

ACADEMIC GUIDE
DOCTOR OF PHILOSOPHY (PHD)

Department of International Health
The Johns Hopkins University
Bloomberg School of Public Health

Academic Year 2006-07

DOCTOR OF PHILOSOPHY (Ph.D.)

Course Requirements and Related Information

**Department of International Health
The Johns Hopkins University
Bloomberg School of Public Health**

(Revised July 2006)

Contains Information for Students Entering
2006-2007 Academic Year

The Department reserves the right to change
existing rules at any time.
Students will be notified of any changes.

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GENERAL INFORMATION

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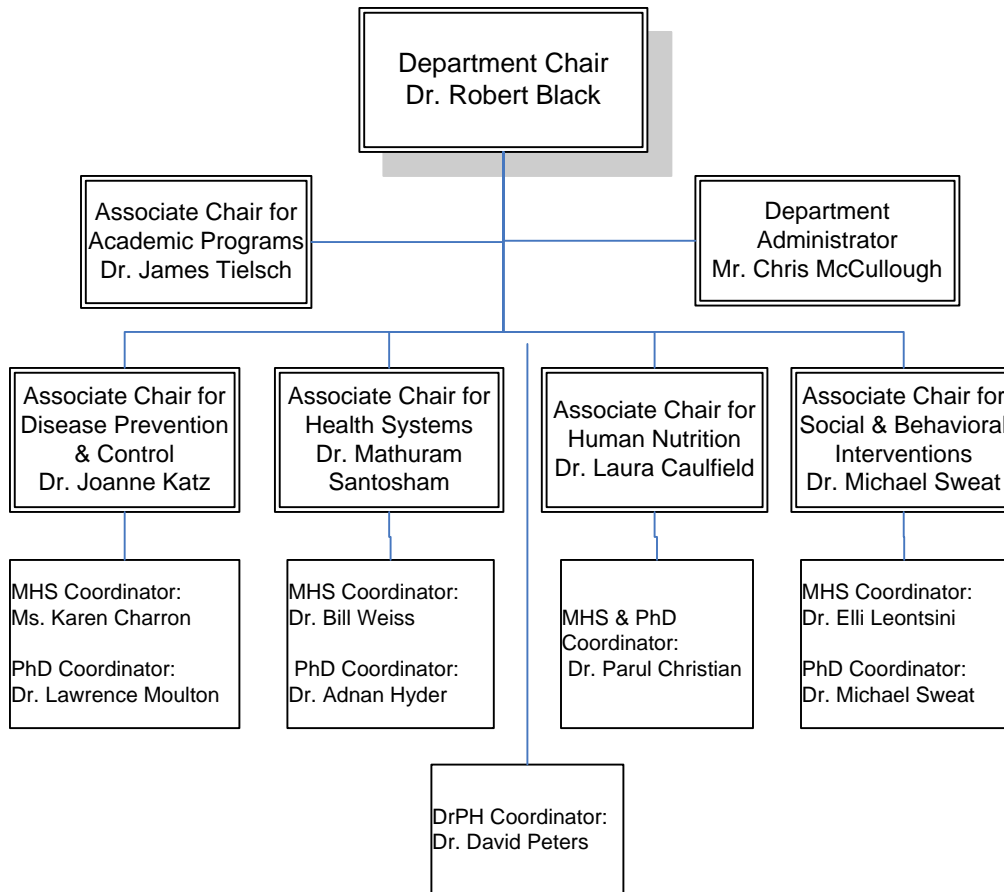
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Departmental Organization

The Department of International Health is one of ten departments in the Bloomberg School of Public Health. The departments of the School reflect both disciplinary and topical orientation. International Health is a topically based department and its faculty reflects a variety of disciplines including anthropology, biostatistics, clinical medicine, communications, demography, economics, epidemiology, immunology, infectious disease, management, nutrition, and sociology. The Department is organized around the academic programs with an Associate Chair heading each program area. In addition, the Associate Chair for Academic Programs coordinates all the academic programs and chairs the admissions and curriculum and credentials committees. Faculty have a primary home in one program area, but many faculty cross-advise students in other program areas as well.

Department Organizational Chart



Academic Program Support Staff

There are several administrative staff and faculty members within the Department who help oversee and facilitate the academic programs. These individuals are available to help you navigate the program and the department. The following information is being provided to help you understand the roles of each of these individuals.

James (Jim) Tielsch (Associate Chair for Academic Programs): Dr. Tielsch is responsible for the management and oversight of all academic programs. In this role, he is also chair of the Curriculum & Credentials Committee, which sets and implements policies and procedures for department academic programs and monitors student progress.

Jennifer Shaffer (Academic Program Administrator): Jennifer oversees the operations of the academic programs in the department and works as the liaison between students, faculty, and administrative offices of both the department and the School. She is also responsible for managing the departmental admissions process, student recruitment activities, coordination of orientation and visit programs, departmental course support (TAs and administrative budgets), academic publications and web materials, course waivers, and staffing the departmental academic committees.

Carol Buckley (Academic Program Coordinator): Carol assists students with all academic issues related to registration, tracking of academic progress and meeting departmental requirements, departmental courses, departmental exams (such as comprehensive exams and thesis defenses), internship checklists, and graduation.

Faculty MHS Program Coordinators – within the Department, the various degree programs are broken down into specific areas of interest, known as program areas. International Health has four program areas. Each program area program has a faculty member who is the overall coordinator of that program area's MHS degree program. They are the general point persons for questions about the program area and degree information (including curriculum requirements, course selection, etc...). They act as a secondary/general advisor for students within their program areas, and can be sought out to answer questions in the advisor's absence or as an additional source of information.

Financial Managers and Payroll Coordinators – the Department has a central payroll office that is staffed by Tanya Falls and Allison Quarles. They handle the General Funds budget as well as any central departmental payroll/awards for students. In addition, each program area has its own financial manager who is responsible for the oversight of their area's budget and payroll activities. Students who plan to work within the department should see one of these individuals to fill out the appropriate paperwork and verify their eligibility for employment prior to their start date. If you are at all uncertain as to who you should see about these issues, contact either Tanya Falls or Jennifer Shaffer for clarification.

Academic Committees

The Academic Program in the Department of International Health is governed by several committees designed to set policies and procedures relevant to the program(s) and ensure that these are fairly and clearly administered and enforced to protect the interests of students and the overall integrity of the program(s). These committees and their members are as follows:

CURRICULUM AND CREDENTIALS COMMITTEE

James Tielsch, Chair
Jennifer Shaffer, Staff

Timothy Baker
Robert Black
Parul Christian
Laura Caulfield
Karen Charron
Doctoral Student Representative
MHS Student Representative

Adnan Hyder
Larry Moulton
Elli Leontsini
David Peters
Michael Sweat
Bill Weiss

Dr. P.H. COMMITTEE

David Peters, Chair
Carol Buckley, Staff

Timothy Baker
Mike Sweat
Mel Thorne
Brad Sack

Mathu Santosham
William Reinke
James Tielsch
Keith West

HONORS, AWARDS AND SCHOLARSHIPS COMMITTEE

Peter Winch, Chair
Barbara Ewing, Staff

Gilbert Burnham
Joel Gittelsohn
Ruth Karron
Joanne Katz

Deanna Kerrigan
David Peters
Hugh Waters

Where noted, it is customary to have student representation on one or more of the above committees. Student representatives are selected each year by the IH Student Group and will be requested to attend meetings and report back to the student group on a regular basis.

IH Student Group

The Department of International Health has a very active and organized student group. This group was formed to facilitate stronger communication and interaction between the Department (faculty and administrators) and the students, and works each year to plan and develop different opportunities aimed at achieving this goal. Participation by all IH students is welcomed and encouraged. For more information on the activities and functions of this group and to learn more about getting involved, please contact the current coordinator, Duza Baba (dbaba@jhsp.h.edu).

Student Space

Each program area within the Department has a limited number of offices allocated for student use. The program areas can assign these to students at their discretion. Please contact the faculty coordinator for your specific program area to inquire about the availability of space and how it is allocated to determine if you are eligible.

In addition, the Department maintains a student office on the 8th floor, room E8038. This room is available for use by all students currently enrolled in the Department. You may pick up a key from Carol Buckley, room E8516. The room is equipped with several computers, a printer, a scanner, a microwave, a refrigerator, and desk space. We encourage students to utilize this space as needed. Please help us in making it enjoyable for everyone by keeping it tidy and clean. We also ask that you return your key upon graduation or if you plan to be out in the field for an extended period of time.

Guidelines for Student Employment

Hours of Work and Overtime

Full-time students who work for Johns Hopkins University School of Public Health may work no more than 19 hours per week during periods of enrollment.

During periods of non-enrollment, (i.e., summer, spring break, etc.), student employees may work up to 40 hours per week. Students that work over 40 hours per week are required by the FLSA to receive overtime pay (time and a half pay).

For FICA TAX purposes, **"summer" begins on June 1st. At that time, students may work up to 40 hours per week.**

Direct Deposit

- **Semi-monthly Pay**

Student employees on semi-monthly payroll may elect direct deposit to any financial institution in the continental United States participating in the Automated

Clearing House. Deposit takes a minimum of three pay periods to begin and must be for the full amount of net pay. Direct deposit forms can be downloaded from <http://www.controller.jhu.edu/uforms/c100.pdf> or secured from the Department of International Health's Human Resources & Payroll Office (Wolfe Street Bldg. E8521).

- **Weekly Pay**

Student employees on the weekly payroll may elect direct deposit with accounts at M&T Bank or Johns Hopkins Federal Credit Union.

Work-Study

Students employed under the Federal Work-Study (FWS) program during the 2006-2007 academic year may also be employed as Teaching Assistants during the same period of FWS employment. The Teaching Assistant employment status is the exception to the restricted crossover status related to FWS employment. If an employer wants to hire a student as a Teaching Assistant and the designated individual is also employed as a FWS student, then both the employer and the student should coordinate the crossover employment period with Katrice Houston (Student Payroll Assistant).

For additional information or specific inquiries, please contact Allison Quarles (443- 287-2192) or Tanya Falls (410-614-6259) in the Department of International Health's Human Resources & Payroll Office.

Policy on General Funds Course Support

The Department of International Health relies on the assistance of students to provide support for the teaching efforts of various courses throughout the year. The following policy has been developed to provide specific details about payment rates, procedures and allowable expenses, as well as to facilitate fairness and equity across the department with respect to student support as it relates to our courses. The policy applies to courses listed in the catalog, including distance education and off-site courses, but does not include summer and winter institutes.

Payment Rates

TA and administrative cost allocations are calculated for each academic year based on the below formula(s) using the prior year's enrollment data. Teaching Assistants are paid on a fee for service basis using these rates.

Teaching Assistant Cost Allowance

Class Size	TA Compensation	TA Compensation	TA Compensation	TA Compensation
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	1 Credit	2 Credits	3 Credits	4 Credits
0-15	\$0.00	\$0.00	\$0.00	\$0.00
16-45	\$384.00	\$768.00	\$1,152.00	\$1,536.00
46-75	\$512.00	\$1,024.00	\$1,536.00	\$2,048.00
76+	\$640.00	\$1,280.00	\$1,920.00	\$2,560.00

TA Responsibilities

Teaching Assistants can be requested to perform a variety of different activities for the course that they are supporting. All TA functions and hours must be determined prior to beginning any effort on behalf of the course by both the TA and the faculty instructor and will be documented in the TA Agreement (see below). Some possible functions of the TA are as follows:

- a. Grading written assignments and exams
- b. Working with and advising discussion groups on projects and other assignments
- c. Facilitating discussion group sessions
- d. Taking attendance
- e. Coordinating the distribution and collection of course materials
- f. Various other duties as requested

Student Eligibility & Payment Procedures

All students must meet certain eligibility requirements to be hired as a TA. These requirements are as follows:

- TAs must be current students enrolled in a degree program at JHSPH. Students who have completed their course requirements but have not yet graduated are still eligible to be TAs until such time as the School has conferred their degree.
- The individual must have successfully completed the course which they are supporting at JHSPH (or a similar course at another institution) prior to the term in which they will act as the TA.

Teaching Assistant (TA) Agreement

Department of International Health

Course Number: _____ Term: _____ Year: _____

Course Title: _____

Name of Principal Instructor (Please Print): _____

Enrollment (# of students enrolled in course): _____

Teaching assistant responsibilities: (please list duties and total hours required for each)

Total Estimated Hours (per week or per term) _____

Total Compensation: \$ _____

Name of TA _____ Social Security #: _____

Signature of TA _____ Date _____

I, _____ (principal instructor), submit this form to begin payment to the student named for the above listed duties. I understand that should the student fail at any time to fulfill these duties as agreed upon, it is my responsibility to notify the payroll office immediately so that the appropriate action can be taken. I further understand that the scope of the work stated above should not be changed during the course of the term (i.e., additional hours/responsibilities added) unless those changes are first discussed and agreed upon with the TA and a revised form submitted to the Academic Program Office.

Signature of Principal Instructor

Print Last Name

Submitted to: _____ Date: _____

Academic Program Administrator

Department of International Health Requirements for Doctoral Study

General Information

Department of International Health (DIH) candidates for the degree Doctor of Philosophy (Ph.D.) must fulfill all School requirements, as specified in the catalog. These include, but are not limited to, a minimum of four consecutive academic terms at the School in full-time residence, satisfactory completion of a Departmental Written Comprehensive Examination, satisfactory performance on Departmental and School Preliminary Oral Examinations testing readiness to undertake research, and preparation and successful defense of a thesis based upon independent research. In addition, all doctoral students must complete a non-thesis related research experience in addition to the doctoral thesis.

Additional DIH requirements are specified herein and include an additional 2 academic terms in full-time residence (total of 6 academic terms). Students having already earned credit within the past three years for any of the listed courses may use them toward satisfaction of doctoral course requirements. Students wishing to receive similar acknowledgement for courses taken in other institutions may petition the DIH Committee on Curriculum and Credentials for determination of equivalency. The Committee also handles requests to make substitutions for stated requirements.

Each student is admitted into one of four programs. If, after beginning the program, a student wants to transfer from one program to another, the student must request that his file be sent to the program coordinator and he/she must be formally accepted into the new program.

Introduction to Online Learning

The School of Public Health offers courses in various formats, including a number of online classes. You may at some point want or need to register for a course online. In order to be eligible to take an online course, students must complete the **Introduction to Online Learning**, which is offered through the Distance Education Division of the Johns Hopkins Bloomberg School of Public Health. This non-credit mini course is a pre-requisite for all courses offered by this division and must be completed prior to the start of the term in which a student wishes to enroll in an online course. Since the School does not permit conditional and/or concurrent enrollment (that is, you must take the online course prior to enrolling in a distance education class), **we require all incoming students to take this non-credit course during the first term they enroll.** For course dates and enrollment information, please visit the Distance Education Division website at; <http://distance.jhsph.edu/oll/> .

Course Waivers

A student with prior pertinent training may request a waiver of specific course requirements upon enrollment. Waiver requests should be addressed to the Chair of the Curriculum and Credentials Committee (Dr. James Tielsch) and submitted to Jennifer Shaffer (E8518) at least one month prior to the beginning of the term in which the course takes place (or within the first week of the first term for students who are just matriculating) in order to give the Committee ample time to consider the request. Requests should include a short letter of explanation, which includes the name of the course the student is requesting to waive out of, as well as the name, description, and grade earned in the course which is being substituted. For best consideration, it is helpful if the student can provide a copy of the syllabus from the course taken. Once a waiver request is approved, a record of its approval will be noted in the student's file on their tracking form. Please note that approval of a waiver request does not reduce the number of credits a student is required to earn in their degree program.

Leave of Absence

Any requests for a change in status must be made in writing to the Department through the Academic Program Coordinator (Carol Buckley). Once Carol receives a written request for a change in status (i.e., leave of absence), she will provide the student with the requisite form which must then be signed by the student's advisor and other applicable persons and submitted to the Registrar's Office for final approval.

Academic Advising

Doctoral degree programs in the Department of International Health are a mixture of didactic coursework, independent reading, research/practice experience and the preparation of a culminating document. As the program progresses, there are many decisions to be made regarding which courses and experience will address a student's educational objectives. To assist with navigating this process, each student is assigned an academic faculty advisor who has the responsibility of serving as a guide and mentor. While these programs seem to be tightly scripted by the Department and School, it is the Department's view that graduate degree programs must be owned by the student with the faculty acting as guides in the student's own development as a scholar and practitioner. This section is intended to guide the student and the faculty member in making the advisor-advisee relationship as successful as possible.

This section has three goals:

- to describe the Department's advising philosophy;
- to provide answers to questions that students frequently ask;
- to provide guidance on how the student and advisor can interact most effectively.

The suggestions in this section are derived from the experience of faculty who have worked with students for many years and from students who themselves have been guided by these faculty members. The document is dynamic and needs input from

students and advisors as they use it. Please submit comments and concerns to the Academic Coordinator.

Advising Philosophy, Department of International Health

The primary purpose of the academic advising process is to assist students in the development and implementation of a meaningful and appropriate plan for their graduate education and future career. This purpose is driven by a set of core values:

1. Advisors are responsible to the students they advise.
 - Advising is an integral part of the educational process with both students and advisors benefiting from the relationship.
 - Regular student-advisor communication allows advisors to maximize the student's ability to develop life-long learning skills and for the advisor to act as an advocate for the student.
 - Advisors must recognize the diversity of student backgrounds and the opportunities provided by this diversity for maximizing educational achievement.
 - Advisors are responsible for connecting students with others in the academic community who can, when appropriate, assist in the advising process.
2. Advisors are responsible to the institution.
 - As faculty, advisors are responsible for maintaining the academic standards and reputation of the Department, School, and University. This implies a focus on academic excellence for the students they advise.
 - Advisors must comply with the policies and procedures established by the Department, School and University for the didactic, exploratory, and research portions of a graduate student's educational experience.
3. Advisors are responsible to the community of higher education.
 - Advisors must uphold the values of academic and intellectual freedom that characterize the university environment in the United States.
 - As faculty, advisors are responsible for the training of the next generation of academic leaders in education, research, practice, and service.
4. Advisors are responsible to the public health community.
 - As faculty in a School of Public Health, advisors are committed to improving the health and well being of populations everywhere in the world through education, research, practice and service.

The Advisor-Advisee Relationship

All students in the Department are assigned a faculty advisor who is a full-time member of the advising faculty in their program area. In addition, **the Academic Coordinator for their program also serves as a back-up advisor to students.** The advisor has the responsibility of assisting the student in designing an academic program that meets the student's goals within the requirements of the University, School and Department. Additionally, the advisor serves to direct the student to appropriate

resources and research opportunities. The advisor should be the first point of contact in resolving academic problems. Advising students is an integral part of every faculty member's responsibilities. Thus, the student should not feel that he/she is imposing by asking for advice. Faculty members expect to be available to students, although the students should be respectful of the faculty's time by scheduling and respecting appointments. This is especially true in our department where research and practice responsibilities of the faculty require them to travel a significant portion of their time.

The responsibility for arranging meetings with their advisor lies with the student.

Students should not expect advisors to seek them out for required

appointments. The student bears the responsibility of consulting the advisor when necessary and arranging periodic appointments, even if there are no specific problems.

In general, advisors and advisees should communicate at least once per term, preferably more often. Course registrations must be approved by the advisor at the beginning of each term. The student is required to schedule a meeting in order to assure that the advisor has reviewed the student's schedule and to plan any special studies projects or thesis research as needed with the advisor before the registration period deadline. If due to travel or scheduling difficulties, such communication cannot be conducted before the registration period deadline, students should receive approval for course registration from their PhD Program Coordinator.

RESPONSIBILITIES: ADVISOR

- To assist in determining the advisee's educational goals and needs at the start of the program.
- To serve as an educational and/or professional mentor for the student.
- To maintain awareness of and sensitivity to the level of compatibility between the student advisee and him/herself in terms of academic, professional, and personal interests.
- To facilitate a change of advisor if deemed appropriate to the student.
- To monitor the advisee's overall academic program and be sensitive to signs of academic difficulty.
- To be sensitive to cultural, medical, legal, housing, visa, language, financial, or other personal problems experienced by the advisee and to be understanding, and supportive. The Department has a sizable portion of foreign students coming from diverse pre-professional and professional educational backgrounds. As such, they have diverse needs and experience in managing a US-based graduate education program.
- To meet regularly with the student and to identify a mechanism for advising while traveling either through email or by identifying a back-up advisor for periods of extended travel.
- To guide the student through the process of selecting a thesis topic and to assist with the planning and conduct of this research.

RESPONSIBILITIES: ADVISEE

- To arrange to meet with the advisor at least once each term.
- To comply with registration and administrative deadlines.
- To identify and develop professional career goals and interests.
- To understand administrative policies and procedures and be familiar with the requirements for their program as described in the *Academic Guide*.
- To maintain the academic checklist and review it at meetings with the advisor.
- To complete an Advisor Evaluation Form twice during the academic year, once at the end of 2nd term and again at the end of 4th term.
- To make regular and sustained progress in the doctoral program with the expectation that the majority of all students will complete the Ph.D. program by the end of 4-5 years.

CHANGE OF ADVISOR

For a variety of reasons, most often related to participation in faculty research for thesis work, a student or a faculty member may wish to have the student change advisors. Faculty wishing to initiate a change should discuss this with the Chair of the Curriculum and Credentials Committee. Faculty will need to submit a report of the student's progress at the time of this request. Student initiated changes of advisor are made without penalty and are a common occurrence. Students should write a letter of request to the Chair of the Curriculum and Credentials Committee to change from one faculty member to another. Both faculty members must agree.

STUDENTS MAY EXPECT THE FOLLOWING FROM THEIR ADVISORS:

- Advisor's approval on course registrations, course changes, pass/fail agreements, waiver requests, and on all petitions to the Curriculum and Credentials Committee.
- At least one meeting per term with the advisor.
- Oversight of the student's overall academic program and sensitivity to any academic difficulties.
- Knowledge of and interest in the student's career objectives.
- Review of required and recommended courses for the program area. Assistance in designing a plan for the fulfillment of required courses and assistance with planning the course schedule for the year.
- Detailed guidance and supervision of the preparations for and conduct of thesis research.

The guidelines below are the absolute minimum interactions students and advisors should expect. Many of our students and faculty meet much more frequently and often become life-long colleagues as a result of the mentoring experience.

Year One: First Term	Check off Activities
Minimum of two meetings – advisor may choose to meet once with all advisees, then once with individual advisees	#1 _____ #2 _____
Identify professional goals and educational objectives	
Review competencies, departmental requirements, develop a written plan of courses and experiences to meet the student’s educational goals	
Review administrative deadlines	
Identify other people and resources of which students should be aware	

Year One: Second Term	Check off Activities
One Meeting	
Review first term transcript	
Monitor student’s progress, evaluate, discuss first term grades	
Provide feedback on first term courses	
Begin discussion of possible research topics for both thesis and non-thesis related research experience	
Follow up on plan set out in first term	
Complete registration forms for third and fourth terms	

Year One: Third Term	Check off Activities
One Meeting	
Monitor student’s progress; evaluate; discuss second term grades	
Provide feedback on second term courses	
Continue discussion on research topics	
Discuss preparation for comprehensive examination, student study groups	

Year One: Fourth Term	Check off Activities
One or two meetings:	
Review 3 rd term transcript	
Monitor student's progress; evaluate; discuss third term grades	
Provide feedback on third term courses	
Encourage participation in study groups for comprehensive examination	

Year Two: Terms One-Four	Check off Activities
One or two meetings:	
Review transcripts	
Monitor student's progress; evaluate; discuss grades	
Continue discussions on research topics	
Encourage participation in study groups for comprehensive examination if not taken at the end of the first year	
Conduct non-thesis related research experience	
Begin preparation of thesis protocol document	
Prepare to take departmental and university oral examinations	

Years Three-Five	Check off Activities
Finalize thesis research proposal	
Take departmental and university oral examinations	
Obtain CHR approvals for thesis research	
Conduct thesis research	
Prepare thesis document	
Defend thesis and conduct public seminar on results	

Student Feedback on Advisor Performance

The Department Chair reviews all faculty performance on an annual basis. This review assesses the career track of each faculty member as a part of the faculty mentoring role played by the Chair. In order to provide the most accurate information on faculty performance, the Chair needs information on all aspects of the faculties' roles including student advising. As a part of this process, we have initiated a formal advisor evaluation process that includes input from students. The provision of honest information is required of all students twice per year and these advisor ratings are handled with complete anonymity. At the completion of the 2nd and 4th terms each year, all students complete an Academic Advisor Evaluation Form (attached) and submit this form to the departmental Academic Coordinator (Jennifer Shaffer).

Academic Advisor Evaluation Form

This form is to be completed and turned into the Departmental Academic Coordinator twice per year, at the end of 2nd and 4th terms. Honest evaluations of advisor performance are an integral part of faculty annual performance evaluation by the Department Chair. Under no circumstances will individual student responses to this evaluation be identified to the faculty member.

Student Information

Program Area: _____
(DPC, HN, HS, SBI, DPH)

Degree Program: _____
(MHS, PhD, DPH)

Evaluation Period: _____
(2nd or 4th term)

Academic year: _____ - _____
(e.g. 06-07)

Advisor Information

Name of Advisor: _____

1) Over the past two terms, how satisfied are you with the advice from the following people?

	<u>Advisor</u>	<u>Faculty Program Coordinator</u>
Very Satisfied	_____	_____
Somewhat Satisfied	_____	_____
Neutral	_____	_____
Somewhat Dissatisfied	_____	_____
Very Dissatisfied	_____	_____

2) Do you feel the following people are concerned with your progress?

	<u>Advisor</u>	<u>Faculty Program Coordinator</u>
Yes, Definitely	_____	_____
Yes, Probably	_____	_____
Unsure	_____	_____
Probably Not	_____	_____
Definitely Not	_____	_____

3) On average in the past 2 terms, how often did you meet in person with the following people each term?

Advisor: _____ per term

Program Coordinator: _____ per term

4) Over the past two terms, how often have you just dropped in for a discussion with:

Advisor: ____ ____ per term Program Coordinator: ____ ____ per term

5) Over the past two terms, have you had trouble meeting with either of the following people? For example, have they broken appointments or been unresponsive in scheduling a meeting?

	<u>Advisor</u>	<u>Faculty Program Coordinator</u>
Yes, Problem	____	____
Unsure	____	____
No Problem	____	____

6) Over the past two terms, have you and each of the following people established a satisfactory method for advising by email when the faculty member is traveling?

	<u>Advisor</u>	<u>Faculty Program Coordinator</u>
Yes, Satisfactory	____	____
Unsure	____	____
No, Unsatisfactory	____	____

7) Do you feel that you and your advisor share common areas of interest?

Yes, Similar Interests	____
Unsure	____
No, Dissimilar Interests	____

8) Do you feel you would be better served by a different advisor?

Yes,	____	If Yes: Why: _____
Unsure	____	_____
No	____	_____

Total Credits

The total number of course credits to be earned depends upon individual track requirements, but must be at least 84. Where general and program-specific requirements total less than 84, the difference may be made up in electives. Special Studies Thesis Research (820 series) may not be included in the count, but tutorials and other studies earning credit in the 840 series are admissible.

Waivers of requirements may be granted for equivalent courses earned in this or another school. The waiver request must be based on coursework already taken which is similar in content, and documentation (i.e., a transcript and course syllabus) must be provided. In addition, the waiver request must be submitted at least one month prior to the beginning of the quarter in which the course is offered. **Requests for waivers for any course offered in the first quarter must be submitted no later than the end of the first day of classes.** No requests for first quarter waivers will be considered after this time. In no case can more than half of the required program-specific credits be waived. Of this total, the School requires that at least 18 credit units must be satisfactorily completed in formal courses outside of the Department of International Health. Among those 18 credit units, no less than three courses must be satisfactorily completed in one or more departments of the School of Public Health. The remaining outside credit units may be earned in any department or division of the University. Candidates who have completed a master's program at this School may apply 12 credits from that program toward these 18 credits.

Standards of Academic Performance

Letter grades must be earned in all courses used to satisfy requirements. **Please note that courses may be counted only once in fulfilling requirements.** Students must receive satisfactory grades of C or higher in all required courses and maintain a cumulative Grade Point Average (G.P.A.) of at least 3.0 in order to remain a doctoral candidate in good standing. Any student who receives a "D" or "F" in a required course must repeat the course. Anyone not meeting these standards will be placed on probationary status pending action by the Department Committee on Curriculum and Credentials. That Committee will either recommend immediate termination from the degree program or will establish the minimum conditions necessary to be fulfilled in order to return to the "good standing" status and avoid termination. In the latter case, the Committee will also specify the maximum time allowed for satisfaction of the conditions.

Doctoral students supported by departmentally administered funds (tuition scholarships and/or stipend support) must maintain a grade point average of 3.0 or above. Students who drop below a GPA of 3.0 and are placed on academic probation will have their scholarship eligibility reviewed by the Department's Committee on Curriculum and Credentials. Consistent academic probation status (defined as two or more terms) will result in a reconsideration of tuition and stipend support.

Registration

All students must be registered full-time (minimum of 16 credits per term) for the duration of their doctoral program. Students must be continuously registered until all requirements for the degree program have been satisfied. **Failure to register for a quarter results in automatic withdrawal.** A withdrawn student must be formally readmitted before resuming a program of study. Upon readmission, a student must be registered for a minimum of two consecutive terms prior to completing degree requirements. After six terms of full-time registration, the School will provide a 75% tuition scholarship for all students in good academic standing and who are making regular and sustained progress towards completion of their doctoral program.

Residence

A minimum of six total terms of registration as a full-time student, four of which must be consecutive, are required for the Ph.D. degree. If a student completes a Masters program at this School and continues into the Ph.D. program, a student's enrollment can be interrupted for no more than 1 year (12 months) in order to count the Masters degree residency for the Ph.D. degree requirement. For example, a student completes a Masters program in May and continues into a Ph.D. program in September of the same year or the following year.

Departmental Written Comprehensive Examination

Satisfactory performance is required on a written comprehensive examination. The exam is offered twice annually near the end of the Second and Fourth Terms and is two days in length. The student should plan to take it when course work is essentially completed, since questions will cover both required courses and those representing the elected field of specialization and research. Because of the infrequent offering, however, the student may choose to take the exam somewhat before the final completion of coursework. While the exam may be taken whenever the student and advisor feel prepared, the timing does not affect the breadth and depth of coverage of course material. Although most of the material is covered in specific courses, it must be understood that graduate education involves much more than the accumulation of specific course credits. Thus, students are responsible for the material, regardless of the particular curriculum followed. **The dates for the 2007 summer doctoral examination are May 24-25, 2007.**

A minimum overall grade of 75 is required. Those scoring below this level must re-take the entire examination at its next semi-annual offering. Only one re-examination is permitted. Students failing twice are terminated from the doctoral program.

Departmental Thesis Committee

In order to undertake research leading to a thesis the student must prepare a research protocol acceptable to a Departmental Thesis Committee (DTC). The DTC is expected: to counsel the student in protocol preparation; to determine its acceptability as a basis for actually carrying out the research; and to provide guidance during the conduct of the research and the writing of the thesis. The three-member DTC, the five-member Preliminary Oral Committee (POC), and the four-member Committee of Final Readers (CFR) are three separate entities. Although it is desirable to provide for overlapping membership, the Thesis Advisor is the only individual who must be a member of all three committees.

The DTC should be formed as soon as the student has selected a tentative research topic. This will normally be by the time that coursework has been completed and the Departmental Written Comprehensive Examination has been taken. The Committee will have at least three members: the Thesis Advisor, a second representative (Advising or Participating Faculty) from the student's program, and a similarly qualified faculty member from another program or department. At least two of the members must be tenure-track faculty eligible to serve on School examining committees. The proposed members must be approved by the relevant Ph.D. Program Coordinator. A form for this purpose is attached. It is expected that the student will meet at least twice per year with the DTC during the thesis phase of the program.

Non-Thesis Related Research Experience

All Ph.D. students must complete a research experience in addition to their doctoral thesis work. This is typically conducted with the student's advisor or other faculty member prior to beginning doctoral thesis work. This can take a variety of forms including participating in the development and planning of a new research project, development of data collection instruments for a research project, conducting analysis of existing data, or completing an entire, small research project on a topic other than the thesis topic.

Special Studies: Thesis Research

Students engaged in the planning or conduct of their thesis research will register for credit (pass/fail) in 22_.820, Special Studies Thesis Research. In order to receive credit for this work a report of progress must be submitted in a form suitable to the Advisor before the end of each academic quarter of such registration. In the absence of a report the Advisor is expected to assign a grade of "F" or "Incomplete." All grades of "Incomplete" automatically convert to "F" if not made up within two academic quarters.

Departmental Oral Examination

The purposes of the departmental oral examination are: (1) to determine whether the student is adequately prepared to conduct the research outlined in a prepared proposal; (2) to offer constructive criticism on all aspects of the proposal; and (3) to determine

whether the student has adequate command of knowledge in the subject area appropriate to his/her track to qualify for a doctoral degree.

Specific procedures for the examination are as follows.

- The student, in consultation with the Thesis Advisor, identifies at least three Departmental faculty, in addition to the Advisor, who are able to participate in the oral examination.
- Copies of the research proposal are to be circulated to all participating faculty in advance of the exam, which is usually held 2-4 weeks before the School Preliminary Oral.
- The most senior faculty member other than the Advisor will act as Chair of the examining committee. The Chair is responsible for maintaining an atmosphere of constructive criticism, ensuring that each faculty member has adequate opportunity to question the student, and limiting the total duration of the exam to two hours or less.
- The oral exam will produce one of three results: (1) Unconditional Pass; proceed with the Preliminary Oral as scheduled; (2) Conditional Pass; before proceeding as scheduled, the student should strengthen his/her competence in certain identified areas of weakness; or (3) Failure.

Only one re-examination is permitted. Anyone failing the departmental oral examination twice will be terminated from the doctoral program.

DEPARTMENTAL THESIS COMMITTEE

TO BE COMPLETED BY STUDENT:

Name: _____

Track: _____

Proposed Committee Members:

Thesis Advisor: _____

Member from Track: _____

Third Member: _____
(selected from another Track or Department)

Committee Membership Approved

Thesis Advisor: _____ (signature) _____ (date)

Track Coordinator: _____ (signature) _____ (date)

University Preliminary Oral Examination

The Preliminary Oral Examination must be taken no later than the end of the student's third year in the Ph.D. program. After a period of leave of absence or withdrawal, a student must be registered for a minimum of two quarters before taking the Preliminary Oral Examination. Ideally, the examination should be taken as soon as possible after: (1) passing the Departmental Written Comprehensive Examination; (2) passing the Departmental Oral Examination; and (3) establishing a specific research topic of interest.

Members of the examining committee must represent the department of their primary appointment. The committee of five members includes the student's Thesis Advisor, one other DIH faculty member, and three members from at least two other departments. The senior faculty member from outside the student's major department will normally serve as the chair and must hold the rank of full or associate professor, and be appointed by the Graduate Board. One adjunct faculty or one scientist track faculty may serve on the committee, but may not serve as the chair or advisor. Students should be aware that an alternate who may need to serve in place of the committee chair must be of the rank of associate or full professor.

The examination purpose is to determine whether the student is sufficiently knowledgeable of the general field of public health and is capable of undertaking independent research in a specialized area of interest. The question period of about two hours considers the student's course work as well as the feasibility and logical consistency of the research proposal. The examination is not meant to be a thesis defense; rather the proposal permits the student to be questioned on grounds with which s/he is familiar.

Three results of the examination are possible: (1) unconditional pass; (2) conditional pass; and (3) failure with the possibility for one reexamination. When the second or third outcomes occur, the examining committee is expected to set time limits for the satisfaction of conditions or the re-examination. In case the examining committee fails to set time limits, they will be established by the Departmental Committee on Curriculum and Credentials. In no case may the time allowed exceed one year. Only one re-examination is permitted. Students failing the Preliminary Oral Examination twice will be terminated from the doctoral program.

Approval of Thesis Proposal

Regardless of the mode and timing of general presentation of the proposal, the DTC members will provide continuing guidance in its development. When they are satisfied that the proposal is of acceptable quality to be implemented they will indicate their approval on a form prepared for this purpose. After giving approval, the DTC is expected to continue offering suggestions for further improvement, especially in light of unexpected difficulties encountered in the field.

Realistically, it is not always possible for the student to carry out in the field the specific study designed in Baltimore. In such cases the study finally approved for implementation may be different from the one presented, and possibly approved, in Baltimore. Although the oral presentation is to cover the study the student intends to carry out, it must necessarily be considered presentation of a study, rather than presentation of the study that must be completed. In the event that the study design changes after the oral presentation, the final design must receive the written approval of the DTC, even if the earlier proposal had already received written approval.

Desired Sequence

The typical sequence for the foregoing events to take place is as follows:

- complete coursework and identify research topic;
- pass Departmental Written Comprehensive Examination;
- conduct non-thesis related research experience;
- form Departmental Thesis Committee;
- pass Departmental Oral Examination;
- pass School Preliminary Oral Examination;
- gain written approval of thesis research protocol;
- gain approval of thesis protocol from the Committee on Human Research or the Committee on Animal Care and Use.
- carry out thesis research.

Flexibility is allowed in following this sequence. Specifically, students are encouraged to gain approval of the research protocol earlier than indicated if attention to the protocol does not impair preparation for Departmental Written and Oral Examinations. Delays in gaining approval of the research proposal will not jeopardize receipt of departmental tuition scholarship after 6 terms of full-time residence.

Criteria and Preparation for Doctoral Thesis Research

The final authority for requirements for the degree Doctor of Philosophy is held by the Graduate Board of Johns Hopkins University. The following description of the doctoral thesis is taken from Guidelines for the Preparation of Dissertations and Theses, The Graduate Board, Johns Hopkins University, October 1998:

The dissertation/thesis is the culmination of the graduate degree. It represents an original critical or synthetic treatment of a subject in the student's field. It documents research formulated independently and presents its findings in a manner consistent with publications in scholarly journals or with scholarly books. The dissertation serves as a reference through the UMI (formerly University Microfilm, Inc.) *Dissertation Abstracts International* and through publication in whole or in part. Manuscripts not conforming to the following standards will not be accepted as partial fulfillment towards the graduate degree.

The Council of Graduate Schools offers the following definition: The doctoral dissertation should

- (1) reveal the student's ability to analyze, interpret, and synthesize information;
- (2) demonstrate the student's knowledge of the literature relating to the project or at least acknowledge prior scholarship on which the dissertation is built;
- (3) describe the methods and procedures used;
- (4) present results in a sequential and logical manner;
- (5) display the student's ability to discuss fully and coherently the meaning of the results. In the sciences, the work must be described in sufficient detail to permit an independent investigator to replicate the results.

The dissertation [thesis] is the beginning of one's scholarly work, not its culmination.

Dissertation research should provide students with hands-on, directed experience in the primary research methods of the discipline, and should prepare students for the type of research/scholarship that will be expected of them after they receive the Ph.D. degree.

The question of originality - In its most general sense, "original" describes research that has not been done previously or that creates new knowledge. Although a dissertation should not duplicate another researcher's or scholar's work, the topic, project, or approach taken need not be solely that of the graduate student. An adviser or other faculty member should encourage a student to explore a particular topic or project with the idea that the student himself or herself will independently develop the "thesis" of the dissertation. The student should be able to demonstrate what portion of the research or scholarship represents his or her own thinking.

The question of collaboration - In those disciplines where doctoral research efforts are typically part of a larger collaborative project, it is crucial that an individual student's contribution be precisely delineated. Whether the collaboration is between faculty or student or among students, Ph.D. candidates are expected to be able to demonstrate the uniqueness of their own contributions and to define what part of the larger work represents their own ideas and individual efforts. (*The Role and Nature of the Doctoral Dissertation*, Council of Graduate Schools. CGS, Washington, D.C. 1991). The student assumes the responsibility for conducting the research and the writing of the dissertation in a manner that reflects the academic integrity of the University.

The Policy and Procedures Manual of the Bloomberg School of Public Health is briefer in its description of a doctoral thesis: "The thesis must be (1) based on original research, (2) worthy of publication, and (3) acceptable to the sponsoring department and to a committee of thesis readers."

Requirements for the doctoral thesis research in the Department of International Health include meeting the following educational objectives:

- Identifying and articulating an important scientific or public health problem in a manner conducive to research. In the thesis proposal this would be expressed by documenting at least one substantive question that is both researchable and important to the field of international health. The research question(s) must be

expressed as specific research objectives and/or hypotheses that define the variables and relationships of interest.

- Summarizing and critically appraising relevant existing knowledge on the subject under study. In the thesis this would be expressed by a focused *and critical* review of the relevant literature pertinent to the research question(s) being addressed. In many theses, this will also involve the description of the theoretical model or conceptual framework upon which the research question(s) will be based.
- Using scientifically sound and appropriate methods to design and implement a research study to adequately address the question(s) of interest. In the thesis this would involve the detailed specification of the study methods, including all data collection and data management efforts needed to implement the study design, a description of the analytic approaches to be used, and the application of any inferential models that will be used to describe the results of the data analysis. All research involving human subjects must be approved by the School's Committee on Human Research and all research involving animals must be approved by the University's Committee on Animal Care and Use. It is expected that the doctoral student will develop the application for approval from these committees under the supervision of his/her thesis advisor.
- Interpreting the research findings in the context of previous knowledge in the specific topical area of the thesis. As a part of the thesis, conclusions and recommendations for further research or programmatic initiatives based on the evidence generated by the thesis research must be critically explored, presented and shown to make important contributions to the state of knowledge in the field.

As the academic programs in the Department of International Health span a spectrum of disciplinary boundaries, the specific requirements for the form of the doctoral thesis work will vary by program. However, all students are expected to meet the above mentioned minimal educational objectives in addition to any further objectives stated in the program-specific sections of this handbook. The specific activities of the doctoral thesis research must meet the experiential requirements of the primary research methods typically employed by the discipline. For example, most doctoral theses in the Social and Behavioral Interventions, Disease Prevention and Control, and Health Systems Programs will be based on primary data collection as this is the primary research method in most behavioral science, epidemiologic, and health services research studies. This will often involve extensive time in the field implementing and/or overseeing the actual data collection and management process. In the Human Nutrition Program, the vast majority of doctoral theses will be based on primary data collection as well. Doctoral theses in the health economics specialization of the Health Systems Program may be based on secondary data analysis or theoretical development. It should be noted that the level and depth of analytic skill expected by the faculty for a doctoral thesis based solely on secondary data analysis will be considerable.

Preparation of the Doctoral Thesis Document

Students may fulfill their thesis requirement using either the traditional or “papers” option. Both options must comply with the organizational and formatting requirements of the Graduate Board (see Guidelines for the Preparation of Dissertations and Theses, The Graduate Board, Johns Hopkins University, October 1998 posted on the Graduate Board website). In each case the product must reflect high standards of scholarly endeavor. It is important to recognize that these options reflect only different formats for presentation and not fundamentally different processes.

The traditional thesis consists of a number of chapters typically including an introduction and specific research objectives, critical review of the literature and discussion of a theoretical or conceptual framework, study methods, results, interpretation, discussion and conclusions.

The “papers” option requires a minimum of three separate papers based on the thesis research in addition to complementary sections that make the thesis a whole. Each paper should stand on its own merits, and in addition, the papers together should embody a recognizable unifying theme. Although no required page length is specified, it is understood that taken together the papers should contain as much substantive information as is usually expected in a traditional thesis. As a result, the length of the papers may exceed the guidelines followed by some journals. Appendices can be used to present additional analyses that allow for the review of the thesis by the thesis and final examination committees, but are not likely to be included in the paper when submitted for publication. Each of these “papers” is typically a separate chapter in the thesis document. A separate literature review is not always necessary; rather, literature citations should be made in each paper as appropriate and a comprehensive list of references must be included at the end of the document as per University regulations. However, the thesis must incorporate a critical review of available literature relevant to the research topic somewhere in the document. If the “papers” option is selected for the format of the thesis, this critical review can be either in a separate chapter or as a part of the discussion in each of the papers. In addition, when the thesis project consists of a portion of a larger research effort, an additional chapter discussing the overall methods and how the thesis research fit into the whole is often helpful and required by the thesis advisor and committee. Finally, discussion, conclusions and recommendations for further research and/or programmatic initiatives should be included either in each paper, or as a separate chapter.

As with most public health research, most thesis research will be a collaborative effort of the student and other members of an investigative team. However, the thesis itself must be authored by the student in its entirety. Therefore, manuscripts arising from the thesis are typically first authored by the student. Papers included in the thesis **must** be first authored by the student.

It should be noted that an overall thesis abstract is required as part of the thesis for both the traditional and papers options.

The student's Departmental Thesis Committee (DTC) will appraise the adequacy of the research proposal and the appropriateness of the option selected for presenting the results. They will also advise the student on the appropriate "chaptering" of the document for their particular case. The student must obtain written approval on both counts from the DTC.

Thesis and Final Oral Defense

The thesis topic acceptable to the DTC must be a piece of original, independent research focusing on selected aspects of international health in developing or underserved societies.

The Final Oral Defense consists of two parts, a public seminar and a defense of the thesis before a Committee of Readers that includes the Thesis Advisor, one other DIH faculty member, and two faculty members with primary appointments in departments other than International Health. The public seminar and closed thesis defense are typically held on the same day with the seminar being conducted first, followed immediately by the closed defense. Thesis readers should have at least one month to read and suggest revisions of the thesis prior to the Final Oral defense. The Committee of Readers must accept the thesis as satisfactory and, in addition, the Committee Chair and the Thesis Advisor must write a letter of acceptance to the Associate Dean for Academic Affairs.

Any student returning from a leave of absence must be registered for a minimum of two quarters before thesis defense can be scheduled.

Annual Review

All students are required to maintain regular and sustained progress towards completion of their doctoral program. Near the end of each academic year a review of past progress and future expectations will be carried out in five stages.

1. The student must ensure that the Tracking Record of satisfactory completion of course and other requirements maintained by the Academic Coordinator is current and correct.
2. The student will prepare a Student Narrative Progress Report of accomplishments to date and objectives for the upcoming year. The narrative should describe the current state of preparation of the research proposal, conduct of the data collection and analysis, or writing of the thesis, along with specific tangible objectives and plans in these regards for the next academic year.
3. The student and advisor will meet (or exchange correspondence if the student is overseas) to review the Tracking Record and Student Narrative Progress Report.
4. The faculty advisor will summarize the understanding reached with the student in a brief Advisor Report.
5. The Curriculum and Credentials Committee will review the students' program and supporting documentation. Continued enrollment in the doctoral program is contingent upon a satisfactory review by the Committee.

The Tracking Record, Student Narrative Progress Report and Advisor Report will become part of the official student record maintained by the Academic Coordinator.

Tuition scholarship awards will be made only for a specific academic year subject to renewal based upon evidence of progress as reflected in the annual report of the student and advisor. Provision will be made for awards of up to eight terms, but only if normal progress toward completion of requirements is registered.

Duration of Study

To maintain candidacy students must remain continuously registered in an acceptable registration status. It is generally expected that students will be registered full-time for the duration of their doctoral program. Not more than seven years may elapse between the date of matriculation and fulfillment of all degree requirements. The time limit excludes periods of approved leaves of absence.

While a seven-year maximum limit has been placed upon the period of doctoral study, DIH students are normally expected to complete all requirements within a period of 4-5 years, depending upon the particular track program they are following.

DISEASE PREVENTION AND CONTROL

Academic Program Coordinator: Lawrence Moulton

Requirements for Admission

Entrants to the program must have a degree in medicine, veterinary medicine, or dentistry; or a master's level degree or equivalent graduate training in epidemiology, statistics, international health, tropical medicine, microbiology, parasitology, immunology, or virology. Prior work experience is preferable.

Educational Objectives

Overall Program Goal

This program provides training for public health researchers who will use epidemiologic, immunologic and/or laboratory and statistical methods to design, implement, and/or evaluate disease control interventions for diseases of public health importance to underserved populations. Graduates will have a fundamental understanding of the pathogenesis, epidemiology, and control measures applicable to diseases of public health importance in disadvantaged populations. Interventions to be studied will be primarily biomedical (e.g. therapeutic or prophylactic drugs, vaccines or environmental modifications), although there may be a behavioral component to effective implementation of such interventions.

Special strengths of the program are infectious disease epidemiology and vaccinology. Students can acquire a broad understanding of the methods needed to design studies and gain hands-on experience in the design, conduct and analysis of community and clinical trials and/or laboratory based investigations, including the immunologic and biologic basis of responses to immunizations and other prophylactic or therapeutic interventions.

General Knowledge

Learning Objectives

- Describe the evolution of key approaches that have been applied in an attempt to address the major public health problems of underserved populations and to place these approaches in the context of general development, culture and health policies.
- Define the most important indicators of health status of underserved populations, identify databases and other sources of information for these indicators, and describe how changes in these indicators reflect changes in the health status of populations.

- Describe the epidemiology, biology, pathophysiology, modes of transmission, and strategies for prevention and control of the major infectious diseases of public health importance to resource-poor environments. Be able to argue for the appropriateness of specific strategies for prevention and control in selected circumstances.

Research Skills

Learning Objectives

- Review and critique the relevant literature on a topic of interest.
- Place a research question in the context of current knowledge.
- Frame a research question in terms of study goals and specific aims.
- Design a research study to address specific aims. Be able to differentiate between study designs and to argue in favor of using a specified design as most appropriate to address that research question.
- Develop and write a research proposal.
- Develop and justify a budget for a research proposal.
- Discuss the ethical issues involved in research in resource poor environments and argue for a particular approach to addressing these ethical issues.
- Prepare an application to an IRB for ethical approval.
- Implement and manage a research study, monitor the progress of the study and the quality of data collected.
- Produce an appropriate statistical analysis of the data collected during the research project, and provide a reasoned interpretation of these results.
- Place the research findings in the context of current knowledge, identify limitations of the research, and be able to specify further areas for research.
- Analyze the policy implications and public health significance of the research findings.

Communications

Learning Objectives

- Make oral and poster presentations of research findings for professional audiences.
- Write manuscripts of publishable quality for the peer reviewed literature that describe and explain research findings.
- Teach other students basic introductory materials in the student's general area of expertise.

Advising Faculty

Abdullah Baqui	Orin Levine
Chris Beyrer	William Moss
Robert Black	Lawrence Moulton
Lou Bourgeois	Luke Mullany
Richard Chaisson	Kenrad Nelson
Chris Coles	Kate O'Brien
Gary Darmstadt	Thomas Quinn
Anna Durbin	Andrea Ruff
Laura Guay	Bradley Sack
Robert Gilman	Mathuram Santosham
Neal Halsey	Mark Steinhoff
Ruth Karron	James Tielsch
Joanne Katz	Jonathan Zenilman

Program Competencies

The educational programs in the School are based on a competencies approach as described by the Council on Education in Public Health. The competencies for the Ph.D. program are described in the following table.

Competencies

PhD – Disease Prevention and Control

1. Demonstrate knowledge of public health problems most pertinent to underserved populations and characterize these problems in terms of measurable health indicators

Specific Competencies	Learning Opportunities	Evaluation Opportunities							
		Course Work/Exam	Written Comps	Department Preliminary Orals	School Preliminary Orals	Thesis	Final Defense	Public Thesis Presentation	Non-Thesis Research
Describe the evolution of key approaches that have been applied to address the major public health problems of underserved populations and to place these strategies in the context of general development, culture, and health policies	M150.711	X	X	X	X	X	X	X	
	220.601 221.605 223.662 223.663 223.680 223.689 223.861 340.642	History of Disease and Disease Control: Comparative Perspectives Introduction to International Health History of International Health and Development Vaccine Development and Application Infectious Diseases and Child Survival Global Disease Control Programs and Policies Biological Basis of Vaccine Development Disease Prevention and Control Program Doctoral Seminar History of Epidemiology I: Infectious Diseases							
Define the most important indicators of health status of underserved populations, identify databases and other sources of information for these indicators, and describe how changes in these indicators reflect changes in health status of populations	M150.715	X	X	X	X	X			
	222.642 222.647 222.649 222.655 224.689 340.751 380.600	Assessment of Nutritional Status Nutrition Epidemiology International Nutrition Nutrition and Life Stages Foundations of Behavioral Change Interventions in Developing Countries Epidemiologic Methods 1 Principles of Population Change							
Identify major environmental health problems in tropical areas and discuss some solutions in detail with an emphasis on water and sanitation.	180.611	X	X	X	X				
	182.626 221.629 180.614	The Global Environment and Public Health Tropical Environmental Health Water and Sanitation Needs in Complex Humanitarian Emergencies Environmental Health and the Developing World							

M = School of Medicine course described at <http://www.hopkinsmedicine.org/som/students/academics> offered by the History of Medicine Department

Evaluation Opportunities

2. Conduct field research from conception of ideas through proposal development, implementation, analysis and publication of findings

Specific Competencies	Learning Opportunities	Course Work/Exam	Written Comps	Department Preliminary Orals	School Preliminary Orals	Thesis	Final Defense	Public Thesis Presentation	Non-Thesis Research
Review and critique the relevant literature on a topic of interest	223.861 Disease Prevention and Control Program Doctoral Seminar Written Proposal for thesis committee approval	X		X	X	X	X	X	
Place a research question in the context of current knowledge	223.861 Disease Prevention and Control Program Doctoral Seminar Written proposal for thesis committee approval		X	X	X	X	X	X	
Frame a research question in terms of study goals and specific aims	223.664 223.861 550.865 Public Health Perspectives on Research Written proposal for thesis committee approval	X		X	X	X	X	X	X
Design a research study to address specific aims. Be able to differentiate between study designs and to argue in favor of a specific design as most appropriate to address that research question	140.621-4 140.651-4 223.664 223.705 340.752 340.603 Cohort Studies: Design, Analysis and Applications	X	X	X	X	X	X	X	X
Develop and write a research proposal	223.664 Design and Conduct of Community Trials Written proposal for thesis committee approval	X		X	X	X	X	X	
Develop and justify a budget for a research proposal	223.664 Design and Conduct of Community Trials Written proposal for thesis committee approval	X	X	X	X	X	X		

Evaluation Opportunities

2. Conduct field research from conception of ideas through proposal development, implementation, analysis and publication of findings, continued

Specific Competencies	Learning Opportunities	Course Work/Exam	Written Comps	Department Preliminary Orals	School Preliminary Orals	Thesis	Final Defense	Public Thesis Presentation	Non-Thesis Research
Discuss the ethical issues involved in research in resource poor settings and argue for a specific approach to addressing these ethical issues	306.665 550.860 Research Ethics and Integrity Research Ethics Written proposal for thesis committee approval	X	X	X	X	X	X		
Prepare an application to an IRB for ethical approval	Written proposal for thesis committee approval			X	X	X			
Implement and manage a research study, monitor progress of the study and the quality of data collected	Thesis research					X			
Produce an appropriate statistical analysis of the data collected and provide a reasoned interpretation of these results	140.624 140.654 340.753 Statistical Methods in Public Health IV Methods in Biostatistics I-IV Epidemiologic Methods 3 Thesis research	X				X	X		
Place the research findings in the context of current knowledge, identify limitations of the research and specify further areas for research	Thesis research					X	X		
Analyze policy implications and public health significance of the findings	Thesis research					X	X		

3. Communicate scientific findings through written and oral methods to scientific audiences and peers

Evaluation Opportunities

Specific Competencies	Learning Opportunities	Course Work/Exam	Written Comps	Department Preliminary Orals	School Preliminary Orals	Thesis	Final Defense	Public Thesis Presentation	Non-Thesis Research
Make oral and poster presentations of research findings for professional audiences	223.663 Infectious Diseases and Child Survival Departmental and Preliminary Orals Final Defense and Public Presentation of Thesis	X		X	X		X	X	
Write manuscripts of publishable quality for the peer reviewed literature that describe and explain research findings	Final Defense Non-thesis related research					X			X
Teach other students basic introductory materials in the student's general area of expertise	223.861 Disease Prevention and Control Program Doctoral Seminar Teaching Assistant Opportunities	X							

Requirements for Track (must be taken for a letter grade):

Waivers and substitutions are possible, depending on student background and interests. See procedures for waivers. Public Health Perspectives on Research can be waived for students with prior public health experience and training.

		<u>Term</u>	<u>Cr</u>
<u>General</u>			
223.840	Special Studies: Educational Program Development	1	1
550.865	Public Health Perspectives on Research	1-2	2
550.860	Research Ethics <u>or</u>	2	1
306.665	Research Ethics and Integrity	3	3
223.861	Doctoral Disease Prevention and Control Seminar Introduction to Online Learning	1-4 1	1 0
	http://distance.jhsph.edu/oll		
<u>International Health</u>			
220.601	Introduction to International Health	1	4
223.663	Infectious Diseases and Child Survival	3	3
223.680	Global Disease Control Programs and Policies	4	4
<u>History Requirement</u>			
340.642	History of Epidemiology I: Infectious Diseases <u>or</u>	1	2
221.605	History of International Health and Development <u>or</u>	3	3
ME 150.711	Disease Control: Comparative Perspectives <u>or</u>	1	3
ME 150.715	History of Health and Development in Africa	3-4	4
<i>Note: not all of these courses are offered every year.</i>			
<u>Biostatistics</u>			
140.621/4	Statistical Methods in Public Health <u>or</u>	1-4	16
140.651/4	Methods in Biostatistics	1-4	16
<u>Epidemiology</u>			
340.751	Epidemiologic Methods 1	1	5
340.752	Epidemiologic Methods 2	2	5
340.753	Epidemiologic Methods 3	3	5
223.664	Design and Conduct of Community Trials <u>or</u>	3	3
223.705	Clinical Vaccine Trials and Good Clinical Practice (on-line only) <u>or</u>	1,4 3	
340.613	Design and Conduct of Clinical Trials	4	3

Environmental Health

182.626	Tropical Environmental Health <u>or</u>	3	2
221.629	Water and Sanitation in complex humanitarian Emergencies <u>or</u>	2	2
180.611	The Global Environment and Public Health <u>or</u>	4	4
180.614	Environmental Health and the Developing World	3	2

Social and Behavioral Sciences

224.689	Foundations of Behavior Change Interventions in Developing Countries <u>or</u>	2	4
221.688	Social and Behavioral Foundations of Primary Health Care	2,S	4

Nutrition

222.642	Assessment of Nutritional Status <u>or</u>	2	3
222.647	Nutrition Epidemiology <u>or</u>	3	3
222.655	Nutrition and Life Stages <u>or</u>	3	3
222.649	International Nutrition	4	3

Vaccines:

223.662	Vaccine Development and Application <u>or</u>	2	3
223.689	Biological Basis of Vaccine Development (with strong background in immunology)	4	3

Population/Family Planning

380.600	Principles of Population Change <u>or</u>	2	4
380.611	Fundamentals of Program Evaluation	3	4

HEALTH SYSTEMS PROGRAM
Program Coordinator: Adnan A. Hyder
Co-coordinator: Courtland Robinson

Educational Objectives

The overall goal of the Doctor of Philosophy (PhD) degree in the Health Systems Program is to produce the next generation of leaders in the research and practice of public health dealing with health systems. Graduates of the PhD program in Health Systems should have the competencies to play leadership roles in: (a) health policy; (b) health planning, financing, management, and evaluation; (c) public health teaching; (d) institution building; (e) community development; and (f) research on health systems; in low and middle-income countries or with disadvantaged populations in any part of the world.

The Health Systems program also offers an optional specialization in International Health Economics as part of the PhD program. The objective of this specialization is to gain an understanding of economic and econometric research methods and their application to health care. Graduates completing this specialization will be able to carry out advanced research in health economics including use of economic evaluation techniques (including cost-benefit and cost-effectiveness analysis); analysis of health care demand and provider behavior; assessment of financing mechanisms and organizational structures and their impact on the health market.

Requirements for Admission

Students must have a prior degree in biological or health sciences, or alternatively in management or social sciences. Prior international or health systems experience and having a potential thesis topic are great advantages. Students seeking the specialization in International Health Economics must have excellent quantitative skills, previous coursework in economics (intermediate microeconomics), calculus (two terms), and matrix algebra.

Advising Faculty

Timothy Baker Abdullah Baqui David Bishai Robert Black William Brieger Gilbert Burnham Gary Darmstadt Kevin Frick Adnan Hyder Orin Levine	Richard Morrow David Peters William Reinke Court Robinson Mathuram Santosham Alan Sorkin Damian Walker Hugh Waters
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PhD – Health Systems

			Evaluation Opportunities								
			Course Work/Exam	Written Comps	Department Preliminary Orals	School Preliminary Orals	Thesis	Final Defense	Public Thesis Presentation	Non-Thesis Research	Seminar Presentations
Specific Competencies	Learning Opportunities										
1. Apply public health sciences to address health problems in vulnerable populations	Identify the social, cultural, economic and other determinants of public health problems	220.601 Introduction to International Health 221.860 Health Systems Program Seminar 550.865 Public Health Perspectives on Research General Electives (see next page) Thesis Non-Thesis Research	X	X	X	X	X	X		X	
	Choose appropriate methods and tools to research the magnitude and determinants of public health problems	140.621-4 Statistical Methods in Public Health I-IV 140.651-4 Methods in Biostatistics I-IV 221.638 Health Systems Research and Evaluation 221.861 Doctoral Seminar in Health Systems 340.751-2 Epidemiology Methods 1 & 2 Methodology Electives (see next page) Advisor/Faculty Mentoring Thesis	X	X	X	X	X	X		X	X
	Design and evaluate public health strategies or programs to address specific public health problems	220.601 Introduction to International Health 221.609 Comparative Health Systems 221.860 Health Systems Program Seminar 221.861 Doctoral Seminar in Health Systems General and Methodology Electives Thesis Advisor/Faculty Mentoring	X	X	X	X	X	X			X

H = Homewood Campus, Johns Hopkins University Department of Economics http://www.econ.jhu.edu/cours_grad.html

Evaluation Opportunities

2. Provide leadership in health systems management and analysis

Specific Competencies	Learning Opportunities	Course Work/Exam	Written Comps	Department Preliminary Orals	School Preliminary Orals	Thesis	Final Defense	Public Thesis Presentation	Non-Thesis Research	Seminar Presentations
Play leadership role in health management	221.860 Health Systems Program Seminar	X	X	X	X	X	X	X		X
	221.861 Doctoral Seminar in Health Systems									
	551.601 Organizations									
	551.602 Exercises in Managing Health Services Or. Departmental and School Preliminary Orals Final Defense and Public Presentation of Thesis									
Assume leadership role in health policy and financing	221.609 Comparative Health Systems	X	X	X	X	X		X		X
	221.860 Health Systems Program Seminar									
	221.861 Doctoral Seminar in Health Systems									
	General Electives in Health Policy Departmental and School Preliminary Orals Final Defense and Public Presentation of Thesis									
Play leadership role in health systems analysis	221.620 Using SMPH to Improve Health Systems	X	X	X	X	X	X			
	221.638 Health Systems Research and Evaluation									
	221.722 Quality Assurance for Developing Countries									
	221.861 Doctoral Seminar in Health Systems									
	551.604 Quantitative Tools for Managers Non-Thesis Research Departmental and School Preliminary Orals Final Defense and Public Presentation of									



3. Conduct independent research on health systems in low income countries and vulnerable populations

Evaluation Opportunities

Specific Competencies	Learning Opportunities	Course Work/Exam	Written Comps	Department Preliminary Orals	School Preliminary Orals	Thesis	Final Defense	Public Thesis Presentation	Non-Thesis Research	Seminar Presentations
Identify and prioritize research questions within the framework of public health problems in health systems	221.620 Using SMPH to Improve Health Systems 221.638 Health Systems Research and Evaluation 221.861 Doctoral Seminar in Health Systems 340.751-2 Epidemiologic Methods 1-2 General and Methodology Electives Non-Thesis Research Research Proposal Thesis	X	X	X	X	X	X			X
Design and conduct a study to respond to specific research questions in health systems	140.621-4 Statistical Methods in Public Health I-IV 140.651-4 Methods in Biostatistics I-IV 306.665 Research Ethics and Integrity 550.860 Research Ethics General and Methodology Electives Departmental and School Preliminary Orals Research Proposal Thesis	X	X	X	X	X	X	X	X	X
Analyze, document and present the results of research in a scientifically sound manner	221.620 Using SMPH to Improve Health Systems 221.638 Health Systems Research and Evaluation General and Methodology Electives Research Proposal Final Defense Post-Thesis Papers	X	X	X	X	X	X	X		X

H = Homewood Campus, Johns Hopkins University Department of Economics http://www.econ.jhu.edu/cours_grad.html

Evaluation Opportunities

4. Communicate effectively with researchers, policy makers and key stakeholders in health systems

Specific Competencies	Learning Opportunities	Course Work/Exam	Written Comps	Department Preliminary Orals	School Preliminary Orals	Thesis	Final Defense	Public Thesis Presentation	Non-Thesis Research	Seminar Presentations
Give effective oral presentations to key stakeholders	Doctoral Seminar Presentation Departmental and School Preliminary Orals Final Defense Public Presentation of Thesis			X	X		X	X		X
Develop effective written materials for public health professionals and policy makers	221.861 Doctoral Seminar in Health Systems Non-Thesis Research	X							X	
Write high quality papers for researchers and the scientific community	Non-Thesis Research Research Proposal Thesis Post-Thesis Papers	X				X			X	

Evaluation Opportunities

5. Competencies for the specialization in Health Economics

Specific Competencies	Learning Opportunities	Course Work/Exam	Written Comps	Department Preliminary Orals	School Preliminary Orals	Thesis	Final Defense	Public Thesis Presentation	Non-Thesis Research	Seminar Presentations
Describe concepts of micro and macroeconomics, basic economic theories of health insurance, principles of welfare economics, and paradigms for the demand and production of health	H180.601	Microeconomic Theory	X	X	X	X	X	X	X	
	313.640-1	Introduction/Intermediate Health Economics								
	313.653-4	Microeconomic Models in Public Health Economics I-II								
Apply economic concepts and tools to analyze health policy problems and propose solutions to these problems	221.609	International Health Reform	X	X	X	X	X	X	X	X
	313.640-1	Introduction/Intermediate Health Economics								
	313.653-4	Microeconomic Models in Public Health Economics I-II								
Implement standard econometric techniques and develop background to learn emerging econometric techniques	H180.615	Mathematical Methods in Economics I	X	X	X	X	X	X		
	H180.633	Econometrics								
	H180.638	Microeconometrics II								
	D440.304	Mathematical Methods for Economists								
	D440.606	Econometrics								

H = Homewood Campus, Johns Hopkins University Department of Economics http://www.econ.jhu.edu/cours_grad.html

S = Johns Hopkins University School for Advanced International Studies http://www.sais-jhu.edu/programs/econ/course_descriptions.html

D = Johns Hopkins University Applied Economics Program at Dupont Circle Campus

http://advanced.jhu.edu/applied_economics/course_descriptions.cfm

5. Additional Competencies for the specialization in Health Economics, continued

			Evaluation Opportunities								
Specific Competencies	Learning Opportunities		Course Work/Exam	Written Comps	Department Preliminary Orals	School Preliminary Orals	Thesis	Final Defense	Public Thesis Presentation	Non-Thesis Research	Seminar Presentations
	313.653-4	Microeconomic Models in Public Health Economics I-II									
	313.631	Cost Effectiveness in Health Care									
Describe standard economic approaches to analyzing health care production and the behavior of health care providers	313.640-1	Introduction/Intermediate Health Economics	X	X	X	X	X	X			
	313.653-4	Microeconomic Models in Public Health Economics I-II									
Formulate testable microeconomic models of aspects of health systems, health demand, and health behavior	313.640-1	Introduction/Intermediate Health Economics	X	X	X	X	X	X			
	313.653-4	Microeconomic Models in Public Health Economics I-II									

H = Homewood Campus, Johns Hopkins University Department of Economics http://www.econ.jhu.edu/cours_grad.html
D = Johns Hopkins University Applied Economics Program at Dupont Circle Campus
http://advanced.jhu.edu/applied_economics/course_descriptions.cfm

Course Work

1. Required Courses

These courses must be taken for a letter grade (unless only Pass/Fail is offered in the specific course). Any application to waive courses must be made in writing (with an approval from the advisor) to the coordinator at least 1 term prior to the start of the course. Even if waivers are granted, students are responsible for course content on comprehensive exams.

Course No.	Title	Quarter	Credits
Management			
551.601	Managing Health Services Organizations	1	4
551.602	Approaches to Managing Health Services Organization	1	2
International Health Systems			
220.601	Introduction to International Health	1	4
221.609	Comparative Health Systems	3	4
Measurement Issues in Health Systems			
221.620	Using Summary Measures of Population Health to Improve Health Systems	4	4
221.638	Health Systems Research and Evaluation in Developing Countries	4	4
Biostatistics			
140.621-624	Statistical Methods in Public Health OR	1-4	16
140.651-654	Methods in Biostatistics	1-4	16
Epidemiology			
340.751	Epidemiologic Methods 1	1	5
340.752	Epidemiologic Methods 2	2	5
Seminars			
221.860	Health Systems Program Seminar	1-4	4
221.861	Doctoral Seminar in Health Systems	3 & 4	2
550.865	Public Health Perspectives in Research	1-2	2
Ethics			
306.665	Research Ethics and Integrity OR	3	3
550.860	Research Ethics	2	1

2. General Elective Courses

Twelve (12) additional credits are required for the PhD program from the following list of courses, if not already selected to satisfy another requirement. The courses must cover at least 2 of the 3 blocks below. These courses may be taken for a letter grade or Pass/Fail.

Course No.	Title	Quarter	Credits
Health Systems Management			
551.603	Fundamentals of Budgeting & Financial Management	2	3
551.604	Quantitative Tools for Managers	2	3
551.605	Case studies in management decision making	3	3
551.607	Pharmaceuticals Management for Under-Served Populations	3	3
551.608	Managing NGOs in the Health Sector	3	3
551.610	Foundations of Leadership: A Leadership survey course	2	3
221.722	Quality Assurance Management for Developing Countries	1	4
312.617	Fundamentals of Financial Accounting	1	3
312.621	Strategic Planning & Operations	4	3
221.606	Training Methods & Continuing Education for Health Workers	3	4
312.633	Health Management Information Systems	4	3
221.706-707	Management of health systems in developing countries	3-4	5
International Health Topics			
221.613	Introduction to Humanitarian Emergencies	1	2
221.633	Public Health Issues in Disasters	3	2
221.639	Refugee Health Care	2	3
221.629	Water and sanitation needs in humanitarian emergencies	2	2
410.610	Health and homelessness	3	3
221.612	Confronting the Burden of Injuries:	2	3
221.616	Ethics of Public Health Practice in Developing Countries	4	2
221.624	Urban Health in Developing Countries	4	2
221.627	Issues in Maternal Mortality in Developing Countries	2	4
224.689	Foundations of behavioral interventions in developing countries	2	4
180.614	Environmental Health and the Developing World	3	2
180.620	Nutritional health, food production and the environment	2	3
182.626	Tropical Environmental Health	3	2
221.635	Case Studies in Primary Health Care	3	4
221.661	Project Development for PHC in Developing Countries	4	4
221.637	Health information systems	4	3
Health Policy			
223.687	Vaccine Policy Issues	3	3
300.652	Politics of Health Policy	3	4
301.607	Health Policy Analysis & Synthesis	3	4
221.614	International Political Science for Public Health Practitioners	3	1
308.610	The political economy of social inequalities and consequences	3	3

3. Research/Analytic Methods Electives

Fifteen (15) additional credits are required from following list of courses. The selected courses must cover at least 2 of the following 5 blocks. These courses may be taken for a letter grade or Pass/Fail.

Course No.	Title	Quarter	Credits
Quantitative Methods			
180.636	Statistical Inference	1-2	6
330.657	Statistics for Psychosocial Research: Measurement	1	4
340.753	Epidemiologic Methods 3	3	5
340.754	Methodologic Challenges in Epidemiologic Research	4	5
340.606	Systematic Reviews & Meta-Analysis	3	4
340.715	Problems in the Design of Epidemiologic Studies	4	6
340.728	Advanced Methods for Design and Analysis of Cohort Studies	3	4
Health Systems/Services Research Methods			
223.664	Design and Conduct of Community Trials	4	4
223.672	Data Management Methods in Health Research Studies	4	5
309.615	Intro to Methods for Health Services Research & Evaluation	2	4
309.712	Assessing Health Status & Patient Outcomes	2	3
309.715	Advanced Methods in Health Services Research: Research Design	2	4
309.716	Advanced Methods in Health Services Research: Analysis	3	3
380.711	Issues in Survey Research	3	3
380.712	Methods of Analysis of Large Population Surveys	4	3
340.717	Health Survey Research Methods	1	4
Qualitative Methods			
410.690	Ethnographic Fieldwork	3	4
224.691	Qualitative Research Methods II	4	6
224.692	Formative Research for Behavioral & Community Interventions	4	3
410.710	Concepts in Qualitative Research for Social & Behavioral Sciences	1	3
Methods in Specific Topics			
222.647	Nutrition Epidemiology	3	3
305.612	Epidemiology of Injuries	2	4
305.613	Design and Evaluation of Community Health & Safety Interventions	3	3
221.641	Measurement Methods in Humanitarian Emergencies	4	2
551.856	Research methods in health and human rights	3	2
Health Economics			
313.640	Introduction to Health Economics I	1	2
313.641	Introduction to Health Economics II	2	2
313.630	Cost-benefit Analysis: Theory & Techniques	3	3
313.631	Cost-Effectiveness, Cost-Utility, and Their Applications	4	3
313.653-4	Microeconomic Models in Public Health Economics I & II	3-4	6
380.756	Poverty, economic development and health	3	4

Specialization in International Health Economics

The specialization in International Health Economics is consistent across the school and comprises the following required, recommended and preparatory courses.

Course Number	Title	Term	Credits	Instructor(s)
Required Courses				
313.640	Introduction to Health Economics	1	5	JHSPH Gaskin, Bridges
313.641	Intermediate Health Economics	2	3	JHSPH Gaskin, Bridges
New	Introduction to Economic Evaluation	4	3	JHSPH Walker
New	Topics in Health Economics	4	3	JHSPH New Faculty
313.630	Cost-Benefit Analysis: Theory and Techniques	3	3	JHSPH (HPM) Frick
313.631	Cost-Effectiveness, Cost Utility and Applications	4	3	JHSPH (HPM) Frick
313.653	Microeconomic Models in Public Health Econ. 1	3	3	JHSPH (HPM) Gaskin
313.654	Microeconomic Models in Public Health Econ. 2	4	3	JHSPH (HPM) Gaskin
313.650	Health Economics Seminar	3	2	JHSPH (HPM) Spencer
180.601	Microeconomic Theory 1*	1	3	Homewood -----
180.633	Econometrics	3	3	Homewood -----
180.636	Statistical Inference** (or 140.651-654 at JHSPH)	1	3	Homewood -----
180.637	Microeconometrics 1	1	3	Homewood -----
180.638	Microeconometrics 2	3	3	Homewood -----
Additional Required Courses – must take one of:				
180.651	Labor Economics	3	3	Homewood -----
180.619	Evolutionary Economics	1	3	Homewood -----
180.628	Economic Development	1	3	Homewood -----
180.671	Industrial Organization	3	3	Homewood -----
180.603	Macroeconomic Theory 1	1	3	Homewood -----

Course Number	Title	Term	Credits	Instructor(s)
Recommended Courses				
New	Economic Concepts Applied to Health Behavior	4	3	JHSPH (HBS) New Faculty
New	Pharmacoeconomics	4	3	JHSPH New Faculty
New	Health, Economics, and Development	3	3	JHSPH (PFHS) Bishai
221.609	Comparative Health Systems	3	4	JHSPH (IH) Waters
309.620	Managed Care and Health Insurance	3	3	JHSPH (HPM) Weiner
330.606	Econ. Mental Health and Substance Use Disorders	4	3	JHSPH (MH) Alexandre
551.606	Case Studies in Health Policy and Leadership	4	3	JHSPH Waters
Preparatory Courses				
313.790	Understanding Cost-Effect. Analysis in Health Care	2	2	JHSPH Internet Frick
440.304	Mathematical Methods for Economists	3	3	JHU Grad School DC -----
440.601	Microeconomic Theory and Policy	3	3	JHU Grad School DC -----
440.606	Econometrics	3	3	JHU Grad School DC -----
440.648	Advanced Econometrics	1	3	JHU Grad School DC -----
180.228	Economic Development	1	3	Homewood -----
180.301	Microeconomic Theory - undergraduate	1	4.5	Homewood -----
180.302	Macroeconomic Theory - undergraduate	1	4.5	Homewood -----
180.314	Mathematical Economics	1	3	Homewood -----
180.614	Mathematical Economics	1	3	Homewood -----
180.615	Mathematical Methods in Economics 1	1	3	Homewood -----
180.616	Mathematical Methods in Economics 2	3	3	Homewood -----

Enrollment in Microeconomic Theory 1 (180.601) will be limited to the following students:

- B or better in intermediate microeconomics in JHU (180.301) or another university. Cannot be taken concurrently.

and one of the following:

- B or better in AS 440. 304 Mathematical Methods for Economists (Grad. School in DC) within last 3 years. Cannot be taken concurrently.
- B or better in AS 180.615 Mathematical Methods in Economics I (Homewood) within last 3 years. Cannot be taken concurrently.
- B or better in Linear Algebra and Calculus class within last 4 years + undergraduate economics major
- Passing a mathematics and economics placement test to be designed cooperatively with the Economics Department.

Similarly, enrollment in Statistical Inference (180.636) will be limited to the following students who meet one of the following criteria:

- B or better in 140.651-654 at JHSPH.
- B or better in Linear Algebra and Calculus class within last 4 years + undergraduate economics major
- Passing a statistics placement test to be designed cooperatively with the Economics Department.

HUMAN NUTRITION

Program Coordinator: Parul Christian

Requirements for Admission

The program hopes to attract the best and the brightest students regardless of previous educational background. Therefore, entry into the doctoral program (PhD) in Human Nutrition requires, at a minimum, a bachelor's degree or its equivalent, preferably in nutrition, biological sciences, health sciences, social sciences or public health.

Educational Objectives

The doctoral program in Human Nutrition is designed to train professionals to identify, understand and solve, through scientific methods, problems of public health importance in human nutrition. Graduates are expected to assume leadership roles in academia, government, industry and other private sector enterprises. They will be expected to advance knowledge in human nutrition through research, and advocate the application of such knowledge through public health policies and programs.

The goals of the program are five-fold and relate to specific competencies expected of program graduates. Students should:

- understand the biochemical, molecular, epidemiological and behavioral fundamentals of human nutritional science;
- comprehend the complex interrelationships between food-and-nutrition and health-and-disease in diverse populations;
- master quantitative and qualitative analytic skills required to understand, critically evaluate and conduct nutrition research;
- be able to integrate ethical principles and standards in the conduct of human research;
- develop the professional skills necessary to communicate effectively.

Advising Faculty

Robert Black	Joel Gittelsohn
Benjamin Caballero	Jean Humphrey
Laura Caulfield	Margarita Treuth
Larry Cheskin	Youfa Wang
Parul Christian	Keith P. West Jr.

Competencies
PhD – Human Nutrition

1. Demonstrate knowledge of public health nutrition problems and characterize these problems in terms of measurable health indicators

			Evaluation Opportunities							
Specific Competencies	Learning Opportunities		Course Mark/Exam	Written Comps	Department Preliminary Orals	School Preliminary Orals	Thesis	Final Defense	Public Thesis Presentation	Non-Thesis Research
Describe key nutritional problems of public health importance, their epidemiology, underlying metabolism, consequences for health, and population level strategies for prevention and treatment	222.840_	Special Studies: Biochemistry and Metabolism	X	X	X	X	X	X	X	
	222.641	Principles of Human Nutrition								
	222.649	International Nutrition								
	222.651	Advanced Nutrient Metabolism								
	222.654	Food, Culture, and Nutrition								
	222.655	Nutrition and Life Stages								
	222.657	Food and Nutrition Policy								
	222.860	Graduate Nutrition Seminar								
Define the most important indicators of nutritional status, their relative strengths and weaknesses, techniques of measurement, sources of information for these indicators, and describe how changes in these indicators reflect changes in the nutritional status of populations	222.642	Assessment of Nutritional Status	X	X	X	X	X			
	222.647	Nutrition Epidemiology								
	340.601	Principles of Epidemiology								
	340.751/3	Epidemiologic Methods I-III								

2. Conduct field research from conception of ideas through proposal development, implementation, analysis and publication of findings

Evaluation Opportunities

Specific Competencies	Learning Opportunities	Course Mark/Exam	Written Comps	Department Preliminary Orals	School Preliminary Orals	Thesis	Final Defense	Public Thesis Presentation	Non-Thesis Research
Review and critique the relevant literature on a topic of interest	222.860 222.861 Graduate Nutrition Seminar Doctoral Seminar in Proposal Development Written proposal for thesis committee approval	X		X	X	X	X	X	
Place a research question in the context of current knowledge	222.658 222.659 222.860 222.861 550.865 Critical Thinking in Nutrition - I Critical Thinking in Nutrition –II Graduate Nutrition Seminar Doctoral Seminar in Proposal Development Public Health Perspectives on Research Written proposal for thesis committee approval		X	X	X	X	X	X	
Frame a research question in terms of study goals and specific aims	222.860 222.861 Graduate Nutrition Seminar Doctoral Seminar in Proposal Development Written proposal for thesis committee approval	X		X	X	X	X	X	X
Design a research study to address specific aims. Be able to differentiate between study designs and to argue in favor of a specific design as most appropriate to address that research question	140.621-4 140.651-4 222.861 340.651/3 Statistical Methods in Public Health I-IV Methods in Biostatistics I-IV Doctoral Seminar in Proposal Development Epidemiologic Methods I-III	X	X	X	X	X	X	X	X
Develop and write a research proposal	222.861 Doctoral Seminar in Proposal Development			X	X	X	X	X	

Written proposal for thesis committee approval

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Evaluation Opportunities

2. Conduct field research from conception of ideas through proposal development, implementation, analysis and publication of findings, continued

Specific Competencies

Learning Opportunities

			Course Mark/Exam	Written Comps	Department Preliminary Orals	School Preliminary Orals	Thesis	Final Defense	Public Thesis Presentation	Non- Thesis Research
Develop and justify a budget for a research proposal	222.861 Doctoral Seminar in Proposal Development Written proposal for thesis committee approval		X	X	X	X	X	X		
Discuss the ethical issues involved in research in resource poor settings and argue for a specific approach to addressing these ethical issues	306.665 Research Ethics and Integrity : US & International Issues 550.860 Research Ethics 306.680 Ethics of Human Subject Research 306.655 Ethical issues in Pubic Health Written proposal for thesis committee approval		X	X	X	X	X	X		
Prepare an application to an IRB for ethical approval	Written proposal for thesis committee approval				X	X	X			
Implement and manage a research study, monitor progress of the study and the quality of data collected	Thesis research						X			
Produce an appropriate statistical analysis of the data collected and provide a reasoned interpretation of these results	140.624 Statistical Methods in Public Health IV 140.654 Methods in Biostatistics I-IV Thesis research		X				X	X		
Place the research findings in the context of current knowledge, identify limitations of the	Thesis research						X	X		

research and specify further areas for research									
Analyze policy implications and public health significance of the findings	Thesis research					X	X		

Evaluation Opportunities

3. Communicate scientific findings through written and oral methods to scientific audiences and peers

Specific Competencies

Learning Opportunities

			Course Work/Exam	Written Comps	Department Preliminary Orals	School Preliminary Orals	Thesis	Final Defense	Public Thesis Presentation	Non-Thesis Research
Make oral and poster presentations of research findings for professional audiences	222.860 Graduate Nutrition Seminar 222.861 Doctoral Seminar in Proposal Development Final Defense and Public Presentation of Thesis		X		X	X		X	X	
Write manuscripts of publishable quality for the peer reviewed literature that describe and explain research findings	Final Defense Non-thesis related research						X			X
Teach other students basic introductory materials in the student's general area of expertise	222.658 Critical Thinking in Nutrition I 222.659 Critical Thinking in Nutrition II Teaching Assistant Opportunities		X							

Requirements

Students will be expected to take 6 quarters and at least 96 credits of coursework to satisfy the educational requirements, pass a written and two oral comprehensive exams, and to successfully complete a thesis research project.

At least two thirds of course credits that are required are associated with the core content areas common to all doctoral students. The exact number of required core course credits taken by a student will vary depending on specific choices made by the student in conjunction with their advisor, but will be 61-71 credits if required courses are taken as suggested. To complete the remainder of their coursework requirements, students will choose elective coursework and special studies. Thus, about 25-35 credits will be completed through electives chosen by the student in conjunction with their advisor, depending on their unique career goals and research interests.

The goals of the doctoral program form the basis for the four core content areas of the educational program: *Metabolism, Research Methods, Nutrition and Health, and Professional Skills*. Students are required to take specific courses in each of these four content areas in order to develop the competencies expected of all doctoral-level nutrition professionals. Within each content area are various sub-areas that more clearly define the content area and provide the basis for identifying minimum competencies for all doctoral candidates. Agreement about these competencies, in turn, led to the development of the core curriculum requirements.

Metabolism

Sub-areas: Biochemistry, Metabolism

Minimum requirements in the area of metabolism would provide candidates with the biochemical and metabolic fundamentals of nutritional science.

Learning Objectives: Know and understand:

- metabolic pathways of macronutrients and micronutrients
- relationship between cell structure and metabolic function

Required Coursework (must be taken for a letter grade unless offered as Pass/Fail)

Course No.	Course Title	Term	Credits
222.641	Principles of Human Nutrition	1	4
222.840	Special Studies: Biochemistry and Metabolism	2	3
222.651	Advanced Nutrient Metabolism	2	3
	Total Required Credits		10

Research Methodology

Sub-Areas: Biostatistics, Epidemiology, Nutritional Assessment, Nutritional Epidemiology, Research Proposal Development, Qualitative Research Methods

Minimum required competencies in research methodology provide candidates with the quantitative and qualitative knowledge and skills for understanding and conducting research in human nutrition.

Learning Objectives:

- Know and understand concepts and terms

- Compose research questions
- Link nutrition research questions to appropriate study design, methods, analysis, interpretation, and writing
- Be familiar with underlying principles, methods of collection, analysis and interpretation of quantitative and qualitative data
- Demonstrate ability to analyze a nutrition-related (e.g., dietary or nutritional status) data set
- Understand the use of nutrition reference data
- Demonstrate competence in one primary statistical software and data management package
- Understand the principles and use of nutrition-related laboratory techniques, equipment and field assessment methods

Required Coursework (must be taken for a letter grade unless offered as Pass/Fail)

Course No.	Course Title	Term	Credits
Research Methods			
140.621/4	Statistical Methods in Public Health I-IV OR	1-4	16
140.651/4	Methods in Biostatistics I-IV	1-4	16
340.751/3	Epidemiologic Methods I-III OR	1-3	15
340.601	Principles of Epidemiology ¹	1	5
222.642	Assessment of Nutritional Status	2	3
222.647	Nutritional Epidemiology	3	3
222.861	Doctoral Seminar in Proposal Development	1-4	4
	Total Required Credits		31-41

Suggested Electives: Research Methods

Course No.	Course Title	Term	Credits
340.717	Health Survey Research Methods	1	4
340.608	Observational Epidemiology*	2	4
340.60?	Topics in Applied Epidemiology	3	3
223.664	Design and Conduct of Community Trials	4	4
222.660	Advanced Nutritional Epidemiology	4	3
410.690	Ethnographic Fieldwork	3	4
224.691	Qualitative Research II	4	6
224.692	Formative Research for Behavioral and Community Interventions	4	3
140.655	Analysis of Longitudinal Data	3	4
140.641	Survival Analysis	3	3
313.630	Cost-benefit Analysis: Theory and Techniques	3	3
313.631	Cost-effectiveness, Cost-Utility, and Their Applications	4	3

¹Those who opt for Principles of Epidemiology may choose to do the Applied Epidemiology series (Observational Epi and Topics in Applied Epi) as electives

Nutrition and Health

Sub-areas: Nutrition over the life span, social, cultural and behavioral influences, food and nutrition policy

This content area of the curriculum has identified a number of core competencies that can be addressed in a flexible manner, and in consultation with their academic advisor.

Learning Objectives:

Know and understand:

- Nutritional processes in each stage of life
- Age-specific, disease- and physiologic state-specific nutrient requirements
- Social, political and cultural contexts influencing nutritional status of individuals and populations
- Pathological processes and how they influence nutritional well-being and *vice versa*
- Development and impact of food and nutrition policy

Required Coursework (must be taken for a letter grade unless offered as Pass/Fail)

Course No.	Course Title	Term	Credits
222.657	Food and Nutrition Policy	1	2
222.655	Nutrition and Life Stages	3	3
222.654	Food, Culture and Nutrition	4	4
	Total Required Credits		9

Suggested Electives: Nutrition and Health

Course No.	Course Title	Term	Credits
222.649	International Nutrition	4	3
222.656	Critical Analysis of Popular Diets	4	3
221.611	Food/nutrition and livelihood in humanitarian emergencies	4	2

Professional Skills

Sub-areas: Grant writing, Teaching and Public Speaking, Ethics, Information technology

The goal of the professional skills core curriculum is to provide the student with exposure to or experiences in important skills necessary to work effectively as a professional at the doctoral level. As shown below, many of the competencies are accomplished through the academic process of the degree rather than through didactic coursework per se.

Required Coursework (must be taken for a letter grade unless offered as Pass/Fail)

Course No.	Course Title	Term	Credits
222.840	Special Studies: Educational Program Development	1	1
222.860	Graduate Nutrition Seminar	1-4	4

222.658	Critical Thinking in Nutrition -I	1	1
222.659	Critical Thinking in Nutrition -II	2	1
550.865	Public Health Perspectives on Doctoral Research I-II	1-2	2
306.665	Research Ethics and Integrity: US & International Issues	3	3
	Total Required Credits		11

Other Suggested Electives:

Additional credits from the list below can be selected:

Course No.	Course Title	Term	Credits
International Health and Disease			
223.663	Infectious Diseases and Child Survival	3	3
220.601	Introduction to International Health*	1	4
221.627	Issues in Maternal Mortality Reduction in Developing Countries*	2	4
223.680	Global Disease Control Programs and Policies	4	4
Population, Behavior, and Health			
380.641	Prenatal and Infant Growth and Development	1	3
380.642	Child Health and Development	4	3
380.643	Growth and Development III: Adolescence	3	3
380.604	Health Across the Life Span: Frameworks, contexts, and measurements*	1	4
380.600	Principles of Population Change	2	4
224.689	Foundations of Behavioral Change in Developing Countries	2	4
380.611	Fundamentals of Program Evaluation	3	4
Environmental Health			
187.610	Principles of Toxicology*	1	4
180.601	Environmental Health*	3	5
182.640	Food and Water Borne Diseases	3	3
221.629	Water and Sanitation Needs in Humanitarian Emergencies	2	2
Management Sciences			
551.603	Fundamentals of Budgeting and Financial Management*	2	3

* NOTE – also taught as an Internet course (check term).

Registration During the Thesis Phase

Course No.	Course Title	Term	Credits
222.820	Thesis Research Human Nutrition	1-4	-

SOCIAL AND BEHAVIORAL INTERVENTIONS

PhD Program Coordinator: Michael Sweat

Requirements for Admission

Entrants into the program must have: professional experience and a degree in the health or social sciences; or at least one year of graduate training in public health.

Educational Objectives

The program provides students with a broad exposure to applied social science theory and methods for health-related research, implementation, and evaluation. Coursework emphasizes theoretical and methodological approaches within applied medical anthropology, medical sociology, health education and communication, qualitative and quantitative methods, competency within a specific cultural/geographic area, and principles and methods for community-based intervention research.

Advising Faculty

Bill Brieger	Deanna Kerrigan
David Celentano (joint)	Suzanne Maman (Adjunct)
Katherine Fritz	Michael Sweat
Joel Gittelsohn	Peter Winch

Competencies

PHD Program – Social and Behavioral Interventions Program

Competencies	Learning Opportunities		Evaluation											
			Course Work/Exam	Written Comps	Deot Preliminary Orals	School Preliminary Orals	Thesis	Final Defense	Public Thesis	Non-Thesis Research	Grand Rounds and Seminar Participation and Presentation			
1. Identify and describe the determinants and behaviors associated with major causes of disease and disability most prevalent among underserved populations.														
List the major causes of disease and disability and describe associated causal factors	220.601 223.680 550.865	Introduction to IH Global Disease Control Programs and Policies PH Perspectives on Research	X	X	X	X	X	X	X					X
<ul style="list-style-type: none"> Identify the major social determinants of health Explain how multi-level influences, including social, policy, familial, dyadic, and environmental forces affect health behavior Provide examples of social and behavioral influences in health 	222.654 410.616 410.612 302.685 302.690 308.610 330.622 330.661 340.705 380.600 380.657 380.658 224.689	Food, Culture, and Nutrition Social and Behavioral Aspects of Primary Health Care Sociological Perspectives on Health Psychosocial Factors in Health and Illness Social and Behavioral Aspects of Public Health Political Economy ... Inequalities Development and Psychopathology Over the Life Span Soc/psych Processes of Dev Mental Behav Disorders Advanced Seminar in Social Epi Principles of Population Change Economics of Mortality, Morbidity, and Fertility Economics of Gender and Family Foundations of Behav Change Interventions Dev Countries	X	X	X	X	X	X	X					X

			Course Work/Exam	Written Comps	Deot Preliminary Orals	School Preliminary Orals	Thesis	Final Defense	Public Thesis Presentation	Non-Thesis Research	Grand Rounds and Seminar Participation and Presentation
Discuss the association between health behavior and health outcomes	410.616 410.612 302.685 340.705 308.610	Soc & Behav Aspects of Primary Health Care Sociological Perspectives on Health Psychosocial Factors in Health and Illness Advanced Seminar in Social Epidemiology Pol Econ Soc Inequalities Conseq Health Quality Life	X	X	X	X	X	X	X		X
For major causes of disease and disability, critique the effectiveness of current behavioral interventions	224.689 303.622	Foundations of Behavior Change Interventions Dev Countries Program Effectiveness in Health Educ & Health Promotion	X	X	X	X					X
<ul style="list-style-type: none"> Describe how community-based behavioral health initiatives are designed, implemented, and evaluated Provide and critique examples of these initiatives 	223.664 224.692	Design and Conduct of Community Trials Formative Research for Behavioral & Community Interventions	X	X	X						X

Competencies	Learning Opportunities	Evaluation									
		Course Work/Exam	Written Comps	Deot Preliminary Orals	School Preliminary Orals	Thesis	Final Defense	Public Thesis Presentation	Non-Thesis Research	Grand Rounds and Seminar Participation and Presentation	
2. Design a theoretically-grounded research study on social, cultural, and behavioral aspects of health											
Evaluate and critique the relevant literature on a topic of interest and frame a research question in terms of study goals and specific aims. The student should consider the following aspects of the health issue of interest: (a) epidemiology (b) regional and global variations (c) biologic aspects and medical treatment, (d) social and behavioral interventions addressing the health issue, (e) policy issues relevant to the health issues, and (f) social aspects such as stigma and discrimination associated with the health issues.	224.840 224.863 / 4 224.860 / 1 224.865	Proposal Development Seminar (w/Dr. Sweat) Doctoral Seminar on Research Methods in Applied Medical Anthropology (Parts I & II) Social And Behavioral Interventions Program Seminar I & II Doctoral Seminar In Behavior, Change And Health	X	X	X		X	X	X		X
Assess the history, geography, medical systems, culture, ethnography, economics, and ethnomedical beliefs and practices of a target study population and use this information to design a research study.	224.840	Special Studies with Relevant Faculty Language Training Courses Non-thesis research Written proposal for thesis committee	X				X			X	X

			Course Work/Exam	Written Comps	Deot Preliminary Orals	School Preliminary Orals	Thesis	Final Defense	Public Thesis Presentation	Non-Thesis Research	Grand Rounds and Seminar Participation and Presentation
Discuss and apply appropriate Social and Behavioral theory to the design of a research study.	224.840 224.689	Proposal Development Seminar (w/Dr. Sweat) Foundations of Behavior Change Interventions in Developing Countries Written proposal for Thesis committee approval	X	X	X		X	X	X		X
Design a research study to address specific aims. Differentiate between qualitative and quantitative designs and discuss the strengths and limitations of each vis-à-vis the research aims.	340.751-2	Epidemiologic Methods 1-2	X	X	X	X	X	X	X		X
	140.658	Statistics for Psychosocial Research: Structural Methods	X	X	X	X	X	X	X		
	223.664	Design and Conduct of Community Trials									
	302.688	Research Design for the Soc & Behav Sciences									
	309.615	Intro to Methods for Health Services Research & Eval									
	340.717	Health Survey Research Methods									
	380.611	Fundamentals of Program Evaluation									
	380.612	Applications in Program Monitoring and Evaluation									
	380.733	Communication Network Analysis in PH Programs									
	410.690	Ethnographic Fieldwork									
	224.691	Qualitative Research Methods I & II									
	224.692	Formative Res for Behav & Community Interventions									
Write a research proposal	224.840	Proposal Development Seminar (w/Dr. Sweat) Written proposal for thesis committee approval	X		X	X	X	X	X		
Develop and justify a budget for the	224.840	Proposal Development Seminar (w/Dr. Sweat)	X	X	X	X	X	X			

research proposal	Written proposal for thesis committee approval										
		Course Work/Exam	Written Comps	Deot Preliminary Orals	School Preliminary Orals	Thesis	Final Defense	Public Thesis Presentation	Non-Thesis Research	Grand Rounds and Seminar Participation and Presentation	
Discuss the ethical issues involved in research in resource poor settings and argue for a specific approach to addressing these ethical issues.	550.860 Research Ethics 306.665 Research Ethics and Integrity 224.840 Proposal Development Seminar (w/Dr. Sweat) Written proposal for thesis committee approval	X	X	X	X	X	X				
Prepare an application to an IRB for ethical approval.	Written proposal for thesis committee approval, and IRB approval			X	X	X					

Competencies	Learning Opportunities	Evaluation							
		Course Work/Exam	Written Comps	Deot Preliminary Orals	School Preliminary Orals	Thesis	Final Defense	Public Thesis Presentation	Non-Thesis Research
3. Conduct field research study on social, cultural, and behavioral aspects of health									
Obtain appropriate language skills before embarking on the research.	Language Courses at Homewood Campus	X				X			
Implement and manage a research study, monitor progress of the study and the quality of data collected.	Thesis research					X			
Produce an appropriate data analysis of the data collected and provide a reasoned interpretation of these results.	140.621 – 4 Statistical Methods in Public Health I thru IV 140.651 – 4 Methods in Biostatistics I thru IV	X				X	X	X	
	410.690 Ethnographic Fieldwork 224.691 Qualitative Research Methods II								
Place the research findings in the context of current knowledge, identify limitations of the research and specify further areas for research.	Thesis Research					X	X	X	
Analyze policy implications and public health significance of the findings.	Thesis Research					X	X	X	

Competencies	Learning Opportunities	Evaluation								
		Course Work/Exam	Written Comps	Dept Preliminary Orals	School Preliminary Orals	Thesis	Final Defense	Public Thesis Presentation	Non-Thesis Research	Grand Rounds and Seminar Participation and Presentation
4. Communicate scientific findings through written and oral methods to scientific audiences and peers										
Present research findings for professional audiences.	Department and Preliminary Orals Final Defense and Public Presentation of Thesis Non-thesis related research 224.860 Social And Behavioral Interventions Program Seminar I & II 224.840 Proposal Development Seminar (w/Dr. Sweat)	X		X	X		X	X	X	X
Develop manuscripts of publishable quality for the peer reviewed literature that describe and explain research findings	Final Defense Non-thesis related research					X			X	
Teach other students introductory material related to social and behavioral science.	224.860 Social And Behavioral Interventions Program Seminar I & II Teaching assistant opportunities.	X								X

Student Tailored Curriculum

In the SBI program doctoral students develop their own unique course curriculum to meet their specific needs. There are some courses that are required to be taken for credit. Otherwise students are to propose a course of study that meets their own intellectual interests and career goals, and which also meet broad learning objectives described herein. Under each set of learning objectives is a list of courses that meet the requirements for the set, some indicated as recommended courses. Students are also free to propose alternative courses.

Prior to registering for 1st term each academic year each doctoral student should develop a course plan. There is a form enclosed that can be used for this purpose. This should be submitted to their advisor, and the student should meet with their advisor to discuss the plan. The SBI faculty will schedule a faculty meeting just prior to 1st term registration to meet briefly as a group with each student to discuss their course plan and provide verbal feedback and approval before registration. Changes can be proposed during the school year if needed. The student is requested to first discuss and get the approval of their advisor, and then submit a memo to Dr. Sweat for approval. Requests for changes to the approved course plan should be submitted to Dr. Sweat at least two-weeks prior to the registration date for each academic term.

If students have particular interests that cannot be met through course offerings, requirements for topic areas F through J can be met through special studies courses. Such courses, when carefully developed, are an excellent way for doctoral students to gain requisite knowledge and skills, and give students the opportunity to work closely with faculty and pursue specific intellectual interests. These courses need to first be negotiated with sponsoring faculty, and the enclosed Special Studies form should be completed and submitted with the student's course plan each academic year (or with requests for changes in the course plan). Students may take courses at any of the Schools within the Johns Hopkins University system. A full listing of University courses can be accessed via: http://webapps.jhu.edu/jhuniverse/academics/online_catalogs/.

SBI SPECIAL STUDIES (224.840) COURSE APPROVAL FORM

This form is for doctoral students in the Social and Behavioral Interventions Program in the Department of International Health. Use this form to seek approval to use a Special Studies Course to meet program requirement.

Student's Name: _____

Student's Advisor: _____

Number of Credit Hours for the Course: _____ Hours

Term & Year Course to be Completed: Summer 1st 2nd 3rd 4th of year 20_____

Please indicate below the area of inquiry that you wish to investigate (attach reading list if appropriate):

Describe the product for the course that you will produce:

Sponsoring Faculty Member Name (Print Name): _____

Signature of Faculty Sponsor Indicating Approval: _____

Date of Approval: _____

SBI CURRICULUM

A. Introduction to Online Learning

It is highly recommended that all students enroll in *Introduction to Online Learning* as soon as they begin their course of study. This is a non-credit mini course that is a prerequisite for all students wanting to take online courses offered by the Distance Education Division of the Johns Hopkins Bloomberg School of Public Health. Students wanting to take an online course must complete Introduction to Online Learning prior to the start of the term in which they wish to enroll in online courses. The School does not permit conditional and/or concurrent enrollment (that is, you must take the online course prior to enrolling in a distance education class). You can enroll for this course at <http://distance.jhsph.edu/oil/>

B. General Requirements (all must be taken for a letter grade)

This area of requirements is designed to give students broad knowledge of global public health issues, and grounding in epidemiology, disease prevention, and statistics.

	Qtr	Cr
220.601 Introduction to International Health	1	4
340.751-2 Epidemiologic Methods 1-2	1-2	12
140.621/4 Statistical Methods in Public Health OR 140.651/4 Methods in Biostatistics	1-4	16
223.680 Global Disease Control Programs and Policies	4	4

C. SBI Program Core Requirements (all must be taken for a letter grade)

These four courses provide students with a theoretical and methodological base necessary to be a competent and educated social scientist working on global health issues in the social sciences.

330.657 Statistics for Psychosocial Research: Measurement	1	4
224.689 Foundations of Behavior Change Interventions in Dev Coun.	2	4
410.690 Ethnographic Fieldwork	3	4
224.691 Qualitative Research Methods II	4	6
224.692 Formative Res for Behavioral & Community Interventions	4	3

D. PhD Seminar Series (all must be taken for a letter grade)

This seminar series is designed to provide doctoral students with structured guidance in developing a focused intellectual trajectory, and an associated course of study. As well, the seminar series provides in-depth coverage of theoretical and methodological issues relevant to public health practitioners and researchers working in the social sciences in a small group format.

224.840 Special Studies: Educational Program Development (Students use this time to develop a course and career plan with their advisor)	1	2
224.863/4 Doctoral Seminar on Res Meth in Applied Med Anthropology	1, 2	8
224.840 Special Studies: Proposal Development (w / Dr. Sweat) (Timing of this course determined with student cohort each year)	Any	3
224.865 Doctoral Seminar in Behavior Change and Health	4	3

E. School-wide Doctoral Requirements (both must be taken for a letter grade)

The following two courses are required of all doctoral students in the School, and provide an overview of the appropriate role of research in the public health endeavor, and how to conduct ethical research with integrity.

550.865 Public Health Perspectives on Research (Waiver is granted for students with prior MPH)	1-2	2
550.860 Research Ethics or	2	1
306.665** Research Ethics and Integrity	3	3

** Highly recommended based on prior student feedback

For Each Of The Following Topic Area Students May Propose Any University Course (Including Special Studies) That Meets The Learning Objectives Associated With Each Topic Area. After Most Topic Areas Is A List Of Pre-Approved Courses, Some Indicated as “Highly Recommended” based on student feedback.

F. Social and Behavioral Sciences (16 Hours)

This area covers a broad range of issues and topics, and is meant to provide a core foundation in the social and behavioral sciences. The learning objectives for this area are to: (a) understand the major social determinants of health, (b) gain an understanding of multi-level influences on health behaviors, including social, policy, familial, dyadic, and environmental forces that affect health behavior, (c) gain broad knowledge of the major theories of behavior change, (d) understand the theoretical basis and components of major types of behavioral health interventions, such as health education and communication, social marketing, and structural and policy-based interventions, (e) gain a comprehensive understanding of the association between health behavior and health outcomes, and (f) understand how community-based behavioral health initiatives are designed and implemented.

221.605 History of International Health and Development (Alternate yrs)	3	3
221.609 Comparative Health Systems	3	4
222.654** Food, Culture and Nutrition	4	4
221.688 Social & Behavioral Foundations of Primary Health Care	2	4
410.612** Sociological Perspectives on Health	1	3
410.613 Psychosocial Factors in Health & Illness	2	4
410.616 Social & Behavioral Aspects of Public Health	1	4
308.610 Political Economy Soc Inequalities Conseq Hlth Quality Life	3	3
330.622 Development and Psychopathology Over the Life Span	4	3
330.661 Soc Psychol & Dev Processes in the Etiology of Mental Disorders	3	3
221.606 Training Methods & Continuing Education for Health Workers	3	4

340.705 Advanced Seminar in Social Epidemiology	4	3
410.620 Fundamentals of Health Educ & Health Promotion	1	3
410.650 Intro to Persuasive Communications: Theories & Practice	3	4
410.651 Communication Strategies for Health Ed & Promotion	3	4
380.600 Principles of Population Change	2	4
410.654/5 Health Communication Programs I & II	3-4	8
410.751 Graduate Seminar in Health Communication	3	2
313.640 Introduction to Health Economics I	1	2
313.641 Introduction to Health Economics II	2	2
380.658 Economics of Gender and Family	4	4
410.653 Contemporary Issues in Health Communication	1	1
380.862 Research Seminar in Health Communication	2	1

** Highly recommended based on student feedback

G. Research Design and Methods (7 Hours)

The learning objectives for this area are to: (a) learn the fundamentals of designing research studies, (b) expand the student's knowledge and facility with a core research methodology, such as in social network analysis, or survey research, and (c) gain a working knowledge of how to appropriately evaluate a social or behavioral intervention.

140.658** Statistics for Psychosocial Research: Structural Models	2	4
223.664 Design and Conduct of Community Trials	4	4
302.688 Research Design in the Social and Behavioral Sciences	3	3
309.615 Intro to Methods for Health Services Research & Evaluation	2	4
340.717 Health Survey Research Methods	1	6
380.611 Fundamentals of Program Evaluation	3	4
380.612 Applications in Program Monitoring and Evaluation	4	4
380.733 Communication Network Analysis in PH Programs	1	4

** Recommended, second part of 330.657

H. History, Geography, Culture, and Linguistics (6 Hours)

The main learning objective associated with this topic area is to prepare the student for dissertation field work with regard to knowledge of the history, geography, culture, and language specific to the population they plan to study. For some, enhancing language skills is an appropriate option for this topic area. As well, the student should use this area to become familiar with ethnographic, sociological, historical and economic literature in the area. They should also become familiar with regional medical systems and literature on ethnomedical beliefs and practices.

I. Public Health Problem Area (6 hours)

The learning objective for this topic area is to acquire detailed knowledge of the public health problem area that the student plans to examine in their dissertation research (e.g., HIV/AIDS, violence, micronutrient deficiency, family planning, malaria, breastfeeding promotion, tuberculosis). The student should consider the following aspects of the health issue of interest: (a) epidemiology (b) regional and global variations (c) biologic aspects and medical treatment, (d) social and

behavioral interventions addressing the health issue, (e) policy issues relevant to the health issues, and (f) social aspects such as stigma and discrimination associated with the health issues, or its interventions.

J. Nutrition – Suggested Courses for Students with Interest in Nutrition (Not Required)

The learning objective for this area is to gain basic competency in one or more of the following: (a) nutritional anthropology, (b) behavioral aspects of nutrition, (c) nutritional biochemistry, (d) nutritional epidemiology, or (e) a specific topical area in nutrition, such as nutrition and aging, or global health issues in nutrition.

222.642 Assessment of Nutritional Status	2	3
222.647 Nutrition Epidemiology	3	3
222.655 Nutrition and Life Stages	3	3
222.649 International Nutrition	4	3
222.654** Food, Culture and Nutrition	4	4
222.641 Principles of Human Nutrition	1	4

** Highly recommended