

**University of Vermont
College of Nursing & Health Sciences**

**DOCTOR OF PHILOSOPHY
IN
INTERPROFESSIONAL HEALTH
SCIENCES**

**∞
HANDBOOK**

(as of October 1, 2023)

CAUTION

This handbook is informational only. Students should always consult the Graduate Catalogue, their advisors and official University Web sites for current policies, schedules, protocols, and forms.

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INTRODUCTION

The College of Nursing and Health Sciences developed the degree program for the Doctor of Philosophy in Interprofessional Health Sciences in response to national initiatives for restructuring health care education and encouraging research in the health care professions. The program is also based on the movement in health care toward the dynamic-systems approach of the World Health Organization's International Classification of Functioning, Disability and Health (the ICF model). This model prioritizes inter-professional research that goes beyond interdisciplinary efforts as our students learn side by side across unique but related health disciplines and our faculty address the contextual nature of health conditions as they affect body functioning, activity performance, and societal participation.

The doctoral program is also aligned with The Pew Health Professions Commission reports¹⁻⁴ that documented fundamental changes in health care and challenged health professional schools to realign training and education to provide students with new competencies and skills. The recommendations of the Pew commission emphasized the importance of interdisciplinary competence in professional curricula¹ and necessity for faculty to develop advanced teaching and research skills.³ These findings were echoed by the National Commission on Allied Health, which described current barriers to change in professional education, such as inflexible curricula and disciplinary boundaries. The commission recommended that higher educational institutions reduce compartmentalization of health professions and enhance collaboration among programs. The report also identified the limited research base in the health professions as a serious impediment to improving care and service delivery and challenged academic institutions to increase graduate education opportunities to prepare health professionals as clinical and health service researchers.⁵

The University of Vermont College of Nursing and Health Sciences designed the Ph.D. program in Interprofessional Health Sciences to consider health at three 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) physical and social aspects of the environment that support the health of individuals and populations. This program is translational in nature as it focuses on understanding the spectrum of human functioning from the basic physiological function of cells and body systems to overall physical capability. These complex human functions and behaviors are unified by the common theme of human performance. Study of abnormal functioning and the related activity impairments and participation restrictions can lead directly to improvements in the physical, psychological, and social health of people with disabling health conditions. In addition, changes in physiological function at the molecular, cell, organ and systems level; motor control; language production and understanding; social cognition; and, participation in physical activity often coincide in persons with disabling health conditions. This interprofessional doctoral program will facilitate the generation of new knowledge by providing an academic training platform for research collaboration across the professional health disciplines represented by the College of Nursing and Health Sciences (CNHS).

There are three central principles that will guide the preparation of students in the doctoral program:

1. To prepare students as researchers and scientists, including how to contribute to evidence-based practice.
2. To prepare students to take an interdisciplinary approach to education, research, and practice.
3. To prepare students in innovative instruction and assessment, as well as to enhance inter-professional education and align it with changes in delivery of health and human services.

To ensure that our interprofessional doctoral program is accessible to non-traditional working professionals while providing a high quality doctoral education, the program employs a hybrid educational model using a variety of distance learning technologies including traditional day, evening, and on line classes as well as intensive summer sessions. This design is responsive to the changing demographics of graduate education with many potential graduate students working full or part-time in their chosen careers. Thus, the Ph.D. program in Interprofessional Health Sciences is designed to be accessible to both traditional full time students and working professionals, including students holding faculty or clinical positions in the Northeast region.

Program Goals & Objectives

The overall goal of this graduate program is to promote interprofessional research across fields relevant to Interprofessional Health Sciences within the dynamic systems framework of the ICF model.

Specifically, we wish to educate individuals to:

- create new knowledge
- promote, communicate, and teach the content to others, and
- translate knowledge into improved interventions for promoting human health.

Students are expected to meet the following objectives:

- Demonstrate fundamental knowledge of human physiology, movement, communication, and exercise sciences
- Understand, create and undertake interprofessional, hypothesis-driven approaches to research, and promote the translation of findings to practice
- Demonstrate skills in a variety of approaches for studying human functioning, including assessment of cellular function and biomarkers of health and injury/disease, instrumented laboratory recordings of biomechanics, physiology and neurophysiology, as well as participant self-reported measures, psychophysical exams, clinical exams, and qualitative observational techniques
- Demonstrate analytical thinking and logic in evaluating their own work and that of others
- Exhibit effective performance as educators and scholars in the health professions

These goals and objectives are achieved not only by educating students in current philosophies of health and human service research and education, but also by selecting students for the program who can demonstrate professional competency in their admissions

application. They are operationalized through student competencies that are taught and assessed through varied program experiences and reviewed with the student at least annually as part of their Annual Review (See Appendix A).

Student Competencies

Students are expected to achieve competencies in four major areas:

Research

- Apply research methods
- Demonstrate skill in scientific inquiry in research rotations
- Communicate scientific content appropriate to professional publication and grant submission

Interprofessional Content

- Apply the ICF and relevant research to the scholarly investigation of important issues and problems related to human functioning and rehabilitation
- Collaborate with teams of researchers, educators, and students to integrate a variety of perspectives in addressing scholarly problems in human functioning and rehabilitation
- Demonstrate advanced knowledge and skills in an area related to human functioning or rehabilitation

Teaching

- Integrate evidence-based teaching methods to develop and implement learning experiences for teaching other students in a supervised classroom setting
- Demonstrate an ability to assess student work in a constructive, fair, and timely manner

Policy

- Explain the impacts of health care and education policy and regulations on delivery systems and health outcomes

Candidates will demonstrate achievement of these competencies through the following activities and expected outcomes:

- Develop, defend, and submit a research proposal for an internal or external grant competition
- Disseminate results of scholarly work in which the candidate has played a significant role through presentation at one or more professional meetings
- Submit at least one peer-reviewed publication on which they are first or co-first author
- Teach at least one course under the mentorship of a faculty member, or serve as a teaching assistant for at least two courses, or serve as a TA for one course and mentor or co-mentor an undergraduate thesis or research project. For persons with significant

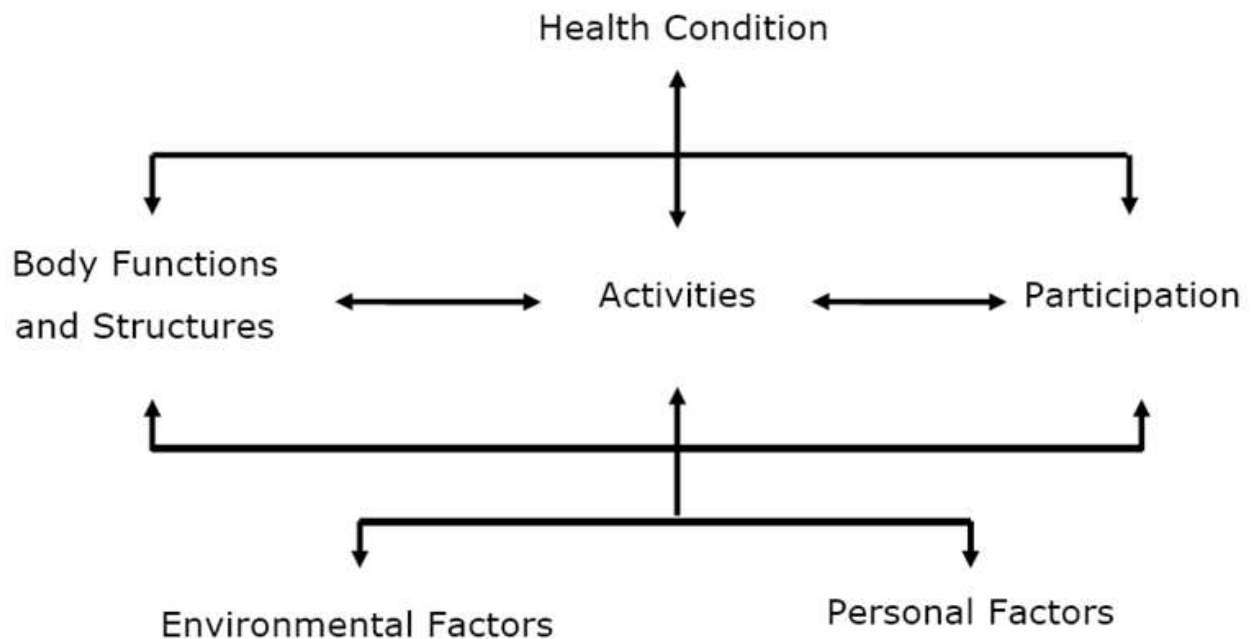
prior teaching experience, teaching competencies may be met via a brief teaching portfolio (at least one syllabus and a letter from teaching mentor or evidence from student evaluations or peer review of teaching).

- Analyze a delivery system or policy process affecting health and human performance of individuals with a selected health condition

PROGRAM DESIGN AND CURRICULUM

Program Design and Interdisciplinary Focus

As mentioned previously, the goal of this graduate program is to promote interprofessional research across fields relevant to Interprofessional Health Sciences within the dynamic systems framework of the ICF model (see figure below).



<i>Two Examples of Health Conditions That Could Benefit from Interprofessional Research Spanning Levels of the ICF Model</i>			
Program Foci	Levels of the ICF Model		
	Body Impairments	Activities	Participation
<i>Parkinson's Disease</i>			
Communication Sciences & Disorders	Hypokinetic dysarthria	Speech / Communication	Recreation & leisure Work participation Family roles Caregiver responsibilities
Movement Science	Bradykinesia Postural instability Tremor	Lay-sit-stand transitions Irregular gait Reach & grasp	
Physical Activity Exercise Behavior	Strength Aerobic capacity Metabolic function	Walking / Running Activities of daily living	
Nursing	Ventilatory function Skin integrity Cognitive function	Self-care Learning Focusing attention	
Medical Laboratory Sciences	Molecular & cellular mechanisms underlying neurodegeneration	Quality of movement	
<i>Autism</i>			
Communication Sciences & Disorders	Implicit learning Speech planning Social cognition	Speech / Communication	For Children: School interaction Recreation / Play For Adults: Family Roles
Movement Science		Irregular gait Reach & grasp	
Physical Activity Exercise Behavior	Sensory reactivity	Activities of daily living	
Nursing	Motor planning Movement concepts	Motor skills	
Medical Laboratory Sciences	GI disorders Improper diet due to sensory reactivity Altered cellular metabolism redox signaling, mitochondrial dysfunction leading to muscle weakness, peripheral neuropathy, GI disorders & seizures	Activities of daily living Activities of daily living Communication Social cognition	

The curriculum focuses on the four competencies outlined above. The curricular approach balances the need for an interprofessional program in Interprofessional Health Sciences and the efficiency of utilizing existing resources so as not to duplicate courses. As such, the core

curriculum includes four newly developed courses as well as existing courses in CNHS. The core curriculum will also include courses provided by Clinical and Translational Science (CTS) to enhance candidate skills in research methods. Existing courses approved for graduate credit across several colleges and programs are also be available to enhance training upon selecting mentors across multiple research foci. The program of study includes activities considered necessary by the National Research Council for formal education in ethics, writing, proposal writing, statistics, and teaching. See Table 1 for an outline of the curriculum.

Table 1. Curriculum Outline

Begin with 12 elective credits transferred in for those holding a graduate degree OR 24 credits taken in the program prior to starting the remainder of the curriculum for those coming in with a B.S., 12 of which would count as transferred electives.				
YEAR 1				
Area	Course Number	Title	Semester	Credits
Research Methods	CTS 6010	Designing Clinical & Translational Research	Fall	3
Research Methods	CTS 6200	Analyzing Clinical & Translational Research	Fall	3
Interprofessional Health Sciences	IHS 7010	Topics & Measurement of Interprofessional Health Sciences	Fall	2
Research Methods	CTS 6250	Multivariate Analysis of Clinical & Translational Research	Spring	3
Elective	Elective	Elective Related to Interprofessional Health Sciences	Spring	3
Professional Rotation	IHS 7XXX	TBD	Spring	2-3
Special Topics	IHS 7990	Monthly doctoral student seminar	Fall and Spring	1
Interprofessional Health Sciences	IHS 7020	Applying the ICF Model to Human Functioning & Rehabilitation (summer intensive)	Summer	3
YEAR 2				
Area	Course Number	Title	Semester	Credits
Elective	Elective	Elective Related to Interprofessional Health Sciences	Fall	3
Elective in Research Methods	EDRM 6310	Mixed method research	Spring	3

Ph.D. in Interprofessional Health Sciences

Elective	Elective	Elective Related to Interprofessional Health Sciences	Fall	3
Teaching & Learning	IHS 7300	Seminar and Practicum in Health Professions Teaching & Learning	Spring	3
Professional Rotation	IHS 7XXX	TBD	Fall and Spring	2-3
Elective in Interprofessional Health Sciences	<u>Research Intensive</u> : 3 credits (IHS 6990) for students who previously carried out a research project but not thesis <u>Research Project</u> : 6 credits (IHS 6990) for students who have previously completed neither	Identify mentor to oversee these credits and conduct interview to plan the course of study (must be approved by PhD Program Director)	Fall and/or Spring	3/6
Special Topics	IHS 7990	Monthly doctoral student seminar	Fall and Spring	1
Professional Writing/Grantsmanship	IHS 7500	Professional Writing & Grantsmanship	summer	2
YEAR 3-5				
Area	Course Number	Title	Semester	Credits
Qualifying Exam (QE)	GRAD 7491	1a. Grant pre-approval form approved by QE committee 1b. Proposal provided to QE cmt. approx. 2 weeks prior to oral defense 1c. oral defense passed 2. Dissertation Concept Paper (written proposal approved by IHS Doctoral committee)	Fall and Spring	TBD
Research	GRAD 7491	dissertation 1. Proposal defense 2. Final defense	Fall and Spring	NA
Special Topics	IHS 7990	Monthly doctoral student seminar	Fall and Spring	1

NOTE: 88 total credits for students who begin the program with a B.S.

Course Delivery and Registration Requirement

Required courses are typically completed during the first two years of the program. A hybrid approach to learning, including on-campus intensive weekend and summer sessions and a variety of distance technologies, is used to make the curriculum accessible to mid-career professionals who cannot leave their jobs. The weekend sessions are generally scheduled from 5 p.m. Friday until midday on Sunday. On-campus sessions for the courses taught in Summer

sessions of years 1 and 2 are typically held in late May-July. The practice components for teaching and research will need to be individually designed and will require an on campus presence.

PROGRAM SEQUENCE

Orientation

Orientation will be held during the first week of the program (usually the week before classes begin in the fall). The purpose of orientation is to familiarize students with the goals, structure, and requirements of the program and to introduce them to core faculty.

Registration Status

Students *must* maintain minimum halftime status throughout the program.

Students who are actively working toward their degree completion and have completed enrollment in all credits required for the degree, but have not completed all graduation requirements, must enroll each semester for Continuous Registration for at least halftime (GRAD 9020, 5 credits). If you are fully funded GRA, you must be have fulltime status (GRAD 9030, 9 credits).

Information about tuition and fees can be found here:

https://www.uvm.edu/studentfinancialservices/traditional_graduate_programs_tuition_and_fees

UVM faculty who are enrolled in the IHS program and who meet the eligibility criteria for employee tuition remission should automatically have their tuition and comprehensive fee covered for up to 15 credits per academic year. If the tuition remission is not applied to the employees student account, it is the responsibility of the employee to contact UVM Human Resource Services (HRS) to verify their eligibility and ensure payment to their student account before the bill due date. Regular UVM employees exceeding the 15 credit eligibility limit for the academic year, are financially responsible for any remaining unpaid tuition and fee charges. Other fees, such as course fees, lab fees, or software licensing fees are not covered through tuition remission benefits.

Course Work

General Requirements

Students must:

- Receive pre-approval for their academic plan by the Program Director who will suggest appropriate supplementary courses to ensure the academic success of students.
- Register for and complete all the required courses by the program.
- Receive pre-approval from the Program Director for deviations from the required course sequence.

- Maintain a 3.0 grade point average in didactic course work, have no more than two grades below a B, have satisfactory evaluations of graduate seminar and research rotations, and pass the qualifying examination.
- Complete the dissertation research and teaching requirements of the program.
- Maintain halftime enrollment (i.e., 5 credits) in the academic year from the beginning of enrollment. If a student is funded on a GRA they must maintain fulltime enrollment (i.e., 9 credits)

Students' course load and research distributions include the following:

- Interprofessional Health Sciences required core courses (this includes 32 credits of course work and 20 credits in doctoral research)
- 12 credits of electives (may include 3-6 credits of IHS 6990 if the student has not previously carried out a research project or thesis at the graduate level)
- 12 credits of relevant electives transferred from previous graduate work
- 12 credits of courses in research methods (three CTS courses and EDRM 6310)
- Participation in professional rotations and doctoral seminars

NOTE:

1. Up to 12 credits of appropriate graduate level electives may be transferred provided a minimum grade of B was attained and the IHS Program Director and Graduate Dean approve the transfer.
2. Students entering without a master's or doctoral degree would initially complete 24 graduate credits in at least two areas within CNHS; 12 of these credits could count as transferred electives for the doctoral program

Academic Courses

Courses are described within the four competency areas—research, interprofessional content, teaching, and policy. Official course descriptions can be found in the graduate catalog and in Appendix B.

Discipline Specific Courses that Satisfy Elective Credits (12-24 credits)

Students are to select at least 12 credits from at least 2 disciplines from the courses that have been approved for graduate credit (see Graduate College Handbook and registrar's schedule of courses for current offerings) and/or transfer up to 12 graduate credits in relevant fields, for a total of 24 credits of electives. Other courses not listed may be taken with permission of the Program Director.

IHS Required Courses:

- **IHS 7010 (2 credits), Topics & Measurement of Interprofessional Health Sciences.** This course facilitates interprofessional exposure to topics and methods associated with all of the program's foci, including exposure to current measurement techniques, primary literature, the current research of program faculty, and a final project proposal that emphasizes the use of interprofessional methods.

- IHS 7020 (3 credits), **Applying the ICF Model to Interprofessional Health Sciences**. This course exposes students to the program's philosophical goals to translate science from impairment-based research to intervention research while accounting for interactions among personal characteristics and environmental factors.
- IHS 7300 (3 credits). **Seminar and Practicum in Health Professions Teaching**. This course provides students with exposure to the fundamentals of health professions teaching and learning, as well as hands-on experience in the classroom with mentorship.
- IHS 7500 (2 credits). **Professional Writing and Grantsmanship**. This course provides students with experience in scientific writing and grant-writing.
- IHS 7491 (20 credits). **PhD Dissertation Research** (mentored experience).
- IHS 7XXX (variable credits: TBD). **Special Topics: Doctoral Seminar**. This is a small group student-led seminar devoted to the conduct of interprofessional scholarship.

All students are required to be engaged in a variety of research activities each semester.

- In years 1-2 they will complete three professional rotations.
- In subsequent years, students are engaged in ongoing research related to their area of specialization. They are required to also present research at professional meetings and to submit a manuscript to a peer-reviewed journal as first or co-first author.

Students are also required to be engaged in a variety of teaching and mentoring activities.

- In their first or second year, students will participate in a teaching and learning seminar the spring semester. As part of that seminar students will be assigned to teach a course under the mentorship of a faculty member or will be co-teaching a class with a faculty member
- Students will be developing a teaching philosophy and plan as part of this course (see teaching practicum protocol in the appendix)
- Students are also expected to help support the teaching and mentorship of undergraduates and graduate students (not those in the PhD program) in their research

Concentrations in Interprofessional Health Sciences:

The Ph.D. in Interprofessional Health Sciences (IHS) program proposes the addition of five new concentrations to increase student interest and the growing demand for translational health research scholars. The broad field of “interprofessional health sciences” is an area of excellence at UVM and the following concentrations take advantage of expertise across the College of Nursing and Health Sciences in which the IHS Ph.D. program is embedded.

Concentration in Communication Sciences & Disorders (CSD)

Our students prepare for careers as CSD scholars through a specialized curriculum emphasizing research experiences with our distinguished faculty mentors and a range of guided teaching and mentoring activities. CSD faculty engage in research focused on speech, language, and cognitive functions, on topics ranging from the nature and treatment of autism to the role of temperament in stuttering, advancing the knowledge of brain function and creating new therapies for children and adults challenged by cognitive and neurological

disorders. Graduate students in this concentration may focus communication disorders that include:

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

CSD Concentration Requirements:

Students work with their academic advisor, research mentors, and committee to design and complete 3 professional 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.

Concentration in Biomedical and Health Sciences (BHSc)

Our students will prepare for careers as biomedical research scholars through a specialized curriculum emphasizing a research experiences with our faculty mentors in who lead highly active research laboratories. BHSc faculty engage in biomedical research focused on topics such as cell biology, cancer, genomics, immunology, and infectious diseases. Graduate students in this concentration may focus on topics that include, but are not limited to:

- Cancer
- Cell signaling
- Autoimmune diseases
- Infectious diseases and immunology
- Genomics
- Genetics
- Metabolism

BHSc Concentration Requirements:

Students work with their academic advisor, research mentors, and committee to design and complete professional rotations in the department of BHSc or related field. This provides students with an opportunity to work in depth on multiple projects relevant to current BHSc theories and methodologies.

Concentration in Rehabilitation and Movement Science (RMS)

Our students will prepare for careers as rehabilitation and movement science research scholars through laboratory, clinic and community-based research experiences with our faculty mentors. Graduate 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

RMS Concentration Requirements:

Students work with their research mentor(s) and committee to design and fulfill degree requirements within this concentration. Three professional 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.

Concentration in Integrative Health

Our students prepare for careers as Integrative Health research scholars. Integrative Health faculty use diverse methodologies across a range of clinically applied areas to examine health outcomes using an integrative approach to medicine and health. Integrative medicine and health “reaffirms the relationship between practitioner and patient, focuses on the whole person, is informed by evidence, and makes use of all appropriate therapeutic and lifestyle approaches, health care professionals and disciplines to achieve optimal health and healing.” (Academic Consortium for Integrative Medicine and Health, 2019).

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

Integrative Health Concentration Requirements:

Students work with their research mentors and committee to design and complete professional 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.

Qualifying Examination

The qualifying examination (QE), which serves as a comprehensive exam and the exam for advancement to candidacy for the PhD, will be undertaken after students have successfully

completed three research rotations as well as all didactic course requirements with a GPA of 3.0 or better with one exception: IHS 7500 may be taken concomitantly with QE credits and activities. The QE consists of two portions: a grant proposal and a dissertation concept paper. The Grant Protocol & Forms and the Dissertation Concept Paper Approval Forms are provided in Appendix A.

Following completion of the qualifying examination

When the student has passed the QE requirements, a Proof of Successful Completion of Comprehensive Exam form (Appendix C) is submitted to the Graduate College. In addition the Individual Development Plan (MyIDP) (available at http://www.uvm.edu/sites/default/files/GradExecApprovedmyIDP-1_0.pdf) and the Program of Study form should continue to be updated each year at the time of annual review (See Appendix A).

Graduate college forms can be found at <http://www.uvm.edu/graduate/resources>.

DISSERTATION

Beginning the Dissertation Process

A **Dissertation Committee** oversees the dissertation process. The committee can be appointed as the student nears completion of the QE. The dissertation process begins when the student, in consultation with his/her academic advisor, selects a dissertation committee and chair. The committee must include a minimum of 4 members of the graduate faculty. At least two committee members must be IHS program core faculty members. One of these two committee members assumes the role of primary advisor once the student has successfully completed all course work and the QE. At least two additional members of the committee must be from the University of Vermont. The Chairperson for the defense must be both a member of the graduate faculty and from outside the College. A Non-UVM faculty member or a non-graduate faculty member may serve as an additional member on the Defense Committee if approved by the Graduate Dean. A written request from the advisor and current curriculum vitae from the proposed additional committee member are required by the Graduate College. This is a formal process that can take some time and that should be factored into the student's timeline.

Further information and a Defense Committee Membership Form (Appendix C) can be found at http://www.uvm.edu/sites/default/files/defensemembershipform_2.pdf.

IHS forms can be found at <https://www.uvm.edu/cnhs/info-current-students>

Graduate college forms can be found at <http://www.uvm.edu/graduate/resources>.

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 five chapters as described in the Dissertation section of this handbook.

Students are advised to remain aware of the schedule for completion of dissertations, which is posted on the Graduate College web pages.

The Dissertation Defense Notice template (Appendix C) can be retrieved from <http://www.uvm.edu/graduate/resources>.

Candidacy and Completion

1. **Doctoral candidacy** is achieved after the student passes a formal **proposal defense**. After approval of the dissertation 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.

All forms can be retrieved from <https://www.uvm.edu/cnhs/info-current-students>

2. **Human Subjects Institutional Review Board (IRB) approval** must be obtained prior to gathering original data or prior to analyzing secondary data. The UVM IRB approval letter is a *required* component of doctoral dissertations.

Forms for **IRB approval** can be found at <http://www.uvm.edu/irb/forms>

3. The **dissertation defense** may be scheduled only after the student's committee has reviewed all components of the written document and agrees that the dissertation is close enough to completion that it is appropriate to schedule the defense. You must submit a Defense Committee Membership Form (Appendix C; can also be found at http://www.uvm.edu/sites/default/files/defensemembershipform_2.pdf) at the beginning of the semester you plan on defending. The defense notice template (Appendix C) must be used for developing a public notice about the defense. The Graduate College Web pages include deadlines for scheduling defense dates and submitting the final document for graduating in particular semesters or summer sessions. Students must follow the University's dissertation guidelines (found in Appendix C and at <http://www.uvm.edu/sites/default/files/Electronic%20Thesis%20and%20Dissertation%20Guidelines.pdf>) and template (Appendix C) in preparing their abstracts. Other dissertation guidelines, templates, and information can be found at <http://www.uvm.edu/graduate/resources>.

All program-specific forms can be found at <https://www.uvm.edu/cnhs/info-current-students>

GRADUATION

When to apply for graduation

Consult the Registrar's Office pages and Graduate College deadlines to verify the last date to apply for graduation and the last date to defend the dissertation. Application for audit is expected to occur 2-4 months prior to the expected commencement date. An Intent to Graduate form (Appendix C) must be submitted to the Graduate College by August 1 for an October graduation, October 1 for January graduation, and February 1 for May completions. This form can be found at

http://www.uvm.edu/sites/default/files/Intent%20to%20Graduate%20-%20Fillable2_0.pdf. It is the student's responsibility to follow University guidelines and the timeline for applying for the graduation audit when eligible

The student will have earned the Doctor of Philosophy degree in Interprofessional Health Sciences after the requirements have been met.

GENERAL PROCEDURES AND REGULATIONS

Students should consult the on-line Graduate Catalog and Graduate College web-pages for official versions of current procedures and regulations. Graduate Catalog policies can be downloaded from <http://www.uvm.edu/graduate/resources>.

Advising

Upon entry to the program, the Program Director will serve as each student's academic advisor. The Program Director supervises the student's academic course work. The Program Director transitions the student to their primary dissertation advisor and collaborates on advising during the qualifying examination (QE) process. Once the student has successfully completed the QE, the main advisor of the student's dissertation committee assumes the role of primary advisor, while the Program Director continues to monitor final steps up to program completion. Students are expected to check their www.uvm.edu email accounts and phone messages regularly and to respond in a timely fashion (within hours if possible, and generally within no more than 1 weekday or weekend) to advisors' attempts to reach them via phone or their www.uvm.edu email addresses. Students should be sensitive to advisors' preferences about attempts to contact them at home and on weekends.

Assessment

Assessment of Student Progress

The program's assessment plan is competency based. It incorporates multiple components, including completion of products and meeting competencies as part of required courses, practicum experiences in research and teaching, comprehensive examinations, and the dissertation. Students play a role in self-evaluation as part of the annual review process (See

Appendix A) and they may receive recommendations as part of that process or be dismissed from the program if their movement through the program is not fully satisfactory.

Courses

Students must maintain a minimum grade-point average of 3.0 (A = 4.0) each semester. In addition, students must earn at least a grade of 'B' in any required graduate course counted towards the degree. One or more grades less than B could be grounds for dismissal. A grade of "incomplete" may only be granted in exceptional circumstances and at the discretion of the instructor of record. The student must have no more than 3 incomplete grades at any one time. Incomplete grades must be removed within one year. No course may be repeated more than once. Non-credit experiences (research rotations, monthly doctoral seminars) will be rated as "satisfactory" or "not satisfactory" in the annual review (See Appendix A).

Annual Review of Student Progress

The IHS Student Progression Committee (made up of core faculty in the IHS program) reviews each student's progress at least once a year with respect to demonstration of program competencies and timely movement through the program (Program of Study Form and Individual Development Plan; See Appendices B and C). Most of the competencies are assessed in association with related coursework and teaching practicum or research rotations. A copy of the review is sent to the student, discussed with the student, and placed in the student's file. When deficits are found, the review may result in a recommendation for dismissal or for "continuation with reservation". If the latter, the student is advised of corrective actions and a timeline in which these must be completed to avoid dismissal from the program.

Other Requirements and Procedures

Required Credit from the University of Vermont

As a University requirement for the doctoral degree, students must take a **minimum** of 75 credit hours from **UVM**, including 30 credit hours of course work and 20 credit hours of research and dissertation. As part of this program, students actually earn 44 hours of coursework in required coursework within the program and 20 hours of dissertation, more than meeting this requirement.

Transfer credits

Students may transfer/take elective courses at other accredited graduate degree granting institutions up to a **maximum** of 12 credit hours, with the permission of the IHS Student Progression Committee. Students are responsible for ensuring that official transcripts are sent from the granting institution to the Graduate College for any coursework that is part of their official programs of study prior to the graduation audit. Students must file a transfer of credit request (appendix C) and should do that in their first semester.

Course Substitution

Course substitution is theoretically possible, but it must be approved by the **Program Director**. Even if a student has prior experience and strength in a particular area, it is part of the interdisciplinary core of the program to expect cohort members to go through the entire course sequence together. Therefore, such requests are rarely approved.

Leave of Absence

The University of Vermont supports a leave of absence policy to assist graduate students who are temporarily unable to continue their programs. The leave of absence may extend consecutively for one year. Such requests must also be approved by the IHS Student Progression Committee within the program and submitted to the Graduate College. The [Leave of Absence Form](#) (found in Appendix C) and procedures can be downloaded from http://www.uvm.edu/sites/default/files/leaveofabsence_0.pdf. The leave of absence does not extend the time limit to degree which is nine years for a doctoral program.

Time Limit of Nine Years

After admission, all requirements for the degree must be completed within nine years from first registration. The College, however, strongly recommends a timely completion of the degree within 5 years. This ensures students receive maximum benefit from the cohort model and engagement with other doctoral students.

ACADEMIC HONESTY AND OTHER UNIVERSITY POLICIES

Professionalism

Students are expected to adhere to professional standards in the classroom and other academic settings. Students' professionalism begins when they start the program, not when they graduate. In general, codes for behavior are established and adhered to in order to convey one's dedication to excellence, commitment to meeting obligations, and respect for peers, colleagues, professors, and research participants.

First and foremost, students must adhere to the Standards for Academic Integrity outlined in University policy (<http://www.uvm.edu/~dledford/academicintegrity.pdf>)

Faculty also expect students to show respect to peers and professors at all times. Professionalism requires that doctoral students approach professors with courtesy and respect for their position:

1. Set up advance appointments and use office hours to discuss issues with faculty;

2. Attend all required classes, arrive on time, and be present and fully engaged;
3. Turn off cell phones prior to coming to class or meetings with professors or peers
4. Avoid the use of a combative or adversarial tone whether discussing issues in person, over the phone, via email, or through other means of online communication.

Faculty will also demonstrate a professional demeanor when interacting with students.

Discrimination and Harassment

The Doctoral Program in Interprofessional Health Sciences in the College of Nursing and Health Sciences strives to ensure all current and prospective members of our community receive fair treatment and opportunity, and experience an environment that is inclusive, and free from harassment, bias, discrimination and bullying. Every member of the program— faculty, staff, and students – is responsible for maintaining a safe, respectful, supportive, and collaborative atmosphere. If an incident occurs, please contact the program director and/or your primary advisor. Please refer to the Office of Affirmative Action and Equal Opportunity for links to policies and procedures: <https://www.uvm.edu/aaeo>.

The discrimination and harassment policy is outlined here:

<http://www.uvm.edu/policies/student/studentharas.pdf>

Attendance Policy

Students are expected to attend all regularly scheduled classes. It is the responsibility of the student to inform the instructor regarding the reason for absence or tardiness from class, and to discuss these with the instructor in advance whenever possible. Circumstances that require the student to be absent for any length of time should be discussed with the faculty member so that a plan can be made for make-up work or extensions of due dates. Student attendance may be evaluated by instructor report to the Program Director at the conclusion of each semester. Details of the UVM attendance policy are outlined on the website.

Common Ground and Code of Student Rights & Responsibilities

Faculty and students will at all times conduct themselves in a manner that serves to maintain, promote, and enhance the high quality academic environment befitting the University of Vermont. Information about Our Common Ground is outlined here:

<http://www.uvm.edu/~president/?Page=miscellaneous/commonground.htm>

Details of the Code of Students Rights and Responsibilities are outlined here:

<http://www.uvm.edu/policies/student/studentcode.pdf>

Religious Holidays

Students have the right to practice the religion of their choice. Each semester students should submit in writing to their instructors by the end of the second full week classes their

documented religious holiday schedule for the semester. Faculty will permit students who miss work for the purpose of religious observance to make up this work.

Academic Honesty

The principal objective of the policy on academic honesty is to promote an intellectual climate and support the academic integrity of the University of Vermont. Each student is responsible for knowing and observing the Code of Student Rights and Responsibilities at <http://www.uvm.edu/~uvmppg/ppg/student/studentcode.pdf> and the Code of Academic Integrity at <http://www.uvm.edu/policies/student/acadintegrity.pdf>. For the purposes of the courses in this program, each assignment contains information about the expectations for individual or collaborative work.

ADA Student Accommodations

Reasonable accommodations are provided for students with appropriate documentation from Student Accessibility Services (SAS). SAS coordinates reasonable accommodations for students with documented disabilities. They are located at A170 Living/Learning Center, and can be reached by phone 802-656-7753, or by e-mail. Visit their website <http://www.uvm.edu/access>. To receive accommodations in the courses in this program, please bring the primary instructors copies of the letter provided by the SAS Office and speak to course instructors about plans to implement the recommendations in each course.

Dismissal from the program

Students may be recommended to the Graduate College for dismissal from the program for any of the following reasons, but not limited to:

Failure to maintain the required grade point average of 3.0 each semester in required courses.

Receipt of two or more grades below a B.

Unsatisfactory performance in a research rotation or monthly doctoral seminar.

Failure to receive a grade of satisfactory on the qualifying examination within two tries.

Failure to pass the dissertation defense within two tries.

Violation of academic honesty in course work or research.

Unethical conduct in the profession or in the conduct of research.

Inability to complete all program requirements within 9 years.

Dismissal recommendations are made by the Program Director and IHS Student Progression Committee (made up of IHS program core faculty members) to the Graduate College. As chair of the Student Progression Committee, the IHS Program Director compiles the student folders for review and communicates recommendations by the committee for dismissal but the Program Director is recused from voting.

REFERENCES

O'Neil, E.H., & Pew Health Professions Commission. (1998). *Recreating Health Professional Practice for a New Century*. San Francisco, CA: Pew Health Professions Commission.

Pew Health Professions Commission. (1995). *Critical Challenges: Revitalizing the Health Professions for the Twenty-First Century*. San Francisco, CA: UCSF Center for the Health Professions.

O'Neil, E.H., & Pew Health Professions Commission. (1993). *Health Professions Education for the Future: Schools in Service to the Nation*. San Francisco, CA: Pew Health Professions Commission.

O'Neil, E.H., & Pew Health Professions Commission. (1991). *Health America: Practitioners for 2005*. San Francisco, CA: Pew Health Professions Commission.

National Commission on Allied Health. Executive Summary. (Summer 1995) *Journal of Allied Health*, 24 (3), 165-185. National Commission on Allied Health was established by the Health Professions Education Extension Amendments in 1995 (PL 102-408).

Sperling, J., & Tucker, R.W. (Fall/Winter 1997). Time for Nationally Authorized Universities. *NLII Viewpoint*, 2, 50-60.

Oblinger, D. (1999). Putting Students at the Center: A Planning Guide to Distributed Learning. *EDUCAUSE Monograph Series*, Boulder, CO.

Michigan Allied Health Professionals Task Force. (August, 1996). *Innovative Partnerships for a New Market: Allied Health Education and Health Care Delivery*. Lansing, MI: Public Sector Consultants, Inc.

National Health Care Skills Standards Project (1996). San Francisco, CA: Wested.

Elder O.C., Nick T.G. (1995) Desired Competencies of Doctorally-Prepared Allied Health Faculty." *Journal of Allied Health*, 24 (2), 109-116.

APPENDICES

APPENDIX A: IHS-SPECIFIC PROTOCOLS AND FORMS

APPENDIX B: COURSE DESCRIPTIONS

APPENDIX C: GRADUATE COLLEGE PROTOCOLS AND
FORMS

APPENDIX A. IHS-SPECIFIC PROTOCOLS AND FORMS

- 1) Annual Review Protocol
 - a) Program of Study Protocol
 - b) Program of Study Form
 - c) Curriculum Vitae FormatNote: Individual Development Plan forms (myIDP) can be found in Appendix C.
- 2) Research Rotation Protocol & Evaluation Forms
 - a) Research Rotation: Interview Form
 - b) Research Rotation: Request Form
 - c) Research Rotation: Self-Evaluation Form
 - d) Research Rotation: Supervisor Evaluation Form
- 3) Extended Research Rotation
 - a) Extended Research Rotation Protocol
 - b) Extended Research Rotation Interview Form
- 4) Monthly Doctoral Seminar Evaluation Protocol
- 5) Teaching Practicum Protocol & Form
- 6) Extended Research Rotation Protocol, Interview Form, & Rubrics
 - a) Research Protocol
 - b) Criteria for Assessment of Research Presentation
 - c) Criteria for Assessment of Research Article
- 7) Grant Protocol & Forms
 - a) Grant Approval & Submission Protocol
 - b) Grant Application Pre-approval Form
- 8) Format for Journal Article review for Journal Study
- 9) **Dissertation Concept Paper Approval Form**



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ANNUAL REVIEW PROTOCOL

Throughout enrollment in the Ph.D. in the IHS program, students' progress and performance is reviewed at least once annually by the IHS Student Progression Committee, led by the Program Director/the student's academic advisor. The requirement for annual review is part of Graduate College policy. By September 1st each year students must complete and submit an updated Program of Study form, CV, and Individual Development Plan (MyIDP) to their academic advisors. Generally by the end of fall semester, students will receive a program review with ratings and comments about their standing within the program.

Students are expected to discuss the annual review report with their advisors within 30 days of receiving it. All annual review materials are kept on file and are referenced in the next review period, along with the newly updated annual review form, which must address the committee's previous recommendations if any reservations were expressed.

Instructions for Completing the Annual Review Forms

The same annual review forms are used throughout the program so that the student and advisor know the current status of the student's progress through the program from year to year. Therefore, it is vital for each student to keep an electronic copy of the annual review forms so it will be possible to add to this form for each annual review. Forms turned in without updating will be returned to the student for revision. It is the student's responsibility to maintain this document throughout the program.

Each July/August, students should:

1. Update an electronic copy of the Annual Review Report, which includes the Program of Study and the Individual Development Plan (MyIDP).
2. Update the CV, preferably using the format provided by the program, and including all categories required in the recommended format.

Students should send electronic copies of both documents to the Program Director by the September 1 deadline and maintain copies in their files.

STUDENTS ARE RESPONSIBLE FOR RECREATING ANY FORMS THAT ARE LOST.



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PROGRAM OF STUDY PROTOCOL

The student is responsible for maintaining an updated Program of Study form as part of the annual review process, which includes the student's approved electives. This is the document that is submitted to the Graduate College. It is signed by the student, the advisor, the program director, and dean of the Graduate College.

The Program of Study form must include all required and electives courses, including grades, as well as a list of the comprehensive examinations and dates passed. The form is used along with the student's Banner record by the Graduate College at auditing to ensure the student has satisfactorily completed the courses and all other requirements for graduation. At the point of the graduation audit, it must include a record of the month and year in which each of the requirements was passed. It also must include evidence of enrollment in at least 20 dissertation credit hours, including the session in which the student expects to graduate. A template for this form follows.

The annual review process also includes completion, review, and discussion of the UVM Graduate College Individual Development Plan (see Appendix C).



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Program of Study Form

Name:	95 #:
Address:	
Phone:	E-mail Address:

Transferred Elective Courses (12 credits maximum)

COURSE NO.	COURSE NAME	HRS	GRADE	SEM/YR	INSTITUTION

Required Courses & Experiences

COURSE NO.	COURSE NAME	HRS	Semester	GRADE*	SEM/YR
Year 1					
CTS 6010	Designing Clinical & Translational Research	3	Fall		
CTS 6200	Analyzing Clinical & Translational Research	3	Fall		
IHS 7010	Topics & Measurement of Interprofessional Health Sciences	2	Fall		
CTS 6250	Multivariate Analysis of Clinical & Translational Research	3	Spring		
CTS 6100	Conducting Clinical & Translational Research	3	Spring		
IHS 7020	Applying the ICF Model to Human Functioning & Rehabilitation	3	Summer		
IHS 7xxx	Three professional rotations (2-3 credits each). List mentors and areas of focus: 1. 2. 3.	8-10	Spring		
Year 2					
Additional Research Methods course (EDLP 6310)	Select a graduate research methods course	3	Fall		

Elective	Elective	3	Fall		
IHS 7300	Seminar and Practicum in Health Professions Teaching & Learning	3	Spring		
CTS 6150	Reporting Clinical & Translational Research	3	Spring		
IHS 7500	Professional Writing and Grantsmanship	2	Summer		
Years 3-5					
GRAD 7491	Qualifying Exam (QE)	TBD	TBD		
IHS 7491	Dissertation	20 total	TBD		

**For non-credit experiences, indicate “S” (satisfactory) or “NS” (not satisfactory)*

Determining Necessary Elective Credits

Students entering the program without an advanced degree are expected to take 12 elective credits. For some students, some of these credits will be taken in IHS 6990, “Directed Study.” For each situation below the required number of credits of IHS 6990 is specified.

1. No degree beyond BA/BS: 12 credits
2. MA/MS but neither Master’s research project nor Master’s thesis: 6 credits
3. MA/MS with Master’s research project: 3 credits
4. MA/MS with Master’s thesis: 0 credits

UVM Electives (at least 12 credits from at least 2 disciplines)

COURSE NO.	COURSE NAME	HRS	GRADE	SEM/YR
IHS 6990	Directed Study (for students entering without sufficient research experience) (mentored)	0-12		

Dissertation Hours

COURSE NO.	COURSE NAME	HRS	GRADE	SEM/YR
IHS 6990	PhD Dissertation Research	20		

TOTAL CREDIT HOURS: _____

GPA

Year	Semester 1 GPA	Semester 2 GPA	Summer GPA (if appropriate)	Cumulative GPA as of August
1				
2				
3				
4				
5				

Explain any milestones not met:

Year (1-5)	Milestone	Reasons	Plan to meet this milestone

CANDIDACY ACCEPTANCE DATE: _____

Required Signatures

Student Signature _____ Date _____

Program Advisor _____ Date _____

Department Chair _____ Date _____



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Curriculum Vitae Format

Updated as of Month/Year

PERSONAL

Date:

Name:

Home phone:

Office phone:

Cell phone:

Fax:

Email:

Current employment
position:

Work Address:

Home Address:

EDUCATION

Institution

Degree Discipline

Date

CERTIFICATION/LICENSURE

Certification/License

State

Date

EXPERIENCE

Employer

Position and Responsibilities

Dates

CONTINUING EDUCATION

Course

Date

PUBLICATIONS

Refereed Journal Articles

Non Refereed Journal Articles

Journal Articles under Review

Books

Book Chapters

Published Proceedings and Abstracts

Other Published Manuscripts

PRESENTATIONS

Refereed Presentations at Professional Conferences

Non refereed Presentations at Professional Conferences

PROFESSIONAL

Professional Responsibilities

Title

Position

Dates

Professional and Honorary Organizations
Organization

Dates

Honors and Awards
Award

Date

RESEARCH INTERESTS

Research Grants
Not Funded

Principal Investigator:
Funding agency:
Project dates:
Direct costs:
Indirect costs:
Total costs:
Role:
Effort:

Funded
Pending

Principal Investigator:
Funding agency:
Project dates:
Direct costs:
Indirect costs:
Total costs:
Role:
Effort:

Active

Principal Investigator:
Funding agency:
Project dates:
Direct costs:
Indirect costs:
Total costs:

Role:
Effort:

Completed

Principal Investigator:
Funding agency:
Project dates:
Direct costs:
Indirect costs:
Total costs:
Role:
Effort:

Consulting Contracts
Contract

Date

TEACHING

Teaching Specialization

Courses Taught For each course taught, provide course number, credit hours, institution, and delivery method.

Course:	Hrs	Institution	Delivery method

Workshops/In service Courses (List under subheading of the institutions, most recent first)

Student Research Co-Mentoring:

Discipline	Number of students	Advisory Role	Date
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SERVICE
Employment

Activity

Dates

Community
Activity

Dates

Professional (scholarship)
Activity

Dates



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PROFESSIONAL ROTATION: PROTOCOL & EVALUATION

In IHS 7010 (Topics & Measurement of Interprofessional Health Sciences), students are exposed to a variety of topics from the fields within the College of Nursing and Health Sciences. At the end of this course, students should be able to identify at least one (or more) professional rotations (2-3 credits each). Each student will indicate the rotations they wish to pursue and submit their preferences on the Rotation Request form, along with their current curriculum vitae (see format).

Purpose

The professional rotations can be of three types: internship (clinical experience), teaching assistantship, or most commonly, the research rotation. The professional rotation experience is an integral component of the IHS Ph.D. program. The purpose of the research rotations is manifold. One goal is to provide students with the opportunity to broaden and refine their research knowledge and skills while contributing to interdisciplinary study. Another goal is to provide students with the opportunity to develop personal and scientific connections that may result in collaborative research and/or choices of advisor or academic committee/dissertation committee members. Other important goals are for the student to 1) develop initiative in pursuing research collaborations and, 2) develop effective time-management strategies that ensure research progress in a 'real-world' professional environment that places competing demands on the researcher's time and energy.

Procedure

Students are responsible for identifying laboratories/faculty they are interested in joining for a research rotation. To facilitate this process, the IHS Program Director will present the student with a list and brief descriptions of available research rotations. The student will then initiate contact with prospective supervising faculty to learn about the rotation and to define the expectations. The **Rotation Interview Form (Appendix A)** is used to facilitate this discussion. This step is crucial: it is important for the student to have a clear understanding of what is expected in each laboratory prior to beginning the rotation. This is intended to make both the student's and the rotation supervisor's experience more rewarding and successful. In short, the rotation interview not only provides the student with the opportunity to assess whether or not the lab is a good fit for him/her, but it is also an opportunity for the faculty mentor to assess whether the student is a good fit for the lab. Once desirable research rotations are identified, the student

completes the **Rotation Request Form (Appendix A)** and submits it to the IHS Program Director.

Evaluation

At the midpoint of each research rotation, the student must complete a self-evaluation and submit it to the rotation supervisor and the IHS Program Director (see the **Rotation Self-Evaluation Form; Appendix A**), either of whom may choose to review the student's evaluation in order to identify areas in need of improvement. At the end of the rotation, the student again completes the Self-Evaluation Form and submits it to the rotation supervisor and the IHS Program Director. The rotation supervisor reviews the student's self-evaluation with the student. The purpose of this process is to provide the student with constructive feedback to help students be successful researchers. At the end of the rotation, the rotation supervisor completes an online evaluation of the student (see **Rotation Supervisor Evaluation Form; Appendix A**). This evaluation is then shared with the student and placed in the student's file. The student's performance in each research rotation is evaluated as Satisfactory/Unsatisfactory on the basis of whether the student performs above or at (satisfactory) or below (unsatisfactory) expectations on the various dimensions assessed. Generally speaking, students who receive a rating from a rotation supervisor on the final evaluation of "below expectations" on any of the dimensions of performance are at risk for failing a rotation.

By the end of the third rotation...

By the end of the third rotation, the student should be in a position to identify a faculty mentor. If, for some unforeseen reason, the student is unable to identify a faculty mentor and/or needs an additional rotation, the student must seek approval for this from the IHS Program Director. If the student has not successfully passed a rotations, additional rotations (if approved) will be required until three rotations have been successfully completed. Specific types of rotations may be mandated by the IHS Program Director in order to remediate specific areas of challenge that have been identified in prior rotations.



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Research Rotation: Interview Form

This form must be completed by the faculty research rotation supervisor and the student prior to the start of the placement and the specific activities, requirements, and expectations should be discussed and agreed upon. As a reminder, each of the three research rotations typically lasts five weeks, with 20 hours of research work performed per week. Changes to the total hours and duration of the rotation are possible but must be pre-approved by the IHS Program Director. These research activities provide students the opportunity to gain exposure to the research done in the rotation lab by 1) understanding the current knowledge in the field, 2) learning about the underlying hypotheses that drive the current lab research, and 3) directly participating in an aspect of the research process (e.g., literature review, method development, data collection, analysis, interpretation, or research dissemination). It is also intended as an opportunity for the rotation supervisor to evaluate the student's performance to further the student's development as a researcher.

The (prospective) supervising faculty and the student should jointly consider the questions/areas below. After this form is completed, a copy should be sent to the IHS Program Director.

Student Name: _____ Rotation # (circle one): 1 2 3 Rotation

Prospective Supervisor: _____

Semester/Year: _____ Proposed start date: _____

What are the specific expectations for the rotation?

1. Over the course of the semester, the student will spend an average of (check one):
_____ 6-7 hours per week (if 2 credit experience)
_____ 9-10 hours per week (if 3 credit experience)
2. Student will keep scheduled appointments, turn in assignments on time, and participate actively in assigned lab activity.



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Rotation Request Form

Name:	95 #:
Address:	
Phone:	E-mail Address:

Research Rotation Choices, in Rank Order:

	Faculty Member	Lab/Project
1 st		
2 nd		
3 rd		
4 th		
5 th		

Describe your research interests:

ATTACH YOUR CURRENT C.V.



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Rotation: Self-Evaluation Form

For each research rotation, the student must complete two self-evaluations: one mid-way through the lab rotation (i.e., between the 2nd and 3rd week) and one at the end. The student is expected to take responsibility for remembering to complete the self-evaluation at the appropriate time. Once each self-evaluation is complete, the student sends it to the research supervisor and the IHS Program Director. Each self-evaluation is a written report (approximately two pages) in which each of the following areas is addressed:

Student's Name: _____ Date: _____

1. **REPORT PROGRESS ON PROJECTS:** Review the Research Rotation Interview form that you completed with your supervisor before you committed to this project. Have you made satisfactory/expected progress in all of the identified research activities? If so, describe. If not, describe and discuss barriers to achieving the stated goals.
2. **REVIEW AND UPDATE TIMELINES FOR ALL MAJOR RESEARCH-RELATED PROJECTS (IF APPLICABLE):** Are adjustments needed to timelines or goals? Do lab duties require re-prioritization? If changes are needed, how have you communicated with your supervisor?
3. **TIME MANAGEMENT:** Have you been able to fulfill the required hours for each week of your rotation? If not, why not? Are you able to perform the research duties at the expected level despite the other demands of graduate school (e.g., coursework) and more general life responsibilities?
4. **YOUR LEARNING:** Have your goals for learning about research in this lab been met? If so, briefly describe your experience. If not, identify barriers to your learning.

It is the student's responsibility to complete and submit to you a **end-rotation** self-evaluation. Did the student do this? Y N

Regardless of whether the student completed the self-evaluation, did you ever have the opportunity to review the student's performance during the research rotation period? Y N

What actions, if any, did you put in place to support the student's research success or to address concerns noted in the student's mid-rotation performance?

Please describe any performance change you observed with these supports in place and/or following a review of expected activities.

Optional comments: _____

Other general comments: _____



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Evaluation of Monthly Doctoral Seminar

Student participation in Journal Study and Graduate Seminar are evaluated on a satisfactory/unsatisfactory basis. More specifically, students will be evaluated on their performance for both leading the discussion and participating in the discussion when another student is the lead. Therefore, to achieve a satisfactory evaluation in Journal Study and Graduate Seminar, all of the following criteria must be satisfied:

When students lead the discussion, they must:

1. Facilitate the agreed upon number of discussions for that semester
2. Prepare for each discussion session by distributing reading materials to the advisor and classmates **at least 2 weeks before the meeting**
3. Complete the Journal Study Review document and distribute that document to the advisor and classmates on the day of the session

When students participate in the discussion led by another student, they must:

1. Attend the meeting (unless there is medical documentation or the absence has been approved ahead of time by the program director).
2. Prepare for each session ahead of time by reading the materials provided by the discussion leader.
3. Engage in a thoughtful and informed discussion based on the pre-reading material and questions and comments posed by the student leading the discussion as well as the reflections of other students in the class.



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**ADDITIONAL REQUIRED ELEMENTS:
PUBLICATION SUBMISSION, ZEIGLER PRESENTATION,
NATIONAL INTERNATIONAL PRESENTATION**

In addition to course work, the QE, and the required professional rotations, IHS Doctoral students are required to **1) give a poster presentation of the research at the Zeigler Research Forum 2), prepare and submit a formal research article based on original research to a peer-reviewed journal as first or co-first author and 3), submit and present the research to a national or international peer-reviewed conference as first or co-first author.** Please note, the requirement that the student present at a peer-reviewed conference is flexible (the student may present at any time *after the Zeigler presentation* and *prior to* advancing to candidacy and the topic may be different than the content presented in the paper or Zeigler presentation referenced above). The Zeigler presentation is evaluated by the IHS Student Progression Committee Confirmation of acceptance of a research project for presentation at a conference as well as confirmation of the submission of an article to a peer-reviewed journal must be sent to the IHS Program Director.

Requirements:

1. The student's research must be presented orally at the Annual CNHS Ziegler Research Forum, at which members of the IHS Student Progression Committee serve as judges (satisfactory or unsatisfactory).
2. The student selects, in consultation with their project mentor, a peer-reviewed academic journal to which to submit the article. The article must be written at a level of scholarship suitable for submission to a specified peer-reviewed journal. For information on how to identify and locate peer-reviewed journals:
 - California State University has published an online tool that may be helpful, <http://lib.calpoly.edu/research/guides/peer.html>
 - A comprehensive list of science journals can also be accessed through the Thompson Reuters website at <http://science.thomsonreuters.com/mjl>.

- When choosing a journal for article submission, it can be important to be aware of the journal's impact factor. The **impact factor**, often abbreviated **IF**, is a measure reflecting the average number of [citations](#) to articles published in [science and social science journals](#) in a specified time frame. It is frequently used as a [proxy](#) for the relative importance of a journal within its field, with journals with higher impact factors deemed to be more important than those with lower ones.
- To explore the impact factor of journals you are considering, visit http://thomsonreuters.com/products_services/science/free/essays/impact_factor.

3. The article must be:

Assessment of Poster Presentation

The presentation at the Zeigler Forum is reviewed and judged by the IHS Student Progression Committee as 'satisfactory' or 'unsatisfactory' in meeting the criteria below. If it is judged as satisfactory, it may then be submitted for presentation at a peer-reviewed scientific conference.

If the presentation is judged unsatisfactory, the student will receive (within approximately 30 days) a written description of:

1. The deficiencies and recommendations for improvements;
2. Plans for scheduling a second presentation.

The student may repeat the oral presentation once. If the second presentation is also assessed as unsatisfactory, the student's name will be forwarded to the IHS Student Progression Committee with a recommendation that the student be dismissed from the program.



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Criteria for Assessment of Zeigler Research Presentation

Failure to achieve a “Satisfactory” rating for *any* Essential Component may result in an unsatisfactory grade for the Research Presentation.

ESSENTIAL COMPONENTS	SATISFACTORY	UNSATISFACTORY
Organization: Completeness and organization.	Presentation content is sufficiently complete, well organized.	Presentation is disorganized, unfocused, or essential components are not addressed.
Rationale: Demonstration of rationale for research.	Rationale for research concisely outlines a research need or gap.	Rationale for research is omitted or appears unjustified.
Research Questions: Inclusion of clearly-stated research question(s).	Research question(s) are appropriate to the study and precisely stated.	Research question(s) are omitted or inappropriate to the study.
Method: Clarity and validity of methods.	Methods are described clearly and are valid for the study.	Methods are inaccurately described or lack validity.
Results: Results directly responsive to research questions and methods used.	Results are directly responsive to research questions and methods used.	Results are omitted or not responsive to research questions and methods used.
Discussion: Inclusion of interpretation of findings.	Findings are critically analyzed and interpreted.	Findings are insufficiently or inaccurately analyzed/interpreted.
Strengths and Limitations:	Research strengths and limitations are clearly identified.	Research strengths and limitations are omitted or inappropriate.

Identification of strengths and limitations.		
Conclusion: Data-supported conclusions.	Conclusions are clear and well supported by study data.	Conclusions are omitted or not supported by study.
Future Research: Inclusion of implications for future research.	Implications for future research are outlined.	Implications for future research are omitted or inappropriate.
Questions: Ability to answer challenging questions.	Presenter answers challenging questions knowledgeably, accurately, and honestly.	Presenter does not answer questions knowledgeably, accurately, or honestly.
Effectiveness: Overall effectiveness of presentation in communicating with intended audience.	Presenter efficiently and effectively communicates the essential meaning of the presentation to the intended audience.	Presentation does not communicate the essential meanings of the research efficiently or effectively with the intended audience.



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TEACHING PRACTICUM PROTOCOL

TEACHING COMPETENCY

Each student must teach at least one course under the mentorship of a faculty member, or serve as a teaching assistant for at least two courses or serve as a teaching assistant for one course and mentor or co-mentor an undergraduate thesis or research project.

WHEN THE STUDENT TEACHES THE COURSE

When the opportunity arises, courses may be taught for pay but only after the student has fulfilled his/her GRA requirements (unless otherwise approved by the program director). Approved courses might include, but are not limited to courses identified as undergraduate, graduate, or continuing education courses that receive credit. Only students that already have a graduate degree may teach a graduate courses and only at the level of their degree or below. Students may use a current course they have been teaching either at UVM or another institution, but must demonstrate improvements in the course based on their learning in IHS 7300. Students who need assistance identifying a course to meet this requirement should begin working with their academic advisors at least a semester ahead of the semester they intend to teach.

STEPS FOR THOSE TEACHING A COURSE

Step 1: TEACHING PLAN

- a. The student should develop a teaching plan that includes consultation with the Center for Teaching & Learning, the chair of the department, or a faculty member who has taught or mentored the course in the past.
- b. The student must submit the following to the program director being to being approved to teach the course:
 1. The student's personal learning objectives – what the student wishes to accomplish through this practicum.
 2. Course number and name.
 3. Target audience – type and anticipated number of students.
 4. Location(s) where it will be taught. Time frame for delivery of course.
 5. Draft Syllabus with:
 - i. Course description.

- ii. Course objectives.
 - iii. Topics to be covered.
 - iv. Sequence in which topics will be presented.
 - v. Pedagogy to be employed.
 - vi. Assessment methods.
6. Description of how the methodology proposed for use in this course is linked to the theories and concepts discussed in IHS 7300.

Step 2: REVIEW of the TEACHING PLAN

Approval of the teaching plan, as described above, rests with the department chair and the Doctoral Program Director.

Step 3: COURSE PREPARATION:

The course must be largely developed and ready to teach ONE MONTH BEFORE the student begins teaching. The materials, which will be reviewed by the supervisor for the course, should include the following:

- Final Syllabus in appropriate format (following departmental or college template) with:
 - Course information – class dates, times, locations, etc.
 - Instructor information – name, contact information, office hours, etc.
 - Textbooks/reading materials
 - Course description
 - Course objectives
 - Class, department, college, and university policies – attendance, make-up or late work, academic honesty, etc.
- Description of each class session, including:
 - Topics to be covered
 - Materials to be used, including audio-visual
 - Activities, including lab activities
 - Readings
 - Assignments
 - Pedagogy
- Assessment of student learning
 - Sequence
 - Format
 - Scoring rubrics for all essay questions, projects etc.
 - Grading policy
- Justification of the chosen topics, delivery model, and instructional methods
- Materials including course packs, handouts, activities, etc.
- Assessments, including copies of all assessments.

Step 4: TEACHING EXPERIENCE

Reflection

- The teaching will not be formally supervised, however, the student is required to provide an end-semester reflection to the Doctoral Program Director following the conclusion of the course as well as journaling throughout the semester (see below).

Creating a teaching portfolio is highly recommended for students teaching a course. The preparation of the teaching portfolio is based on coursework from IHS 7300 and materials developed during the teaching mentorship, including a reflective narrative summarizing the contents of the formative journaling and student course evaluations.

Satisfactory completion of the practicum experience will be judged by the Doctoral Program Director.

STEPS FOR THOSE SERVING AS TAs and MENTORS OF STUDENT RESEARCH

Step 1: TA Experience

When students serve as Teaching Assistants, they may do so as part of their Graduate Research Assistantship or for independent study credits toward their graduate elective requirements (3-6 credits). When conducted as an independent study, students must conduct a semi-structured interview with a potential teaching mentor (see Program Director for materials to facilitate the interview) and submit this documentation to the Program Director for approval prior to beginning the independent study. Please review this documentation carefully as it details the expectations for collaboration, reflection and journaling activity, as well as the nature of student feedback and student evaluations of teaching.

Satisfactory completion of all teaching experiences will be judged by the Doctoral Program Director in collaboration with the teaching and mentoring supervisors.

Step 2: Mentoring Experience (students must already have a master's or more advanced degree to mentor an undergraduate thesis)

The student must submit documentation of their mentorship of an undergraduate or master's student's research including:

- Personal learning objectives – what you hope to learn
- Mentorship objectives- what you hope accomplish through this research mentorship experience with a student
- Identification of the student mentee and a description of their research project
- Outcomes of the research mentorship experience
 - Description of the process
 - Description of the content
 - Description of the responsible conduct of research

Satisfactory completion of all teaching experiences will be judged by the Doctoral Program Director and (as applicable) in collaboration with the teaching and mentoring supervisors.

Step 3: Portfolio

The student must submit a teaching portfolio to the supervising faculty member and the doctoral program director. The preparation of the teaching portfolio is based on coursework from IHS 7300 and materials developed during the teaching mentorship, including a reflective narrative summarizing the contents of the formative journaling and student course evaluations.

Satisfactory completion of all teaching experiences will be judged by the Doctoral Program Director and (as applicable) in collaboration with the teaching and mentoring supervisors.

Step 4: Journal

Journal

In order to gain approval for teaching competencies, students are expected to keep a journal throughout the experience to:

- Provide an ongoing formative self-analysis of his/her performance.
- Assess his/her achievement of the learning objectives as outlined in the proposal.
- Take a student-centered perspective and gather and reflect on assessment data regarding how his/her students are learning.

Tips on Journaling

You should make your journaling interactive with the supervising instructor.

Journal entries should capture both descriptive information about the experience, and self-reflective information about what you are learning. Reflect both on a surface level [e.g., *next time I'll do this first instead of that*] and on a deeper level [e.g., *I am finding that I need to work on responding to questions in a way that is less defensive; Today, the discussion really got going, and I think it was because...*]. The reflection also should address the personal goals you have set for yourself.

It is suggested that you share your impressions and your learning about the teaching process, as well as any input or suggestions about what journaling practices worked well for you, with your fellow cohort members.

The student will be expected to keep a journal (see Tips on Journaling below) throughout the experience to:

- Provide an ongoing formative self-analysis of his/her performance.
- Assess his/her achievement of the learning objectives as outlined in the proposal.
- Take a student-centered perspective and gather and reflect on assessment data regarding how his/her students are learning.
- The student must share journal entries with the supervisor (in person or via email) at least twice per month across the semester, so that the supervisor and the student teacher have an opportunity to interact with each other at multiple points.



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GRANT PROTOCOL

A student’s qualifying exam (QE) will include a grant proposal that is written and orally defended which must be passed successfully for the student to advance to candidacy. The grant proposal must receive preapproval from the student’s QE committee and be written at a level of scholarship acceptable and suitable for submission to a specified funding agency, conforming to the format and referencing style of that agency.

QE Protocol Options

IHS doctoral students are expected to develop and defend a grant proposal that is written in the context of an actual grant funding mechanism. This is important for pedagogical reasons: in practice, it is the funding mechanism that shapes the purpose, length, and specific requirements of a grant proposal. Although it is strongly encouraged, students are *not required to actually submit* their grant proposal. In summary then, students may choose one of two options for completing the grant protocol portion of the QE which involves a decision regarding whether or not they plan to submit their grant proposal for funding. The following conditions apply for each option:

QE GRANT PROTOCOL OPTIONS	Faculty Co-investigators listed on grant	Minimum funding amount
Plan to submit	Yes	No but must be IHS PD approved
No plan to submit	No	\$10,000 or IHS PD approved

Requirements

1. The student must be first author or co-first author (or co-primary investigator) on the submission.
2. The student must assemble a QE committee consisting of at least three faculty members from at least two disciplines (one of which shall be named Chair of the committee and will oversee the QE process).
3. All students must submit the Grant Proposal Pre-Approval form to the QE Committee chair for transmission to the Committee for approval *before* writing the grant. The purpose of the pre-approval is to make sure the student’s committee is ‘on board’ and that they agree that the grant is feasible and appropriate (e.g., time, scope, content area,

question). This is important to ensure that the student does not do a lot of work on a grant that is ultimately untenable or that has little chance for success. The pre-approval is an up or down decision. If denied, the committee may request adjustments or suggestions for a subsequent attempt. The form must include:

- A brief description of the specific project and funding agency.
 - The Request for Proposals (RFP) of the agency, including any submission dates (past or future) and page limits.
 - A 1-2 page “concept paper” outlining the essence of the proposed activity:
 1. Introduction – statement of problem, need, and significance
 2. Objectives – measurable objectives (objectives you can evaluate)
 3. Resources required – staff, equipment, materials, etc.
 4. Implementation plan – what you are going to do, who is going to do it, how you are going to do it, and when you will do it
 5. Funding timeline – duration of funding needed
4. If the student is planning to submit the grant (i.e., they have co-investigators or collaborators who will be named in the actual grant submission, the student must provide documentation of approval (can be an email) from all key partners at each step of the process (pre-approval, draft review, and prior to final submission to the funding agency).
 5. The grant must be external (not internal) and must be research related in some capacity. Intramural grant funding will be considered for part-time UVM faculty IHS students on a case by case basis and must be approved by the IHS Program Director.
 6. The application should meet all of the specifications of the funding agency.
 7. If the requirements of the funding agency are “minimal,” the IHS Student Progression Committee or QE Committee may require the student to provide a more extensive description of key components.
 8. As stated above, actual submission of the grant is *not* a requirement of the examination, but submission to the agency is strongly encouraged. In rare cases, a grant may have already been submitted but the committee may ask for additional revisions for the purpose of the examination.
 9. If human subjects are involved in the project, the student must follow required procedures. The student may not need IRB approval prior to submitting the grant if not required by the funding agency. However, if the grant is funded and IRB approval is required, and if the student is a member of key personnel for the project, the student must obtain the necessary IRB approvals.
 10. The proposal and accompanying approval forms must be consistent with the grant proposal and submission guidelines of the institution through which the application is being submitted.
 11. If the student proposes to use the grant funding to support dissertation research, the student must have an approved dissertation committee and dissertation concept paper prior to writing the grant. In such cases, the dissertation committee will participate as members of the QE committee.

Written Exam

The written exam involves writing the grant proposal (i.e., all aspects of the grant submission *excluding* the budget justification section) using the concepts learned in the core courses. The student must select a novel research question that meets the FINER criteria (feasible, interesting, novel, ethical, relevant). Although neither the IHS Program Director nor faculty co-investigators (in the event that there are any) may serve on the QE Committee, they may assist the student in the conceptualization of the proposal (e.g., literature review, methods, analysis). They may also assist in the writing of the grant proposal portion of the student's exam but in a limited way. Specifically, the student is expected to take the lead on the writing (i.e., the student will write a first and complete draft of the grant proposal and co-investigators may edit the manuscript and offer recommendations for revision). In addition, it is expected that the student will formally describe his/her role in the grant development process and this statement is approved as accurate by the student's co-investigators/collaborators as appropriate. This said, it is also important to note that the borrowing of standard technical language (e.g., to describe a proposed methodology) is considered permissible and students are encouraged to borrow such language and include it in their grant proposals as deemed appropriate. *In many cases, the grant/research proposal will be related to the student's anticipated dissertation topic, although this is not a requirement of the exam.* Students (and their collaborators) who chose to submit the grant, should be aware that there is an obligation to pursue the proposed studies as in the case that the grant is funded.

In addition, in the event that students identify faculty who are well-suited to provide specific kinds of guidance to improve the content of their grant proposal, they may (and are encouraged to) meet/consult with those faculty. Students may verbally consult with faculty on any aspects of the grant proposal (e.g., research question, literature review, methods, analysis) irrespective of whether those faculty members also serve on the student's QE committee.

To the students:

When you have selected a research question, ask yourself these questions before requesting approval of your protocol:

1. Is this research question FINER?
2. Can you state concisely the goals of the proposed research and summarize the expected outcome(s), including the impact that the results of the proposed research will exert on the research field(s) involved? (From NIH Specific Aims)
3. Can you list succinctly the specific objectives of the research proposed, e.g., to test a stated hypothesis, create a novel design, solve a specific problem, challenge an existing paradigm or clinical practice, address a critical barrier to progress in the field, or develop new technology? (From NIH Specific Aims)

To the student's QE committee:

Please carefully review the student's application in the context of the funding mechanism and specific RFA. The student should be judged solely in their ability to respond effectively to the RFA in terms of the prescribed content, format, and level of detail requested. This may mean that, for example, that for this QE, the student may or may not be expected to be able to describe specific methodologies or statistical procedures (such educational goals are instead, inherent to

the conduct of the dissertation). As such, evaluation of the student's performance must be framed within the specific and particular demands of the RFA that the student has chosen. With this in mind, some questions that may be appropriate include:

- Is this research question FINER?
- What are the goals of the proposed research
- Can you summarize the expected outcome(s)?
- What are the implication of the proposed study for theory or clinical practice?

Assessment: Written and Oral Exam

Students will meet with their QE Committee to answer questions related to the written grant proposal. No formal presentation of the written protocol is required as part of the oral exam. Students should dress appropriately for the oral defense and be prepared for 2-3 hours of examination. After the Committee is satisfied that all questions have been answered, the student will be excused from the room while the Committee discusses the student's performance. At this time, the committee will formally evaluate both the written and oral exam. The written portion of the exam will be evaluated by the QE committee using the Criteria for Assessment of Written Grant Proposal form (see below). With regard to the oral exam, the Committee should consider the following questions in making their assessments:

- Is the proposed research question FINER? Does it address the "so what" factor?
- Is the grant submission responsive to the RFA (note: the specific content and level of detail required for each RFA will vary significantly and, consequently, the expectations for the student's written and oral portion of the exam will vary as well). With the specific RFA in mind, the committee should consider how well the student is able to describe and/or answer questions related to the:
 - research design, subjects, intervention (if applicable), and methods, including data collection and management
 - analytic plan including plans for descriptive, basic and multivariate statistics and sample size requirements
 - protection of human subjects including: human subjects involvement, potential risks, recruitment and informed consent and risks/potential benefits
 - potential limitations and threats to validity and any plans to address them
 - translational or policy implications of the proposed research.

The written grant proposal and the oral defense of the grant proposal will be evaluated by the QE Committee using the criteria summarized below and ***with reference to the criteria of the funding agency***. When the evaluation of the written proposal and oral defense is complete, the committee will judge the completion of this requirement as "satisfactory" or "unsatisfactory."

If the written grant and/or oral exam is/are judged as satisfactory (meaning no or few revisions are recommended), the student is provided minor edits/recommendations by the committee, however, reexamination and confirmation of changes is not necessary.

If the written grant and/or oral exam is/are judged as unsatisfactory (meaning significant revisions or a retake of the exam is necessary), the student may receive mentoring and resubmit the written grant to the committee and/or retake the oral exam. If significant written revisions or re-examination are required, the QE Chair will solicit comments from the other panel members and communicate them in writing to the student. The Chair will work with the student on a reasonable process and timeline for the revisions. In most cases, the student should be offered 30 days to make revisions and/or prepare for re-examination of the oral exam component. With

regard to the written grant, any resubmitted materials must be sent to the QE committee chair with a cover letter that explains how the revised materials are responsive to the Committee's recommendations. With regard to the oral component, the student must communicate to the QE Chair in writing, what steps or actions the student has taken to gain knowledge or skill in the specific areas previously deemed lacking. If the student's written revisions and/or oral re-examination are deemed unsatisfactory, the student's name will be forwarded to the IHS Student Progression Committee with a recommendation that the student be dismissed from the program.



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Grant Application Pre-Approval Form

Student Name: _____ Date submitted: _____

Committee member (chair): _____ Discipline: _____
Committee member 2: _____ Discipline: _____
Committee member 3: _____ Discipline: _____

Official Name, Address of Grant Agency:

Grant submission date (past or future):

Do you intend to actually submit this grant (yes or no; if no, the funding mechanism must exceed \$10,000)?

What is the dollar amount you seek?

Working Title of Proposed Activity:

Concept Paper: (1-2 pages, 1" margins, 12 pt Times, single-spacing)

1. Introduction – statement of problem, need, and significance
2. Objectives – measurable objectives (objectives you can evaluate)
3. Resources required – staff, equipment, materials, etc.
4. Implementation plan – what you are going to do, who is going to do it, how you are going to do it, and when you will do it
5. Funding timeline – duration of funding needed

Outline of Agency's Requirements: (These should be taken from the proposal guidelines and scoring criteria and pasted into this document, including page limits and whether the document should be single or double spaced.) Include electronic link to grant mechanism here if available.

Submission Deadline(s): (It is essential for the committee to be aware of submission deadlines and whether the deadlines roll on a quarterly or annual schedule.)

Reference: (Weblink where official information on the grant can be found.)

The QE committee has determined that this QE concept proposal is: APPROVED NOT APPROVED (see attached comments)

Committee member (chair): _____ Date: _____
[signature or typed]



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Criteria for Assessment of Written Grant Proposal

Repeated failure to achieve a “Satisfactory” rating for *any* Essential Component may result in failure to pass Grant Application competency.

	ESSENTIAL COMPONENTS	SATISFACTORY	UNSATISFACTORY
1.	Responsive to Funding Agency Elements of the application (excluding budget which is not evaluated) conform to the guidelines required by the funding agency and address its mission.	All or most elements of the application are within the parameters required by the funding agency, and the purpose of the project is relevant to the agency’s mission.	No or few elements required by the specified funding agency are included, or the student demonstrates insufficient knowledge of the funding agency’s requirements and mission.
2.	Overview and Purpose Clarity and precision of overview of project, goals, and specific problem the project will address. The required specificity and level of detail will vary by RFA.	Clear overview of project, concise account of project goals, clear statement of problem to be addressed.	Overview confusing or missing, or goals unclear or problem not well defined.
3.	Background and Significance Persuasive nature of the description of the significance of the problem evidenced by the review of the key literature. The required specificity and level of detail will vary by RFA.	The review of the literature and other data provide a cogent argument for the importance of addressing this problem, using excellent sources and rationale for establishing the background and the significance of the proposed activity.	Review of literature cursory, absent, inappropriate, or otherwise unresponsive to the guidelines of the RFA. Inadequate sources of information are used, or the background is poorly described, or the significance of the proposed activity is not well established.
4.	Objectives Objectives are described with measurable benchmarks. The required specificity and level of detail will vary by RFA.	An appropriate number of clearly defined measurable objectives as called for by the RFA.	Inappropriate number of objectives or objectives that are not measurable; poor or ill-conceived research design; inadequate or poorly articulated methodology, inappropriate analysis, or presentation of objectives that is not responsive to the RFA.
5.	Implementation Plan Methods for addressing the problem include (as appropriate) research design, procedures, and analysis plan. Also describes appropriate work plan including resources	Effective research design, well thought-out description of the methodology. Achievable work plan and timeline. Description and justification of all resources (e.g., named personnel, equipment, and	Implementation plan is illogically presented or lacks adequate description (e.g., personnel roles, equipment or materials needed, unrealistic timeline) or is otherwise unresponsive to the guidelines put forth in the RFA.

	required and realistic timeline: What, who, when, and how. The required specificity and level of detail will vary by RFA.	materials required at each stage) as called for by the RFA.	
6.	Evaluation/Data Analytic Plan Evaluation plan and/or data analytic plan of outcomes to answer research questions. The required specificity and level of detail will vary by RFA and may even be ‘not applicable’ for some RFAs.	If applicable, there is an evaluation/data analytic plan that describes how outcomes will be measured and evaluated and that is responsive to the guidelines put forth in the RFA.	If applicable, the evaluation/analytic plan is poorly developed, does not measure outcomes, is missing, or is otherwise unresponsive to the guidelines put forth in the RFA.
7.	Hypotheses/Outcomes Formal hypotheses/ or other expected research are described and justified. The required specificity and level of detail will vary by RFA.	Formal hypotheses/exploratory research questions, or other expected outcomes are described and justified and responsive to the guidelines put forth in the RFA.	Formal hypotheses/exploratory research questions, or other expected outcomes are not described and/or justified or presentation is not responsive to the guidelines put forth in the RFA.
8.	References References are appropriate, cover sufficient breadth and depth, use a citation format that is consistent and accurate, and exactly match the citations in the grant narrative.	Cited references are appropriate, cover sufficient breadth and depth of topic, and the citation format is consistent and accurate. Reference list matches citations in document exactly.	Some references are inappropriate, their selection is superficial, or citation format is inconsistent or does not follow prescribed format. Some references are missing, others that were not cited are included in the reference list.
9.	Length Proposal length conforms to agency’s prescribed limit.	Length of the proposal conforms to funding agency’s limit and addendum.	Length of the proposal does not conform to agency’s limit, or addendum.
10.	Overall Quality of Application Quality of application is organized, accurate, scholarly, and of solid substance and is responsive to RFA.	Information is presented and organized efficiently and effectively, with accurate grammar and spelling and few/no proofreading errors; application is responsive to the guidelines put forth in the RFA.	Presentation is of low quality and disorganized, or grammar and spelling or proofreading errors are present; application is not responsive to the guidelines put forth in the RFA.

Comments: _____



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JOURNAL STUDY REVIEW FORMAT
for Journal Study Presentations

Reference: Author, A., Author, B.B., & Author, C.C. (Year). Title of the journal article with only the first letter of the first word capitalized. *Journal of Research is in Italics Followed by the Volume Number (also in Italics) and then Page Numbers, ##, pp-pp.* If the article is from an internet-only journal, include the following immediately after the page numbers (underlined for emphasis here only). Retrieved month day, year, from http://__. If the internet article is based on a printed journal that you only viewed electronically, then include [Electronic version] just after the article title but before the period.

Introduction: In your own words, give a brief introduction (1-3 sentences) to give the necessary background to the study and state its purpose.
What problem was being addressed or what was the purpose of the study?
What were the hypotheses?
Was the literature cited current and relevant?

Procedures: In your own words, describe the specifics of what this study involved.
Who were the participants?
How were they grouped?
What did they have the participants do? Under what conditions? For how long?
What was measured?
What was being compared?

Findings: In your own words discuss the major findings and results.
Identify the findings relevant to each hypothesis.
How useful or significant are the results?

Conclusions: In your own words, summarize the researchers' conclusions.
What was the major outcome of the study?
Did the results support the conclusions drawn?

Personal comments: Give your reaction to the study.
What did you learn from the study?
How might you apply the results in a future teaching/clinical application?

Explain how this study might relate to the lab, lab topic, and/or your research project.



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ACADEMIC HONESTY DECLARATION

You are responsible for making yourself aware of and understanding the policies and procedures of the University of Vermont that pertain to Academic Honesty. These policies include cheating, fabrication, falsification and forgery, multiple submission, plagiarism, complicity and computer misuse. If there is reason to believe you have been involved in academic dishonesty, you will be referred to the Office of Student Conduct. You will be given the opportunity to review the charge(s). If you believe you are not responsible, you will have the opportunity for a hearing. You should consult with the course instructor or the Doctoral Program Director if you are uncertain about an issue of academic honesty prior to the submission of an assignment or test.

I have read and understand the [Code of Academic Integrity](#) of the University of Vermont. All work that I submit as a requirement for the Ph.D. in Interprofessional Health Sciences degree will abide by all of these policies and the guidelines specified for each assignment by the instructor.

Student's Printed Name: _____

SIGNATURE

Date: _____

Doctoral Program Director's Printed Name: _____

SIGNATURE

Date: _____



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DISSERTATION CONCEPT PAPER PROTOCOL

The purpose of the dissertation concept paper is to lay out the basic concepts and methods for the dissertation research for review, discussion, and tentative approval by the student's dissertation committee. The process (described below) for approving the dissertation concept paper is intended to be informal and interactive. Both qualitative and quantitative methods are valued in this program and can be used for dissertation research, pending approval of the student's IHS and dissertation committees.

FORMAT

The student should describe similar concepts for each of the three component papers in a concise form. Concept papers are approximately 5-10 pages in length.

Statement of the Problem

The statement of the problem is a rational and reasoned argument that posits the problem and indicates the necessity for the research. This should be supported by a literature review of critical studies that provide sufficient information to identify the "gap" in the current research that will be addressed by the proposed study. This will set the stage for how your research will contribute to attempts to address the problem. This section also will incorporate definitions of key concepts.

Significance of the Research

Significance should be established by presenting an integrative review of key sources that establish the need for the study or studies. The far-reaching implications of the project findings should be addressed as well. This should include a brief review of the literature with relevant citations and may also include an outline of additional topics to be included in the review of the literature conducted while in the dissertation phase for the main study or collection of studies.

Articulation of Interprofessional Scholarship

The way(s) in which the proposed research is interprofessional should be described. In what ways does the proposed research integrate knowledge or expertise from two or more professions or disciplines to produce new scientific knowledge?

Research Question(s)

The research questions should be presented and show how the methods will be designed to answer those questions. Bear in mind that any questions should be answerable within the timeline and framework of dissertation research. Consider the nature of the data that will be

gathered and analysis techniques that will be used to answer each question or set of questions. One way to do this is by providing a table that will show the independent and dependent variables and analysis tools that will be used for each study.

Method(s)

The methods description(s) should include data sources, instruments, procedures, and analysis methods to be used in each study. It will be important to gather the committee's input and tentative approval of the methods, which the student will tighten and elaborate for the formal proposal.

Dissertation Concept Paper Approval Process

The dissertation concept paper (generally 5 – 10 pages in length) is developed to outline the plan for the dissertation. The student and student's mentor, submits the dissertation concept paper to the IHS Student Progression Committee via email for approval who will evaluate the proposal for its appropriateness with regard to scope, rigor, and feasibility. If the IHS Student Progression Committee has questions or concerns, these will be addressed with the student prior to progressing. The Dissertation Concept Paper Approval Form is provided below.



The University of Vermont
COLLEGE OF NURSING
AND HEALTH SCIENCES
DOCTORAL PROGRAM OF STUDY
IN INTERPROFESSIONAL HEALTH SCIENCES

Dissertation Concept Paper Approval Form:

WORKING TITLE:

STUDENT'S NAME:

IHS Student Progression Committee

The IHS Student Progression Committee agrees the proposed project is appropriate in scope and feasibility and may be pursued to fulfil the program requirement of dissertation. The full proposal still must be presented in a formal meeting with the student's dissertation committee for approval. Only at that point can the student apply for Doctoral Candidate status.

IHS Committee Chair _____ Date _____



The University of Vermont
COLLEGE OF NURSING
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DOCTORAL PROGRAM OF STUDY
IN INTERPROFESSIONAL HEALTH SCIENCES

Dissertation Format

Students are required by the Graduate College to use a computer software program appropriate to the discipline to create the Table of Contents and the Lists of Tables and Figures from the dissertation text headings. (see <http://catalogue.uvm.edu/graduate/degreerequirements/requirementsforthedoctorofphilosophydegree/>)

A dissertation must be prepared and submitted in compliance with the "**Guidelines for Writing a Thesis or Dissertation**" available from the Graduate College office and the program. A formatted copy of the dissertation must be submitted to the Graduate College for a Format/Record Check at least three weeks prior to the scheduled oral defense. Each student must also provide defensible copies of the dissertation to members of the dissertation defense examination committee at least two weeks before the scheduled examination. Individual departments may require earlier deadlines.

Students must notify the Graduate College prior to defending their dissertations.

The oral defense of a dissertation can be scheduled only after successful completion of the comprehensive examination and the submission of an original copy of the dissertation to the Graduate College for a Format/Record Check.

Note: The descriptions in this section provide suggestions for formatting. The actual proposal format and content will be guided by the student's dissertation committee and will comply with the standards of the Graduate College.

Dissertation Proposal

- The proposal must be defended in a formal face-to-face meeting with the student's dissertation committee. Faculty members from outside the University may join in via conference call as needed. This proposal meeting should be scheduled for a two-hour block of time. It generally begins with a formal presentation of 20-30 minutes, followed by discussion. Alternatively, shorter presentations may be provided for each of the studies being proposed, with discussions following each component study presentation.
- After a successful defense, the student will have earned doctoral candidate status and permission to move forward in completing the proposed research.

Dissertation Completion

- A standard structure is recommended for the IHS Doctoral Program (major sections include Introduction, Method, Results, Discussion). The research may be conducted using quantitative, qualitative, or mixed methods.
- Alternatively and at the discretion of the student in consultation with the dissertation committee, the paper may adopt multiple papers structure reflecting anticipated publishable units. For example:
 - Chapter I = Introductory Chapter
 - Chapter II = Paper 1
 - Chapter III = Paper 2
 - Chapter IV = Paper 3
 - Chapter V = Integrative Discussion
- The student and dissertation chair will decide how to engage members of the dissertation committee during the process of completing the research and writing the required papers. Any major variations in methodology approved as part of the proposal should be presented to the committee for approval if they arise.
- Students often present drafted chapters to the chair of their dissertation committee first and then to the whole committee when approved for submission by the chair. As a general guideline the committee should be given two weeks for reviewing each submission (unless a different timeframe has received agreement by the committee).
- When the candidate, chair, and committee agree that the document is ready, the candidate may schedule the dissertation defense. The two-hour defense must be formally scheduled with the Graduate College at least 3 weeks prior to the scheduled defense date.
- At this point, the candidate should provide a completely compiled dissertation to members of the dissertation committee, allowing approximately 2 weeks for the committee to review the final version of dissertation prior to meeting.
- In most cases, a dissertation defense begins with a public presentation of approximately 30-35 min, followed by a period of 25-30 min for questions from the audience. At this point, the committee chair excuses other guests and the committee meets with the candidate for 45-90 minutes to discuss any further changes needed in the dissertation and to ask questions of the candidate about any aspects of the work. At the conclusion, the candidate is excused while the committee deliberates approval of the defense and the document. Most candidates are asked to make some changes before submitting the document to the Graduate College. It is wise to arrange for a professional formatter to assist with the final preparation of the manuscript prior to submission to the Graduate College. Requirements and forms for submission can be found at <http://catalogue.uvm.edu/graduate/degreerequirements/requirementsforthedoctorofphilosophydegree/>

Dissertation Defense Examination Committee

Upon receipt of a completed dissertation, the Dean of the Graduate College will appoint a dissertation defense examination committee based upon nominations submitted by the candidate's advisor. The dissertation defense examination committee consists of a minimum of four University of Vermont faculty members, all regular members of the graduate faculty. At

least two graduate faculty members must be from inside the department or program. The chair must be both a member of the graduate faculty and from outside the candidate's department and program. The definition of outside faculty means the faculty member has no appointment of any kind in the department or program. For University-wide interdisciplinary programs, the chair must be outside the department of the candidate's advisor. The chair will be designated by the Graduate College dean upon nomination by the dissertation advisor. Individual programs may require more than four committee members or have other specific membership requirements. The dissertation defense examination committee and the graduate studies committee do not have to be the same.

The chair of the dissertation defense examination committee has the responsibility for ensuring proper conduct of the examination, appropriate documentation of the results, and that the signatures of endorsement are added to the acceptance page of the dissertation following a successful defense.

The acceptability of the dissertation is determined by the dissertation defense examination committee. The chair of the dissertation defense examination committee notifies the Graduate College of the outcome. A grade of "S" or "U" is awarded. If a student's defense examination performance is not satisfactory, then one reexamination, and one only, is permitted.

After a successful dissertation defense, candidates must electronically upload the corrected dissertation to <http://www.etsadmin.com/uvm> for approval by the Graduate College within the time period specified by the dissertation defense examination committee, and/or the Graduate College.

APPENDIX B. GOVERNING COMMITTEE DESCRIPTIONS

Interprofessional Health Sciences PHD Student Progression Committee

The Interprofessional Health Sciences PHD Student Progression Committee is responsible for student admissions and shall provide recommendations regarding GTRA placements. The Committee will also review achievement of student program milestones. These milestones include review of the student's Zeigler presentation and dissertation concept paper as well as other metrics related to achievement of goals. In the event that a student fails to achieve program requirements, the Committee may recommend to the Graduate College that a student be dismissed from the program. The Committee also considers and makes recommendations regarding applications from students for third and fourth year stipends. The Committee will consist of the IHS PHD Program Director as well as three graduate faculty involved in the program and who represent different disciplines and research foci. These three graduate faculty will serve a 3 year term.

Interprofessional Health Sciences PHD Executive Committee (IHSX)

Interprofessional Health Sciences PhD Executive Standing Committee (IHSX): The primary functions and responsibilities of the IHSX include program curriculum review and management, setting and measuring general program outcomes, determination of program membership, creation and oversight of program policies and procedures (e.g., handbook), program fiscal review, and other related matters.

Composition: The committee shall consist of tenure-track and tenured faculty members representing each department, elected by departmental faculty; plus one member-at-large elected by the College faculty as a whole. With approval of the Associate Dean for Research and Faculty Affairs, a clinical faculty member with appropriate research appointment can also serve as a department representative in lieu of a tenured faculty member. The committee may solicit nominations for and appoint members-at-large on an as-needed basis. The Chairperson of the Committee will be chosen by the members of the committee. Members will typically serve 3-year renewable terms. The Associate Dean for Research and Faculty Affairs, in conjunction with the IHS Program Director shall serve ex officio to offer guidance related to the University policies governing academic actions, budgetary concerns, etc

APPENDIX C. COURSE DESCRIPTIONS

CTS 6010 Designing Clinical & Translational Research. The goal of this course is for participants to learn how to write their own research protocols suitable for submission to an Institutional Review Board or funding agency. Each session covers part of the protocol design process such as choosing a question, picking a design, selecting measurement instruments, minimizing bias, identifying subjects, estimating sample size, designing an analytic plan, avoiding ethical problems, and finding funding sources. Each session includes presentation of a

textbook chapter [Hulley SB, et al. *Designing Clinical Research: An Epidemiologic Approach*, 3rd ed. Williams and Wilkins, Philadelphia, 2006], review of assigned readings from the medical literature, class discussion, and student presentations of their own research protocols. The final sessions are devoted to a mock study section that closely mimics the NIH study section process. Prerequisites: none. 3 credit hours.

CTS 6100 Conducting Clinical and Translational Research. This course is designed for new investigators and others wishing to learn the ethics, regulatory requirements, and practical considerations for undertaking a clinical research project. Example topics include: Protecting human subjects; Research with vulnerable populations; Roles, rules, and mechanics of the IRB; Recruitment, compensation, and consent of subjects; Data safety and monitoring; Planning and carrying out surveys and interventions; Conflicts between research and care for individual patients; and, Legal issues in clinical research-authorship, collaboration and conflict of interest. Students will acquire the knowledge and skills to present and defend a proposal before an Institutional Review Board (IRB). The class functions as a mock IRB as it considers proposals and problems designed to illustrate many facets of conducting research. Students present their own protocols before the "Board" as a final class project. Prerequisites: none. 3 credit hours.

CSD 6100 Reporting Clinical and Translational Research. This course is designed to develop communications skills for writing, editing, and presenting clinical and translational science. The course prepares students to master five presentation formats: abstracts, posters, brief oral presentations, full-length presentations such as Grand Rounds or seminars, and research reports/journal articles. The course explores American Medical Association standards for publication style and terminology [Iverson 1998] using a text written by experienced clinical investigators [Browner 1999]. The course uses a three-session cycle for each of the five formats. The ethics of publication and the potential conflicts and pitfalls of authorship are also covered. Prerequisites: graduate standing or instructor permission. 3 credit hours

CTS 6200 Analyzing Clinical and Transitional Research. This course is designed to provide basic analytical skills for clinical and translational research. Prior clinical research experience is helpful but not required. The course assumes no prior statistical experience and mathematics is kept to a minimum, requiring comprehension at the high school algebra level. Content includes basic data considerations, descriptive statistics, hypothesis testing, and bivariate analyses. Classes provide a small group interactive seminar approach with "hands on" analyses using the statistical software package STATA. Analyses of ample datasets are completed on a weekly basis. Specific datasets are provided, but students are encouraged to bring their own datasets to use throughout the course. Lectures are available online. Prerequisites: graduate standing or instructor permission. 3 credit hours.

CTS 6250 Multivariate Methods for Clinical and Translational Research. This intermediate course builds upon the descriptive and bivariate statistical methods presented in *Analyzing Clinical Research*. Emphasis is on developing the foundational skills and knowledge for using regression analytical techniques based on the correlational aspects of clinical data. The conceptual and applied applications of correlational and regression analyses to clinically relevant research datasets are the focus of the course while keeping mathematics to a minimum of basic college-level algebra. Specific datasets are provided along with encouragement for students to

incorporate their own research datasets into the course. Class assignments involve actual computer analyses illustrating the concepts discussed in class while allowing students the flexibility of choosing datasets and variables that are of specific interest. Prerequisites: graduate standing or instructor permission. 3 credit hours.

EDRM 6310 Mixed Method Research. An advanced research seminar designed to introduce students to mixed methods research, which integrate qualitative and quantitative approaches, inquiries, and data collection and analysis strategies into a single study or research project. Prerequisite: Documented completion of basic quantitative and qualitative research methods courses

IHS 6990 Interprofessional Health Sciences: Directed Study. This course will provide an opportunity for students who have not completed a thesis or research project prior to admission in the IHS doctoral program to carry out a graduate level research project under the supervision of an IHS faculty member. Prerequisites: none. 3 to 6 credit hours.

IHS 7010 Topics & Measurement of Interprofessional Health Sciences. In this course, students will learn fundamental concepts, principles, equipment, and tools essential in conducting quantitative research in the areas of human cellular physiology, movement, communication, and physical activity in relation to human function and rehabilitation sciences. They will learn to discuss the features of the quantities to be measured in each focus area and issues relating to the selection and design of appropriate tools specific to each quantity through examples of faculty research projects. Students will participate in lectures, class discussions, hands-on demonstrations and practice, and critical appraisal of published literature. Prerequisites: none. 3 credit hours.

IHS 7020 Applying the IFC Model to Human Functioning & Rehabilitation. The course will provide an overview of the ICF model and will provide several applications of the ICF framework to Interprofessional Health Sciences. Most uniquely, it will further support interdisciplinary thinking, practice, and research by enhancing the opportunity to look at research questions with an innovative and biopsychosocial approach. Prerequisites: none. 3 credit hours.

IHS 7300 Seminar and Practicum in Health Professions Teaching & Learning. This seminar recognizes the increasing interest and need within the academy in developing the teaching skills of the future professoriate in addition to developing their research capabilities. The seminar is designed to acquaint students with the foundational concepts of teaching and learning particularly as they are related to health professions education. Students will begin to develop a teaching philosophy and teaching goals, and determine how to align those goals with student, program and/or institutional needs. The practicum will allow students to design and implement learning activities for students under the direction of a faculty mentor. Prerequisites: none. 3 credit hours.

IHS 7500 Professional Writing and Grantsmanship. This seminar builds upon the skills that students have developed in CTS 301 (Designing Clinical & Translational Research), CTS 310 (Conducting Clinical & Translational Research), and CTS 315 (Reporting Clinical & Translational Research). Topics will include reporting research results in various formats

(dissertation, scientific article, grant proposal); selecting an appropriate publication for a given research study; the variety of grant mechanisms available to graduate students and entry-level professionals (including both federal sources and private foundations); criteria for successful grant applications; common errors in grant proposals; and journal and grant peer review processes. Prerequisites: none. 2 credit hours.

IHS 7491 Doctoral Dissertation Research. Directed interprofessional dissertation research in Interprofessional Health Sciences. Prerequisites: CTS 301, CTS 310, CTS 315 IHS 401, IHS 402, IHS 450. 1 to 9 credit hours.

PH 6010 Policy Health and Health Policy. Course focuses on current public health issues, barriers to improving population health, and policy tensions between science, economics, education, politics, government, media, and public health. Prerequisites: none. 3 credit hours.

APPENDIX D. LINKS TO GRADUATE COLLEGE PROTOCOLS AND FORMS

Leave of Absence Form

Transfer of Credit Form

Individual Development Plan Protocol & Form

Proof of Successful Completion of Comprehensive Exam

Defense Committee Guidelines and Membership Form

Intent to Graduate form

Dissertation Defense Notice template & Abstract

Defense Timetable

Thesis Template Starter

Thesis & Dissertation Guidelines