

INTERPROFESSIONAL HEALTH SCIENCES PH.D.

All students must meet the Requirements for the Doctor of Philosophy Degree (<http://catalogue.uvm.edu/graduate/degree/requirements/requirementsforthedoctorofphilosophydegree/>)

OVERVIEW

Interprofessional Health Sciences is translational in nature focusing on understanding the spectrum of human functioning from the basic physiological function of cells and body systems to overall physical and psychological health and unified by the common theme of human performance. The program is designed to consider health at 3 levels: 1) status of body structures and functions (molecular, cellular, and organ systems levels); 2) ability of the individual to participate in human activities and assume societal roles; and, 3) psychological and social aspects of the environment that support the health of individuals and populations. This program prioritizes interprofessional and translational research. Students come from a wide range of disciplines (e.g., physical therapy and movement science, biomedical sciences, special education, communication disorders, nursing, neuroscience, psychology, nutrition, and related health professions). They learn side by side with other students and faculty from unique but related health professions to address the contextual nature of health conditions that affect body functioning and/or societal participation.

Doctoral student preparation considers three central principles:

1. Educating students as researchers and scientists, including how to contribute to evidence-based practice.
2. Fostering in students an interdisciplinary approach to education, research, and practice.
3. Engaging students in innovative instruction and assessment that is interprofessional and aligns with changes in delivery of health and human services.

SPECIFIC REQUIREMENTS

REQUIREMENTS FOR ADMISSION TO GRADUATE STUDIES FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

Students with at least a master's degree or the equivalent in a health-related field (e.g., kinesiology, exercise physiology, exercise science, movement sciences, communication sciences and disorders, rehabilitation science, nursing, psychology, education) may apply. Evaluations will be based upon the applicant's grade point average, previous research experience, a statement of purpose for graduate study, and 3 letters of reference. In rare circumstances students with a bachelor of science degree showing exceptional promise as evidenced by their previous research experience, mentor recommendations, undergraduate GPA will be considered.

MINIMUM DEGREE REQUIREMENTS

For students entering with a prior graduate degree in a relevant field, the Ph.D. in Interprofessional Health Sciences requires 76 credits, 32 of which are required course credits and 20 of which are required research credits. The remaining 24 credits are elective, 12 of which may transfer in from the prior degree. Students must maintain a 3.0 average in coursework, have no more than 1 grade below a B, have acceptable evaluations of their research, and pass their qualifying examination. Students will be required to teach in at least 1 course under the mentorship of a faculty member or serve as a teaching assistant for at least 1 course and mentor/co-mentor an undergraduate or master's degree research project. The dissertation will be based on original research focusing on a significant problem in the student's area of specialization with an interprofessional application. Under the guidance of the dissertation committee, each student will use a format consisting of 3 publishable papers (at least 1 of which has been submitted for publication) for which they are first author, with integrated introduction and conclusion chapters.

BIOMEDICAL AND HEALTH SCIENCES (BHSC)

Students in this concentration may focus in 2 general areas, that include, but are not limited to, the following topics:

BASIC SCIENCE RESEARCH

- Cancer
- Cell signaling and metabolism
- Immunology and Infectious diseases
- Genomics and Genetics

MEDICAL LABORATORY SCIENCE

- Molecular diagnostics and genomic medicine
- Molecular pathology and functional genomics
- Clinical microbiology
- Clinical hematology

Students should contact the IHS PHD program director for more information on concentration requirements.

COMMUNICATION SCIENCES & DISORDERS (CSD)

Students in this concentration may focus communication disorders that include:

- Apraxia of speech
- Autism and other developmental disabilities
- Fluency disorders
- Neurogenic disorders
- Social cognition
- Speech sound disorders

Students work with their academic advisor, research mentors, and committee to design and complete 3 of the 4 required Ph.D. research rotations in the department of CSD or related field. This provides

students with an opportunity to work in depth on multiple projects relevant to current CSD theories and methodologies.

INTEGRATIVE HEALTH

Students in this concentration may focus on Integrative Health topics such as:

- Traditional European Medicine (TEM)
- Yoga
- Nature Therapy / Forest Bathing
- Culinary Medicine
- Mindfulness
- Anxiety Management Strategies
- Integrative Pain management
- Integrative psychology
- Acupuncture
- Integrative Oncology
- Behavior change/ health coaching
- Integrative physical therapy/ manual therapy

Students work with their research mentors and committee to design and complete 3 of the 4 required Ph.D. research rotations within an approved Integrative Health research setting and educational elective requirements. This provides students with an opportunity to work in depth on multiple projects relevant to current Integrative Health theories and methodologies. UVM Integrative Health is a member of the Academic Consortium for Integrative Medicine and Health (ACIMH) and students are encouraged to take an active role in the Consortium’s Research Working Group.

REHABILITATION AND MOVEMENT SCIENCE (RMS)

Students in this concentration may focus on topics that include, but are not limited to:

- Biomechanics
- Motor control
- Muscle physiology
- Exercise and physical activity
- Neurophysiology and neurorehabilitation
- Movement analysis
- Physiological biomarkers
- Imaging
- Outcome measure assessment

Students work with their research mentor(s) and committee to design and fulfill degree requirements within this concentration. Two regular (100 hours each) and one extended (200 hours) research laboratory rotations should take place in the department of RMS or in a RMS-approved research laboratory. This provides students with an opportunity to work in-depth on various research projects relevant to current RMS research areas.

Students in all concentrations are required to take the following courses:

CTS 301	Design Clin&Translational Res	3
CTS 310	Conduct Clin&Translational Res	3
CTS 315	Report Clin&Translational Res	3
CTS 320	Analyze Clin&Translational Res	3
CTS 325	Multi Analysis Clin&Trans Res	3
EDLP 459	Mixed Method Research	3
IHS 401	Topics & Measurement in IHS	3
IHS 402	Applying the ICF Model in IHS	3
IHS 430	Sem/Pract Teach & Learn IHS	3
IHS 450	Prof Writing & Grantsmanship	2
PH 301	Public Health & Health Policy	3
20 credit hours of IHS 491, Doctoral Dissertation Research		20
Elective courses related to Interprofessional Health Sciences (face to face, online, evening)		12
Students coming into the program with a graduate degree will transfer in 12 credits from their prior degree		12
Total Credits		76
Students coming into the program with an undergraduate degree will need to earn an additional 12 credits of elective courses, for a total of 88 credits.		

COMPREHENSIVE EXAMINATION

The qualifying examination process (QE), which serves as a comprehensive exam and the exam for advancement to candidacy for the PhD, will be undertaken after students have completed all of the didactic course requirements of the program with a GPA of 3.0 or better. This exam process will consist of 2 portions, a research proposal written in the form of a grant proposal and an oral defense of this proposal, and a dissertation concept paper.

REQUIREMENTS FOR ADVANCEMENT TO CANDIDACY FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

Doctoral candidacy is achieved after the student passes a formal proposal defense. After approval of the concept paper, the student works on the formal dissertation proposal, and, with guidance from his/her dissertation chair, schedules a date with the committee for the formal proposal defense.