



JOHNS HOPKINS

BLOOMBERG SCHOOL  
*of* PUBLIC HEALTH

**Department of International Health**

**ACADEMIC GUIDE 2014-2015**  
**Doctor of Philosophy (PhD)**



**Contains Information for Students Entering  
In Academic Year 2014-2015**

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

**PhD Academic Guide  
Department of International Health  
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**Cover Photo Credit:** © 2004 Pablo Peñataro Yori

**Caption:** Children taking a bath by a river in Loreto, Perú

## GENERAL INFORMATION

### Academic Program Administration

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Cristina Salazar, E8518  
Academic Program Manager  
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[csalazar@jhu.edu](mailto:csalazar@jhu.edu)

Dr. Joanne Katz  
Associate Chair for Academic Programs  
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[jkatz1@jhu.edu](mailto:jkatz1@jhu.edu)

Carol Buckley, E8516  
Academic Program Coordinator  
(410) 614-3000  
[cbuckle1@jhu.edu](mailto:cbuckle1@jhu.edu)

### Program Director

### PhD Program Coordinator

#### Global Disease Epidemiology and Control

Dr. Andrea Ruff  
[aruff1@jhu.edu](mailto:aruff1@jhu.edu)

Dr. Larry Moulton  
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#### Health Systems

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Dr. Courtland Robinson  
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#### Human Nutrition

Dr. Keith West  
[kwest1@jhu.edu](mailto:kwest1@jhu.edu)

Dr. Parul Christian  
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#### Social and Behavioral Interventions

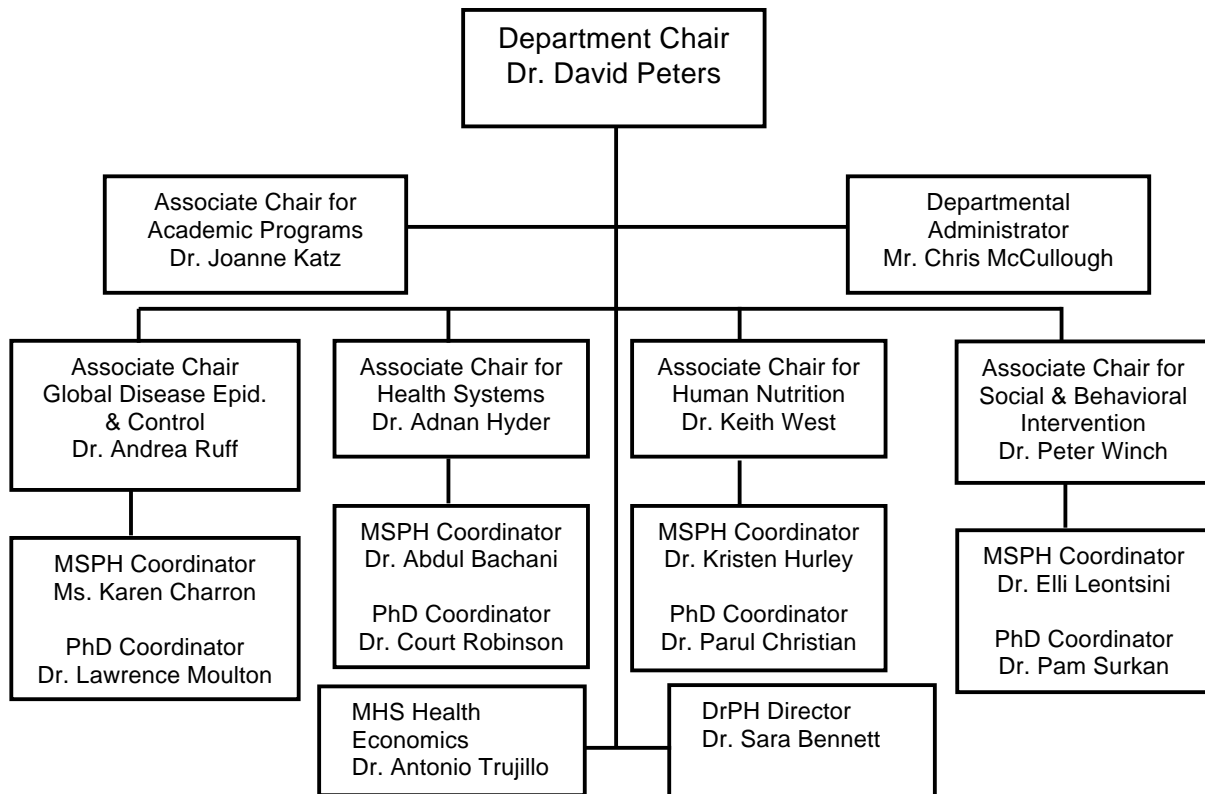
Dr. Peter Winch  
[pwinch@jhu.edu](mailto:pwinch@jhu.edu)

Dr. Pamela Surkan  
[pamela.surkan@jhu.edu](mailto:pamela.surkan@jhu.edu)

### 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, and nutrition. 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 Staff

Several administrative staff and faculty members within the Department 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.

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

**Cristina Salazar** (Academic Program Manager): Cristina 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 visitor 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 PhD 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 PhD degree program. They are responsible for the management and oversight of the individual PhD programs. Students can approach program coordinators 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 his/her 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 Cristina Salazar 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**

Joanne Katz, Chair  
Cristina Salazar, Staff

Abdul Bachani  
Sara Bennett  
Parul Christian  
Karen Charron  
Kristen Hurley

Elli Leontsini  
Larry Moulton  
Court Robinson  
Antonio Trujillo  
Steve Harvey

### **HONORS, AWARDS AND SCHOLARSHIPS COMMITTEE**

Court Robinson, Chair  
Cristina Salazar, Staff

Kavi Bhalla  
Laura Caulfield  
Julie Denison  
Shannon Doocy  
Elli Leontsini

Li Liu  
Larry Moulton  
Pamela Surkan  
Sameera Talegawkar

## DEPARTMENT OF INTERNATIONAL HEALTH PhD REQUIREMENTS

### General Requirements

Department of International Health (DIH) candidates for the degree Doctor of Philosophy (Ph.D.) must fulfill all School requirements, as specified in the PhD PPM from 07/24/14. 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 University 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), and require that full-time registration be a minimum of 16 credits per term. 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.

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.

### Completion of Requirements

PhD students are expected to complete all requirements for the degree within seven years of matriculation. Formal leaves of absence may extend this time beyond seven years. 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 program they are following.

### Introduction to Online Learning

The School of Public Health offers courses in various formats, including a number of online classes. Students 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), **the school requires all incoming students to take this non-credit course during or before the first term they enroll.** For course dates and enrollment information, please visit the Distance Education Division website: <http://distance.jhsph.edu/oll/>

### General Doctoral Requirements

**Ethics (2 courses)** - All doctoral students must take two general ethics courses. The first, 550.860.82 Academic and Research Ethics, is an online course for 0 credits that every student is required to take in their first term of matriculation. Failure to complete this course will prevent students from registering for the following term. PhD students are also required to take one of the two courses listed below. The second course is an



option between 550.600 Responsible Conduct of Research offered first term, OR 306.665 Research Ethics and Integrity: US and International Issues offered third term.

**Doctoral Seminar in International Health** – All doctoral students are required to take the multi-term course 220.605 and 220.606 Doctoral Seminar in International Health I & II, offered in first and second terms. This course explores the topics relevant to International Health in a seminar format with readings and critical writing. These courses are not a requirement for PhD Human Nutrition students, but are recommended.

**Public Health Perspectives on Research** – All PhD students are required to take 550.865 Public Health Perspectives on Research offered online in 2<sup>nd</sup> term. This requirement must be completed before scheduling the School Preliminary Oral Exam. Students may request a waiver from this course if they have completed an MPH, professional MHS, or MSPH degree at a domestic institution within the last ten years. Requests for waivers should be addressed to Maryann Smith ([maryann.smith@jhu.edu](mailto:maryann.smith@jhu.edu)).

### 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 continuously maintain a cumulative Grade Point Average (G.P.A.) of at least 3.0 in order to remain a degree candidate in good standing. Any student who receives a “D” or “F” in a required course must repeat the course and achieve at least a “C”. Anyone not meeting these standards will be placed on probationary status pending action by the Department Committee on Curriculum and Credentials. The Committee will either recommend immediate termination from the degree program or will establish the minimum conditions to be fulfilled in order to return to the “good standing” status and avoid termination. In case conditions are imposed, the Committee will 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.

### Total Credits

The total number of course credits to be earned depends upon individual program 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.

The School requires that at least 18 credits must be satisfactorily completed in formal courses outside of the Department of International Health. Among those 18 credits, no less than three courses must be satisfactorily completed in one or more departments of the School of Public Health. The remaining outside credits 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.

### Registration, Enrollment and Tuition Scholarship

PhD students must register for a minimum of 16 credits of courses each term to be a full-time student in the IH department (students do not register for summer or winter intersession). Registration below 16 credits is not allowed and violates the terms of the tuition scholarship.



PhD students are expected to complete all requirements for the degree within seven years of matriculation. Formal leaves of absence may extend this time beyond seven years. All students must be continuously registered full-time until all requirements for the degree program have been satisfied. The Department of International Health defines full-time as a minimum of 16 credits per term. **Failure to register for a term results in automatic withdrawal.** A withdrawn student must be formally readmitted before resuming a program of study. This would mean providing the original application, most current transcript prior to withdrawal, and a cover letter explaining reasons for withdrawal and why they want to be readmitted. Upon readmission, a student must be registered for a minimum of two consecutive terms prior to completing degree requirements.

All new doctoral students will receive 100% of tuition scholarship for the first four terms of full time enrollment, provided they maintain full-time status and good academic status standing (see page 8). After the first four terms, students will receive a 50% tuition scholarship each term until the end of their fifth year of enrollment (20<sup>th</sup> term). Beyond five years there is no more tuition scholarship. Students who have not completed their degree by the fifth year will be responsible for 100% of their tuition. Leaves of absence are not counted in the five-year plan.

### Stipend

All doctoral students will receive a stipend award of \$2200 at the beginning of their first, second, and third years. Students can choose to receive this money to cover their tuition, health insurance, fees, or receive a one-time check. Students must communicate with Cristina Salazar on how they want this money disbursed. This stipend is only for doctoral students in good academic standing, and registered for a minimum of 16 credits each term.

### Departmental Written Comprehensive Examination

Satisfactory performance is required on a written comprehensive examination. The exam is offered annually near the end of the Second and/or Fourth Terms depending on the program 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 2015 summer doctoral examination will be announced by October 31<sup>st</sup>, 2014.**

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. MSPH students who pass the PhD examination must enter the PHD program within 3 years (4 years for Peace Corps/Masters International students), or retake and pass it again.

### 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 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 PhD Program Coordinator. Please use the Departmental Thesis Committee Form (page 45). It is expected that the student will meet at least twice per year (either in-person or electronically) 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. Please fill out the Non-Thesis Related Research Form in the forms section of the guide or from the Academic Program Manager (page 47).

### **Special Studies: Thesis Research**

Students engaged in the planning or conduct of their thesis research will register for credit (pass/fail) in 22X.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.

### **Teaching Experience Requirement**

As part of the doctoral academic training, students are required to gain teaching experience by assisting instructors in at least twelve credits over the first three years of their doctoral program. These courses must be in the Department of International Health only. Doctoral students must coordinate with Cristina Salazar the courses they will assist prior to the start of the term. Exceptions to this requirement must have prior approval by the Associate Chair for Academic Programs.

All TA's must take the TA training course designed to guide students in their roles and responsibilities as TA's. The training can be done fully online at <https://sites.google.com/site/ctlteachingtoolkit/teaching-assistants>.

### **Departmental Oral Examination**

The purpose of the departmental oral examination is to determine whether the student is adequately prepared to conduct the research. Because the department requires the student to have a proposal for their research in hand and to provide this proposal to the examining committee in advance of the examination, the student may receive constructive criticism of the proposal as part of feedback associated with the examination.

Specific procedures for the examination are as follows.

- The student, in consultation with the Thesis Advisor, identifies at least three Departmental faculty (with “Scientist” or “Professor” in their official titles, and with primary appointments in our Department), in addition to the Advisor, who are able to participate in the oral examination. One additional faculty members should be identified as alternate.
- Copies of a research proposal are to be circulated to all participating faculty **at least 2 weeks** in advance of the exam. The student should also arrange for a meeting room and multimedia equipment.
- Departmental Orals must be taken **at least one month** before the University Preliminary Oral Exam.
- 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 University 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.

### University Preliminary Oral Examination

The University Preliminary Oral Examination must be taken no later than the end of the student's third year in the Ph.D. program. However, it is preferable to have completed this examination by the end of the second year. Students must have taken the course 550.865.81 Public Health Perspectives on Research before taking the University Oral Exam. After a period of leave of absence or withdrawal, a student must be registered for a minimum of two quarters before taking the University 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 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 in the University. Note that one of those three can be another DIH faculty member. The senior faculty member from outside the student's major department will serve as the chair and must hold the rank of full or associate professor. One adjunct faculty or one scientist track faculty may serve on the committee, but may not serve as the chair or advisor. Two alternates should be identified. 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 and be from outside the Department of International Health.

The examination's 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 any research proposal. The examination is not meant to be a proposal defense; rather a research proposal permits the student to be questioned on areas of expertise and public health problems 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 University Preliminary Oral Examination twice will be terminated from the doctoral program.

For both the Departmental and University oral examinations, the student may need to begin polling faculty for dates/times that will be available a couple months in advance, as many faculty members have fixed teaching and travel commitments. **Paperwork for the school wide oral must be submitted one month prior to the date of the exam.** To complete the paperwork, students should meet with Carol Buckley.

**Advising and Exam Committee Composition by Faculty Rank**

	<b>Professor Track</b>	<b>Scientist Track</b>	<b>Adjunct</b>	<b>Other Part-Time Appointments</b>
<b>Advising Doctoral Students</b>	Yes	No	*	No
<b>Co-Advising Doctoral students</b>	Yes	Yes***	Yes***	Yes***
<b>Serving on Preliminary/Final Exams</b>	Yes	Yes**	Yes**	No

- \* Adjunct faculty may continue as a student’s advisor if the initial assignment as advisor occurred during his/her full-time faculty appointment. Adjunct faculty may not serve as newly appointed advisor
- \*\* Either one Scientist track or one Adjunct may serve on an exam committee, but not both
- \*\*\* Serving as co-advisor is permissible with Professorial Track faculty as other co-advisor.

Other Notes:

An advisor must have an active primary or joint appointment in the student’s department. Emeriti Professors may serve as doctoral advisors or as Chair of the exam committee. Although visiting faculty have full-time appointments, they may not serve as doctoral advisors. Sr. Research associates and research associates, Instructors, and non-faculty practitioners cannot be doctoral advisors, co-advisors or serve on exams.

**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. The Department expects students will meet with the DTC at least once per year during the course of thesis research. Student must get the Departmental Thesis committee to sign the Thesis Proposal Approval Form (see forms section) and return to Carol Buckley in room E8516.

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 in the preliminary oral examinations is meant to describe the study the student intends to carry out, it must necessarily be considered a presentation of a study, rather than a presentation of the study that will 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 University Preliminary Oral Examination;
- Gain written approval of thesis research protocol;
- Gain approval of thesis protocol from the Institutional Review Board (<http://phirst.jhsph.edu>), or the Committee on Animal Care and Use (<http://web.jhu.edu/animalcare/>).
- Carry out thesis research.
- Public oral and defense of thesis research.

Flexibility is allowed in following this sequence. Specifically, students are encouraged to gain approval for the research protocol earlier than indicated if attention to the protocol does not impair preparation for Departmental Written and University Preliminary Oral Examinations. Delays in gaining approval for 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](http://www.library.jhu.edu/services/cbo/guidelines.html) from the Sheridan Libraries Website located: <http://www.library.jhu.edu/services/cbo/guidelines.html>:

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 Institutional Review Board 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 who must be named as Principal Investigator of the IRB protocol.
- 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 all four program areas in the department will be based on primary data collection, as this is the primary research method in most behavioral science, epidemiologic, nutrition, 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. Doctoral theses in the health economics specialization of the Health Systems Program may be based on original data or on secondary data analysis or theoretical development. It should be noted that the level and depth of analytic skill, scientific rigor and innovative approaches 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](http://www.library.jhu.edu/services/cbo/guidelines.html) from the Sheridan Libraries Website: <http://www.library.jhu.edu/services/cbo/guidelines.html>). 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 journals. Appendices can be used to present additional analyses that allow for the review of the thesis by the 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. 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.

The Committee of Readers: An associate dean responsible for student academic affairs shall, upon recommendation of the student's Department Chair, approve a committee of four readers, including the student's thesis advisor, who serves as a departmental reader. The readers should be at the rank of Assistant Professor or higher. A minimum of three departments of the University, two being from the School of Public Health, must be represented. Two readers must be from the student's Department; however, with the approval of the Committee on Academic Standards, the Department may nominate an individual from outside the Department to replace a departmental reader. At least one reader must have neither a primary nor joint appointment in the student's Department.

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

Final Thesis must be submitted to the JHU Library, the JHSPH office, and to the Department of International Health. The Department of International Health accepts final theses as a PDF document or as a printed copy.

## **Bi-Annual Reviews**

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.

In addition, the advisor will write a brief report of student progress mid-way through the academic year. These reports will be presented and discussed at a Curriculum and Credentials Committee meeting and students not making adequate progress may receive letters of warning or requests for plans to move ahead with their programs. The Tracking Record, Student Narrative Progress Report and Advisor Reports will become part of the official student record maintained by the Academic Coordinator.

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.

## STUDENT INFORMATION

### Academic Ethics

The faculty and students of the School of Public Health have the joint responsibility for maintaining the academic integrity and guaranteeing the high standard of conduct of this institution.

An ethical code is based upon the support of both faculty and students who must accept the responsibility to live honorably and to take action when necessary to safeguard the academic integrity of this University.

Students enrolled in the School assume an obligation to conduct themselves in a manner appropriate to The Johns Hopkins University's mission as an institution of higher education. A student is obligated to refrain from acts which he or she knows, or under the circumstances has reason to know, impair the academic integrity of the University. Violations of academic integrity include, but are not limited to, cheating, plagiarism; knowingly furnishing false information to any agent of the University for inclusion in the academic records; falsification, forgery, alteration, destruction or misuse of official University documents or seal; violation of the rights and welfare of human subjects in research; violation of the welfare of animal subjects in research, falsification of research results; misconduct as a member of either School or University committees or recognized groups or organizations.

All members of the academic community are responsible for the academic integrity of the university. Students and faculty alike must work together to minimize the possibility of violations of academic integrity.

The faculty is responsible for the conduct of examinations, for announcing the ground rules for all work in a course at the beginning of the term in which the course is offered, and for the security of examination papers and teaching laboratories. Proctoring is at the discretion of the instructor.

A student with knowledge of any violation of academic integrity governed by the School of Public Health constitution has an obligation to report such violation, including the identity of the alleged violator(s) to the appropriate faculty member, one of the deans or to the Academic Ethics Board.

All members of the Johns Hopkins community are responsible for immediately informing the Academic Ethics Board of the School of Public Health of any suspected violations of its Constitution. The Ethics Board, composed of six students and four faculty members, is responsible for implementing its Constitution according to the procedures set forth therein. This includes formal hearings of suspected violations. Students and faculty should become familiar with the Constitution, copies of which can be obtained in the office of one of the deans responsible for student affairs.

To be approved for graduation, the student must have all outstanding charges of misconduct and violations of academic ethics resolved.

- The Code in its entirety can be found in the School-wide Student Handbook under Policy and Procedure Memorandum Students 1

**All students in the Department need to read and follow this code. Failure to adhere to the academic ethics code may result in dismissal from program, department and/or school.**

### Disability Support Services

The Johns Hopkins University does not discriminate on the basis of race, color, gender, religion, sexual orientation, national or ethnic origin, age, disability, marital status, or veteran status in any student program or activity administered by the University or with regard to admissions or employment. The University provides appropriate, necessary, and reasonable accommodation to qualified students, faculty, and staff who are disabled.

In accordance with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 (ADA), the University provides appropriate, necessary, and reasonable accommodation to qualified students who are disabled. When generally accessible facilities do not adequately accommodate a specific disability, the University makes program and/or facility adjustments as are reasonably necessary to assure individual access.

For individual-specific accommodations, individuals are required to provide from an appropriate professional diagnostician a comprehensive evaluation of their specific disability and recommended accommodations based upon their current level of functioning in an academic or employment setting. This documentation regarding students should be forwarded directly to the school's disability coordinator immediately after the school's offer of admission or as soon as student is enrolled. The University reserves the right to request additional information from an individual's health care provider, or a health care provider that it designates, to verify appropriate accommodations.

Costs for personal attendants, personally prescribed devices, and services for personal use or study are the responsibility of the disabled student, faculty, or staff member.

Questions regarding this policy should be referred to Betty Addison, the school's disability services director, who may be reached at 410-955-3034; fax 410-955-0464; email [dss@jhsp.h.edu](mailto:dss@jhsp.h.edu). The Office for Disability Services at the Bloomberg School of Public Health is located at 2017 East Monument St. Additionally, the University Affirmative Action Office is located on the Homewood Campus: 205 Garland Hall, 410-516-8075.

### **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 Cristina Salazar, the Academic Programs Administrator.

### **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 8<sup>th</sup> floor, room E8038. This room is available for use by all currently enrolled International Health students. The room is card accessible by way of your JHU ID badge. 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.

### **Course Waivers**

Waivers of requirements may be granted for credits earned in equivalent courses taken 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.

WAIVER PROCESS: Waiver requests should be addressed to the relevant Program Coordinator (Dr. Robinson for Health Systems, Dr. Moulton for GDEC, Dr. Winch for SBI and Dr. Christian for Human Nutrition) of the student's program area at least one month prior to the beginning of the term in which the course takes place 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, course syllabus, and transcript showing the grade earned in the course which is being substituted. Once the Program Coordinator has approved the request he/she will forward the email to the Chair of the Curriculum and Credentials Committee (Dr. Joanne Katz) and copy Cristina Salazar.

Once a waiver request is approved, a record of its approval will be noted in the students file on the student's 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.

## Guidelines for Student Employment

All the procedures and forms are posted online <https://my.jhsph.edu/sites/IH/student/default.aspx>

### Hours of Work and Overtime

Full-time students who work for Johns Hopkins Bloomberg School of Public Health may work a maximum of 19 hours per week during the term students are enrolled.

During periods of non-enrollment, (i.e., summer, spring break, etc.), student employees may work up to 40 hours per week. Students that wish to work over 40 hours per week are required to have it approved by the IH payroll *prior* to the work.

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

### Direct Deposit

Student employees on 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).

### Work-Study

Students employed under the Federal Work-Study (FWS) program during the 2014-15 academic year may also be employed as Teaching Assistants during the same period of FWS employment only with prior approval by the Department of International Health and by the FWS employment office. The Teaching Assistant employment status is the exception to the restricted crossover status related to FWS employment. Those students in FWS seeking to work as a TA must request approval from Amy Jones (Associate Director) in Financial Aid.

For additional information or specific inquiries, please contact Tomeka Chance (443- 287-8796; [tchance1@jhu.edu](mailto:tchance1@jhu.edu)) or Tanya Falls (410-614-6259; [tfalls@jhu.edu](mailto:tfalls@jhu.edu)) in the Department of International Health's Human Resources & Payroll Office.

## Teaching Assistantships

These are voluntary work agreements beyond the Teaching requirements (page 10). Students can start TA'ing for a wage but need instructor AND Department's approvals prior to starting work. For more information students must talk to the instructor and Cristina Salazar to fill out necessary forms.

## Leave of Absence

A Leave of Absence is an officially recognized inactive student status. This is an option available to students who are forced to take a temporary break from their program of study due to reasons beyond their control. There are specific criteria for determining if you are eligible for a LOA and it may have an impact on international student visa status, financial aid, and student employment. International students who are on LOA and are out of the United States for more than three months will have their I-20/DS2019 cancelled, and will have to request a new visa in order to come to the US again. It is important to review the LOA policy for information on the process to request a Leave of Absence.

Students requesting a LOA cannot be employed in a position where their work is related to their thesis.

Any requests for a change in status must be made in writing to the Department through the Academic Program Manager (Cristina Salazar). Once a written request for a change in status (i.e., leave of absence) is received, the student will be given a requisite form, which must then be signed by the student's advisor and other applicable persons, and must be approved by the Curriculum and Credentials (C&C) Committee. The C&C committee will review it and may ask for more information about the request. If approved, the Academic Program Manager will submit the Leave of Absence Requisite form to the Registrar's Office for final approval. When approved, students will pay \$50 per term for each term on leave.

## Parental Leave of Absence

Graduate students and postdoctoral fellows at the Johns Hopkins Bloomberg School of Public Health may request parental leave following the adoption or birth of a child. Parental leave applies to either parent. If both parents are graduate students and/or postdoctoral fellows in the School, both may request simultaneous parental leave.

This policy covers wages to graduate students and postdoctoral fellows who at the time of request for the leave are receiving stipend support from a training grant, departmental funds, Sommer Scholarship or other School scholarship. The policy also applies to wages for work that is directly related to their dissertation/thesis; postdoctoral fellows receiving either stipends or wages for work that is directly related to their research training are also covered by this policy. Wages for other types of employment or federal work-study are not covered under this policy. Students and fellows who receive such wages may take unsupported leave.

### Provisions

Parental leave shall include sixty calendar days of stipend/salary support\* and health insurance coverage. Stipend and health insurance support during parental leave will not be granted to those individuals who do not have such support provided to them at the time of the request for leave. Graduate students and postdoctoral fellows who receive loans must comply with his/her loan payback requirements.

Any leave requested longer than one term or sixty calendar days must be approved by the graduate student's or postdoctoral fellow's department, but shall be considered unsupported leave\*\*. Insurance premiums during unsupported leave will be the responsibility of the graduate student or postdoctoral fellow. However, the department, at its discretion, may continue to support the student or fellow, including providing for insurance premiums, if other funds are available.

The leave begins on the day the graduate student or postdoctoral fellow is no longer fully engaged in their professional and academic activities and, to the extent possible, should be requested in advance of a birth or adoption. Retroactive requests will be considered on a case-by-case basis.

### Procedures

1. A graduate student or postdoctoral fellow should notify the department at the earliest date possible of the intent to utilize the parental leave policy. The department is responsible for updating the payroll and tuition payment systems.
2. If the leave begins mid-term, the graduate student or postdoctoral fellow shall receive the grade of “Incomplete” for all courses and academic credits taken during the then current term; the graduate student or postdoctoral fellow will then be on leave of absence for the following term and is expected to officially change her/his registration status to “Leave of Absence.” The graduate student or postdoctoral fellow is responsible for making arrangements with each instructor to resolve a grade of incomplete; an incomplete grade, if unresolved, will become “F” after 120 days unless an extension of this time has been approved by the instructor and the registrar notified.
3. Any leave of absence exceeding 60 days shall be considered personal leave. In any event, only 60 calendar days of stipend/wages will be provided, whether the leave crosses two terms or covers only one term.

\* This policy is based on the NIH Grants Policy Statement “Subpart B: Terms and Conditions for Specific Types of Grants, Grantees and Activities” pertaining to the parental leave policy for National Research Service Awards (NRSA) awardees.

\*\* Students and Postdoctoral Fellows supported on NIH Training Grants must adhere to the NIH Policy on Unpaid leave, which states, “Individuals requiring extended periods of time away from their research training experience, that is, more than 15 calendar days of sick leave or more than 60 calendar days of parental leave, must seek approval for an unpaid leave of absence. Approval for a leave of absence must be requested in advance from the NIH awarding office. Fellows must provide a letter of support from the sponsor, countersigned by an AOO, and must advise the NIH awarding office of the dates of the leave of absence. Upon approval of the request, the NIH awarding office will issue a revised NRFA extending the ending date of the current budget period by the appropriate number of days or months of unpaid leave time. Recipients are precluded from spending award funds during the leave of absence.”

## Academic Advising

PhD 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. 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:

- describe the Department’s advising philosophy;
- provide answers to frequently asked questions;
- provide guidance on how the student and advisor can interact 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**

#### **Please refer to the Advisor/Advisee Meeting Guidelines on page 24**

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 PhD Academic Coordinator for their program also serves as a general 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. All course registrations must be approved by the advisor. 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 (at least once a term is recommended) and to identify a mechanism for advising while traveling either through email or by identifying a back-up advisor for periods of extended travel.

### **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 2<sup>nd</sup> term and again at the end of 4<sup>th</sup> term.

### **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.

### **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 2<sup>nd</sup> and 4<sup>th</sup> terms each year, all students will complete an Academic Advisor Evaluation Form and submit it to the departmental Academic Program Administrator (Cristina Salazar).

<h3><b>PhD Advisor/Advisee Meeting Guidelines</b></h3>
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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.

<b>Year One: First Term</b>	<b>Date</b>
Minimum of two meetings	
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	

<b>Year One: Second Term</b>	<b>Date</b>
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 thesis and non-thesis related research	
Follow up on plan set out in first term	
Complete registration forms for third and fourth terms	

<b>Year One: Third Term</b>	<b>Date</b>
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	

<b>Year One: Fourth Term</b>	<b>Date</b>
One or two meetings:	
Review 3 <sup>rd</sup> 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	

<b>Year Two: Terms One-Four</b>	<b>Date</b>
One or two meetings:	
Review transcripts	
Monitor student's progress; evaluate; discuss grades	
Continue discussions on research topics	
Encourage study groups for comprehensive examination if not taken the previous year	
Conduct non-thesis related research experience	
Begin and finalize preparation of thesis protocol document	
Prepare to take departmental and/or take university oral examinations	

<b>Years Three-Five</b>	<b>Date</b>
If not already completed in year two, finalize thesis research proposal	
Take departmental and university oral examinations	
Obtain IRB approvals for thesis research	
Conduct thesis research	
Prepare thesis document	
Defend thesis and conduct public seminar on results	

**Most important steps for all students:**

1. **Fill out the International Travel Checklist**
2. **Fill out the Travel to Countries with Travel Warnings Form (if necessary)**
3. **Register travel on the International Travel Registry at <https://travelregistry.johnshopkins.edu/Travel>**

As you prepare to take an overseas assignment you should take into account a few administrative, health, and safety issues before you leave the country. Keep in mind that when working overseas, even in the short-term, you need to be prepared before leaving the US in order to have a productive experience and avoid unnecessary health and safety risks. The Department of International Health has developed the attached checklist for you to complete prior to leaving the country to assist you in preparing for your assignment. **It is the responsibility of each student to complete and submit the completed checklist no later than THREE WEEKS prior to your departure for all overseas assignments. Students traveling to countries with Travel Warnings issued by the U.S. State Department must follow the procedure described in section B. Safety (2).** Copies of the checklist may be obtained from the Departmental Academic Coordinator or online at <http://goo.gl/Wsjcbc>. Here are instructions for you when traveling overseas:

**A. Administrative:**

(1) TRAVEL ORIENTATION – All students must take the CoursePlus International Travel Orientation here <https://courseplus.jhsph.edu/core/index.cfm/go/course.home/coid/5331/showvisitor/1/> during their first year of their degree. Students must complete all lectures, take the quiz, and participate in a LiveTalk session during the year.

(2) UNIVERSITY APPROVALS – Be sure that you have the requisite approvals from the University to initiate any overseas research. These include submission of the attached checklist, approval from your thesis committee for dissertation research (must be signed before collecting data) or approval from your advisor and Program Coordinator for the MSPH internship, and approval from the IRB for collecting data for research projects. Remember that for student research your advisor is the Principal Investigator, and she/he must approve the research and sign the forms. The IRB committee meets monthly, and it can take several months to get all of the IRB approvals finalized, so plan ahead accordingly. You may also need to have approval from the NIH to conduct your research overseas. The Office of Protection of Research Risks (OPRR) is the agency that grants such approvals. There is a special form that must be signed by dissertation committees for approval of thesis research. Post-hoc submission of these forms is not acceptable, and you run the risk of your research being deemed invalid, so you should take these precautions seriously. Conducting research on human subjects without IRB approval is a serious breach of ethical conduct.

(3) DEPARTMENTAL APPROVALS – All students must submit the International Health Travel Checklist prior to traveling. If a student is traveling to a country with a Travel Warning he/she must submit the Traveling to Countries with Travel Warning form at least three weeks prior to departure, to get approval from the Steering Committee (for more information see section B.2). Student must also include an evacuation plan if traveling with an outside organization or with faculty. Students cannot travel without this approval. All forms can be found here <http://goo.gl/Wsjcbc> and must be submitted to the Academic Programs Manager Cristina Salazar.

(4) REGISTERING TRAVEL – Once your travel plans are finalized and the plane tickets are purchased, the University requires that you register all your travel details online here <https://travelregistry.johnshopkins.edu/Travel>. Please make sure you add the emergency contact information and fill out the dates of your itinerary. If your itinerary changes throughout your trip, make sure you update your information online.

(5) TRAVEL DOCUMENTATION – You should assure that your travel documents are current and appropriate. Visas, if necessary, should be obtained well in advance of your travel. You can find out if a visa is required for

the country you will be visiting by calling the embassy of that country (most are in Washington), or by checking the web sites of most embassies. If you have a problem with getting a visa you will often fare better if you then go yourself to the embassy to have the visa processed. This is especially true if you hold a non-US passport. Remember also that you may need a visa for transit through some countries. Also, a tourist visa is often all you will need, but a business visa may give you extra time in-country and help you avoid additional fees if multiple visits are required. Your advisor can help you obtain a letter to submit with your visa application if that is required. You should also be sure that your passport will be valid for the full time that you will be away. Most countries require that your passport be valid for 6 months from the date of departure. Finally, be sure that you have return airline tickets well in advance of your trip. Do not travel with a one-way ticket, as you may be restricted from entering the country upon arrival, and you may have difficulty securing airline tickets while away.

(6) HOST COUNTRY APPROVALS – Be sure that you have the necessary approvals from the host country to travel and conduct research. Many host country governments have agencies that must approve all foreign research projects. To check on this you should consult with your advisor, as well as with your host country collaborators. These approvals often take considerable time, so be sure to plan ahead. You should also be sure that the host-country collaborating agency has granted you approval. It is good to get this in writing. Be sure that they know the scope of your work in-country, your travel dates, where you will stay while there, and who they can contact if a problem develops. Take care to set your travel dates to accommodate your collaborators. If you are not sensitive to their schedules you run the risk of getting a low level of support while you are on travel status.

## **B. Safety**

(1) CRIME – Crime is a serious problem for persons traveling. It is recommended that you not carry or display large amount of cash when traveling. Use a money belt to store your money and valuables. Store valuables (including your airline tickets, credit cards, money, passport, and travelers checks) in the hotel safe, or other secure location if a safe is not available. Check with your local collaborators about risky situations and areas to avoid. If you are robbed do not resist – give them your money and valuables. It is always better to replace them than risk physical harm. Report such events to the police immediately. You should also make a photocopy of your passport and store it separate from your passport. This can be very helpful if you lose your passport. If you need to keep identification on you, use the photocopy of the passport with your driver's license. It is also helpful to make photocopies of your credit cards, passport, and travelers check receipts and leave them with someone you can contact back home. This will facilitate replacement if they are lost or stolen.

(2) TERRORISM AND CIVIL CONFLICT – Check before you leave the country with the State Department ([http://travel.state.gov/travel/cis\\_pa\\_tw/tw/tw\\_1764.html](http://travel.state.gov/travel/cis_pa_tw/tw/tw_1764.html)) to see about safety in the country you are traveling to. If you are traveling for a school related activity (including a practicum requirement with an organization or a faculty member, or for your doctoral thesis research), to a country that has a Travel Warning from the US. State Department, you must follow the following procedure:

1. Complete the International Travel Checklist
2. Complete the Countries with Travel Warnings Checklist
3. Obtain an evacuation plan or a safety plan from the organization or faculty member you will be working for in said country.
4. Make a photocopy of your passport, health insurance card, and student ID card

Submit all the paperwork to Cristina Salazar (E8518) at least THREE WEEKS in advance. This material will be reviewed by the Steering Committee and will have to be approved by the International Health Department Chair, Dr. David Peters, before you commence travel.

Register with the US embassy and/or your home embassy if you are a 3<sup>rd</sup> country national (if working on a US sponsored project 3<sup>rd</sup> country nationals should register with the US embassy) when you arrive. If you have any problems you should contact the embassy. This includes for problems with health, safety, or civil conflict. You should also contact your advisor and family if you have any problems. Use common sense in your dealings,

and avoid association with persons who may place you at risk, or cause you to be a target for terrorism or police harassment.

(3) CONTACT INFORMATION – It is important that you leave your contact information with your family and your advisor. Also, be sure to leave your family's contact information with your advisor, and vice versa. If you are out of town while away be sure to let your advisor and family know. It is quite common for students to leave town for trips and people at home are unable to reach them, generating significant worry and concern among your family and colleagues. You should also leave behind the name and contact information of your colleagues you are working with, and let them know how to contact you when you are in-country in the event of an emergency.

### C. Health

(1) VACCINATIONS – Be sure that you have obtained relevant vaccinations prior to travel. To ascertain which vaccinations you need you should consult with a travel medicine specialist. There is a travel medicine clinic on campus, and many HMO (such as Kaiser) have travel medicine offices. You can also consult the CDC website for recommendations of appropriate vaccines. Many vaccinations require a series of injections or oral medications, so plan ahead to assure that you are properly vaccinated. When traveling to areas with malaria you should secure a prescription for malaria prophylaxis medications. One of the most serious health risks you face is from malaria, and it can be lethal. Take such medications as recommended, and take the full course – which usually requires that you take them for a full four weeks upon your return. If you get a high fever, severe headache, or flu-like symptoms upon return from a malaria zone be sure to go to the doctor immediately, as this can be a sign of malaria. Prompt treatment is imperative to avoid serious health consequences. Other vaccinations that are often needed include tetanus, measles, polio, rabies, Hepatitis A, Hepatitis B (especially if you are sexually active or work with biologic samples or blood), Japanese Encephalitis, and yellow fever. Note that entry into some countries requires a yellow fever vaccination, which must be recorded on a yellow form provided by the WHO. There are only certain places you can obtain these, so plan ahead. In some countries in Africa if you arrive without the yellow fever vaccination card you will be vaccinated upon entry, which carries some risk of contamination with unsterile equipment. Consult with a travel medicine specialist well before departing. **The student health plan offered by the School does not cover the cost of these immunizations.**

(2) INFECTIOUS DISEASES – Take care with what you eat and drink to avoid food-borne contamination. It is advisable that you consult the CDC website to get advice on how to avoid food and drink borne infections. You may also want to carry a supply of an antibiotic (such as ciprofloxacin), which your travel doctor can give you before you go. Be sure to get instructions on when to take these, as well as how to take them. You should also be very careful with the water and drinks that you consume. It is advisable to drink bottled water in which you see the sealed bottle. Do not request ice in drinks. Be careful of fruit juices which are often contaminated or which have had water added to them. Note also that table condiments, such as chili sauce, are also often a source of contamination. It is also very important that you take extreme care to avoid a sexually transmitted infection, including HIV. If you will be sexually active you should use a condom for all sexual contact, oral, vaginal, or anal. You may want to carry condoms with you as a source of condoms may be difficult to find. Take care that the condoms are stored correctly (not in heat) and that they are not expired. The best way to avoid a sexually transmitted disease is to avoid sexual contact.

(3) ACCIDENTS – This is probably the most likely health risk that you face, especially traffic accidents. Avoid traveling by car at night, especially on long-distance highways. When you travel by car use a seatbelt (even if others do not), and tell the driver to slow down if you feel unsafe. It is always much better to risk social embarrassment to avoid an accident, so do not be shy about asserting your desire to have a driver go slower. You may want to establish a maximum driving speed before you depart. You should also tell the driver to avoid passing (overtaking) if you feel that he/she is being unsafe. It is also advisable to carry a first aid kit. If an accident does occur seek medical care quickly. If you wait too long you risk serious health consequences. It is suggested that you get and read "When there is no doctor" before you travel. This is an excellent resource on travel health issues for developing countries. It is especially important that you avoid unsterile needles and syringes. In many cases you can request to purchase a new needle or syringe, or have someone with you do so. Note also that the US embassy maintains a list of medical providers in most countries. If you need medical

care you may want to contact the embassy. You should also get word back to your advisor and family if an accident occurs.

(4) INSURANCE – You should check to be sure that your health insurance will cover you when you are overseas. You should also consider getting evacuation insurance (such as International SOS which has an inexpensive student policy). This type of insurance will assist you in seeking quality medical care, and in evacuating you should a serious problem arise. Please note the conditions under which your insurance plan will or will not reimburse you for overseas costs. Sometimes you may need to notify your insurance provider within a certain time frame of seeking care in order to be reimbursed.

(5) DENTAL – If you will be overseas for an extended time be sure to have a dental check up prior to leaving. You should avoid dental care in many developing countries.

(6) MEDICATIONS – Be sure to carry an adequate supply of required medicines with you. You may not be able to get them while traveling.

### **Final Note**

Please take these common sense precautions seriously. With a little care and planning you can have a safe and enjoyable experience overseas. Realize that each country is unique and has special issues that should be attended to. Your advisor, and others who have traveled regularly to the country you are visiting, can help you plan for your trip accordingly. Note also that this list of recommendations is cursory and will not cover all events that may occur. Plan ahead, be careful, follow the advice of colleagues, and do not be shy about advocating for your health and safety. It can also be helpful to contact students who have worked in that country or with the organization you will be working with as they may have additional advice and useful tips for you. They can also help you budget by giving you cost of living information.

### **Internet Resources for Traveling Abroad:**

[http://travel.state.gov/travel/cis\\_pa\\_tw/safety/safety\\_2836.html](http://travel.state.gov/travel/cis_pa_tw/safety/safety_2836.html) – US State Department Travel Information

<http://wwwn.cdc.gov/travel/default.aspx>– CDC’s “Traveler’s Health” site. Useful information on health issues, and warnings by country.

<http://phirst.jhsph.edu/>– JHU Institutional Review Board. Includes forms for applying for approval.

<http://www.internationalsos.com/> – Low cost travel evacuation insurance company offered by JHU.

[http://travel.state.gov/travel/cis\\_pa\\_tw/tw/tw\\_1764.html](http://travel.state.gov/travel/cis_pa_tw/tw/tw_1764.html) US State Department Current Travel Warnings

<http://www.travelhealthresource.com/clinics/MARYLAND.asp> List of most travel clinics in Maryland

# GLOBAL DISEASE EPIDEMIOLOGY AND CONTROL

Ph.D. Program Coordinator: Lawrence Moulton

## Requirements for Admission

Applicants 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 under-served populations. Graduates will have a fundamental understanding of the pathogenesis, epidemiology, and control measures applicable to diseases of public health importance in disadvantaged populations throughout the world. 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	Amita Gupta	Luke Mullany
Chris Beyrer	Neal Halsey	Kenrad Nelson
Robert Black	Laura Hammitt	Kate O'Brien
Richard Chaisson	Ruth Karron	Thomas Quinn
Chris Coles	Joanne Katz	Bradley Sack
Anna Durbin	Margaret Kosek	David Sack
Christine Marie George	Alain Labrique	Daniel Salmon
Robert Gilman	William Moss	Mathuram Santosham
Jonathan Golub	Lawrence Moulton	Jonathan Zenilman

## Global Disease Epidemiology and Control Course Requirements

All required courses must be taken for a letter grade with the exception of courses only offered for pass/fail.

Course no.	Course title	Term	Credits
<b>General</b>			
220.605-06	Doctoral Seminar in International Health I & II	1 & 2	3
223.840	Special Studies & Research GDEC: Education Prog. Development	1	1
550.865.81	Public Health Perspectives on Research	2	2
223.861	Doctoral Global Disease Epidemiology and Control Seminar	1 – 4	1
	Introduction to Online Learning ( <a href="http://distance.jhsph.edu/iol">http://distance.jhsph.edu/iol</a> )		
<b>Ethics</b>			
550.860.82	Academic and Research Ethics	1	0
550.600 <b>OR</b>	Responsible Conduct of Research	1	1
306.665	Research Ethics & Integrity: US & International Issues	3	3
CITI Training <a href="http://www.jhsph.edu/offices-and-services/institutional-review-board/Training.html">http://www.jhsph.edu/offices-and-services/institutional-review-board/Training.html</a>			
<b>International Health</b>			
223.663	Infectious Diseases and Child Survival	3	3
223.680	Global Disease Control Programs and Policies <sup>4</sup>	4	4

<b>Biostatistics, choose one of the following series for a total of 16 units:</b>			
140.621 – 4	Statistical Methods in Public Health I – IV	1 – 4	4
140.651 – 4	Methods in Biostatistics I – IV	1 – 4	4
<b>Epidemiology</b>			
340.751 – 3	Epidemiologic Methods 1 – 3	1 – 3	5
<b>choose one of the following courses:</b>			
223.705.81	Clinical Vaccine Trials and Good Clinical Practice (internet only)	4	4
223.664	Design and Conduct of Community Trials	3	4
<b>Environmental Health, choose one of the following courses:</b>			
180.602	Environment and Health in Low and Middle Income Countries (recommended)	3	2
180.611	The Global Environment and Public Health	1	4
182.626	Issues for Water and Sanitation in Tropical Environmental Health	3	2
<b>Social and Behavioral Sciences, choose one of the following courses:</b>			
410.620	Program Planning for Health Behavior Change <sup>4</sup>	1	3
224.689	Health Behavior Change at the Individual, Household And Community Lvl's	2	4
410.650	Introduction to Persuasive Communications: Theories and Practice	2	4
410.651	Health Literacy: Challenges and Strategies For Effective Communication	3	3
410.630	Implementation and Sustainability of Community-based Health Prog.	4	3
<b>Nutrition, choose one of the following courses:</b>			
222.642	Assessment of Nutritional Status	2	3
222.647	Nutritional Epidemiology	3	3
222.655	Nutrition and Life Stages	3	3
222.649	International Nutrition	4	3
223.665.81	Infection, Immunity, and Undernutrition: Interactions and Effects (Internet only)	3	4

<b>Vaccines, choose one of the following courses:</b>			
223.662	Vaccine Development and Application	2	4
223.687	Vaccine Policy Issues	3	3
223.689	Biological Basis of Vaccine Development	4	3
<b>Population/Family Planning, choose one of the following courses:</b>			
380.600.81	Principles of Population Change (online only)	2	4
380.603	Demographic Methods for Public Health <sup>3</sup>	2	4
380.753	Dynamics of Population Aging	3	3
380.758	Demographic Estimation for Developing Countries	4	4

<sup>2</sup> This course is also offered online 2<sup>nd</sup> term

<sup>3</sup> This course is also offered online 3<sup>rd</sup> term

<sup>4</sup> This course is also offered online 4<sup>th</sup> term

The foregoing requirements represent the minimum common core courses for GDEC students. Depending on a student's background and interests, it may be advisable to attain further expertise in an area. For example, many students obtain a concurrent MHS in Biostatistics.

Students are encouraged to take advantage of offerings in other schools of the University. The Institute of the History of Medicine in the School of Medicine is a unique resource; the courses most relevant to GDEC students are: History of International Health and Development, and History of Health and Development in Africa (<http://www.hopkinshistoryofmedicine.org/content/course-descriptions>)

\*For Program Competencies see page 50

## HEALTH SYSTEMS PROGRAM

Ph.D. Program Coordinator: Courtland Robinson

### Requirements for Admission

Applicants must have a prior degree in biological or health sciences, or alternatively in management or social sciences. Prior international or health systems experience is a significant advantage.

### 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 health systems research and practice, particularly in low- and middle-income country settings. Graduates of the PhD program in Health Systems should have the competencies to play leadership roles in: (a) health policy; (b) health planning, financing, and management; (c) monitoring and evaluation; (d) institution building and community development; (e) public health teaching; and (f) research on health systems; in low and middle-income countries or with disadvantaged populations in any part of the world.

### Overall Program Goal

There are four overarching academic competencies applicable to each area of study, that students are expected to master during the course of their doctoral program. Students should be able to:

- Apply public health sciences to address health problems in vulnerable populations
- Provide leadership in health systems management and analysis
- Conduct independent research on health systems in low- and middle-income countries and vulnerable populations
- Communicate effectively with researchers, policy makers, and key stakeholders in health systems

### Advising Faculty

Abdullah Baqui  
Sara Bennett  
Stan Becker  
Kavi Bhalla  
David Bishai  
William Brieger  
Gilbert Burnham  
Shannon Doocy  
Azadeh Farzin  
Asha George  
Adnan Hyder  
Tom Kirsch

Alain Labrique  
Maria Merritt  
David Peters  
Krishna Rao  
William Reinke  
Courtland Robinson  
Mathuram Santosham  
Alan Sorkin  
Kent Stevens  
Antonio Trujillo  
Alex Vu

### Health Systems Course Requirements

All required courses must be taken for a letter grade with the exception of courses only offered for pass/fail. 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.

## Required Courses

Course No.	Course Title	Term	Credits per term
<b>Program Requirements</b>			
220.605-06	Doctoral Seminar in International Health I & II	1 & 2	3
221.602	Applications to Managing Health Services Organizations in Low and Middle Income Countries	1	3
221.646**	Health Systems in Low and Middle Income Countries <sup>2</sup>	2	3
221.638	Health Systems Research and Evaluation in Developing Countries	3	4
221.620*	Using Summary Measures of Population Health to Improve Health Systems <sup>4</sup>	4*	4
	Introduction to Online Learning ( <a href="http://distance.jhsph.edu/iol">http://distance.jhsph.edu/iol</a> )		

<b>Research Methods</b>			
<b>Biostatistics, choose one of the following series (a total of 16 units):</b>			
140.621 – 4	Statistical Methods in Public Health	1 – 4	4
140.651 – 4	Methods in Biostatistics	1 – 4	4
<b>Epidemiology</b>			
340.751 – 2	Epidemiologic Methods 1 – 2	1 – 2	5
<b>Seminars</b>			
550.865.81	Public Health Perspectives on Research	2	2
221.860	Health Systems Program Seminar	1 – 4	1
221.861	Doctoral Seminar in Health Systems	3 & 4	1
<b>Ethics</b>			
550.860.82	Academic and Research Ethics (internet only)	1	0
550.600 OR	Responsible Conduct of Research	1	1
306.665	Research Ethics and Integrity: US or International Issues	3	3
CITI Training <a href="http://www.jhsph.edu/offices-and-services/institutional-review-board/Training.html">http://www.jhsph.edu/offices-and-services/institutional-review-board/Training.html</a>			

\* PhD students must take the on-campus version only.

\*\* PhD students may take the on-campus or online version

**Fifteen (15) 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.

## General Elective Courses

Course No.	Course Title	Term	Credits per term
<b>Health Systems Management</b>			
221.722	Quality Assurance Management Methods for Developing Countries	1	4
312.617	Fundamentals of Financial Accounting	1	3
551.603.81	Fundamentals of Budgeting & Financial Management (online only)	1,2,3	3
551.604	Quantitative Tools for Managers	2	3
551.610	Foundations of Leadership: A Leadership Survey Course	2, 3	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
312.621	Strategic Planning	3, 4	3
312.633.81	Health Management Information Systems (Internet only)	3, 4	3
<b>International Health Topics</b>			
221.613	Introduction to Humanitarian Emergencies	1	2
180.620.81	Food Production, Public Health, and the Environment (Internet only)	2	4

221.612	Confronting the Burden of Injuries: A Global Perspectives <sup>2</sup>	2	3
221.627	Issues in the Reduction of Maternal and Neonatal Mortality in Low and Middle Income Countries	2	4
221.637.81	Health Information Systems (Internet only)	2	3
221.639	Refugee Health Care <sup>1</sup>	2	3
224.689	Health Behavior Change At Individual, Household and Community Levels	2	4
182.626	Issues for Water and Sanitation in Tropical Environmental Health	3	2
221.635	Advances in Community-Oriented Primary Health Care <sup>3</sup>	3	4
410.610	Health and Homelessness	4	3
221.616	Ethics of Public Health Practice in Developing Countries	4	2
221.624.81	Urban Health in Developing Countries (Internet only)	4	3
221.661	Project Development for Primary Health Care in Developing Countries	4	4
<b>Health Policy</b>			
300.600.81	Introduction to Health Policy (Internet only)	1	4
300.711	Health Policy I: Social and Economic Determinants of Health Policy	1	3
221.614	International Political Science for Public Health Practitioners	2	2
300.712	Health Policy II: Public Health Policy Formation	2	3
308.610	The Pol. Econ. of Social Inequalities and Consequences for Quality of Life	3	3
221.650	Health Policy Analysis in Low and Middle Income Countries	3	3
223.687	Vaccine Policy Issues	3	3
300.652	Politics of Health Policy	3	4
300.713	Research and Evaluation Methods for Health Policy	4	4
300.714	Health Policy Analysis & Synthesis	3	3

**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.

### Research/Analytic Methods Electives

Course No.	Course Title	Term	Credits per term
<b>Quantitative Methods</b>			
140.646	Essentials of Probability & Statistical Inference I : Probability	1	4
330.657	Statistics for Psychosocial Research: Measurement <sup>1</sup>	1	4
340.728	Advanced Methods for Design and Analysis of Cohort Studies	1	4
140.647	Essentials of Probability & Statistical Inference II: Statistical Inference	2	4
340.753	Epidemiologic Methods <sup>3</sup>	3	5
340.606	Systematic Reviews & Meta-Analysis	3	6
340.715	Problems in the Design of Epidemiologic Studies	4	4
340.754	Methodologic Challenges in Epidemiologic Research	4	5
<b>Health Systems Research &amp; Evaluation</b>			
309.712	Assessing Health Status & Patient Outcomes	2	3
309.715	Advanced Methods in Health Services Research: Research Design	2	4
340.717	Health Survey Research Methods	2	4
380.711	Issues in Survey Research	3	3
223.664	Design and Conduct of Community Trials	3	4
380.712	Methods of Analysis of Large Population Surveys	4	3
<b>Qualitative Methods</b>			
410.710	Concepts in Qualitative Research for Social & Behavioral Sciences	2	3
224.690	Qualitative Research Theory and Methods	3	5
224.691	Qualitative Data Analysis	4	5

224.692	Formative Research for Behavioral & Community Interventions	4	4
<b>Methods in Specific Topics</b>			
305.612	Epidemiologic Methods in Injury Control	2	3
222.647	Nutrition Epidemiology	3	3
305.613	Design and Evaluation of Community Health & Safety Interventions	3	4
221.641	Measurement Methods in Humanitarian Emergencies	2	2
221.644	Econometric Methods for Evaluation of Health Programs	4	4
380.750	Migration and Health: Concepts, Rates and Relationships	3	3
<b>Health Economics</b>			
313.641, 644	Health Economics I & II	2 – 3	3
313.631-2	Economic Evaluation II & III	3 – 4	4 – 3
221.644	Econometric Methods for Evaluation of Health Programs	4	4
380.756	Poverty, Economic Development and Health	2	4
221.652	Health Financing in Low and Middle Income Countries	3	3

<sup>1</sup> This course is also offered online 1<sup>st</sup> term

<sup>2</sup> This course is also offered online 2<sup>nd</sup> term

<sup>3</sup> This course is also offered online 3<sup>rd</sup> term

<sup>4</sup> This course is also offered online 4<sup>th</sup> term

\*Detailed Program Competencies are in page 55

# HUMAN NUTRITION

Program Coordinator: Parul Christian

## Requirements for Admission

The program seeks to attract and train future experts and leaders in public health nutrition across a range of professional interests and backgrounds. Entry into the doctorate in philosophy (PhD) program in Human Nutrition requires, at a minimum, a bachelor's degree or its equivalent, preferably in nutritional, biological, food health or social sciences, public health practice, food security, economics or health policy with a minimum of one year of post-baccalaureate experience which can take the form of a master's degree, a dietetic internship, medical training or other relevant work experience.

## 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.

### Overall Program Goal

There are five overarching academic competencies, applicable to each area of study, that students are expected to master during the course of their doctoral program. Students should:

- Understand the biochemical, molecular, epidemiological, social and behavioral fundamentals of human nutrition
- 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

Students in the doctoral program in Human Nutrition are expected to gain knowledge and master skills in the following broad content areas of the curriculum, each with sub-areas of specialization:

### 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 core competencies that can be addressed in a flexible manner, and in consultation with a student's academic advisor.

Learning Objectives: Know and understand:

- Nutritional processes in each stage of life
- Age-, 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 application of evidence-based food and nutrition policies

### Biochemistry and Metabolism

*Sub-areas: Nutrient 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:

- Biochemical and metabolic pathways of macronutrients and micronutrients
- Relationship between cell structure and metabolism and nutrient functions
- Genetic basis of nutritional interactions and requirements

## 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

## 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.

<h3>Advising Faculty</h3>
---------------------------

Robert Black  
Benjamin Caballero  
Laura Caulfield  
Parul Christian  
Christian Coles  
Joel Gittelsohn

Jean Humphrey  
Kristen Hurley  
Jessica Jones-Smith  
Sameera Talegawkar  
Keith P. West Jr.

<h3>Requirements</h3>
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Students are expected to take 6 quarters and at least 96 credits of coursework to satisfy the educational requirements, pass a written and an oral comprehensive exam, a final oral defense 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 courses 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.

### Human Nutrition (HN) Course Requirements

All required courses must be taken for a letter grade with the exception of courses only offered for pass/fail.

#### Nutrition and Health: Required

Course No.	Course Title	Term	Credits per term
222.641.60	Principles of Human Nutrition in Public Health	1	4
222.657	Food and Nutrition Policy	1	2
222.655	Nutrition and Life Stages	3	3
222.654	Food, Culture and Nutrition	4	4

#### Nutrition and Health: Suggested Electives

Course No.	Course Title	Term	Credits per term
222.XXX	Introduction to Obesity in Public Health	3	3
223.665.81	Infection, Immunity and Undernutrition: Interactions and Effects	3	4
222.649	International Nutrition	4	3
410.675	Critical Analysis of Popular Diets & Dietary Supplements	4	3
222.652.81	Nutrition in Disease Treatment and Prevention (online)	4	3
221.611	Food/Nutrition and Livelihood in Humanitarian Emergencies	4	2

#### Biochemistry and Metabolism: Required

Course No.	Course Title	Term	Credits per term
222.644	Nutritional Biochemistry	1	3
222.651	Advanced Nutrient Metabolism	2	3

#### Research Methodology: Required

Course No.	Course Title	Term	Credits per term
<b>Biostatistics, choose one of the following series (a total of 16 credits):</b>			
140.621 – 4	Statistical Methods in Public Health I-IV	1 – 4	4
140.651 – 4	Methods in Biostatistics I-IV	1 – 4	4
<b>Epidemiology, choose one of the following:</b>			
340.751 – 3	Epidemiologic Methods I-III	1 – 3	5
340.601	Principles of Epidemiology	1	5
<b>Research Methods</b>			
222.861	Doctoral Seminar in Proposal Development	1 – 4	4
222.642	Assessment of Nutritional Status	2	3
222.647	Nutrition Epidemiology	3	3

#### Research Methods: Suggested Electives

Course No.	Course Title	Term	Credits per term
140.641	Survival Analysis I	1	3
340.717	Health Survey Research Methods	2	4
340.608	Observational Epidemiology <sup>3</sup>	2	4
140.655	Analysis of Longitudinal Data	3	4
223.664	Design and Conduct of Community Trials	3	4
224.690	Qualitative Research Theory and Methods	3	5
313.631 – 2	Economic Evaluation I - II	3 – 4	4 – 3
224.691	Qualitative Data Analysis	4	5
224.692	Formative Research for Behavioral and Community Interventions	4	4

### Professional Skills: Required

Course No.	Course Title	Term	Credits per term
222.840	Special Studies & Research in HN: Educational Program Development	1	1
222.658-9	Critical Thinking in Nutrition I – II	1 – 2	1
550.865.81	Public Health Perspectives on Research	2	2
222.860	Graduate Nutrition Seminar	1 – 4	1
222.840	Special Studies & Research in HN: General	1 – 4	
	Introduction to Online Learning ( <a href="http://distance.jhsph.edu/iol">http://distance.jhsph.edu/iol</a> )		
<b>Ethics</b>			
550.860.82	Academic and Research Ethics (internet only)	1	0
550.600 <b>OR</b>	Responsible Conduct of Research	1	1
306.665	Research Ethics and Integrity: US or International Issues	3	3
CITI Training <a href="http://www.jhsph.edu/offices-and-services/institutional-review-board/Training.html">http://www.jhsph.edu/offices-and-services/institutional-review-board/Training.html</a>			

### Other Suggested Electives

Course No.	Course Title	Term	Credits per term
<b>International Health and Disease</b>			
220.605-6	Doctoral Seminar in International Health	1 – 2	3
220.601	Introduction to International Health <sup>4</sup>	1	4
221.627	Issues in the Reduction of Maternal and Neonatal Mortality in Low and Middle Income Countries	2	4
223.663	Infectious Diseases and Child Survival	3	3
223.680	Global Disease Control Programs and Policies <sup>4</sup>	4	4
<b>Population, Behavior, and Health</b>			
380.641	Prenatal and Infant Growth and Development	1	3
380.604	Life Course Perspectives on Health <sup>1</sup>	1	4
380.600.81	Principles of Population Change (online only)	2	4
224.689	Health Behavior Change At The Individual, Household And Community Levels	2	4
380.642	Child Health and Development	2	3
380.611	Fundamentals of Program Evaluation	3	4
380.623	Adolescent Health and Development <sup>3</sup>	3	3
<b>Environmental Health</b>			
187.610	Public Health Toxicology <sup>2</sup>	1	4
180.601.81	Environmental Health (internet only)	3	5
182.640	Food and Water Borne Diseases	3	3
<b>Management Sciences</b>			
551.603.81	Fundamentals of Budgeting and Financial Management (online)	1,2,3	3

### Thesis Registration

Course No.	Course Title	Term	Credits per term
222.820	Thesis Research Human Nutrition	1 – 4	

<sup>1</sup> This course is also offered online 1<sup>st</sup> term

<sup>2</sup> This course is also offered online 2<sup>nd</sup> term

<sup>3</sup> This course is also offered online 3<sup>rd</sup> term

<sup>4</sup> This course is also offered online 4<sup>th</sup> term

\*For Program Competencies see page 59

## SOCIAL AND BEHAVIORAL INTERVENTIONS

PhD Program Coordinator: Pamela Surkan

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

### Advising Faculty

William Brieger  
David Celentano (Joint)  
Larry Chang (Joint)  
Julie Denison

Joel Gittelsohn  
Steven Harvey  
Larissa Jennings  
Caitlin Kennedy

Deanna Kerrigan (Joint)  
Pamela Surkan  
Tonia Poteat  
Peter Winch

### 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 meets the 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 1<sup>st</sup> 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 the student's advisor, and the student should meet with his/her advisor to discuss the plan. The SBI faculty will hold a 2-hour meeting on course selection on the first day of registration, then a day-long orientation session for incoming MSPH and PhD students on the day before the first term. During these two sessions, faculty will 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. Winch for approval. Requests for changes to the approved course plan should be submitted to Dr. Winch 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 Social and Behavioral Sciences through Nutrition 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/](http://webapps.jhu.edu/jhuniverse/academics/online_catalogs/).

\*For Program Competencies see page 64

## SBI CURRICULUM

All required courses must be taken for a letter grade with the exception of courses only offered for pass/fail.

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

Course No.	Course Title	Term	Credits/term
220.605-6	Doctoral Seminar in International Health	1 & 2	3
340.601 <b>AND</b>	Principles of Epidemiology	1	5
340.608 <b>AND</b>	Observational Epidemiology <sup>3</sup>	2	4
340.769 <b>AND</b>	Professional Epidemiology Methods	3	4
340.770	Public Health Surveillance	4	3
<b>OR</b>			
340.751 <b>AND</b>	Epidemiologic Methods I	1	5
340.752 <b>AND</b>	Epidemiologic Methods II	2	5
340.753	Epidemiologic Methods III	3	5
<b>OR</b>	This option requires advanced permission from Program Director		
340.601 <b>AND</b>	Principles of Epidemiology	1	5
340.XXX <b>AND</b>	Advanced Epi course*	2	TBD
340.XXX <b>AND</b>	Advanced Epi course*	3	TBD
340.XXX	Advanced Epi course*	4	TBD
	Introduction to Online Learning ( <a href="http://distance.jhsph.edu/iol">http://distance.jhsph.edu/iol</a> )		
<b>Biostatistics, choose one of the following series (a total of 16 credits):</b>			
140.621 – 4	Statistical Methods in Public Health I-IV	1 – 4	4
140.651 – 4	Methods in Biostatistics I-IV	1 – 4	4

\* examples are 340.666, 340.705, and 340.717. If taken to satisfy this requirement, it cannot count as part of the requirement for courses in Research Design and Methods below

## B. SBI Program Core Requirements

These nine 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.

Course No.	Course Title	Term	Credits/term
224.840	Special Studies: Educational Program Development	1 or 2	2
330.657	Statistics for Psychosocial Research: Measurement <sup>1</sup>	1	4
140.658	Statistics for Psychosocial Research: Structural Methods	2	4
224.863 – 4	Doctoral Seminar on Res Meth in Applied Med Anthropology	1 – 2	4
224.860 – 2	SBI Program Seminar I – III	1 – 3	1
224.689	Health Behavior Change At The Individual, Household And Community Levels	2	4
224.690	Qualitative Research Theory and Methods	3	5
224.691	Qualitative Data Analysis	4	5
224.692	Formative Research for Behavioral & Community Interventions	4	4

## C. School-wide Doctoral Requirements

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.

Course No.	Course Title	Term	Credits/term
550.865.81	Public Health Perspectives on Research	2	2
550.860.82	Academic and Research Ethics (internet only)	1	0
306.665 <b>OR</b>	Research Ethics and Integrity: US and International Issues	3	3
550.600	Responsible Conduct of Research	1	1
<b>AND CITI Training</b> <a href="http://www.jhsph.edu/offices-and-services/institutional-review-board/Training.html">http://www.jhsph.edu/offices-and-services/institutional-review-board/Training.html</a>			

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.

#### **D. Research Design and Methods (7 credits)**

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 social network analysis, or survey research, and (c) gain a working knowledge of how to appropriately evaluate a social or behavioral intervention.

Course No.	Course Title	Term	Credits/term
410.733	Communication Network Analysis in Public Health Programs	1	4
340.666	Foundations of Social Epidemiology	2	3
340.705	Advanced Seminar in Social Epidemiology	3	3
340.717	Health Survey Research Methods	2	4
380.603	Demographic Methods for Public Health <sup>3</sup>	2	4
223.664	Design and Conduct of Community Trials	3	4
140.640	Statistical Methods for Sample Surveys	3	3
410.615	Research Design in the Social and Behavioral Sciences	3	3
380.611	Fundamentals of Program Evaluation	3	4
380.711	Issues in Survey Research Design	3	3
309.616-7.81	Intro Methods for Health Services Res & Eval I – II (online only)	3 - 4	2
221.645	Large-Scale Effectiveness Evaluations of Health Programs <sup>4</sup>	4	3
380.612	Applications in Program Monitoring and Evaluation	4	4
380.712	Methods in Analysis of Large Population Surveys	4	3

#### **E. Social and Behavioral Sciences (12-16 credits)**

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. This list is not comprehensive. Other courses in social and behavioral sciences offered in the School of Public Health, the School of Arts and Sciences or elsewhere in the university could be substituted with permission of the PhD Program Directors.

Course No.	Course Title	Term	Credits/term
410.612	Sociological Perspectives on Health	1	3
313.641, 644	Health Economics I – II	2 – 3	3 – 3
410.650	Intro to Persuasive Communications: Theories & Practice	2	4
221.605	History of International Health and Development [Next offered 2014-15]	3	2
410.613	Psychosocial Factors in Health and Illness	3	3
308.610	The Political Econ. Of Social Inequalities & Consequences on Health & Quality of Life	3	3
330.661	Sociological, Psychological, & Developmental Processes in the Etiology of Mental Disorders <sup>3</sup>	3	3
340.705	Advanced Seminar in Social Epidemiology	3	3
410.651	Communication Strategies for Health Education & Promotion	3	3
410.654 – 5	Health Communication Programs I – II	3 – 4	4

#### **F. History, Geography, Culture, and Linguistics (6 credits)**

The main learning objective associated with this topic area is to prepare students for dissertation fieldwork with regard to knowledge of the history, geography, culture, and language specific to the population they plan to study. Given that there is no required set of courses for this topic area, students and their advisors should include in their course plan which of the three options below the student will pursue:

**Option 1** consists of an applied social and behavioral interventions component during or between the 1st and 2nd year of the doctoral program (similar to the MSPH internship program) that provides students with field experience in a particular country or context. As part of this requirement, students prepare a short paper or essay highlighting the history, geography, culture, and language (where relevant) of the practicum area in the context of their work or study there. The field practicum should be no less than 3 weeks and may be fulfilled domestically or abroad.

**Option 2** includes a combination of direct study courses across the University that is relevant to the student's fieldwork area, including language study. Students who are unable to obtain a field practicum prior to their dissertation fieldwork may benefit from this option. A minimum sum of 6 units is required.

**Option 3** requires enrollment in a special studies course plan (minimum of 6 credits) with the student's advisor. The special studies should integrate a pre-approved reading list and attendance or participation in at least three cultural, ethnographic, historical, or political activities. Examples of such activities include, but are not limited to: review of a related film or documentary, informational meeting with community or health systems representative, seminar attendance, cultural fest attendance/participation, etc. As part of this requirement, students prepare a short paper or essay summarizing their experience and/or findings in the context of their proposed fieldwork or study proposal.

The overall goal in providing these three options is to enable students to fulfill this requirement within the contexts of their dissertation fieldwork, intellectual needs, and/or course availability. For example, enhancing language skills may be appropriate for some students, but not others. Students should also use this area to become familiar with ethnographic, sociological, historical and economic literature in the area – as well become familiar with regional medical systems and literature on ethnomedical beliefs and practices.

Course No.	Course Title	Term	Credits/term
<b>Choose one of the following options:</b>			
224.810.	<b>Option 1:</b> Applied SBI Field Practicum (between 1 <sup>st</sup> and 2 <sup>nd</sup> year) (Field Placement Social and Behavioral Interventions)	1 – 4	6
	<b>Option 2:</b> Combination of selected direct study courses for history, geography, culture, or language related to area of student's dissertation country, region, or neighborhood of choice at JHSPH, Homewood Campus, SAIS, etc.	1 – 4	6
224.840	<b>Option 3:</b> Special Studies and Res Social & Behavioral Interventions	1 – 4	6

\* Any course with the Schools of the University, subject to the approval of the advisor or PhD program Coordinator

### G. Public Health Problem Area (6 credits)

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.

Course No.	Course Title	Term	Credits/term
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340.646	Epidemiology and Public Health Impact of HIV and AIDS <sup>2</sup>	1	4
221.627	Issues in the Reduction of Maternal and Neonatal Mortality in Low and Middle Income Countries	2	4
380.662	Critiquing the Research Literature in Maternal, Neonatal and Reproductive Health	2	4
380.760	Clinical Aspects of Reproductive Health	3	3
380.761	STI Prevention: Using Epidemiology to Inform Policy and Programs <sup>4</sup>	3	4
380.665	Family Planning Policies and Programs	3	4
380.668	International Perspectives on Women, Gender and Health	3	3
380.661	Clinical Aspects of Maternal and Newborn Health	3	3
380.762	HIV Infection in Women, Children and Adolescents <sup>4</sup>	4	4

#### H. 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.

Course No.	Course Title	Term	Credits/term
222.641	Principles of Human Nutrition	1	4
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

<sup>1</sup> This course is also offered online 1<sup>st</sup> term

<sup>2</sup> This course is also offered online 2<sup>nd</sup> term

<sup>3</sup> This course is also offered online 3<sup>rd</sup> term

<sup>4</sup> This course is also offered online 4<sup>th</sup> term

**DEPARTMENTAL THESIS COMMITTEE**

TO BE COMPLETED BY STUDENT:

Name: \_\_\_\_\_

Program Area: \_\_\_\_\_

Proposed Committee Members:

Thesis Advisor: \_\_\_\_\_

Member from Pgm. Area: \_\_\_\_\_

Third Member: \_\_\_\_\_

(selected from another Program Area or Department)

Committee Membership Approved

Thesis Advisor: \_\_\_\_\_ (signature) \_\_\_\_\_ (date)

Program Coordinator: \_\_\_\_\_ (signature) \_\_\_\_\_ (date)

Assoc. Chair, Acad. Prog: \_\_\_\_\_ (signature) \_\_\_\_\_ (date)

After obtaining signatures, please return form to Room E8516.



**THESIS PROPOSAL APPROVAL FORM**

Student's Name: \_\_\_\_\_

Program Area: \_\_\_\_\_

Departmental Thesis Committee:

Thesis Advisor: \_\_\_\_\_ (signature) \_\_\_\_\_ (date)

Second Member: \_\_\_\_\_ (signature) \_\_\_\_\_ (date)

Third Member: \_\_\_\_\_ (signature)\* \_\_\_\_\_ (date)

\*Signature denotes approval of proposal

Thesis topic:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Exposure to non-Thesis Related Research Experience**

Name \_\_\_\_\_

Program Area \_\_\_\_\_

Description of Research:

Advisor Approval \_\_\_\_\_

Program Director Approval \_\_\_\_\_

## Academic Advisor Evaluation Form

This form is to be completed and turned into the Departmental Academic Coordinator twice per year, at the end of 2<sup>nd</sup> and 4<sup>th</sup> 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.

Circle one

**Program Area:** DPEC    HN    HS    SBI    DPH    **Degree:** MSPH    PhD    DPH    **Evaluation Term:** 2<sup>nd</sup>    4<sup>th</sup>

Advisor: \_\_\_\_\_

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

	Advisor	Faculty Program Coordinator
Very Satisfied	<input type="checkbox"/>	<input type="checkbox"/>
Somewhat Satisfied	<input type="checkbox"/>	<input type="checkbox"/>
Neutral	<input type="checkbox"/>	<input type="checkbox"/>
Somewhat Dissatisfied	<input type="checkbox"/>	<input type="checkbox"/>
Very Dissatisfied	<input type="checkbox"/>	<input type="checkbox"/>

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

	Advisor	Faculty Program Coordinator
Yes, Definitely	<input type="checkbox"/>	<input type="checkbox"/>
Yes, Probably	<input type="checkbox"/>	<input type="checkbox"/>
Unsure	<input type="checkbox"/>	<input type="checkbox"/>
Probably Not	<input type="checkbox"/>	<input type="checkbox"/>
Definitely Not	<input type="checkbox"/>	<input type="checkbox"/>

**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?**

	Advisor	Faculty Program Coordinator
Yes, Problem	<input type="checkbox"/>	<input type="checkbox"/>
Unsure	<input type="checkbox"/>	<input type="checkbox"/>
No Problem	<input type="checkbox"/>	<input type="checkbox"/>

**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?**

	Advisor	Faculty Program Coordinator
Yes, Satisfactory	<input type="checkbox"/>	<input type="checkbox"/>
Unsure	<input type="checkbox"/>	<input type="checkbox"/>
No, Unsatisfactory	<input type="checkbox"/>	<input type="checkbox"/>

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

Yes, Similar Interests	<input type="checkbox"/>
Unsure	<input type="checkbox"/>
No, Dissimilar Interests	<input type="checkbox"/>

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

Yes	<input type="checkbox"/>	If yes, please explain: _____
Unsure	<input type="checkbox"/>	_____
No	<input type="checkbox"/>	_____



Comp #	Competency	Course	Course Title	Course Work/ Exam	Written Comps	Dept Preliminary Orals	School Preliminary Orals	Dissertation	Public Presentation of Dissertation	Non-thesis Research	Primary or Reinforcing?
1	Assess the disease control needs of a specific underserved population, and the current epidemiologic context, economic development of the country, culture, and health policies.			X				X		X	
		<a href="#">220.605</a>	IH Doctoral Seminar I								P
		<a href="#">220.606</a>	IH Doctoral Seminar II								P
		<a href="#">222.642</a>	Assessment Nutri. Status								P
		<a href="#">380.603</a>	Demographic Methods PH								R
		<a href="#">410.618</a>	Integrating SB Theory in PH								P
		<a href="#">410.620</a>	Prog Plan. Hlth Beh Change								P
2	Determine the most important indicators of health status in an underserved population, and the relevant extant data sources to track the progress of a disease control intervention.			X	X	X	X	X	X		
		<a href="#">220.605</a>	IH Doctoral Seminar I								P
		<a href="#">220.606</a>	IH Doctoral Seminar II								P
		<a href="#">223.663</a>	Infectious Disease & Child Survival								R
		<a href="#">380.600</a>	Principles Pop. Change								P
		<a href="#">380.758</a>	Demographic Estim. DC								P

Comp #	Competency	Course	Course Title	Course Work/ Exam	Written Comps	Dept Preliminary Orals	School Preliminary Orals	Dissertation	Public Presentation of Dissertation	Non-thesis Research	Primary or Reinforcing?
3	Design an intervention program to address a problem in a cost-effective way, taking into consideration the environment and public health services including nutrition, immunization, and family planning programs.			X	X			X		X	
		<a href="#">180.611</a>	Global Environ. & PH								P
		<a href="#">182.626</a>	Issues Water/Sanit. Trop Env Hlth								R
		<a href="#">222.642</a>	Assessment Nutri. Status								P
		<a href="#">222.647</a>	Nutritional Epi								R
		<a href="#">222.649</a>	International Nutrition								R
		<a href="#">222.655</a>	Nutrition & Life Stages								R
		<a href="#">223.662</a>	Vaccine Dev & Application								P
		<a href="#">223.665.81</a>	Infect. Immun. Undernutrition								R
		<a href="#">223.680</a>	GDCPP								P
		<a href="#">223.687</a>	Vaccine Policy Issues								P
		<a href="#">223.689</a>	Bio Basis Vaccine Dev.								P
		<a href="#">224.689</a>	Health Behavior Change								P
		<a href="#">410.650</a>	Intro Persuasive Comm.								P
		<a href="#">410.651</a>	Health Literacy								R

Comp #	Competency	Course	Course Title	Course Work/ Exam	Written Comps	Dept Preliminary Orals	School Preliminary Orals	Dissertation	Public Presentation of Dissertation	Non-thesis Research	Primary or Reinforcing?	
4	Formulate an epidemiological research question with specific goals and study aims			X	X	X	X	X				
		<a href="#">222.647</a>	Nutritional Epi								P	
		<a href="#">223.664</a>	Design Conduct Comm Trials								P	
		<a href="#">223.861</a>	Doctoral GDEC Seminar								R	
5	Select an appropriate research design from among numerous potential randomized and observational designs, so as to ensure the estimation of key parameters that would enable designing health interventions in a population.			X	X	X	X	X	X	X		
		<a href="#">223.664</a>	Design Conduct Comm Trials									R
		<a href="#">223.690</a>	Cluster Randomized Trials									R
		<a href="#">223.861</a>	Doctoral GDEC Seminar									R
		<a href="#">340.751</a>	Epi Methods I									P
		<a href="#">340.752</a>	Epi Methods II									P
		<a href="#">340.753</a>	Epi Methods III									P
6	Develop a research proposal, complete with sample size justification and budget, and implement, manage and monitor the study's progress and data quality.			X		X	X	X				
		<a href="#">140.621</a>	Stats Methods I								P	
		<a href="#">140.622</a>	Stats Methods II								P	
		<a href="#">223.664</a>	Stats Methods III								P	

Comp #	Competency	Course	Course Title	Course Work/ Exam	Written Comps	Dept Preliminary Orals	School Preliminary Orals	Dissertation	Public Presentation of Dissertation	Non-thesis Research	Primary or Reinforcing?
		<a href="#">223.705.81</a>	Clinic. Vaccine Trials & Good Clinical Practice								P
7	Account for cross-cultural differences, local needs and politics of the research population, in creating an informed consent process and handling ethical challenges inherent in working in low resource populations.	<a href="#">223.680</a>		X	X		X	X			
		<a href="#">223.680</a>	GDCPP								R
		<a href="#">306.665</a>	Researc Ethics: US & Int'l Issues								R
		<a href="#">410.618</a>	Integrating SB Theory in PH								P
		<a href="#">410.630</a>	Implement. & Sustainability								P
		<a href="#">550.600</a>	Responsible Conduct Research								P
		<a href="#">550.860</a>	Academic & Research Ethics								P
8	Produce an appropriate statistical analysis of the data collected and provide a reasoned interpretation of these results.			X	X			X	X	X	
		<a href="#">140.621</a>	Stats Methods I								P
		<a href="#">140.622</a>	Stats Methods II								P
		<a href="#">140.623</a>	Stats Methods III								P
		<a href="#">140.624</a>	Stats Methods IV								P
		<a href="#">340.751</a>	Epi Methods I								R
		<a href="#">340.752</a>	Epi Methods II								R



Comp #	Competency	Course	Course Title	Course Work/ Exam	Written Comps	Dept Preliminary Orals	School Preliminary Orals	Dissertation	Public Presentation of Dissertation	Non-thesis Research	Primary or Reinforcing?
		<a href="#">340.753</a>	Epi Methods III								R
9	Place the research findings in the context of current knowledge, identify limitations of the research and specify further areas for research. Analyze policy implications and public health significance of the findings.			X					X		
		<a href="#">223.687</a>	Vaccine Policy Issues								P
		<a href="#">410.630</a>	Implement. & Sustainability								P
10	Disseminate research findings through oral and poster presentations, writing manuscripts for the peer reviewed literature, and teaching students.			X							
		<a href="#">223.680</a>	GDCPP								R
		<a href="#">223.861</a>	Doctoral GDEC Seminar								P

Comp #	Competency	Course	Course Name	Course Work/ Exam	Written Comps	Dept. Prelim. Orals	School Prelim. Orals	Thesis/Dissertation	Public Presentation	Thesis	Spec. Stud./Seminars	Primary or Reinforcing?	
1	Identify and critically appraise the social, cultural, economic and other determinants of public health problems as they apply particularly to disadvantaged populations and/or populations in low and middle income countries			X	X	X	X	X	X	X	X		
		<a href="#">220.605</a>	Doctoral seminar IH I										P
		<a href="#">220.606</a>	Doctoral seminar IH II										P
		<a href="#">221.646</a>	HS in LMIC										P
		<a href="#">221.860</a>	HS Seminar										R
		221.861	Doctoral seminar HS									P	
2	Assess methods and tools appropriate to Health Systems research disciplines, including health policy, health planning, financing and management; monitoring and evaluation, and institution building and community development			X	X	X	X	X	X				
		<a href="#">221.646</a>	HS in LMIC										P
		221.638	HS Research & eval										P
		221.620	Summary measures										P
		<a href="#">140.621</a>	Stats I										P
		<a href="#">140.622</a>	Stats II										P
		<a href="#">140.623</a>	Stats III										P
		<a href="#">140.624</a>	Stats IV										R
		<a href="#">140.651</a>	Biostats I										P
		<a href="#">140.652</a>	Biostats II										P
		<a href="#">140.653</a>	Biostats III										P
		<a href="#">140.654</a>	Biostats IV										R
		<a href="#">340.751</a>	Epi Methods I										P
		<a href="#">340.752</a>	Epi Methods II										P
<a href="#">340.753</a>	Epi Methods III										P		

Currently under review. For the most updated information go to: [my.jhsph.edu/sites/IH/](http://my.jhsph.edu/sites/IH/)

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3	Develop and conduct a focused and critical review of scientific literature pertinent to a health systems research topic					X	X	X			X	
		221.820	Thesis Research HS									R
		221.840	Special Studies HS									P
4	Evaluate and critique the relevant literature on a health systems research topic and frame a research question in terms of study goals and specific aims			X		X	X	X				
		<a href="#">220.605</a>	Doctoral seminar IH I									P
		<a href="#">220.606</a>	Doctoral seminar IH II									P
		221.820	Thesis Research HS									R
		221.840	Special Studies HS									R
5	Appraise and apply scientifically sound and appropriate methods and tools to design a research study including a conceptual/theoretical framework, study instrument, sampling design, and plan for data analysis					X	X	X			X	
		221.861	Doctoral seminar HS									P
		221.820	Thesis Research HS									P
		221.840	Special Studies HS									R
6	Implement and manage a research project, monitor progress of the study and the quality of data collected			X				X			X	
		221.602	Applications MHSO									P
		221.820	Thesis Research HS									P
		221.840	Special Studies HS									R
7	Prepare applications to an IRB for ethical approval			X		X	X	X			X	
		<a href="#">550.865</a>	PH Perspect									P
		<a href="#">550.860</a>	A&R ethics									P

Comp #	Competency	Course	Course Name	Course Work/ Exam	Written Comps	Dept. Prelim. Orals	School Prelim. Orals	Thesis/Dissertation	Public Presentation	Thesis	Spec. Stud./Seminars	Primary or Reinforcing?
		<a href="#">550.600</a>	Responsible Conduct of Research									P
		<a href="#">306.665</a>	Res Ethics									P
		221.820	Thesis Research HS									R
		221.840	Special Studies HS									R
8	Produce data analysis and provide a reasoned interpretation of the results							X	X	X		
		<a href="#">140.621</a>	Stats I									P
		<a href="#">140.622</a>	Stats II									P
		<a href="#">140.623</a>	Stats III									P
		<a href="#">140.624</a>	Stats IV									R
		<a href="#">140.651</a>	Biostats I									P
		<a href="#">140.652</a>	Biostats II									P
		<a href="#">140.653</a>	Biostats III									P
		<a href="#">140.654</a>	Biostats IV									R
		<a href="#">340.751</a>	Epi Methods I									P
		<a href="#">340.752</a>	Epi Methods II									P
		<a href="#">340.753</a>	Epi Methods III									P
		221.820	Thesis res HS									R
		221.840	Special Studies HS									R
9	Organize the research findings in the context of current knowledge, identify limitations of the research, specify further areas for research, and analyze policy implications and public health significance							X	X			
		221.820	Thesis Research HS									P
		221.840	Special Studies HS									P

Comp #	Competency	Course	Course Name	Course Work/ Exam	Written Comps	Dept. Prelim. Orals	School Prelim. Orals	Thesis/Dissertation	Public Presentation	Thesis	Spec. Stud./Seminars	Primary or Reinforcing?	
10	Communicate scientific findings through written and oral methods to scientific audiences and peers									X			
		221.820	Thesis Research HS										P
		221.840	Special Studies HS										P
11	Perform a leadership role in health systems to address health problems in disadvantaged populations in low and middle income countries							X	X				
		221.602	Applications MHSO										P
		221.820	Thesis Research HS										P
		221.840	Special Studies HS										P

Comp #	Competency	Course	Course Name	Course Work/ Exam	Written Comps	Dept. Preliminary Orals	School Preliminary Orals	Thesis/Dissertation	Public Presentation Thesis/Dissertation	Special Studies/Seminars	Primary or Reinforcing?	
1	Master and apply core principles and concepts in human nutrition, biochemistry and metabolism			X	X					X		
		<a href="#">222.644</a>	Nutrition Biochemistry									P
		<a href="#">222.641</a>	Principles Human Nutrition in PH									P
		<a href="#">222.649</a>	International Nutrition									R
		<a href="#">222.651</a>	Adv. Nutrient Metabolism									P
		<a href="#">222.655</a>	Nutrition & Life Stages									P
		<a href="#">222.860</a>	Grad Nutrition Seminar									R
		223.665	Infection, Immunity, Undernutrition									
2	Investigate the epidemiology and underlying causes and public health consequences of key nutritional problems			X						X		
		<a href="#">222.647</a>	Nutrition Epidemiology									P
		<a href="#">222.649</a>	International Nutrition									P
		<a href="#">222.654</a>	Food Culture & Nutrition									R
		<a href="#">222.655</a>	Nutrition & Life Stages									R
		<a href="#">222.860</a>	Grad Nutrition Seminar									R
		222.XXX	Intro Obesity in PH									
3	Place public health nutrition problems in their biological, social, cultural, and behavioral context			X	X							
		<a href="#">222.649</a>	International Nutrition									R
		222.653	Food, Technology Health									R
		<a href="#">222.654</a>	Food Culture & Nutrition									P
		<a href="#">222.655</a>	Nutrition & Life Stages									P
		<a href="#">222.657</a>	Food & Nutrition Policy									R

Comp #	Competency	Course	Course Name	Course Work/ Exam	Written Comps	Dept. Preliminary Orals	School Preliminary Orals	Thesis/Dissertation	Public Presentation Thesis/Dissertation	Special Studies/Seminars	Primary or Reinforcing?
		222.XXX	Intro Obesity in PH								R
		223.665	Infection, Immunity, Undernutrition								R
4	Design, test, and implement population-based food and nutrition interventions and strategies for prevention and treatment of global nutritional problems			X							
		<a href="#">140.621</a>	Statistical Methods I								P
		<a href="#">140.622</a>	Statistical Methods II								P
		<a href="#">140.623</a>	Statistical Methods III								P
		<a href="#">140.624</a>	Statistical Methods IV								P
		<a href="#">140.651</a>	Methods Biostatistics I								P
		<a href="#">140.652</a>	Methods Biostatistics II								P
		<a href="#">140.653</a>	Methods Biostatistics III								P
		<a href="#">140.654</a>	Methods Biostatistics IV								P
		<a href="#">222.647</a>	Nutritional Epidemiology								P
		<a href="#">222.649</a>	International Nutrition								R
		222.653	Food, Technology Health								R
		<a href="#">222.657</a>	Food & Nutrition Policy								R
		<a href="#">340.601</a>	Principles Epidemiology								P
		<a href="#">340.751</a>	Epidemiology Methods I								P
		<a href="#">340.752</a>	Epidemiology Methods II								P
		<a href="#">340.753</a>	Epidemiology Methods III								P
		410.675	Critical Analysis Popular Diets								R

Comp #	Competency	Course	Course Name	Course Work/ Exam	Written Comps	Dept. Preliminary Orals	School Preliminary Orals	Thesis/Dissertation	Public Presentation Thesis/Dissertation	Special Studies/Seminars	Primary or Reinforcing?
5	Critically evaluate the reliability and validity of indicators of nutritional status (anthropometry, biochemical markers), and measures of dietary assessments and food related behaviors, including strengths, weaknesses, and techniques of measurement for assessing the nutritional status of populations			X							
		<a href="#">222.642</a>	Asses. Nutritional Status								P
		<a href="#">222.647</a>	Nutritional Epidemiology								P
		<a href="#">222.641</a>	Principles Human Nutrition in PH								P
		222.661	Designing Healthy Diets								
		<a href="#">340.601</a>	Principles Epidemiology								R
		<a href="#">340.751</a>	Epidemiology Methods I								R
		<a href="#">340.752</a>	Epidemiology Methods II								R
		<a href="#">340.753</a>	Epidemiology Methods III								R
6	Frame research question to address specific aims, in the context of existing knowledge			X						X	
		<a href="#">222.649</a>	International Nutrition								P
		<a href="#">222.654</a>	Food Culture & Nutrition								R
		<a href="#">222.658</a>	Critical Thinking Nutrition I								R
		<a href="#">222.659</a>	Critical Thinking Nutrition II								R
		222.661	Designing Healthy Diets								
		<a href="#">222.860</a>	Grad Nutrition Seminar								P
		<a href="#">222.861</a>	Doctoral Seminar Proposal Development								R
		222.XXX	Intro Obesity in PH								P



Comp #	Competency	Course	Course Name	Course Work/ Exam	Written Comps	Dept. Preliminary Orals	School Preliminary Orals	Thesis/Dissertation	Public Presentation Thesis/Dissertation	Special Studies/Seminars	Primary or Reinforcing?
		<a href="#">550.865</a>	PH Persp. Research								R
7	Design and conduct field research from conception of ideas through proposal development, implementation, analysis and publication of findings			X				X		X	
		<a href="#">222.820</a>	Thesis Research Human Nutrition								P
		<a href="#">222.861</a>	Doctoral Seminar Proposal Development								P
		<a href="#">222.860</a>	Grad Nutrition Seminar								R
		<a href="#">340.601</a>	Principles Epidemiology								P
		<a href="#">340.751</a>	Epidemiology Methods I								P
		<a href="#">340.752</a>	Epidemiology Methods II								P
		<a href="#">340.753</a>	Epidemiology Methods III								P
		<a href="#">140.621</a>	Statistical Methods I								P
		<a href="#">140.622</a>	Statistical Methods II								P
		<a href="#">140.623</a>	Statistical Methods III								P
		<a href="#">140.624</a>	Statistical Methods IV								P
		<a href="#">140.651</a>	Methods Biostatistics I								P
		<a href="#">140.652</a>	Methods Biostatistics II								P
		<a href="#">140.653</a>	Methods Biostatistics III								P
		<a href="#">140.654</a>	Methods Biostatistics IV								P
8	Prepare applications to an IRB for ethical approval, considering ethical issues involved in research in resource poor settings and argue for a specific approach to addressing these ethical issues			X				X		X	
		<a href="#">306.655</a>	Ethical issues PH								P
		<a href="#">306.665</a>	Research Ethics & Integrity								P

Comp #	Competency	Course	Course Name	Course Work/ Exam	Written Comps	Dept. Preliminary Orals	School Preliminary Orals	Thesis/Dissertation	Public Presentation Thesis/Dissertation	Special Studies/Seminars	Primary or Reinforcing?
		<a href="#">550.600</a>	Responsible Conduct Research								P
		<a href="#">550.860</a>	Academic & Research Ethics								R
		<a href="#">222.820</a>	Thesis Research Human Nutrition								R
9	Place the research findings in the context of existing knowledge, identify limitations of the research, specify further areas for research, and analyze policy implications and public health significance of the findings			X				X		X	
		<a href="#">222.820</a>	Thesis Research Human Nutrition								P
		<a href="#">222.657</a>	Food & Nutrition Policy								P
10	Communicate scientific findings through written and oral methods to scientific audiences and peers, and teach students			X		X	X	X	X	X	
		<a href="#">222.820</a>	Thesis Research Human Nutrition								R
		<a href="#">222.659</a>	Critical Thinking Nutrition II								P
		<a href="#">222.655</a>	Nutrition and Life Stages								P
		<a href="#">222.861</a>	Doctoral Seminar Proposal Development								P
		<a href="#">222.649</a>	International Nutrition								P
		<a href="#">222.860</a>	Nutrition Seminar								R

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1	Analyze 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			X	X						X	
		220.605	Doc seminar IH I									P
		220.606	Doc seminar IH II									P
		224.840	Special studies SBI									
		224.86	SBI Prog seminar I									R
		224.861	SBI Prog seminar II									R
		224.862	SBI Prog seminar III									R
		224.863	Seminar Med. Anthro I									R
		224.864	Seminar Med. Anthro II									R
		224.810	SBI field practicum									P
		224.840	Special studies SBI									P
		410.618	SB Theory PH I									P
		410.612	Sociological persp. PH									P
		313.641	Health Econ I									P
		313.644	Health Econ II									P
		410.650	Intro Persuasive Comm.									P
		221.605	History IH									P
		410.613	PsychoSocial factors									P
		308.610	Polit. Econ Soc. Ineq.									P
		330.661	Socio.psycho. Develop. Process									P
		340.705	Adv. Seminar Social Epi									P
		410.651	Comm strategies									P
		410.654	Health Comm I									P
		410.655	Health Comm II									P

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		340.646	Epi PH HIV									P
		221.627	Maternal mortality LMIC									P
		380.662	Critiquing Lit Maternal Reproduct. Hlth									P
		380.760	Clin. Aspects Repr. Hlth									P
		380.761	STI prevention									P
		380.665	Family planning policies									P
		380.668	Intl Perspective women gender									P
		380.661	Clinical Aspects Maternal Health									P
		380.762	HIV Infection Women Children									P
2	Identify and describe the determinants and behaviors associated with major causes of disease and disability most prevalent among underserved											
		224.689	Health Beh. Change									P
		224.810	SBI field practicum									P
		224.840	Special studies SBI									P
		410.618	SB Theory PH I									P
		410.612	Sociological persp. PH									P
		313.641	Health Econ I									P
		313.644	Health Econ II									P
		410.650	Intro Persuasive Comm.									P
		221.605	History IH									P
		410.613	PsychoSocial factors									P
		308.610	Politica Econ Social inequalities									P

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		330.661	Socio.psycho. Develop. Process									P
		340.705	Adv. Seminar Social Epi									P
		410.651	Comm strategies									P
		410.654	Health Comm I									P
		410.655	Health Comm II									P
		340.601	Principles Epi									R
		340.608	Observ. Epi									R
		340.769	Prof Epi									R
		340.770	PH Surveillance									R
		340.751	Epi Methods I									R
		340.752	Epi Methods II									R
		340.753	Epi Methods III									R
		340.646	Epi PH HIV									P
		221.627	Maternal mortality LMIC									P
		380.662	Critiquing Lit Maternal Reproduct. Hlth									P
		380.760	Clin. Aspects Repr. Hlth									P
		380.761	STI prevention									P
		380.665	Family planning policies									P
		380.668	Intl Perspective women gender									P
		380.661	clinical aspects maternal Health									P
		380.762	HIV infection women children									P

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3	Assess the effectiveness of current behavioral interventions for major causes of disease and disability											
		224.689	Health Behavior Change									P
		224.810	SBI field practicum									R
		224.840	Special studies SBI									R
		410.618	SB Theory PH I									P
		410.612	Sociological persp. PH									P
		313.641	Health Econ I									P
		313.644	Health Econ II									P
		410.650	Intro Persuasive Comm.									P
		221.605	History IH									P
		410.613	PsychoSocial factors									P
		308.610	Politica Econ Social inequalities									P
		330.661	Socio.psycho. Develop. Process									P
		340.705	Adv. Seminar Social Epi									P
		410.651	Comm strategies									P
		410.654	Health Comm I									P
		410.655	Health Comm II									P
		340.646	Epi PH HIV									P
		221.627	Maternal mortality LMIC									P
		380.662	Critiquing lit maternal repr hlth									P
		380.760	Clin. Aspects Repr. Hlth									P
		380.761	STI prevention									P
		380.665	Family planning policies									P

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		380.668	Intl Perspective women gender									P	
		380.661	clinical aspects maternal Health										P
		380.762	HIV infection women children										P
4	Evaluate and critique the relevant literature on a topic and frame a research question in terms of study goals and specific aims.												
		224.860	SBI Prog seminar I									P	
		224.861	SBI Prog seminar II									P	
		224.862	SBI Prog seminar III									P	
		224.863	Seminar med anthro I									R	
		224.864	Seminar med anthro II									R	
		224.810	SBI field practicum									R	
		224.840	Special studies SBI									R	
		410.618	SB Theory PH I									P	
		410.612	Sociological persp. PH									P	
		313.641	Health Econ I									P	
		313.644	Health Econ II									P	
		410.650	Intro Persuasive Comm.									P	
		221.605	History IH									P	
		410.613	PsychoSocial factors									P	
		308.610	Politicia Econ Social inequalities									P	
		330.661	Socio.psycho. Develop. Process									P	
		340.705	Adv. Seminar Social Epi									P	
		410.651	Comm strategies									P	

Currently under review. For the most updated information go to: [my.jhsph.edu/sites/IH/](http://my.jhsph.edu/sites/IH/)

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		410.654	Health Comm I									P
		410.655	Health Comm II									P
		340.646	Epi PH HIV									P
		221.627	Maternal mortality LMIC									P
		380.662	Critiquing Lit Maternal Reproductive Hlth									P
		380.760	Clin. Aspects Repr. Hlth									P
		380.761	STI prevention									P
		380.665	Family planning policies									P
		380.668	Intl Perspective women gender									P
		380.661	clinical aspects maternal Health									P
		380.762	HIV infection women children									P
5	Design, implement and evaluate community-based behavioral health initiatives											
		330.657	Stat psychoSocial Research									P
		140.658	stat. psy struct.									P
		340.601	Principles Epi									P
		340.608	Observ. Epi									P
		340.769	Prof Epi									P
		340.770	PH Surveillance									P
		340.751	Epi Methods I									P
		340.752	Epi Methods II									P
		340.753	Epi Methods III									P



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		410.733	Comm Anal.									P
		340.666	foundations Social Epi									P
		340.705	Adv. Seminar Social Epi									P
		340.717	Health Survey Research									P
		380.603	Demographic meth									P
		223.664	design conduct Comm									P
		140.640	statistical Methods									P
		410.615	Research Design SBS									P
		380.611	Fundamentals Prog Eval									P
		380.711	Issues Survey Research									P
		309.616	Intro Methods HS R&E I									P
		309.617	Intro Methods HS R&E II									P
		221.645	Large Scale Effectiveness									P
		380.612	Applications M&E									P
		380.712	Methods analysis Large									P
		140.621	Stats I									P
		140.622	Stats II									P
		140.623	Stats III									P
		140.624	Stats IV									P
		140.651	Biostats I									P
		140.652	Biostats II									P
		140.653	Biostats III									P
		140.654	Biostats IV									P
6	Design, implement, and manage a theoretically-grounded research study on social, cultural, and behavioral aspects of health, differentiating between qualitative and quantitative designs											
		224.860	SBI Prog seminar I									R
		224.861	SBI Prog seminar II									R
		224.862	SBI Prog seminar III									R
		224.863	Seminar med anthro I									R

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		224.864	Seminar med anthro II									R
		224.689	Health Behavior Change									P
		224.690	Qualitative Theory									P
		224.691	Qualitative Data Analysis									P
		224.692	Formative Research									P
		410.733	Comm Network Analysis PH Prog									P
		340.666	foundations Social Epi									P
		340.705	Adv. Seminar Social Epi									P
		340.717	Health Survey Research Methods									P
		380.603	Demographic Method									P
		223.664	Design Conduct Community Trials									P
		140.640	statistical Methods Sample Survey									P
		410.615	Research Design SBS									P
		380.611	Fundamentals Prog Eval									P
		380.711	Issues Survey Res. Design									P
		309.616	Intro Methods HS R&E I									P
		309.617	Intro Methods HS R&E II									P
		221.645	Large Scale Effect. Eval									P
		380.612	Applications M&E									P
		380.712	Methods analysis Large Pop. Survey									P

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7	Prepare applications to an IRB for ethical approval, considering ethical issues involved in research in resource poor settings and argue for a specific approach to addressing these issues										
		224.690	Qualitative Theory								P
		224.691	Qualitative Data Analysis								P
		224.692	Formative Research								P
		340.601	Principles Epi								R
		340.608	Observ. Epi								R
		340.769	Prof Epi								R
		340.770	PH Surveillance								R
		340.751	Epi Methods I								R
		340.752	Epi Methods II								R
		340.753	Epi Methods III								R
		550.865	PH Perspectives								R
		550.86	A&R ethics								R
		306.665	Research ethics integrity								R
		550.600	Respons. Conduct Res.								R
		410.733	Comm Network Analysis PH Prog								P
		340.666	Foundations Social Epi								P
		340.705	Adv. Seminar Social Epi								P
		340.717	Health Survey Research Mth								P
		380.603	Demographic meth								P
		223.664	Design Conduct Comm Trials								P

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		140.640	Statistical Methods Sample Survey									P
		410.615	Research Design SBS									P
		380.611	Fundamentals Prog Eval									P
		380.711	Issues Survey Research Design									P
		309.616	Intro Methods HS R&E I									P
		309.617	Intro Methods HS R&E II									P
		221.645	Large Scale Effectiveness									P
		380.612	Applications M&E									P
		380.712	Methods analysis Large Pop. Survey									P
8	Use formative research data to design the content of a behavioral or community intervention											
		224.692	Formative Research									P
9	Analyze data in terms of policy implications and public health significance of the findings.											
		330.657	Stats Psychosocial I									R
		140.657	Stats Psychosocial II									R
		224.689	Health Behavior Change									R
		224.690	Qualitative Theory									P
		224.691	Qualitative Data Analysis									P
		410.618	SB Theory PH I									R
		410.612	Sociological persp. PH									R
		313.641	Health Econ I									R

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		313.644	Health Econ II									R
		410.650	Intro Persuasive Communication									R
		221.605	History IH									R
		410.613	PsychoSocial factors									R
		308.610	Politica Econ Social inequalities									R
		330.661	Socio.psycho. Develop. Process									R
		340.705	Adv. Seminar Social Epi									R
		410.651	Comm strategies									R
		410.654	Health Comm I									R
		410.655	Health Comm II									R
		340.601	Principles Epi									R
		340.608	Observ. Epi									R
		340.769	Prof Epi									R
		340.77	PH Surveillance									R
		340.751	Epi Methods I									R
		340.752	Epi Methods II									R
		340.753	Epi Methods III									R
		140.621	Stats I									R
		140.622	Stats II									R
		140.623	Stats III									R
		140.624	Stats IV									R
		140.651	Biostats I									R
		140.652	Biostats II									R
		140.653	Biostats III									R

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		140.654	Biostats IV									R
		410.733	Comm Network Analysis PH Prog									R
		340.666	Foundations Social Epi									R
		340.705	Adv. Seminar Social Epi									R
		340.717	Health Survey Research Method									R
		380.603	Demographic meth									R
		223.664	Design Conduct Comm Trials									R
		140.640	Statistical Methods Sample Survey									R
		410.615	Research Design SBS									R
		380.611	Fundamentals Prog Eval									R
		380.711	Issues Survey Research Design									R
		309.616	Intro Methods HS R&E I									R
		309.617	Intro Methods HS R&E II									R
		221.645	Large Scale Effectiveness									R
		380.612	Applications M&E									R
		380.712	Methods analysis Large Population Survey									R
10	Communicate effectively through oral presentations and written materials like publishable manuscripts, with the scientific community, researchers, policy makers and key stakeholders											
		410.733	Comm Network Analysis PH Prog									

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		340.666	foundations Social Epi									R
		340.705	Adv. Seminar Social Epi									R
		340.717	Health Survey Research Mth									R
		380.603	Demograp. Method.									R
		223.664	Design Conduct Comm Trials									R
		140.640	Statistical Methods Sample Survey									R
		410.615	Research Design SBS									R
		380.611	Fundam. Prog Eval									R
		380.711	Issues Survey Research Design									R
		309.616	Intro Methods HS R&E I									R
		309.617	Intro Methods HS R&E II									R
		221.645	Large Scale Effect. Eval									R
		380.612	Applications M&E									R
		380.712	Methods analysis Large Pop. Survey									R
		224.689	Health Behavior Change									P
		224.690	Qualitative Theory									P
		224.691	Qualitative Data Analysis									P
		224.692	Formative Research									P
		410.618	SB Theory PH I									R
		410.612	Sociological persp. PH									R
		313.641	Health Econ I									R

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		313.644	Health Econ II									R
		410.650	Intro Persuasive Comm.									R
		221.605	History IH									R
		410.613	Psychosocial factors									R
		308.610	Politica Econ Social inequalities									R
		330.661	Socio.psycho. Develop. Process									R
		340.705	Seminar Social Epi									R
		410.651	Comm strategies									R
		410.654	Health Comm I									R
		410.655	Health Comm II									R
		340.646	Epi PH HIV									R
		221.627	Maternal mortality LMIC									R
		380.662	Critiq. Lit. repr hlth									R
		380.760	Clin. Aspects Repr. Hlth									R
		380.761	STI prevention									R
		380.665	Family planning policies									R
		380.668	Intl Prsp. women gender									R
		380.661	Clin. Aspects Repr. Hlth									R
		380.762	HIV infection women children									R