

PhD in Interdisciplinary Health Sciences Program Handbook

Welcome

The 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 sciences are not adequately preparing graduates to identify and utilize the expertise of other disciplinary 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.

The 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. 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. Students across the various sub-disciplines in the health sciences will have an opportunity to share their science and learn from others through several interdisciplinary seminars. Taken together, the plan of study will provide an interdisciplinary experience 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 program. This program is innovative in that it is one of the first interdisciplinary Ph.D. programs in Health Sciences in the Western U.S. 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, developing 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. 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 2: Orally defend dissertation.

Deliverable 3: Present at least one national/international presentation as a podium (oral) or a poster from research generated during Ph.D. program (preferred) or present research generated during PhD program in HSC 710 (Interdisciplinary Seminar) or other approved venue to faculty and students.

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 emily.lin@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

PhD in Interdisciplinary Health Sciences

Overseeing Deans

Alyssa Crittenden PhD (Graduate College), <u>alyssa.crittenden@unlv.edu</u>
Ronald Brown, PhD (Interdisciplinary Health Sciences), <u>ronald.brown@unlv.edu</u>

Department Chairs from Participating Programs

Health Physics and Diagnostic Sciences: Steen Madsen, PhD, steen.madsen@unlv.edu Kinesiology and Nutrition Sciences: Richard Rosenkaranz, PhD, richard.rosenkranz@unlv.edu Physical Therapy: Merrill Landers, PT, DPT, PhD, OCS, merrill.landers@unlv.edu

Executive Governing Committee

IHS Program Director

Steen Madsen, PhD, steen.madsen@unlv.edu, 702-895-1805

Committee Members

Szu-Ping Lee, PhD, <u>szu-ping.lee@unlv.edu</u>, 702-895-3086, Janice Pluth, PhD, <u>janice.pluth@unlv.edu</u>, 702-895-3136, Brian Schilling, PhD, <u>brian.schilling@unlv.edu</u>, 702-895-1130, Thessa Hilgenkamp, PhD, <u>thessa.hilgenkamp@unlv.edu</u>, 702-895-1055

Program Requirements

Program requirements regarding admission, coursework and culminating experience are found in the graduate catalog.

Degree Program Benchmarks

The student's faculty mentor and associated academic unit Graduate Coordinator will be in charge of assessment of student learning. Student learning outcomes that will be evaluated in addition to the items in Section C above include the following:

- 1. Course grades. 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.
- 2. Comprehensive examination. Must complete satisfactorily.
- 3. Dissertation defense. Must complete satisfactorily.
- 4. Student publications and presentations completed by time of graduation.
- 5. Current student surveys as disseminated centrally from the Graduate College.

Students must complete 30 credits in the interdisciplinary health sciences core (12 of which are dissertation credits) and must complete 30 additional credits in their individualized program of study. 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 C will not be acceptable. If a grade less than a B (B- not acceptable) was received in a core class, the student must retake the class. At this point, the student will be placed on probation vi the Graduate College process. If a core class is not satisfactorily passed on two attempts, the student will be separated from the program after being placed on probation. (Please see the Graduate Catalog for more information) If the grade was in an elective class, the class can be retaken or replaced with another elective class.

Students will complete a comprehensive examination which will consist of a literature review and an oral examination. The oral examination is not restricted to content in the literature review but rather, is questioning relative to any aspects of the student's doctoral education (didactic experiences, research, etc.) 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. Upon the first failed attempt, the students will be placed on probation via the Graduate College process. If the student fails a second time, they may be separated from the program.

Students will also be required to complete a prospectus (see 'Prospectus Procedures' section below) prior to the dissertation in a focused research area. The dissertation committee will minimally consist of the student's doctoral mentor and at least two other content-area faculty with IHS Graduate Faculty status along with a Graduate College Representative. The Graduate College Representative is to be a UNLV faculty member with Graduate Faculty status in an academic unit outside of IHS. With appropriate approval, additional committee members may be added as appropriate.

Students will be required to complete at least one national/international presentation as a platform or poster presentation from research generated during their PhD program or present research generated during PhD program in HSC 710 (Interdisciplinary Seminar) or other approved venue to faculty and students.

Sample Program Core Courses PhD – Interdisciplinary Health Sciences Core Courses – 30 total credits

Required: Complete all courses listed below [12 credits]	Elective: Complete one course listed below [3 credits]	Required: Complete both courses listed below [15 credits]
 HSC 703 Grant Writing for Health Sciences (3 credits) HSC 704 Statistics for Health Sciences II (3 credits) HSC 706 Health Science Writing and Communication (3 credits) HSC 710 Seminar (1 credit repeated 3 times) 	 HSC 700 Statistics for Health Sciences I (3 credits) HSC 702 Translational Research Design (3 credits) HSC 705 Clinical Trial Design and analysis (3 credits) 	 HSC 789 Dissertation Prospectus (3 credits) HSC 799 Dissertation (12 credits)

Sample Program Elective Courses

PhD – Interdisciplinary Health Sciences Elective Classes – 30 total credits

Elective Contracted Research Courses [up to 15 credits]	Elective Interdisciplinary and Content Courses [at least 15 credits]
 HSC 787 Special Problems in Health Science (up to 6 credits) HSC 788 Independent Study (up to 9 credits) HSC 790 Guided Research (3 credits) 	 Two 700-level interdisciplinary courses outside of student's primary focus area (6 credits) Three or more 700-level content area courses (at least 9 credits)

Example Schedule of Interdisciplinary Core Courses

Fall Semester	Spring Semester	Summer Semester
HSC 703 Interdisciplinary	HSC 702	HSC 710 Seminar
Grant Writing for Health	Translational	
Sciences	Research Design)	
HSC 704 Statistics for	HSC 706 Health Science Writing	
Health Sciences (II)	and Communication	
HSC 705 Clinical Trial Design		
and Analysis		
HSC 710 Seminar	HSC 710 Seminar	

The official degree requirements can be found in the Graduate Catalog.

Professional Code of Ethics/Discipline Guidelines

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

Annual Mandatory Individual Development Plan (IDP)

Each winter break and early spring term, graduate students are **required** to complete the Graduate Student Individual Development Plan (IDP) form [Formerly known as the Student Annual Review]. The review covers the prior calendar year and assesses student progress, and it establishes reasonable goals for the year ahead.

Faculty Advisors/Graduate Coordinators have the option to provide feedback to each students' submitted IDP and provide acknowledgement that they have reviewed the IDP.

Reported student data is shared with students' graduate coordinators and advisors to foster opportunities for discussion about students' strengths and weaknesses, accomplishments and next requirements, and mentoring plans so that students know what they need to do in order to progress successfully through their programs in a timely manner.

Students who are graduating are also required to complete the form in order to record their achievements since the data is also used to track UNLV metrics related to the annual productivity of all students.

Probation

If a student fails to successfully progress in their degree program, their department/school will recommend that the student be placed on probation by the Graduate College. Students on probation may be dismissed/separated from their program for failing to successfully meet the conditions of their probation by the deadline provided. Please see the <u>Probation and Separation</u> section of the Graduate Catalog for more information.

University Resources

The Graduate Academy: Innovative Leadership, Professional, and Career Development

The goal of the <u>Graduate Academy</u> is to serve as a virtual resource providing support and many professional opportunities to UNLV graduate students. The Academy offers information about events and services such as graduate certificate programs, workshops, training sessions and career services. You can follow Academy activities via social media or look for regular updates on the website.

Academic Success Center

The goal of the <u>Academic Success Center</u> is to help students do well academically and complete they 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 140,000 strong, the <u>UNLV Alumni Association</u> 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 Office of the Registrar, the <u>commencement office</u> 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. It is the students' responsibility to ensure they apply for <u>graduation on time</u> and submit all required forms to the Graduate College. Questions regarding thesis/dissertation should be directed to the Graduate College <u>Student Services Team</u> and questions regarding required forms should be directed to the Graduate College <u>RPC Team</u>

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 <u>DRC</u> 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 <u>Jean Nidetch Women's Center</u> 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.

The Intersection

The Intersection is a one-stop resource for UNLV's highly diverse student body — a comprehensive multicultural center grounded in the academic life of our students. As an intersecting campus resource, the Intersection helps ensure students, particularly first-generation and students of color, successfully navigate their academic careers. Here, all members of campus can discuss their differences, discover their similarities, and build a shared sense of belonging.

UNLV Libraries

<u>UNLV Libraries</u> 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 <u>Graduate & Professional Student Association</u> 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 and Gateway Building PDAC Room. 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.

Military and Veteran Services Center

The <u>Military and Veteran Service Center</u> 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 <u>Financial Aid & Scholarships Office</u> 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
- <u>Jean Clery Campus Safety and Security Report</u>
- Proof of Immunization
- Policies and Procedures on the Protection of Research Subjects
- Rebelmail Policy
- Student Conduct Code
- Student Computer Use Policy
- <u>Title IX</u>

UNLV does not discriminate in its employment practices or in its educational programs or activities, including admissions, on the basis of sex/gender pursuant to Title IX, or on the basis of any other legally protected category as is set forth in NSHE Handbook Title 4, Chapter 8, Section 13. Reports of discriminatory misconduct, questions regarding Title IX, and/or concerns about noncompliance with Title IX or any other anti-discrimination laws or policies should be directed to UNLV's Title IX Coordinator Michelle Sposito.

The Title IX Coordinator can be reached through the online reporting form, by email at titleixcoordinator@unlv.edu, by phone at (702) 895-4055, by mail at 4505 S. Maryland Parkway, Box 451062, Las Vegas, NV, 89154-1062, or in person at Frank and Estella Beam Hall (BEH), Room 555.

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.

Dissertation Committee

The dissertation committee should be formed as early as possible in the student's program of study. The minimum composition of the committee is to include: 1) Committee Chair, 2) Two additional content-area members with Graduate Faculty Status in IHS, and 3) One Graduate College Representative with Graduate Faculty Status outside of IHS. The committee Chair must hold Graduate Faculty status in Interdisciplinary Health Sciences and the right to chair dissertations. The two additional committee members must hold Graduate Faculty status in Interdisciplinary Health Sciences, minimally at the doctoral-member level. The Graduate College Representative must hold an approved level of Graduate Faculty status in any area outside of Interdisciplinary Health Sciences, Health Physics and Diagnostic Sciences, Kinesiology and Nutrition Sciences, or Physical Therapy.

Comprehensive Examination Components and Procedures

All students in the Interdisciplinary Health Sciences Ph.D. program must successfully complete a comprehensive examination prior to enrolling in dissertation credits. This examination should occur during the final semester of their coursework, in accordance with the degree plan. It is recommended that not more than 6 credits of coursework, including HSC 789 (Dissertation Prospectus), should be in process when the student begins the comprehensive examination process.

The aims of the comprehensive examination are for the student to: 1) display a strong mastery of the basics of their field, 2) demonstrate a high level of knowledge in their field commensurate with that of a professional who has earned a Doctor of

Philosophy degree, and 3) demonstrate breadth of knowledge in their broad are of inquiry and depth of knowledge in their specialized area of

inquiry. These aims will be achieved through the successful completion of two serially occurring tasks: a written literature review followed by an oral examination.

Literature Review: A comprehensive literature review on a relevant and broad topic of research interest pertinent to the student's research and topically guided by the committee. The student should meet with each content-area committee member (excluding the Graduate College Representative) *a priori* to assure inclusion of "focus area(s)" related to the student's research that the committee member will expect to be included. This will provide the student a framework for expected content to be included in the literature review. Typical literature reviews contain 10,000 – 15,000 words, not including works cited. Figures and tables should be included in the appendix. Margins, font, spacing, style, and reference/citation format can be determined by the student and their primary advisor.

Oral Examination: The format of the oral examination will include: 1) A brief presentation of approximately 20-30 minutes of the findings from the literature review, and) 1-2 hours of intense questioning by committee during and after the presentation on all relevant topics from the literature review, presentation, didactic elements of the student's program, and related expected knowledge.

Procedures:

- 1) Candidates will submit their literature review to the Advisory Committee. It is suggested this is done 3 weeks before the anticipated oral defense. The Advisory Committee will review the literature review within two weeks of submission and has the right to return it for revision.
 - If the Advisory Committee finds the first submission unsatisfactory, the student will be placed on probation via the Graduate College process.
 - If after a second submission (revision) the Advisory Committee finds the product unsatisfactory, the Program Director, on behalf of the Executive Governing Committee, will make a recommendation to the Graduate College for the student to be separated from the program.
 - If the literature review is deemed satisfactory then the oral defense date is confirmed. Please note that this
 step does not connote a pass of the comprehensive examination and is only approval to proceed to the oral
 defense.
- 2) The Advisory Committee will serve as the evaluating body to determine the outcome of the comprehensive examination (literature review and oral defense).
 - The oral defense will provide an opportunity for the student to articulate what they have communicated in prose form, and possibly to address weaknesses or shortcomings in particular areas, as expressed by the Advisory Committee.
 - Outcomes include:
 - Pass: student matriculates to Dissertation Prospectus
 - 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 responses. The student will be placed on probation via the Grad College process.
- 3) At least four weeks (but no more than 8 weeks) must pass before scheduling a retake of the oral defense.
 - If a student fails the oral defense a second time, the Program Director, on behalf of the Executive Governing Committee, will make a recommendation to the Graduate College for the student to be separated from the program.

Prospectus Procedures

Following successful completion of the Comprehensive Examination, the student must complete a Dissertation Prospectus (HSC 789). The format of the prospectus is dependent upon the choice of dissertation (traditional or multi-project) made by the student and their committee. In either case, the prospectus deliverables will include a: 1) written document of proposed research, and 2) public oral presentation of proposed research.

The Advisory Committee will serve as the evaluating body to determine the outcome of the dissertation prospectus. Outcomes include:

- Pass: student is Advanced to Candidacy
- Fail: student is advised of status and that the prospectus must be repeated. The student will be placed on probation via the Grad College process. At least four weeks (but no more than 8 weeks) must pass before rescheduling the dissertation prospectus.
 - o If the student fails the dissertation prospectus the first time, he/she will be placed on probation.
 - o If a student fails the dissertation prospectus a second time, the Program Director, on behalf of the Executive Governing Committee, will make a recommendation to the Graduate College for the student to be separated from the program.

A student may not enroll in dissertation credits until advanced to candidacy (first term following advancement to candidacy).

Admissions Policies and Procedures

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 is an overall undergraduate/graduate GPA >3.25, three letters of recommendation (one letter must be from the proposed mentor), Kira interview, curriculum vitae and letter of intent. The curriculum vitae should include a list of the applicant's published manuscripts, grant applications, conference presentations (posters and talks), honors and awards (academic, professional, and research-related), professional development (seminars, memberships, conference attendance), and professional experience (clinician, practitioner in discipline and university teaching). The letter of intent should include a description of the applicant's research skills (devices, methods, statistics and writing), career aspiration, and specific justification for studying in the UNLV IHS program. The committee will consider all requirements and parts of the application as part of a holistic admissions review. 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 scoring 85 or higher on Duolingo, 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 a regionally accredited institution or equivalent in a related field (e.g., biology, engineering, exercise science, nutrition 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.

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

Handbook Information

Last revised	Revised by	Department Vote Tally: Yes/No/Abs. (date of vote)	Changes summary
March 28, 2023	S.J. Madsen – IHS Graduate Faculty	19/5/0 (02/17/2023)	Update EGC membership and admission requirements