

Doctor of Philosophy - Interdisciplinary Health Sciences

Plan Description

This IHS Ph.D. will provide students from different disciplines an opportunity to learn how to approach complex healthcare problems by using the expertise from their own as well as other disciplines. This goal will be achieved through completion of a common core of courses identified to provide a strong research foundation along with the ability to communicate this research to a broad audience of healthcare scientists and professionals. These core courses will be the foundation of the Ph.D.; however, students will be able to individualize their program of study with appropriate specialized coursework as well as independent research experiences. Strengths of the faculty in IHS focus around the following: 1) Biomechanics, 2) Exercise Physiology and Nutrition Sciences, 3) Health Physics, 4) Motor Control/Learning, and 5) Rehabilitation Sciences.

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

Admission Requirements

Application deadlines

Applications available on the UNLV Graduate College website.

Students will be admitted into the program by the IHS Executive Governing Committee. Review of applicants for admission by this committee will occur after screening by the student's mentor. Note the mentor is to be identified prior to program admission. The minimum requirements of the Ph.D. in IHS are:

1. GPA requirements:
 - Undergraduates: An overall undergraduate GPA of 3.25 or higher
 - Graduates: An overall graduate GPA of 3.25 or higher
2. 50th average percentile or above on the quantitative, verbal, and analytic portions of the GRE (taken within the last 5 years) is preferred.
3. Three letters of recommendation. One letter must be solicited by the applicant from their proposed mentor.
4. Kira interview
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 following the requirements in the UNLV English Proficiency page (add link).

Applicants must have graduated from a regionally accredited institution or equivalent in a related field (e.g., biology, engineering, exercise science, health physics, physical therapy, psychology, occupational therapy) at the Master's or first-professional clinical doctoral level. Applicants with Bachelor degrees may be admitted to the program but are required to take an additional 30 credits of elective, degree-appropriate coursework.

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

Subplan 2 Requirements: Post-Master's Track

Subplan 1 Requirements: Post-Bachelor's Track

Total Credits Required: 90

Course Requirements

Interdisciplinary Research Core Courses – Credits: 15

Complete 12 credits by completing HSC 703, 704, 706, 710 (HSC 710 must be taken 3 times).

In addition, complete 3 credits by choosing either: HSC 700, 702, or 705.

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|---|---|
| HSC 703 Interdisciplinary Grant Writing for Health Sciences | 3 |
| HSC 704 Selected Applications in Statistics 2 | 3 |
| HSC 706 Health Science Writing and Communication | 3 |
| HSC 710 Seminar | 1 |
| [After] In addition, students must complete one of the following courses: | |
| HSC 700 Selected Application of Statistical Techniques I | 3 |
| HSC 702 Translational Research Design | 3 |
| HSC 705 Clinical Trial Design And Analysis | 3 |

Elective Courses – Credits: 60

Complete 60 credits of advisor approved graduate-level courses:

Minimum of 6 credits of graduate level interdisciplinary courses outside of the student's primary focus area

Minimum of 9 credits of 700-level content/focus area courses

Up to 15 credits of HSC 787 and HSC 788.

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| HSC 787 Special Problems in Interdisciplinary Health Sciences | 1 - 6 |
| HSC 788 Independent Study in Interdisciplinary Health Sciences | 1 - 9 |

Dissertation Prospectus - Credits: 3

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| HSC 789 Dissertation Prospectus | 3 |
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Research Dissertation Experience – Credits: 12

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| HSC 799 Doctoral Dissertation | 1-12 |
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Degree and Graduation Requirements

Please see degree and graduation requirements below.

Subplan 2 Requirements: Post-Master's Track

Total Credits Required: 60

Course Requirements

Interdisciplinary Research Core Courses – Credits: 15

Complete 12 credits by completing HSC 703, 704, 706, 710 (HSC 710 must be taken 3 times).

In addition, complete 3 credits by choosing either: HSC 700, 702, or 705.

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| HSC 703 Interdisciplinary Grant Writing for Health Sciences | 3 |
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|---|---|
| HSC 704 Selected Applications in Statistics 2 | 3 |
| HSC 706 Health Science Writing and Communication | 3 |
| HSC 710 Seminar | 1 |
| [After] In addition, students must complete one of the following courses: | |
| HSC 700 Selected Application of Statistical Techniques I | 3 |
| HSC 702 Translational Research Design | 3 |
| HSC 705 Clinical Trial Design And Analysis | 3 |

Elective Courses – Credits: 30

Complete 30 credits of advisor approved graduate-level courses:

Minimum of 6 credits of graduate level interdisciplinary courses outside of the student's primary focus area.

Minimum of 9 credits of 700-level content/focus area courses

Up to 15 credits of HSC 787 and HSC 788.

| | |
|--|-------|
| HSC 787 Special Problems in Interdisciplinary Health Sciences | 1 - 6 |
| HSC 788 Independent Study in Interdisciplinary Health Sciences | 1 - 9 |

Dissertation Prospectus - Credits: 3

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|---------------------------------|---|
| HSC 789 Dissertation Prospectus | 3 |
|---------------------------------|---|

Research Dissertation Experience – Credits: 12

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| HSC 799 Doctoral Dissertation | 1-12 |
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Degree and Graduation Requirements

Please see degree and graduation requirements below.

Degree Requirements

1. Students must complete 30 credits in the interdisciplinary health sciences core (15 of which are dissertation-related credits) and must complete 60 elective credits (BS-prepared students) or 30 elective credits (MS-prepared students) as defined above. A minimum of 90 credits is required for graduation from the IHS PhD program (60 credits for students admitted with a masters degree).

2. Students must complete the degree with a cumulative GPA ≥ 3.0 and graduation must occur preferably within 6 years for students enrolling with master's degrees and 8 years for students enrolling with bachelor's degrees.
3. Students must obtain a B (not B-) or better in all core coursework and maintain an overall grade point average of 3.0 across all coursework with no single course grade dropping below a C. A grade below B in a core class is unacceptable and, as such, the student must retake the class. If a core class is not satisfactorily passed on two attempts, the student will be dismissed from the program. If the grade is 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 consist of a written and an oral examination as outlined in the program handbook. If a student fails the comprehensive examination, at least four weeks (but no more than eight weeks) must pass before scheduling a retake of the exam. If the student fails 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 in that the Chair and two of the committee members will be faculty with Interdisciplinary Health Sciences Graduate Faculty status. The fourth committee member must be from outside the IHS Graduate Faculty and serves as the Graduate College Representative. Additional committee members may be added as appropriate.
6. Students will complete at least one national/international presentation as a platform or a poster from research generated during their Ph.D. program or present research generated during PhD program in HSC 710 (Interdisciplinary Seminar) or other approved venue to faculty and students.

Plan Graduation Requirements

1. The student must submit all required forms to the Graduate College as well as apply for graduation up to two semesters prior to completing their degree requirements for the Doctoral portions of the program.
2. The student must adhere to the following dissertation requirements:
3. 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.
- 3.1. 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:
 - Introduction (background, statement of the problem(s), purpose of the study, hypotheses, limitations,

delimitations)

- Review of the Literature Methods
- Results
- Discussion/Conclusion/Recommendations Optional appendices, figures, and tables are also to be included. The oral defense will be that of this single research experiment.

3.2. Multiple-Projects Dissertation:

- The dissertation must align with the graduate college guidelines for alternative dissertations.
- The form of the dissertation may be either 1) a linear progression of at least three topically developing research deliverables, 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:
 - Introduction (background, statement of the problem(s), hypotheses, limitations, delimitations)
- Experiment 1: Written in the format required by the target journal, which is typically Introduction,
 - Methods, Results and
 - Discussion/Summary/Conclusions.
- Experiment 2: Written in the format required by the target journal which is typically Introduction, Methods, Results and Discussion/Summary/Conclusions
- Experiment 3: Written in the format required by the target journal which is typically Introduction, Methods, Results and Discussion/Summary/Conclusions

Each "Experimental Section" should be preceded with an introduction to the project and/or bridge section that leads from one experiment to the next.

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.

- Outcomes include:

Pass: student is recommended to the Graduate College for granting of the Ph.D. degree

Fail: student advised of status and that the oral defense will be repeated to provide an opportunity to correct errors, clarify nebulous areas and/or expand on superficial presentation of information or data.

At least four weeks (but no more than 8 weeks) must pass before scheduling a re-take of the oral defense. If a student fails the oral defense a second time, they will be separated from the program.

The student must submit and successfully defend their dissertation by the posted deadline. The defense must be advertised and is open to the public.

The student must submit their approved, properly formatted dissertation to the Graduate College, and submit the approved electronic version to ProQuest by the posted deadline.