Interdisciplinary core
<ul style="list-style-type: none"> HSC 701 Interdisciplinary team science (3 credits) HSC 702 Translational research design (3 credits) HSC 703 Interdisciplinary grant writing for health sciences (3 credits) HSC 704 Statistics for health sciences (3 credits) HSC 705 Clinical trial design and analysis (3 credits) 	<ul style="list-style-type: none"> HSC 710 Seminar (1 credit repeated 3 times) HSC 711 Dissertation (12 credits)
Nursing sub-plan coursework	
NURS 709 Teaching and Learning in Nursing Education (3) NURS 771 Theory Development in Nursing (3) NURS 772 Nurse as Leader (3) NURS 775 Statistical Methods for Nursing Research I: Univariate Methods (3) NURS 780 Quantitative Methods in Nursing (3) NURS 781 Qualitative Research Methods in Nursing (3) NURS 739 Bio-behavioral approaches in nursing research (3)* NURS 747 Introduction to laboratory procedures for bio-behavioral studies (2)* NURS 741 Bio-behavioral mechanism, pathways and measurements (3)* NURS 746 Bio-behavioral Nursing Seminar: Developing a dissertation study (4)* NURS 789 Independent study/Elective course in research (3) Must take 5 elective credits relevant to course of study	
Rehabilitation Sciences sub-plan coursework – 36 total credits	
Sub-plan core coursework (21 credits): DPT 710 Neuroplasticity (3 credits) DPT 711 Pathobiomechanics (3 credits) DPT 712 Physiological bases of rehabilitation (3 credits) DPT 713 Genomic and regenerative rehabilitation concepts (3 credits) Must take at least 3 additional graduate level courses (9 credits) relevant to course of study Rehabilitation research core (12 credits): DPT 702 Critical appraisal and synthesis of research in rehabilitation (3 credits) DPT 703 Measurement theory and outcomes in rehabilitation (3 credits) Must take at least 2 additional graduate level statistics courses (6 credits) Pedagogy core (3 credits): Must take at least one pedagogy class from College of Education (examples: EDH 733, EDH 742, EDH 627, EDW 733, EDW 747, EPY 712, EPY 757, EPY 767, EPY 777, CIT 608, CIT 643, CIT 647, CIT 648, CIT 653, CIT 667, CIT 669, CIT 778)	
Health Physics sub-plan coursework – 36 total credits	
Health Physics sub-plan core coursework (18 credits) HPS 602 – Detectors (3) HPS 603 – Detector Lab (3) HPS 701 – Nuclear Physics (3) HPS 703 – Interactions (3) HPS 720 – Dosimetry (3) HPS 730 – Advanced Radiation Biology (3) Health Physics electives (18 credits) - complete 18 credits of electives approved by the HP sub-plan committee. Examples: HPS 611 - Graduate Seminar(1-3) HPS 616 - Advanced Health Physics (3) HPS 670 - Environmental Health Physics (3) HPS 718 - Radiochemistry Lab (3)	

HPS 719 - Radiochemistry lecture (1)
 HPS 740 - Imaging Physics (3)
 HPS 742 - Physics of Radiation Therapy (3)
 HPS 742L - Physics of Radiation Therapy Lab (3)
 HPS 750 - Radiation Risk Assessment (3)
 HPS 760 - Waste Management (3)
 HPS 790 - Clinical Internship (1-3)
 HPS 792 – Ethics for Medical Physicists (1)
 HPS 794 – Directed Research (1-12)
 HPS 795 - Independent Study (1-9)

Kinesiology sub-plan coursework – 36 total credits

Two of the following four courses (6 credits total):

- KIN 736 Biomechanical Applications in Kinesiology (3)
- KIN 740 Advanced Exercise Physiology (3)
- KIN 760 Motor Skill Learning & Performance (3)
- KIN 765 Neurophysiology of Movement (3)

Both of the following courses (6 credits)

- KIN 752 Selected Applications in Statistics 2 (or other advanced stat course) (3)
- KIN 789 Dissertation Prospectus (3)

Students will then select an area of emphasis and take 24 credits within that area:

Biomechanics electives (24 credits)

- KIN 700 Special Problems (up to 9 credits)
- KIN 717 Survey and Analysis of Professional Literature
- KIN 736 Biomechanical Applications in Kinesiology
- KIN 737 Biomechanics of Strength
- KIN 740 Advanced Exercise Physiology
- KIN 743 Research Techniques in Biomechanics
- KIN 760 Motor Skill Learning & Performance
- KIN 765 Neurophysiology of Movement
- KIN 788 Independent Study (up to 9 credits)
- KIN 656 Biomechanics of Endurance Performance
- DPT 711 Pathobiomechanics
- EGG 651 Ergonomics
- EGG 747 Orthopedic Biomechanics
- EGG 750 Analysis of Human Movement
- Other graduate level courses relevant to course of study

Exercise Physiology electives (24 credits)

- KIN 607 Comp & Integrative Med. Nutr Therapy
- KIN 657 Physiology of Endurance Performance
- KIN 700 Special Problems (up to 9 credits)
- KIN 717 Survey & Analysis of Prof. Literature in KIN
- KIN 720 Issues & Trends in Exercise Physiology
- KIN 738 Human Physiology
- KIN 739 Evaluation of Physical Work Capacity
- KIN 745 Human Energy Metabolism
- KIN 744 Thermoregulation during Physical Work
- KIN 765 Neurophysiology of Movement
- KIN 788 Independent Study (up to 6 credits)
- Other graduate level courses relevant to course of study

Motor learning/Control electives (24 credits)

- KIN 614 Enhancing Mental and Motor Abilities
- KIN 700 Special Problems (up to 9 credits)
- KIN 743 Research Techniques in Biomechanics
- KIN 760 Motor Skill Learning & Performance
- KIN 788 Independent Study (up to 9 credits)
- EGG 750 Analysis of Human Movement
- PSY 620 Psychology of Learning

- PSY 701 Biological Bases of Behavior
- PSY 702 Sensation and Perception
- PSY 703 Cognitive Psychology
- PSY 719 Behavioral Neuroscience
- PSY 720 Systems and Cognitive Neuroscience
- PSY 741 Psychology and Health
- PSY 742 Psychopharmacology
- PSY 744 Neuropsychology
- KIN 746 Matlab Programming
- KIN 762 – Motor Learning Applications
- Other graduate level courses relevant to course of study

Example schedule of Interdisciplinary core courses timeline		
Fall Semesters	Spring Semesters	Summer Semesters
HSC 701 - Interdisciplinary team science	HSC 703 - Interdisciplinary grant writing for health sciences	HSC 705 - Clinical trial design and analysis
HSC 702 - Translational research design	HSC 704 - Statistics for health sciences	
HSC 710 - Seminar	HSC 710 - Seminar	HSC 710 - Seminar

Professional Code of Ethics/Discipline Guidelines

UNLV Graduate College policy regarding academic integrity can be found in the graduate catalog.

Annual Review Procedures

Each spring term, graduate students are required to complete the Graduate Student Annual Review survey. This survey will be sent by the Graduate College to the student's Rebelmail account. The review covers the prior calendar year and assesses student progress while setting goals for the year ahead.

University Resources

Academic Success Center

The goal of the Academic Success Center is to help students do well academically and complete their studies on time. They offer or will refer you to such programs and resources as tutoring, advising, skills testing, career exploration and more. They guide students every step of the way to the many established resources created to ensure they complete their educational goals. Learn more about the programs and services the center currently offers.

Alumni Association

With an alumni base 90,000 strong, the UNLV Alumni Association offers a variety of services and opportunities in support of alumni and their families. UNLV alumni are encouraged to support the values of higher learning through advocacy, involvement, and giving.

Commencement Office

Located in the UNLV Registrar's Office, the commencement office is the last step in the graduation process. Please check with the commencement office for information on the commencement ceremony and your diploma; for all other information about graduate student degree completion and graduation, including thesis/dissertation requirements and doctoral hooding, please contact the Graduate College.

Office of Diversity Initiatives

The vision of the Office of Diversity Initiatives is to advocate, promote, and support the advancement of equity, inclusiveness, and empowerment of a continuously changing collegiate and global community. The mission of the Office of Diversity Initiatives is to provide leadership and support for UNLV's diversity mission: *to nurture equity, diversity, and inclusiveness that promotes respect, support, and empowerment*. This Office also handles UNLV Title IX questions, inquiries, and reporting.

Disability Resource Center (DRC)

The DRC is committed to supporting students with disabilities at UNLV through the appropriate use of advocacy, accommodations, and supportive services to ensure access to campus courses, services, and activities. The DRC is the university-designated office that determines

and facilitates reasonable accommodations in compliance with the Americans with Disabilities Act (ADA) and Section 504 of the Rehabilitation Act of 1973. Graduate students with disabilities must disclose to the DRC in order to receive appropriate accommodations.

Office of International Student and Scholars

International Students and Scholars (ISS) ensures compliance with both SEVIS (Student and Exchange Visitor Information System) and federal law, so that the university can continue to be authorized by the U.S. federal government to enroll international students; host and hire international scholars; assist and advise employment eligibility and authorization relating to international students and scholars, and visa, travel, and immigration issues; provide critical and specialized services to the international students and scholars of the UNLV community; and facilitate their transition to the campus and the U.S.

Jean Nidetch Women's Center

The Jean Nidetch Women's Center is committed to creating a supportive and inclusive environment for all genders through programming, services, and advocacy for the UNLV community. The Women's Center has informational resources, brochures, and flyers for a variety of on and off campus organizations to help empower and protect yourself, and learn about your options. They also provide free tampons, pads, and condoms.

UNLV Libraries

UNLV Libraries has always been more than books; they are about encouraging students and creating quality programs that elevate growth and learning. Please visit their website for important information about the services they offer to graduate students.

Graduate & Professional Student Association (GPSA)

The Graduate & Professional Student Association serves all currently enrolled University of Nevada, Las Vegas graduate and professional students. The GPSA maintains the Graduate Student Commons located in the Lied Library room 2141. The facility a working office equipped with a copier, fax, flatbed scanners, color laser printer, office supplies, and computers with printers and a small kitchen area. The GPSA is the graduate student governance body at UNLV; the GPSA Council consists of one graduate student representative from each graduate department, and they meet monthly. The GPSA also provides volunteer opportunities, sponsors social events, and supports graduate student research through the graduate research and travel grants program.

Office of Student Conduct

The Office of Student Conduct is a student-centered, service-oriented office located within the Division of Student Affairs. The Office of Student Conduct collaborates with the UNLV community to provide an inclusive system through enforcement of the *UNLV Student Code of Conduct* by:

- Promoting awareness of student rights and responsibilities;
- Establishing accountability for student choices;
- Creating opportunities for involvement in the process; and
- Striving to uphold the values and ethics that advance the common good.

Office of Veteran Services

The UNLV Office of Veteran Services is staffed with veterans and GI Bill-experienced staff to assist more than 1,000 veterans, dependents, active duty service members, National Guard members, and reservists. Their mission is to develop a welcoming, veteran-friendly campus environment that fosters academic and personal success.

The Financial Aid & Scholarships Office

The Financial Aid & Scholarships Office supports higher-education access and persistence by providing financial aid to eligible students. The office partners with student organizations, the UNLV Foundation, the Graduate College, and other external constituents to provide financial aid learning opportunities and scholarship support for graduate students.

Writing Center

This is a free service to UNLV students to help you with any writing project, from papers to creative writing, to resumes, and we can work with you at any stage of the writing process. The center can help you brainstorm, make an outline, work on your drafts, or just be a soundboard for your ideas. The center staff can assist you in person, or via the Online Writing Lab (OWL) page.

University Policies and Procedures

Graduate students are responsible for knowing and acting in accordance with UNLV Policies and Procedures. To view the most commonly referenced campus policies and procedures, you can refer to the following websites:

- [Academic Integrity](#)

- Activation for Military Service
- Change of Address
- FERPA/Privacy Rights
- Health Insurance - Mandatory
- Jean Clery Campus Safety and Security Report
- Proof of Immunization
- Policies and Procedures on the Protection of Research Subjects
- Rebelmail Policy
- Student Conduct Code
- Student Computer Use Policy
- Title IX

To ensure compliance with Graduate College policies and procedures, please review the relevant sections of the [Graduate Catalog](#) :

- Academic Calendar
- Academic Policies
- Admission and Registration Information
- Degree Progression Policies & Procedures

In addition, the [Graduate College website](#) contains additional information regarding policies and procedures.

Nothing in this handbook supersedes any NSHE, UNLV, or Graduate College policy.

Handbook Information

Last revised	Revised by	Changes summary
[May 9, 2016]	J.S. Dufek	Dissertation format for KIN track; Minor edits
May 9, 2016	M.C. Clark	Minor edits
May 9, 2016	C. Dingley	Minor edits

Nursing Sub-Plan Policies and Procedures

Admissions

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 is an overall undergraduate/graduate GPA >3.25, >50th average percentile on the quantitative, verbal, and analytic portions of the GRE (taken within the last 5 years), three letters of recommendation, interview with two core faculty members, curriculum vitae, and personal statement. 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.

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

Rehabilitation Sciences Sup-Plan Policies and Procedures

Admissions

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 is an overall undergraduate/graduate GPA >3.25, >50th average percentile on the quantitative, verbal, and analytic portions of the GRE (taken within the last 5 years), three letters of recommendation, interview with two core faculty members, curriculum vitae, and personal statement. 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.

Applicants must 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.

Health Physics Sub-Plan Policies and Procedures

Admissions

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 is an overall undergraduate/graduate GPA >3.25, >50th average percentile on the quantitative, verbal, and analytic portions of the GRE (taken within the last 5 years), three letters of recommendation, interview with two core faculty members, curriculum vitae, and personal statement. 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.

Applicants must have 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).

Kinesiology Sub-Plan Policies and Procedures

Admissions

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 is an overall undergraduate/graduate GPA >3.25, >50th average percentile on the quantitative, verbal, and analytic portions of the GRE (taken within the last 5 years), three letters of recommendation, interview with two core faculty members, curriculum vitae, and personal statement. 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.

Applicants must have 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.

Dissertation Format

In consultation with their advisor, the student has two options for the structure and associated content of the dissertation. These will be termed "traditional" and "multiple-projects". All dissertations will include a title page, acknowledgements, table of contents, references, and appendices as appropriate. Minimum content and suggested structure for the specific categories of dissertations are outlined below.

Traditional Dissertation

This form of the dissertation is organized around one particular experiment. Specifically this should be an in-depth examination of a specific question/topic involving a single, comprehensive experiment. The structure of this document will consist of a minimum of an abstract, bibliography and five chapters to include:

1. Introduction (background, statement of the problem(s), purpose of the study, hypotheses, limitations, delimitations)
2. Review of the Literature
3. Methods
4. Results
5. Discussion/Conclusion/Recommendations

Optional appendices, figures and tables are also to be included.

The oral defense will be that of this single research experiment.

Multiple-Projects Dissertation

The form of the dissertation may be either 1) a linear progression of at least three topically developing experiments, or 2) a series of a minimum of three experiments designed around a theme or topical area of inquiry. The exact structure of the document may vary based upon choice of linear or circular design. It is imperative that each experiment is of adequate scientific merit to stand on its own as an independent publication.

Packaging of the multiple-projects dissertation should include:

1. Introduction (background, statement of the problem(s), hypotheses, limitations, delimitations)
2. Experiment 1: Written in the format required by the target journal, which is typically Introduction, Methods, Results and Discussion/Summary/Conclusions.
3. Experiment 2: Written in the format required by the target journal which is typically Introduction, Methods, Results and Discussion/Summary/Conclusions
4. Experiment 2: Written in the format required by the target journal which is typically Introduction, Methods, Results and Discussion/Summary/Conclusions
5. Summary / Future Directions

This example suggests three experiments; however additional experiments may be proposed and completed. The number of projects to be completed will be proposed by the student with final approval given from the doctoral advisor and dissertation committee. Optional appendices, figures and tables are also to be included.

The oral defense will include the entire document, inclusive of all experiments conducted.