DEPARTMENT OF INTERNATIONAL HEALTH

Academic Guide 2020-2021
Master of Health Science (MHS)
Master of Science in Public Health (MSPH)
Doctor of Philosophy (PhD)
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DEPARTMENT OF
INTERNATIONAL HEALTH

About
The Department of International Health (https://www.jhsph.edu/departments/international-health) is a global leader and partner in building capacity and identifying, developing, testing, and implementing practices and policies that help the world’s most vulnerable and disadvantaged people improve their health and well-being.

Programs
- International Health, MSPH (http://e-catalog.jhu.edu/public-health/departments/international-health/international-health-msph)
- International Health, MSPH/RD (http://e-catalog.jhu.edu/public-health/departments/international-health/international-health-msph-rd)
- International Health, MA/MSPH (http://e-catalog.jhu.edu/public-health/departments/international-health/international-health-ma-msph)
- International Health, PhD (http://e-catalog.jhu.edu/public-health/departments/international-health/international-health-phd)
- Non-Degree Training (http://e-catalog.jhu.edu/public-health/departments/international-health/non-degree-training)

General Information
Central Academic Program Administration

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<th>Name</th>
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Global Disease Epidemiology and Control

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<tr>
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<tbody>
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Health Systems

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Human Nutrition

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<tr>
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Social and Behavioral Interventions

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Global Health Economics

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**Departmental Policy**

**Academic Faculty and Staff**

Several administrative staff and faculty members within the Department help oversee and facilitate the academic programs. They are available to help you navigate the program and the department. The following information is intended to help you understand the roles of each person.

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

**Associate Chair for Student Matters**: This position is responsible for the management and oversight of all students. In this role, leads the Admissions committee and coordinates with all academic coordinators and programs by leading new efforts to improve master's and doctoral student experiences. The Associate Chair for Student Matters will be announced in September.

**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.

**Audrey Lindahl** (Senior Academic Coordinator): Audrey is the Sr. Academic Program Coordinator for all master’s and doctoral programs and assists students and Program Coordinators with academic issues related to tracking of student academic progress, departmental exams, and graduation requirements.

**Natalie Wertz** (Academic/Student Payroll Coordinator): Natalie assists in processing teaching assistant (TA) forms for all students, from instructor approval to payments, and processes all student payroll for research assistants (RA). Natalie assists with training grant data collection and oversees and processes all postdoctoral fellows’ applications (application reviews, payroll, and completion of certificates).

**Degree Program Coordinators** – within the IH Department, the PhD and MSPH degrees are broken down into four concentrations, also known as program areas. Each program area has a faculty member as the overall coordinator of the degree program. The degree program coordinators are responsible for the management and oversight of the individual degree programs and are the first point of contact for any questions, issues, or concerns. 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. Students are encouraged to approach program coordinators for questions about the program area and degree information (including curriculum requirements, course selection, etc.). The MHS degree program has a program director serving in the role of a degree program coordinator.

**Financial Managers and Payroll Coordinators** – the Department has a central payroll office that is staffed by Tanya Falls and Allison Quarles. In addition, each program area has its own financial manager and payroll coordinator who are responsible for the oversight of each 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 who you should see about an issue, contact Cristina Salazar for clarification.

**Academic Committees**

**Curriculum and Credentials Committee**

- Cyrus Engineer: Chair
- Cristina Salazar: Staff
- Audrey Lindahl: Staff

**Honors and awards Committee**

- Laura Caulfield: Chair
- Audrey Lindahl: Staff

**Course Waivers and/or Substitutions**

Waivers of requirements may be granted for credits earned in equivalent graduate level courses taken in this or another school. The course 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, a waiver request form must be submitted prior to the beginning of the quarter in which the course is offered. No requests will be granted after a course has been taken. Requests for waivers for any course offered in the first quarter must be submitted no later than the end of the first day of class. No requests for first term waivers will be considered after this time.

**WAIVER PROCESS**: The course waiver form can be found in the Portfolio Library and should be completed for each course requirement a student is requesting be waived. Requests should include the required supporting documentation noted on the form and a short explanation, which includes the name of the course, and why he/she is requesting the waiver. The completed form and supporting documentation should be merged into one PDF and emailed to the Senior Academic Coordinator, Audrey Lindahl alindahl@jhu.edu, for review. The Senior Academic Coordinator will review the request and obtain the appropriate approval from the student’s faculty Program Coordinator and or the IH Associate Chair for Academic Programs. The student will then receive the course waiver form with a final decision to keep for their record and a copy of the form will be kept in the students’ academic file.

Course waivers are only approved by the Program Coordinators for each program and/or the Associate Chair for Academic Programs. Advisors do not approve waivers or course substitutions. Students should not consider a course waived until they have completed the course waiver form and received a decision form from the Senior Academic Coordinator.

**SUBSTITUTION PROCESS**: A similar process should also be followed to request course substitutions. Students are reminded that waivers are not the same as substitutions. Waiving out of a course requirement allows a student to take any course(s) they choose in place of the course they are receiving permission to waive out of. A substitution allows students to substitute a specific program requirement by another course that is approved by the Program Coordinator in advance. Please note that approval of a waiver or substitution request does not reduce the total number of credits a student is required to earn in their degree program to meet graduation requirements.

**Leave of Absence**

A Leave of Absence is an officially recognized inactive student status. Please read the schoolwide academic leave of absence (http://e-
catalog.jhu.edu/public-health/policies/academic/academic-leave-absence) policy. This is an option available to students who must 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 will have their I-20/DS2020 cancelled and will have to request a new visa in order to come to the US again. If you are considering requesting a LOA, the first thing you should do is speak with Cristina Salazar to determine your eligibility and consider other potential impacts.

Students requesting a LOA cannot be employed in a position where their work is related to their MSPH requirement. Any requests for a LOA must be made in writing to the Department through the Academic Program Manager (Cristina Salazar) by both the student submitting a letter of request and fully complete LOA form, along with a supporting letter from their advisor. Once a written request for a LOA is received, the student’s request must be approved by the Curriculum and Credentials (C&C) Committee. The C&C committee will review the request and may ask for more information. If the C&C approves the LOA request the Academic Program Manager will then submit the Leave of Absence Form to the Registrar’s Office for final processing. Once the Registrar’s office has processed the LOA request, the student will receive an email indicating they are on LOA and will be charged $50 per term for each term they are on leave. When a student is ready to return they should contact Cristina Salazar. If a student takes a leave of absence, the student must be registered for a minimum of two consecutive terms prior to completing degree requirements.

In some instances you may be forced to take a involuntary Leave of Absence and Condition of Enrollment, please read the schoolwide policy Involuntary Leave of Absence and Condition of Enrollment (http://e-catalog.jhu.edu/public-health/policies/academic/involuntary-leave-absence) for more information.

**Parental Accommodations**

Contact Cristina Salazar to discuss the accommodations policy and how it impacts the student, at least three months before the birth or adoption of a child, as we may need to create a plan that instructors, supervisors, student and advisors approve of. Please read the University parental accommodations policy (https://policies.jhu.edu/?event=render&mid=764&pid=32391&fd=policy_32391.pdf&_=0.931885768396) for more information.

**Travel Policy for Students Traveling Abroad**

Below is the required process for all International Health students traveling for school related purposes, and students from other departments working under the supervision of International Health faculty.

1. Fill out the Student Emergency Information Form (https://goo.gl/forms/lkTcqXnioVH89NFE3) (IH students complete this during orientation)

2. Complete the online course International Travel Preparation, Safety and Wellness (220.600.81) during your first year and/or prior to travel

3. Fill out the IH Department Travel Registration Form (https://goo.gl/forms/jRimLu7EImyS2Qaj1) prior to every trip abroad

4. Fill out the University Travel Registry (https://travelregistry.johnshopkins.edu/Travel) prior to every trip abroad

As you prepare to take an overseas assignment you should take into account a few administrative, health, and safety issues and requirements 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 step by step process listed above for you to complete prior to leaving the

**Transfers**

MSPH to MPH: It is important to note that transfers between these programs are very rare due to the capacity of each program and because the MPH program timeline starts one term before the MSPH program. If after beginning the MSPH program a student desires admission to the MPH program instead, the student must contact Cristina Salazar. Students will need to obtain advisor approval in writing and also receive approval from the Associate Chair for Academic Programs. If approved

the student will submit this approved letter, to the Director of the MPH Program. Once the letter is signed for approval by the Director of the MPH Program, it is then submitted to the Office of Records and Registration to make the transfer official.

MSPH to MSPH (from one program to another or one department to another): It is important to note that these types of transfers are very rare, due to the capacity of the programs and the sequencing of courses by each program area. If after beginning the MSPH program a student wishes to change programs, the student must request the change in writing along with a new personal statement and have it endorsed by the MSPH Program Coordinator(s) of the current and future program area. The request then needs to be endorsed by the Associate Chair for Academic Programs.

Students considering transfers to the MPH or a different MSPH program, must first talk to Cristina Salazar before submitting written requests.

MSPH to PhD: Students in the MSPH program who are interested in going on to a PhD program in the Department of International Health are required to formally apply to the Department for admission to the PhD program. They must first complete the MSPH degree and then apply to the PhD program to enter in September following the completion of the MSPH practicum and completion of their MSPH capstone.

**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 Audrey Lindahl alindahl@jhu.edu and Cristina Salazar csalazar@jhu.edu.

IH Student Group

Contact Cristina Salazar to discuss the accommodations policy and how it impacts the student, at least three months before the birth or adoption of a child, as we may need to create a plan that instructors, supervisors, student and advisors approve of. Please read the University parental accommodations policy for more information.

**Tracking Sheets**

Tracking sheets are used to track all course requirements from each student's program. All students are required to fill out and submit their tracking sheets at least once a year, by the end of 3rd term for all continuing students, to Audrey Lindahl alindahl@jhu.edu via their CoursePlus Portfolio. Approved waivers and substitutions must also be submitted with the tracking sheets. Students should use the tracking sheet when meeting with their advisors.

**Transfers**

MSPH to MPH: It is important to note that transfers between these programs are very rare due to the capacity of each program and because the MPH program timeline starts one term before the MSPH program. If after beginning the MSPH program a student desires admission to the MPH program instead, the student must contact Cristina Salazar. Students will need to obtain advisor approval in writing and also receive approval from the Associate Chair for Academic Programs.
country to assist you in preparing for your assignment and in acquiring the appropriate approvals before traveling.

It is the responsibility of each student to complete and submit the completed registration forms no later than FIVE WEEKS prior to your departure for all overseas assignments.

The US State Department now issues travel advisories using a system of levels 1 through 4. Students traveling to countries with Travel Advisory levels 3 or 4, or Bangladesh, Cameroon, Colombia, Egypt, Ethiopia, Jordan, Kenya, or Mexico, must follow the procedure described in section A. Administrative (11). Students traveling to other countries may also be required to follow procedure A. Administrative (11) if the IH Leadership deems it necessary upon initial review of their IH Travel Registration Form. Copies of the registration form may be obtained from the Departmental Senior Academic Coordinator. Students must register their travel each time they travel and every time they return for follow up trips. Students traveling to travel warning countries must obtain approval prior to every trip.

Below are instructions for you when traveling overseas:

A. ADMINISTRATIVE

(1) STUDENT EMERGENCY INFORMATION FORM: Students must submit the online Student Emergency Information Form during orientation. A copy of the form will be kept securely in each student’s academic file and will be updated by the student on a yearly basis.

(2) TRAVEL COURSE REQUIREMENT – All students must take the online course 220.600.81 International Travel Course through CoursePlus during their first year. It is a mandatory 1-credit pass/fail course offered 2nd, 3rd and 4th terms. Students must complete all lectures and assignments, take the quiz, and participate in a LiveTalk session during the year. The course provides information on University and departmental travel approvals and procedures, safety, health information and guides students in answering questions they have about traveling abroad. Students in other departments who are engaging in work with IH Faculty or in IH projects must take this course. Students who do not take this course will not be allowed to travel.

(3) REQUIRED FORMS AND DEPARTMENTAL APPROvals – All students must submit the IH Department Travel Registration Form prior to traveling. If a student is traveling to a country with a U.S. State Department Travel Warning he/she must also complete the Traveling to Countries with Travel Warning portion of the form and submit everything at least five weeks prior to departure, to get approval from the IH Leadership Committee (see section 11 below). MSPH students are required to have their practicum approval form submitted and approved along with the IH travel policy process completed before traveling. Proper registration of student travel facilitates a faster response during an emergency. Students who travel without prior approval and without completing the IH travel forms outlined by this policy may be subject to disciplinary action deemed appropriate by the IH Leadership.

(4) UNIVERSITY TRAVEL REGISTRY (https://travelregistry.johnshopkins.edu) – Once travel plans are finalized and the plane tickets are purchased, the University requires that you register all your travel details online.

(5) STUDENTS FROM OTHER JHU DEPARTMENTS – Students from other JHSPH departments who will be traveling with the IH Department for school related travel must follow the DIH travel policy and process outlined in pages one to four, including steps 1-4 on page one, and must notify and obtain permission from their primary department prior to traveling.

(6) REPEAT TRAVEL TO THE SAME COUNTRY – If a student is traveling to the same city and country he/she traveled previously and all the information in the initial form is the same, the student has to submit a short version of the IH Department Travel Registration Form, in which only the dates of travel are updated. If this repeat trip is to a country with a U.S. State Department Travel Warning, they have to go through IH Leadership approval again. Repeat travel must also be registered in the University Travel Registry.

(7) SHORT TRIP TO ANOTHER COUNTRY WITHIN INITIAL TRAVEL ASSIGNMENT – Students who will be engaged in short trips to another country from their initial country of travel for personal reasons, must submit a short version of the IH Department Travel Registration Form. Short trips are defined as trips that last up to 14 days.

(8) 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 embassy web sites. 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. Students on a visa should consult with OIS regarding letters and or information they might need to re-enter the country.

(9) UNIVERSITY APPROVALS – Be sure that you have the requisite approvals from the University to initiate any overseas research. These include 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 Practicum, and approval from the IRB for collecting data for research projects. Remember that for student research, the Principal Investigator for purposes of JHSPH IRB approval will be either (typically) your advisor or (in some cases) another JHSPH faculty member selected in consultation with your advisor, and she/he must approve the research and sign the forms. It can take several months to get all of the IRB approvals finalized, so plan ahead accordingly. 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. All students should discuss the IRB process with their advisors and review the JHSPH website for more information (https://www.jhsph.edu/offices-and-services/institutional-review-board).

(10) 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. You should identify who your local preceptor supervisor will be.

**NOTE TO STUDENTS**

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

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**A. CONTACT INFORMATION**

- **Insurance Card**
  - **Location**: In your wallet. The card is good for 5 weeks. You must fill out the Student Emergency Information Form to use it. The card outlines in three simple steps on who to contact if the student is in an emergency while traveling abroad and can only reach their emergency contact. All IH students should provide the card to their emergency contact prior to traveling and inform them of the process if an emergency were to occur while traveling. The card outlines in three simple steps on who to contact if the student is in an emergency while traveling abroad and can only reach their emergency contact. All IH students should provide the card to their emergency contact prior to traveling and inform them of the process if an emergency were to occur while traveling.

**B. HEALTH**

- **Insurance**
  - **Check** to be sure that your health insurance will cover you when you are overseas. Contact your provider to obtain information on coverage overseas. 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. Usually, if you need prescription medicine for more than three months, your medical insurance will require a written letter from the department stating the nature of the trip and the length of time. Cristina Salazar may write this letter if you were to need it. You should also consider obtaining supplementary travel insurance. This type of insurance will assist you in seeking quality medical care should a serious problem arise.

**C. IN CASE OF AN EMERGENCY**

- **Evacuation Plan or Safety Plan**
  - **State Department**'s country alerts and warnings website (https://travel.state.gov/content/passports/en/alertswarnings.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 Advisory level of 3, 4, or Bangladesh, Cameroon, Colombia, Egypt, Ethiopia, Jordan, Kenya, or Mexico, from the US. State Department, you must submit the following forms prior to every trip:

1. A completed International Health Department Travel Registration Form
2. An evacuation plan or a safety plan from the organization or faculty member you will be working with.
3. A Practicum Proposal form approved by your advisor (MSPH students only)
4. A photocopy of your passport (needed only once)

**CAUTION**

- **NOTE** to students
  - **University**'s country alerts and warnings website (https://travel.state.gov/content/passports/en/alertswarnings.html) to see about safety in the country you are traveling to.

- **Students** must register on the Healix Travel Oracle website (https://traveloracle.healix.com/johnshopkins) to gain access to Johns Hopkins specific travel assistance information. Use policy number JH18492 to register. From there, you may also download the Travel Oracle app.

- Students should carry the Healix contact information with them at all times while traveling in case of an emergency or for medical or travel assistance. If you have questions about the Johns Hopkins Global Travel Assistance Program, send an email johnshopkins@healix.com to Healix. You can also find information about these program services on the Johns Hopkins Travel Portal under Traveler Tools.

2. **EMERGENCY CONTACT TRAVEL CARD**
   - Every student will receive a wallet size card to be given to their emergency contact (person identified in the Student Emergency Information Form) while the student is traveling along with a letter describing the intention of the card and how to use it. The card outlines in three simple steps on who to contact if the student is in an emergency while traveling abroad and can only reach their emergency contact. All IH students should provide the card to their emergency contact prior to traveling and inform them of the process if an emergency such as a natural disaster were to occur while traveling. The card should only be used for this purpose.

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**To Students**

Make sure to keep a copy of all relevant travel information, including your passport, visa, and any health documents. Also, make sure to carry a copy of your insurance card and a list of emergency contacts with you at all times. By taking these precautions, you can ensure a safe and enjoyable experience while traveling overseas.
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**
- US State Department Travel Information (https://travel.state.gov/content/travel.html)
- CDC's "Traveler's Health" site. Useful information on health issues, and warnings by country (https://wwwnc.cdc.gov/travel/content/travel.html)
- Healix Travel website (https://traveloracle.healix.com/register/a9f118-b5b0-482c-8a59-993e5855e444). Useful information on medical, security, travel, and other alerts worldwide and specific vaccination requirements for different countries.
- Full list of travel clinics in Maryland (http://www.travelhealthresource.com)
- US State Department Study Abroad Website (https://travel.state.gov/content/travel/en/international-travel/before-you-go/travelers-with-special-considerations/students.html?refcode=osac). Useful travel and destination info for students before and during their trips. The site is mobile-responsive

**Guidelines for Student Employment**
For information about student employment please follow this link All the procedures and forms are posted online (https://my.jhsph.edu/sites/IH/student/default.aspx). For additional information or specific inquiries, please contact Natalie Wertz, the academic and student payroll coordinator (nwertz1@jhu.edu) in the Department of International Health's Payroll Office.

**Teaching Assistantships**
Students can TA in the department for a wage but need instructor AND departmental approval prior to starting work. For more information, students must talk to the instructor and Natalie Wertz (nwertz1@jhu.edu) to fill out the necessary forms.

All TA's are required to take the TA training course designed to guide students in their roles and responsibilities as TA's prior to beginning any work. The training can be done online (https://courseplus.jhu.edu/core/index.cfm/go/enr/start/cid/1886). Our CTL's TA Training has been approved by Homewood's CIRTL to fulfill Teaching Academy – Preparing Future Faculty (PFF) program – Phase I requirement. Students interested in obtaining a Teaching Academy certification can finish our TA training and continue their path with Teaching Academy, if interested. For more information on the Teaching Academy Program please follow this link (http://e-catalog.jhu.edu/public-health/departments/international-health/%20http://cer.jhu.edu/teachingacademy/pff/requirements).

**Withdrawals**
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 the student wants to be readmitted. Upon readmission, a student must register for a minimum of two consecutive terms prior to completing degree requirements.

**Registration**
All MSPH, MHS, and PhD students must register for a minimum of 16 credits of courses each term until they graduate to be a full-time student in the IH department. Students do not register for summer or winter intersession.

**Introduction to Online Learning**
The School of Public Health offers courses in various formats, including a number of online classes. You may at some point want or need to register for a course online. In order to be eligible to take an online course, students must complete the Introduction to Online Learning, which is offered through the Distance Education Division of the Johns Hopkins Bloomberg School of Public Health. This noncredit mini course is a prerequisite for all courses offered by this division and must be completed prior to the start of the term in which a student wishes to enroll in an online course. Since the School does not permit conditional and/or concurrent enrollment (that is, you must take the online course prior to enrolling in a distance education class), we require all incoming students to take this non-credit course during the first term they enroll. For course dates and enrollment information, please visit the CoursePlus website (https://courseplus.jhu.edu/core/index.cfm/go/course/home/cid/90).

**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 to fulfill requirements. Students must receive satisfactory grades of C or higher in all required courses and continuously maintain a cumulative Grade Point Average (GPA) of at least 2.75 in the MSPH and MHS programs, and a cumulative GPA of at least 3.0 in the PhD program 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. The Committee will establish the minimum conditions to be fulfilled in order to return to the “good standing” status and avoid termination. Typical cases with no conditions require that students improve their academic standing within 2 academic terms. In cases where conditions are imposed, the Committee will specify the maximum time allowed for satisfaction of the conditions. Failure to satisfy these conditions may result in termination from the program.

If students receive Federal Loans administered through the Financial Aid Office (http://www.jhsph.edu/offices-and-services/student-affairs/financial-aid) there are other academic standards that students must abide by in order to comply with Federal Loan requirements. Please check with the Financial Aid office or email them at JHSPH.finaid@jhu.edu to request more information.
NON-DEGREE TRAINING

Non-Degree Training
Continuing Education Programs
The Department of International Health sponsors two types of continuing education programs for both health professionals and students.

Certificate programs (https://www.jhsph.edu/departments/international-health/continuing-education/certificates)
Certificate programs offer focused academic training in specific areas of public health. Certificates typically require less time and coursework than a degree, making them appealing both to current Bloomberg degree students desiring specialization in particular topic areas and to individuals seeking to learn more about specific areas of public health. See our certificate programs. (https://www.jhsph.edu/departments/international-health/continuing-education/certificates)

Winter and Summer Institute
Institute courses are short (one day to three weeks in length), offered in January, over the Summer, and in November and can be taken for academic credit (resulting in an official transcript from JHSPH) or not for credit (at a reduced cost). See list of our institutes. (https://www.jhsph.edu/departments/international-health/continuing-education/institutes) Institute courses have the same academic rigor and same world-class faculty as regular term courses, but the courses are compressed to take place in fewer days.

Courses vary in length from one day to three weeks, depending on the number of credits and the requirements of the particular course.

INSTITUTES SPONSORED BY INTERNATIONAL HEALTH
- Center for American Indian Health (http://caih.jhu.edu/training/course-offerings) (offered winter and summer)

- Health Emergencies in Large Populations (HELP) (http://www.hopkinshumanitarianhealth.org/education/help-course) (offered winter and summer)

- Health Systems Summer Institute (https://www.jhsph.edu/departments/international-health/continuing-education/institutes/health-systems-summer-institute) (only offered in summer)


Post-Doctoral Training (https://www.jhsph.edu/academics/postdoctoral-training/University%20Policy.pdf)
Students in the dual degree program may complete both Masters in 3 years (6 terms at JHSPH and 3 semesters at SAIS) depending on what SAIS track a student chooses. Dual degree candidacy does not remove the MSPH practicum or the master’s Capstone requirements. Students can choose to do the MSPH or MA first. For more information about the dual degree please ask Cristina Salazar csalazar@jhu.edu, the Academic Program Manager. For more information please visit this site (https://www.jhsph.edu/departments/international-health/global-health-masters-degrees/master-of-science-in-public-health/ma-msph).
GLOBAL HEALTH ECONOMICS, MHS

Overview
Director: Dr. Antonio J. Trujillo

The Master of Health Science (MHS) in Global Health Economics is a 9-month academic program that teaches students how to use economic tools to help solve pressing global health problems.

With increasing globalization, there is a growing need for health economists who can translate research into policy and directly inform governments and organizations on the best course of action. Through this degree program, students will learn how health economic principles are used to address global issues such as migration, displaced persons, climate change and pandemics. They'll also learn how health economics can be used to promote healthy lifestyles, positive health outcomes, and equitable access to care.

Using applied health cases from around the world, students will learn how to conduct economic evaluations of health programs and how to evaluate the impact of social problems on the health of a community or population. They will also gain a solid understanding of how to influence behavior through the use of economic incentives.

The major components of the MHS in Global Health Economics include:

- Nine months of academic coursework building strengths in economics, econometrics, economic evaluation, and epidemiology
- Written comprehensive exam
- Scholarly paper
- Specialty elective courses in international health

Completion of a scholarly paper that integrates material from multiple courses applying econometric, evaluation or other research techniques to a topic of interest. Within the School this degree is classified as an academic MHS as it provides an opportunity for advanced study and research in a specific public health discipline and will prepare students for a career in global health economics or further graduate study.

An academic adviser is assigned from the list of Advising Faculty in the student's program area. The Program Coordinator provides general guidance and supervision over all students in each program area.

Requirements for Admission
Students must have a strong quantitative background with undergraduate coursework in microeconomics and calculus highly recommended. Some prior international or health systems experience is highly desirable.

Advising Faculty
While students will have a designated adviser, they are encouraged to meet and discuss their interests with a variety of faculty members.

- David Bishai
- Bryan Patenaude
- Alan Sorkin
- Cristina Garcia
- Krishna Rao
- Antonio J. Trujillo

Andres Vecino

General Requirements
A minimum of 64 credits in formal coursework must be earned over four academic quarters. Required and elective courses are described in the curriculum section. Students must be continuously registered until all requirements for the degree program have been satisfied. Failure to register for a quarter will result in automatic withdrawal. A withdrawn student must be formally readmitted before resuming a program of study. Upon readmission, a student must be registered for a minimum of two consecutive terms prior to completing degree requirements.

Ethics Requirement
Ethics – All master’s students are required to take the course PH.550.860 Academic & Research Ethics at JHSPH. This 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 matriculating for 3rd term.

Students who are being funded by an NIH training grant must also take one of the following two courses: PH.550.600 LIVING SCIENCE ETHICS - RESPONSIBLE CONDUCT OF RESEARCH offered first term, OR PH.306.665 RESEARCH ETHICS AND INTEGRITY: U.S. AND INTERNATIONAL ISSUES, offered third term.

Core and International Health Requirements
Students in the MHS in Global Health Economics must take the required courses listed below. Schedule permitting, students can take additional electives provided they do not conflict with the required and elective courses. A list of elective courses is provided. Additional electives not included in the list need to be approved by the Program Director.

All core and elective courses must be taken for letter grade. Course substitutions are not allowed for any of the required or the elective courses. Students cannot take more than 22 credits per term.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PH.140.621</td>
<td>Statistical Methods In Public Health I</td>
<td>4</td>
</tr>
<tr>
<td>PH.221.840</td>
<td>SPECIAL STUDIES AND RESEARCH HEALTH SYSTEMS ([IGA] Sign up under adviser)</td>
<td>1</td>
</tr>
<tr>
<td>PH.221.801</td>
<td>Health Systems Program Seminar I</td>
<td>1</td>
</tr>
<tr>
<td>PH.318.603</td>
<td>Applied Microeconomics for Policymaking</td>
<td>3</td>
</tr>
<tr>
<td>PH.340.721</td>
<td>Epidemiologic Inference in Public Health</td>
<td>5</td>
</tr>
<tr>
<td>PH.552.603</td>
<td>The Role of Qualitative Methods and Science in Describing and Assessing A Population'S Health</td>
<td>0.5</td>
</tr>
<tr>
<td>PH.550.860</td>
<td>Academic &amp; Research Ethics at JHSPH</td>
<td>4</td>
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Second Term

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<tr>
<td>PH.140.622</td>
<td>STATISTICAL METHODS IN PUBLIC HEALTH II</td>
<td>4</td>
</tr>
<tr>
<td>PH.221.802</td>
<td>HEALTH SYSTEMS GRADUATE SEMINAR 2</td>
<td>1</td>
</tr>
<tr>
<td>PH.313.643</td>
<td>HEALTH ECONOMICS</td>
<td>3</td>
</tr>
<tr>
<td>PH.221.638</td>
<td>HEALTH SYSTEMS RESEARCH AND EVALUATION IN DEVELOPING COUNTRIES</td>
<td>4</td>
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<tr>
<td>PH.313.601</td>
<td>Economic Evaluation I</td>
<td>3</td>
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</table>

Third Term

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<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>PH.313.602</td>
<td>Economic Evaluation II</td>
<td>3</td>
</tr>
<tr>
<td>PH.220.601</td>
<td>Foundations of International Health (On campus only)</td>
<td>4</td>
</tr>
</tbody>
</table>
PH.221.651 ECONOMETRICS I 4
PH.221.803 HEALTH SYSTEMS GRADUATE SEMINAR 3 1
PH.221.662 GLOBALIZATION AND HEALTH: ECONOMIC DEVELOPMENT 3
PH.313.644 INTERMEDIATE HEALTH ECONOMICS 3
PH.221.652 FINANCING HEALTH SYSTEMS FOR UNIVERSAL HEALTH COVERAGE 3
PH.221.840 SPECIAL STUDIES AND RESEARCH HEALTH SYSTEMS (Sign up under adviser for Scholarly paper) 2

Fourth Term
PH.221.620 Applying Summary Measures of Population Health to Improve Health Systems 3
PH.221.840 SPECIAL STUDIES AND RESEARCH HEALTH SYSTEMS (Sign up under adviser for Scholarly paper) 2
PH.221.804 Health Systems Graduate Seminar 4 1
PH.313.604 ECONOMIC EVALUATION IV 3
PH.221.663 GLOBALIZATION AND HEALTH: FRAMEWORK FOR ANALYSIS 3

NOTE: Students must choose from the elective selection given to them for each term. They cannot substitute with a course not listed.

Code Title Credits
Elective Courses
PH.221.627 ISSUES IN THE REDUCTION OF MATERNAL AND NEONATAL MORTALITY IN LOW INCOME COUNTRIES 4
PH.221.639 Health Care in Humanitarian Emergencies 3
PH.221.650 HEALTH POLICY ANALYSIS IN LOW AND MIDDLE INCOME COUNTRIES 3
PH.140.640 STATISTICAL METHODS FOR SAMPLE SURVEYS 3
PH.223.687 VACCINE POLICY ISSUES 3
PH.313.861 PUBLIC HEALTH ECONOMICS SEMINAR 1
PH.140.632 INTRODUCTION TO THE SAS STATISTICAL PACKAGE 3
PH.221.617 Behavioral Economics in Health Decisions 2
PH.223.680 GLOBAL DISEASE CONTROL PROGRAMS AND POLICIES 4
PH.340.600 Stata Programming 2
PH.380.712 METHODS IN ANALYSIS OF LARGE POPULATION SURVEYS 3
PH.140.624 STATISTICAL METHODS IN PUBLIC HEALTH IV 4

Comprehensive Exam
Satisfactory performance is required on a written comprehensive examination. Students will take the exam in the 4th term date to be announced in February. The exam will cover the materials taught in the core courses, and the required courses from International Health.

A minimum overall passing grade of 75 is required. Exams will be graded by the co-instructors of the Capstone course. Those scoring below this level may re-take the entire examination on a later term decided by the co-Director of International Health (student must maintain registration if taking the comprehensive exam a second time). Only one re-examination is permitted. Students failing twice are terminated from the MHS program.

Scholarly Paper
Students are expected to write a scholarly paper during their four-term degree. Students must work with their adviser on their paper starting 1st term. Students must register for Special Studies with the Global Health Economics Program Director for 2 credits, during third and fourth terms to work solely on their scholarly paper. The paper must be completed during the Special Studies course in fourth term and due date for the paper TBA. The scholarly essay will be graded by two faculty members: the Director of the MHS program in Global Health Economics, and the student's adviser. If a student identifies a topic that does not align with their adviser's research area, the student must identify a new adviser and needs to seek approval of this change from the Program Director.

Time of Completion of Requirements
Students are expected to complete all requirements for the degree in one year (four terms). Delays for reason will be considered, but in no case, may the time in the program exceed four years from the time of matriculation, regardless of the residence status of the student (other than leave of absence).

BA/MHS
Johns Hopkins undergraduate students currently majoring in Public Health Studies interested in the BA/MHS program contact Audrey Lindahl alindahl@jhu.edu for more information.

PREREQUISITE COURSES
Undergraduate students applying must have completed the following coursework and have received a B or higher on each of the following:

• AS 280.380 Global Health Principles and Practice
• AS 280.345 Public Health Biostatistics
• AS 280.350 Fundamentals of Epidemiology
• AS 180.101 Elements of Microeconomics
• AS 180.301 Intermediate Microeconomics

BENEFITS OF PROGRAM
• Johns Hopkins University undergraduates (only) to take JHSPH courses during their undergraduate program, re-use up to 16 credits accumulated as undergraduates in the Master's program.
• Apply by July 1, before senior year, without submitting GRE's as long as their cumulative and SPH undergraduate grade point average remains above 3.3.
• Students who complete the BA/BS at JHU, become MHS candidates and follow the MHS program.
• Receive International Health advisor during your senior year
• This 9-month MHS program allows students to apply to PhD programs faster

BA/MHS ADMISSION REQUIREMENTS
• Online SOPHAS Express application
• Unofficial JHU transcripts when applying. Official transcript required before starting the MHS degree.
• GRE score if GPA less than 3.3
• Three letters of recommendation
• Resume or curriculum vitae
INDIVIDUALIZED GOALS ANALYSIS (IGA)

The IGA is a process of discussion with your advisor resulting in a written document.

**Part 1:** Briefly explain what knowledge, skills, and experiences you bring to the program.

**Part 2:** Identify your goals for your education by explaining what you hope to gain in terms of knowledge, skills, personal and professional contacts, and other experiences while a student in the program. Describe one or more topics for your scholarly paper and indicate how these will be used to build your competencies and achieve your goals.

**Part 3:** Identify what courses and electives you intend to take and when you plan to complete your courses. Course descriptions in the catalog indicate when courses are generally offered. Your tracking sheet should include a tentative list of electives you plan to complete and the total credit hours. Carefully review your paper and tracking sheet with your advisor to ensure the proposed curriculum is not only feasible, but that it meets program requirements. Explain how your curriculum plan is aligned with the goals you identified in Part 2. A spreadsheet is often the best way to do this part.

1. Use statistics and econometric methods (including statistical inferences, regression methods, and applied econometric methods) to solve public health problems.
2. Understand the burden of disease; measure and calculate health outcomes; differentiate between methods of economic evaluation; and practice use of economic evaluation.
3. Apply economic theory and mathematical microeconomic modeling within the field of health economics.
4. Evaluate and apply methods in health economics and economic evaluation in public health research.
5. Use economic theory and economic modeling to interpret, analyze, and evaluate health policy in the context of low- and middle-income countries (LMIC).
6. Describe the health status and demographic profile of LMIC populations including incidence and prevalence of disease morbidity and mortality, and life expectancy in LMIC’s.
7. Interpret and understand the link of economic development and health, macroeconomics and health and the connection between poverty, growth and health investment.

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 to fulfill requirements. Students must receive satisfactory grades of C or higher in all required courses and continuously maintain a cumulative Grade Point Average (GPA) of at least 2.75 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. The Committee will establish the minimum conditions to be fulfilled in order to return to the "good standing" status and avoid termination. Typical cases with no conditions require that students improve their academic standing within 2 academic terms. In cases where conditions are imposed, the Committee will specify the maximum time allowed for satisfaction of the conditions. Failure to satisfy these conditions may result in termination from the program.

If students receive Federal Loans administered through the Financial Aid Office (http://www.jhsph.edu/offices-and-services/student-affairs/financial-aid) there are other academic standards that students must abide by in order to comply with Federal Loan requirements. Please check with the Financial Aid office or email them at JHSPH.finaid@jhu.edu to request more information.

Registration

MHS 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 term or winter intersession classes. Registration below 16 credits is not allowed and violates the terms of a student’s full-time requirements and good academic standing. Any student registering below 16 credits during any term could be in violation of their requirements. Audit courses do not count toward the 16-credit per term requirement.
INTERNATIONAL HEALTH, MSPH

MASTER OF SCIENCE IN PUBLIC HEALTH
DEPARTMENT OF INTERNATIONAL HEALTH

Overview

Each student is admitted into one of the four program areas approved for study leading to the Master of Science in Public Health degree in International Health: Social and Behavioral Interventions, Global Disease Epidemiology and Control, Health Systems, or Human Nutrition.

An academic adviser is assigned from the list of Advising Faculty in the student's program area. The Program Coordinator provides general guidance and supervision over all students in each program area.

Concentrations

GLOBAL DISEASE EPIDEMIOLOGY AND CONTROL
Director: Andrea Ruff, MD
Program Coordinators: Victoria Chou, PhD and Yvonne Tam, MHS

Requirements for Admission

Students in the program ideally have a bachelor’s degree in health or biological sciences or statistics. An applicant with another undergraduate degree must have satisfactorily completed courses in mathematics; biology; and chemistry, physics, or another natural science.

Educational Objectives

Overall Program Goal

This program provides training for public health practitioners 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. 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 (including emerging infections), vaccinology, and micronutrients. Students have the opportunity to learn from leading experts in vaccine science and policy and may take courses to complete a certificate in this area. Students can acquire a broad understanding of the methods, skills, and tools needed to design, conduct, and analyze community and clinical trials and/or laboratory-based investigations. Students will be able to provide technical assistance to public health researchers and public health managers in the design, implementation and evaluation of programs to address public health problems facing underserved populations in the US and abroad.

Advising Faculty

Smisha Agarwal       Mohammad Ali
Agbessi Amouzou       Jessica Atwell

Naor Bar-Zeev       Robert Black
Emily Carter       Subhra Chakraborty
Victoria Chou       Amanda Debes
Anna Durbin       Christine Marie George
Robert Gilman       Laura Hammitt
Kyla Hayford       Mary Carol Jennings
Almamy Malick-Kante  Ruth Karron
Joanne Katz       Maria Knoll
Alain Labrique       Rupali Limaye
Abdoulaye Maiga       Melissa Marx
Diwakar Mohan       Lawrence Moulton
Melinda Munos       Moise Ngwa
Bareng Aletta Nonyane Jamie Perin
Malathi Ram       Timothy Roberton
Andrea Ruff       Beulah P. Sabundayo
David Sack       Dan Salmon
Ashley Sheffel       Anita Shet
Kawsar Talaat       Yvonne Tam
Brian Wahl       Neff Walker

HEALTH SYSTEMS
Director: Sara Bennett PhD
Program Coordinators: Andreea Creanga, MD, and Ligia Paina, PhD

Requirements for Admission

Students must have a degree in biological or health sciences, social sciences or management. Some prior international or health systems experience is highly desirable.

Educational Goals

Graduates of the Health Systems MSPH program will be prepared to take on leadership and management roles in health policy and planning, health financing and management, and monitoring and evaluation of health programs. Graduates will contribute to strengthening health systems through the implementation of equitable and cost-effective interventions for improving access, quality, and efficiency of health services for underserved populations. A health-related practicum experience is an important component of this degree program.

Core Health System Competencies

1. Demonstrate knowledge of public health problems pertinent to disadvantaged populations and approaches to their assessment, management, and control;
2. Demonstrate a thorough understanding of concepts and application of management principles to the operation of health systems in resource-poor settings;
3. Analyze and synthesize data relevant to the management and control of health problems of public health importance in resource-poor settings;
4. Produce written and oral reports for public health professionals and policy makers.

Advising Faculty
Joe Ali Olakunle Alonge
Chiara Altare Abdulgafoor Bachani
Abdullah Baqui Sara Bennett
William Brieger Gilbert Burnham
Andreea Creanga Shannon Doocy
Anbrasi Edward Dustin Gibson
Shivam Gupta Connie Hoe
Rasheda Khanam Alain Koffi
Adam Koon Qingfeng Li
Nina Martin Amber Mehmood
Maria Merritt Rosemary Morgan
Ligia Paina George Pariyo
Bryan Patenaude David Peters
Hafizur Rahman Krishna Rao
Court Robinson Daniela Rodriguez
Mathuram Santosham Meike Schleiff
Yusra Shawar Jeremy Shiffman
Anthony So Alan Sorkin
Paul Spiegel Antonio Trujillo
Andres Vecino-Ortiz Shirin Wadhwaniya
William Weiss

HUMAN NUTRITION
Director: Parul Christian
Program Coordinator: Vanessa Garcia-Larsen, MSc MEd PhD

Requirements for Admission
The program seeks to attract and train future experts in public health nutrition across a range of professional interests and background. Entry into the Master of Science in Public Health (MSPH) program in Human Nutrition requires, at a minimum, a bachelor's degree or its equivalent, preferably in nutrition, biology, health or social sciences, public health, health, economics, or health policy.

Educational Objectives
The MSPH program in Human Nutrition is designed to train professionals to focus on understanding and solving public health problems in food and nutrition across a diverse societal landscape. The MSPH degree in Human Nutrition prepares students to assume professional, technical, and management positions within public health nutrition programs or government, international or nongovernmental agencies, universities, hospitals and private industry. The program also offers a broad public health nutrition component that complements dietetics skills acquired in the combined MSPH-RD program (see below). The MSPH program also prepares students with a foundation of knowledge and skills for carrying out subsequent doctoral studies and research in the field of human nutrition, or training in medicine.

Overall Program Goal
There are four overarching academic competencies that students are expected to master during the course of their masters’ degree program. Students should:

- Demonstrate knowledge of public health nutrition problems and characterize these problems in terms of measurable indicators
- Identify nutrition problems of public health importance; analyze and synthesize relevant data; and develop and implement prevention, control, and evaluation plans
- Participate in a field, laboratory or clinical experience related to nutrition research or programs from conception of ideas through design, management, monitoring, data collection, and analysis
- Communicate through written reports, oral presentations and other media nutrition information of high technical quality and program or policy relevance.

Advising Faculty
- Laura Caulfield
- Jessica Fanzo (co-adviser)
- Joel Gittelsohn
- Ethan Gough
- Jean Humphrey
- Vanessa Garcia-Larsen
- Rebecca Heidkamp
- Kristen Hurley
- Yunhee Kang
- Yeeli Mui
- Amanda Palmer
- Kerry Schulze
- Andrew Thorne-Lyman
- Keith P. West Jr.

Program Requirements
Students will be expected to enroll each term, satisfy the educational requirements, and successfully complete a practicum experience and write a capstone. Students must also pass a written comprehensive exam. A minimum of 16 total credits of coursework per term is required. Of these, approximately 64 credits are associated with directed coursework usually completed in the first year, a minimum of 28 credits
are associated with a practicum experience, and minimum of 4 credits with a capstone usually completed during the second year.

Students are required to take specific courses in each of four core content areas in order to develop specific competencies: Nutrition and Health, Biochemistry and Metabolism, Research Methods, and Professional Skills. Approximately 53 course credits are associated with these core content areas common to all MSPH students. MSPH-RD students are required to take an additional 12 credits of required coursework. Within these required classes, all students must complete coursework in environmental health and management sciences. To complete the remainder of their coursework requirements, students will choose elective coursework and special studies in conjunction with their adviser, depending on their unique career goals.

**Nutrition Practicum**

MSPH candidates complete a practicum for a minimum of 2 terms. The student, faculty adviser and other faculty within the department or school arrange this experience, as necessary. The practicum complements and reinforces the didactic portion of the MSPH program. It provides students with an opportunity to apply the knowledge gained during the first year, to develop field, laboratory, or clinical skills related to nutrition research or programs according to individually designed learning objectives, and to work as part of a team in an applied research or practice project. Students are placed in a variety of professional settings, which may include: government, non-government organizations (NGO’s), university projects, and multi-lateral, private, and/or for-profit sector. Practicum locations exist in the US and in most regions of the world. Students are often placed in organizations such as WHO, the World Bank, UNICEF, Helen Keller International, USDA, Feeding America, and the Center for Livable Future. Funding or scholarship opportunities for the practicum experience include funding from the Center for Global Health at JHU, Sight and Life, and the Borlaug Foundation. In addition to providing students with a real-life opportunity to apply their knowledge, the practicum experience helps facilitate subsequent career opportunities.

**SOCIAL AND BEHAVIORAL INTERVENTIONS**

**Director:** Caitlin Kennedy, PhD

**Program Coordinator:** Elli Leontsini, MD, MPH

**Requirements for Admission**

Applicants into the program must have a bachelor’s degree in the health or social sciences. Some prior international or health experience is highly desirable.

**Educational Objectives**

The program offers multidisciplinary training for researchers and public health practitioners who wish to use the social sciences in the design, implementation, and evaluation of public health programs, particularly community-based interventions. The program provides students with exposure to applied theory and methods from the fields of social psychology and medical anthropology and sociology. The combined use of qualitative and quantitative methods is a defining characteristic of the program.

Students may choose to specialize in the development, implementation, and evaluation of public health programs related to a given area of interest such as HIV/AIDS, maternal and child health, malaria prevention, or a host of other topical areas relevant to the enhancement of health in lower income settings. Upon completion of the program, students will be able to provide technical assistance in assessing and responding to the socio-cultural context surrounding public health interventions, and in the development, implementation, and evaluation of social and behavioral change programs to improve the health of underserved communities.

The program addresses the following educational objectives:

**The Evidence Base for International Health:** Identify, define and address major global health problems of underserved populations in lower income contexts, using appropriate indicators and current best practice.

- **International Health:** Examine conditions faced by disadvantaged populations in lower income contexts, principles of health equity and social justice and apply a range of tools to achieve better health outcomes.
- **Public Health Biology:** Explain biologic mechanisms and/or clinical manifestations of disease(s) impacting public health.
- **Environmental Health:** Discuss environmental influences on public health and appropriate risk assessment and public health response options.

**Epidemiology and Biostatistics:** Develop a solid foundation in epidemiologic and statistical research and evaluation skills applicable to public health assessment and action.

- Identify and utilize epidemiologic and biostatistics tools relevant to assessing the scope of a public health problem or the impact of public health action on a given condition.

**Social and Behavioral Interventions:** Develop the theoretical and methodological tools to gain an understanding of the socio-cultural context surrounding public health in lower income contexts and to assist in the development, implementation and evaluation of locally appropriate social and behavioral change programs.

- **Theory and Practice:** Apply relevant theories and concepts drawn from anthropology, sociology and psychology to design effective theory-driven social and behavioral interventions to improve the health and well-being of underserved communities.
- **Qualitative Methods:** Develop an understanding of theoretical paradigms and perspectives informing ethnography and qualitative research and use appropriate and rigorous qualitative research methods to understand the socio-cultural context of health and inform public health action.
- **Formative Research:** Conduct multi-method formative research to develop locally appropriate social and behavioral interventions to improve health, including development of appropriate communication interventions in support of those strategies.

**Management and Leadership:** Apply management and leadership techniques to develop, implement and evaluate health programs including organizational and financial best practices.

**Evaluation:** Propose, conduct, or assess process and outcome evaluations of social and behavioral interventions in global health

**Professional Communication and Interprofessional Performance:**

Produce written reports of programmatic findings and/or research and communicate them via oral presentations, posters, briefs, or other official documents, intended for public health professionals and/or policy makers in audience-appropriate formats; perform effectively on interprofessional teams with local community organizations and stakeholders over the course of a project of mutual interest.
Advising Faculty

• Allison Barlow
• William Brieger
• Laura Beres
• Svea Closser
• Mary Cwik
• Julie Denison
• Joel Gittelsohn
• Emily Haroz
• Steve Harvey
• Allison Ingalls
• Caitlin Kennedy
• Anne Kenney
• Shea Littlepage
• Kristin Masten
• Elli Leontsini
• Hannah Marker
• Victoria O'Keefe
• Hima Patel
• Summer Rosenstock
• Erica Rosser
• Kate Rucinski
• Haneefa Saleem
• Pamela Surkan
• Lauren Tingey
• Peter Winch
• Melissa Walls
• Emma Waugh
• Teresa Yeh

BA/MSPH
FOR PUBLIC HEALTH MAJORS AT JHU KRIEGER SCHOOL OF ARTS AND SCIENCES

The Department of International Health offers early graduate school admission to JHU seniors majoring in Public Health Studies. This transition program serves as a mode of entry into the following International Health MSPH degree programs:


Students in this Program will receive co-advising from both Schools as part of this unique experience. Admitted students must complete the BA degree before formally enrolling in the degree program.

Once students complete the BA degree, admitted students will be automatically enrolled into the MSPH degree at JHSPH starting that fall. The MSPH degree consists of a full year of coursework, a comprehensive written exam, and in the second year, a minimum of 4 months and maximum of 9 months of a full time practicum (32 credits), where students apply all their skills in a field setting, and finally fulfilling the MSPH Essay requirement. Students find practicum opportunities overseas or domesticaly.

Applications for the BA/MSPH degree must be submitted by July 1 between the junior and senior years to ensure completion of the review process prior to the first day of the academic year. Students must be accepted before the start of their senior year.

Standardized test scores are not required for application to the BA/MSPH program for students with a cumulative GPA of 3.3 or higher. However, a transcript is required for all prerequisite courses listed below and for all coursework through the 2nd semester of the student's junior year.

Undergraduate students applying must have completed the following coursework and have received a B or higher on each of the following:

• AS 280.380 Global Health Principles and Practice
• AS 280.345 Public Health Biostatistics
• AS 280.350 Fundamentals of Epidemiology

HOW TO APPLY

Applications for the BA/MSPH degree should be submitted by July 1 between the junior and senior year. Admitted students must complete their BA degree before formally enrolling in the Bloomberg School.

To apply, please use the the SOPHAS Express Application. (https://sophasexpress.liaisoncas.com/applicant-ux/#/login)

If you have questions please email Audrey Lindahl Alindahl@jhu.edu

MSPH Requirements

Program Concentration Specific Requirements

Global Disease Epidemiology and Control

GDEC MSPH Course Requirements

All required courses must be taken for a letter grade except for courses only offered for pass/fail.

Students may choose Epidemiology Option 3 with guidance and approval from their academic adviser AND the GDEC MSPH Academic Program Coordinators. Please review the guidance from the Epi Dept provided during GDEC orientation to decide which Epi course option best fits you.
# Required Courses

## General

<table>
<thead>
<tr>
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<th>Title</th>
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<tr>
<td>PH.550.860</td>
<td>Academic &amp; Research Ethics at JHSPH</td>
<td>1</td>
</tr>
<tr>
<td>PH.223.840</td>
<td>SPECIAL STUDIES AND RESEARCH DISEASE CONTROL (Individual Goals Analysis (IGA) (Register and select your advisor's name)</td>
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</tr>
<tr>
<td>PH.223.801</td>
<td>Global Disease Epidemiology and Control Program Seminar 1</td>
<td>1</td>
</tr>
<tr>
<td>PH.223.802</td>
<td>GLOBAL DISEASE EPIDEMIOLOGY AND CONTROL PROGRAM SEMINAR 2</td>
<td>1</td>
</tr>
<tr>
<td>PH.223.803</td>
<td>GLOBAL DISEASE EPIDEMIOLOGY AND CONTROL PROGRAM SEMINAR 3</td>
<td>1</td>
</tr>
<tr>
<td>PH.220.600</td>
<td>INTERNATIONAL TRAVEL PREPARATION, SAFETY, &amp; WELLNESS</td>
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## Epidemiology (Choose one series option)

### Epidemiology - Series Option 1

<table>
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<tr>
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<tbody>
<tr>
<td>PH.340.721</td>
<td>Epidemiologic Inference in Public Health I</td>
<td>5</td>
</tr>
<tr>
<td>PH.340.722</td>
<td>EPIDEMIOLOGIC INFECTION IN PUBLIC HEALTH II</td>
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### Epidemiology - Series Option 2

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<tr>
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<tbody>
<tr>
<td>PH.340.721</td>
<td>Epidemiologic Inference in Public Health I</td>
<td>5</td>
</tr>
<tr>
<td>PH.340.770</td>
<td>Public Health Surveillance</td>
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### Epidemiology - Series Option 3

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<tr>
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<tbody>
<tr>
<td>PH.340.751</td>
<td>EPIDEMIOLOGIC METHODS 1</td>
<td>5</td>
</tr>
<tr>
<td>PH.340.752</td>
<td>EPIDEMIOLOGIC METHODS 2</td>
<td>5</td>
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## Biostatistics

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<tr>
<th>Code</th>
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<tbody>
<tr>
<td>PH.140.621</td>
<td>Statistical Methods In Public Health I</td>
<td>4</td>
</tr>
<tr>
<td>PH.140.622</td>
<td>STATISTICAL METHODS IN PUBLIC HEALTH II</td>
<td>4</td>
</tr>
<tr>
<td>PH.140.623</td>
<td>STATISTICAL METHODS IN PUBLIC HEALTH III</td>
<td>4</td>
</tr>
<tr>
<td>PH.140.624</td>
<td>STATISTICAL METHODS IN PUBLIC HEALTH IV</td>
<td>4</td>
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## International Health

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<tr>
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<tbody>
<tr>
<td>PH.220.601</td>
<td>Foundations of International Health</td>
<td>4</td>
</tr>
<tr>
<td>PH.223.680</td>
<td>GLOBAL DISEASE CONTROL PROGRAMS AND POLICIES</td>
<td>4</td>
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## Infectious Disease (Choose one)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>PH.223.663</td>
<td>INFECTIOUS DISEASES AND CHILD SURVIVAL</td>
<td>3</td>
</tr>
<tr>
<td>PH.223.682</td>
<td>CLINICAL AND EPIDEMIOLOGIC ASPECTS OF TROPICAL DISEASES</td>
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## Applied Epidemiology/Randomized Trials (Choose one)

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<th>Title</th>
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<tbody>
<tr>
<td>PH.223.664</td>
<td>DESIGN AND CONDUCT OF COMMUNITY TRIALS</td>
<td>4</td>
</tr>
<tr>
<td>PH.340.769</td>
<td>PROFESSIONAL EPIDEMIOLOGY METHODS</td>
<td>4</td>
</tr>
<tr>
<td>PH.223.705</td>
<td>GOOD CLINICAL PRACTICE: A VACCINE TRIALS PERSPECTION</td>
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## Vaccines

<table>
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<tr>
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<tbody>
<tr>
<td>PH.223.662</td>
<td>VACCINE DEVELOPMENT AND APPLICATION</td>
<td>4</td>
</tr>
<tr>
<td>PH.223.687</td>
<td>VACCINE POLICY ISSUES</td>
<td>3</td>
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## Environmental Health

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<th>Title</th>
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<tbody>
<tr>
<td>PH.180.602</td>
<td>ENVIRONMENT AND HEALTH IN LOW AND MIDDLE INCOME COUNTRIES</td>
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</table>

## Management Sciences

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>PH.221.602</td>
<td>Applications in Managing Health Organizations in Low and Middle income Countries</td>
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</table>

## Qualitative Methods (choose one of the below)

<table>
<thead>
<tr>
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<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>PH.550.604</td>
<td>QUALITATIVE REASONING IN PUBLIC HEALTH</td>
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</table>

## Design and Implementations choose one of the below

<table>
<thead>
<tr>
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<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>PH.224.689</td>
<td>HEALTH BEHAVIOR CHANGE AT THE INDIVIDUAL, HOUSEHOLD AND COMMUNITY LEVELS</td>
<td>4</td>
</tr>
<tr>
<td>PH.221.688</td>
<td>Social and Behavioral Foundations of Primary Health Care</td>
<td>4</td>
</tr>
<tr>
<td>PH.221.661</td>
<td>PROJECT DEVELOPMENT FOR PRIMARY HEALTH CARE IN DEVELOPING COUNTRIES</td>
<td>4</td>
</tr>
<tr>
<td>PH.410.620</td>
<td>Program Planning for Health Behavior Change</td>
<td>3</td>
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</tbody>
</table>

## Leadership and Interprofessional Practice

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>PH.552.625</td>
<td>BUILDING COLLABORATIONS ACROSS SECTORS TO IMPROVE POPULATION HEALTH</td>
<td>0.5</td>
</tr>
<tr>
<td>PH.552.623</td>
<td>Principles of Negotiation and Mediation for Public Health Professionals</td>
<td>0.5</td>
</tr>
<tr>
<td>PH.552.624</td>
<td>Applications Of Negotiation And Mediation For Public Health Professionals</td>
<td>0.5</td>
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</table>

## YEAR 2 Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>PH.223.810</td>
<td>Global Disease Epidemiology and Control Practicum (Students must complete a minimum of 28 credits of practicum)</td>
<td>14</td>
</tr>
<tr>
<td>PH.223.810</td>
<td>Global Disease Epidemiology and Control Practicum (Students must complete a minimum of 28 credits of practicum)</td>
<td>14</td>
</tr>
<tr>
<td>PH.223.850</td>
<td>MSPH Capstone Global Disease Epidemiology and Control</td>
<td>4</td>
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</table>

## Recommended Courses based on student feedback and topic areas

### International Health and Diseases

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>PH.221.627</td>
<td>ISSUES IN THE REDUCTION OF MATERNAL AND NEONATAL MORTALITY IN LOW INCOME COUNTRIES</td>
<td>4</td>
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</tbody>
</table>

### Infectious Disease

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PH.340.612</td>
<td>Epidemiologic Basis for Tuberculosis Control</td>
<td>2</td>
</tr>
<tr>
<td>PH.340.646</td>
<td>Epidemiology and Public Health Impact of HIV and AIDS</td>
<td>4</td>
</tr>
<tr>
<td>PH.340.627</td>
<td>Epidemiology of Infectious Diseases</td>
<td>4</td>
</tr>
<tr>
<td>PH.340.609</td>
<td>CONCEPTS AND METHODS IN INFECTIOUS DISEASE EPIDEMIOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>PH.340.677</td>
<td>INFECTIOUS DISEASE DYNAMICS: THEORETICAL AND COMPUTATIONAL APPROACHES</td>
<td>3</td>
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</tbody>
</table>

### Chronic Disease

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>PH.223.667</td>
<td>Chronic Diseases in Low and Middle income Countries: Prevalence and Epidemiology</td>
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</tbody>
</table>

### Nutrition

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>PH.222.641</td>
<td>Principles of Human Nutrition in Public Health</td>
<td>4</td>
</tr>
<tr>
<td>PH.222.647</td>
<td>NUTRITION EPIDEMIOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>PH.222.649</td>
<td>INTERNATIONAL NUTRITION</td>
<td>3</td>
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</table>

### Population/Program Evaluation

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>PH.221.641</td>
<td>MEASUREMENT METHODS IN HUMANITARIAN EMERGENCIES</td>
<td>2</td>
</tr>
<tr>
<td>PH.221.645</td>
<td>LARGE-SCALE EFFECTIVENESS EVALUATIONS OF HEALTH PROGRAMS</td>
<td>4</td>
</tr>
<tr>
<td>PH.380.600</td>
<td>PRINCIPLES OF POPULATION CHANGE</td>
<td>4</td>
</tr>
<tr>
<td>PH.380.603</td>
<td>DEMOGRAPHIC METHODS FOR PUBLIC HEALTH</td>
<td>4</td>
</tr>
</tbody>
</table>

## Qualitative Methods (choose one of the below)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PH.552.603</td>
<td>The Role of Qualitative Methods and Science in Describing and Assessing A Population’S Health</td>
<td>0.5</td>
</tr>
<tr>
<td>Course Title</td>
<td>Credits</td>
<td></td>
</tr>
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**Plan of Study Example**

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<td>PH.223.802 GLOBAL DISEASE EPIDEMIOLOGY AND CONTROL PROGRAM SEMINAR 2</td>
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PH.223.680 GLOBAL DISEASE CONTROL PROGRAMS AND POLICIES 4

Credits 8

Total Credits 49

Add in your selections from the following to the Plan of Study Example:

• General: International Travel Preparation, Safety and Wellness
• Infectious Disease
• Applied Epidemiology/Randomized Trials
• Social and Behavioral Sciences
• Leadership and Interprofessional Practice

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

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<td>PH.550.604</td>
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<td>INTERNATIONAL TRAVEL PREPARATION, SAFETY, &amp; WELLNESS</td>
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Health Systems Program Requirements

PH.221.840 SPECIAL STUDIES AND RESEARCH HEALTH SYSTEMS (Individual Goals Analysis) 1

PH.221.801 Health Systems Program Seminar I 1

PH.221.802 HEALTH SYSTEMS GRADUATE SEMINAR 2 1

PH.221.803 HEALTH SYSTEMS GRADUATE SEMINAR 3 1

PH.221.804 Health Systems Graduate Seminar 4 1

PH.221.602 Applications in Managing Health Organizations in Low and Middle income Countries 3

PH.221.646 HEALTH SYSTEMS IN LOW AND MIDDLE INCOME COUNTRIES 3

PH.221.638 HEALTH SYSTEMS RESEARCH AND EVALUATION IN DEVELOPING COUNTRIES 4

PH.221.650 HEALTH POLICY ANALYSIS IN LOW AND MIDDLE INCOME COUNTRIES 3

PH.221.620 Applying Summary Measures of Population Health to Improve Health Systems 3

PH.221.661 PROJECT DEVELOPMENT FOR PRIMARY HEALTH CARE IN DEVELOPING COUNTRIES 4

Year 2

PH.221.810 Health Systems Practicum (Students must complete a minimum of 28 credits of practicum) 14

PH.221.810 Health Systems Practicum (Students must complete a minimum of 28 credits of practicum) 14

PH.221.850 MSPH Capstone Health Systems 2

Health Systems Program Electives Twelve (12) additional credits should be selected from the following list of elective courses. Courses below are organized under specific headings relevant to our program to facilitate selection, thus some classes may appear under more than one heading. These courses must be taken for a letter grade, with the exception of courses only offered pass/fail.

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<td>PH.312.617</td>
<td>Fundamentals of Financial Accounting</td>
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<td>PH.410.620</td>
<td>Program Planning for Health Behavior Change</td>
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<td>PH.312.603</td>
<td>Fundamentals of Budgeting and Financial Management</td>
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<td>PH.312.604</td>
<td>Quantitative Tools for Managers</td>
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<td>STRATEGIC LEADERSHIP PRINCIPLES AND TOOLS FOR HEALTH SYSTEM TRANSFORMATION IN DEVELOPING COUNTRIES</td>
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<td>SYSTEMS THINKING IN PUBLIC HEALTH: APPLICATIONS OF KEY METHODS AND APPROACHES</td>
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<td>Foundations of Organizational Leadership</td>
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<td>CASE STUDIES IN MANAGEMENT DECISION-MAKING</td>
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<td>HISTORY OF INTERNATIONAL HEALTH AND DEVELOPMENT</td>
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<td>FORMATIVE RESEARCH FOR BEHAVIORAL AND COMMUNITY INTERVENTIONS</td>
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International Health Topics

PH.221.613 Introduction to Humanitarian Emergencies 3

PH.180.620 An Introduction to Food Systems and Public Health 4

PH.221.612 CONFRONTING THE BURDEN OF INJURIES: A GLOBAL PERSPECTIVE 3

PH.221.627 ISSUES IN THE REDUCTION OF MATERNAL AND NEONATAL MORTALITY IN LOW INCOME COUNTRIES 4

PH.221.637 HEALTH INFORMATION SYSTEMS 3

PH.221.639 Health Care in Humanitarian Emergencies 3

PH.224.689 HEALTH BEHAVIOR CHANGE AT THE INDIVIDUAL, HOUSEHOLD AND COMMUNITY LEVELS 4

PH.182.626 ISSUES FOR WATER AND SANITATION IN TROPICAL ENVIRONMENTAL HEALTH 2

PH.221.634 STRESS MANAGEMENT FOR RELIEF WORKERS 2

PH.221.643 ARMED CONFLICT AND HEALTH 2
### PH.221.649
**INTRODUCTION TO DIGITAL HEALTH IN LOW- AND MIDDLE-INCOME COUNTRIES**
4

### PH.221.688
Social and Behavioral Foundations of Primary Health Care
4

### PH.380.750
**MIGRATION AND HEALTH: CONCEPTS, RATES, AND RELATIONSHIPS**
3

### PH.221.642
MENTAL HEALTH ASPECTS OF DISASTER: PUBLIC HEALTH PREPAREDNESS AND RESPONSE
2

### PH.221.616
ETHICS OF PUBLIC HEALTH PRACTICE IN DEVELOPING COUNTRIES
2

### PH.221.624
URBAN HEALTH IN DEVELOPING COUNTRIES
3

### PH.221.611
FOOD SECURITY AND NUTRITION IN HUMANITARIAN EMERGENCIES
2

### PH.221.653
Hospital-Based Injury/Trauma Surveillance in Low-and Middle-income Countries
3

### PH.380.610
THE POLITICAL ECONOMY OF SOCIAL INEQUALITIES AND ITS CONSEQUENCES FOR HEALTH AND QUALITY OF LIFE
3

### PH.330.657
Statistics for Psychosocial Research: Measurement
4

### PH.221.641
MEASUREMENT METHODS IN HUMANITARIAN EMERGENCIES
2

### PH.221.701
Applications to Gender Analysis Within Health Research and Interventions
2

### PH.309.712
FORMULATING POLICY: STRATEGIES AND SYSTEMS OF POLICYMAKING IN THE 21ST CENTURY
3

### PH.223.687
VACCINE POLICY ISSUES
3

### PH.300.714
POLICY ANALYSIS IN PRACTICE
3

### PH.300.652
Politics of Health Policy
4

### PH.301.645
LARGE-SCALE EFFECTIVENESS EVALUATIONS OF HEALTH PROGRAMS
4

### PH.221.631
EVALUATION METHODS FOR INJURY INTERVENTIONS
3

### PH.223.632
METHODS FOR PLANNING AND IMPLEMENTING EVALUATIONS OF LARGE-SCALE HEALTH PROGRAMS IN LOW AND MIDDLE INCOME COUNTRIES
4

### PH.380.611
FUNDAMENTALS OF PROGRAM EVALUATION
4

### PH.300.713
RESEARCH AND EVALUATION METHODS FOR HEALTH POLICY
3

### PH.380.612
APPLICATIONS IN PROGRAM MONITORING AND EVALUATION
4

### PH.318.603
Applied Microeconomics for Policymaking
3

### PH.313.601
Economic Evaluation I
3

### PH.313.602
Economic Evaluation II
3

### PH.313.603
ECONOMIC EVALUATION III
3

### PH.313.604
ECONOMIC EVALUATION IV
3

### PH.313.643
HEALTH ECONOMICS
3

### PH.221.652
FINANCING HEALTH SYSTEMS FOR UNIVERSAL HEALTH COVERAGE
3

### PH.221.662
GLOBALIZATION AND HEALTH: ECONOMIC DEVELOPMENT
3

### PH.221.663
GLOBALIZATION AND HEALTH: FRAMEWORK FOR ANALYSIS
3

### PH.309.670
COMPARATIVE HEALTH INSURANCE
3

### PH.221.617
Behavioral Economics in Health Decisions
2

### PH.221.651
ECONOMETRICS I
4

### PH.380.712
METHODS IN ANALYSIS OF LARGE POPULATION SURVEYS
3

### PH.221.641
MEASUREMENT METHODS IN HUMANITARIAN EMERGENCIES
2

### PH.221.645
LARGE-SCALE EFFECTIVENESS EVALUATIONS OF HEALTH PROGRAMS
4

### PH.221.631
EVALUATION METHODS FOR INJURY INTERVENTIONS
3

### PH.223.632
METHODS FOR PLANNING AND IMPLEMENTING EVALUATIONS OF LARGE-SCALE HEALTH PROGRAMS IN LOW AND MIDDLE INCOME COUNTRIES
4

### PH.380.611
FUNDAMENTALS OF PROGRAM EVALUATION
4

### PH.300.713
RESEARCH AND EVALUATION METHODS FOR HEALTH POLICY
3

### PH.380.612
APPLICATIONS IN PROGRAM MONITORING AND EVALUATION
4

### PH.318.603
Applied Microeconomics for Policymaking
3

### PH.313.601
Economic Evaluation I
3

### PH.313.602
Economic Evaluation II
3

### PH.313.603
ECONOMIC EVALUATION III
3

### PH.313.604
ECONOMIC EVALUATION IV
3

### PH.313.643
HEALTH ECONOMICS
3

### PH.221.652
FINANCING HEALTH SYSTEMS FOR UNIVERSAL HEALTH COVERAGE
3

### PH.221.662
GLOBALIZATION AND HEALTH: ECONOMIC DEVELOPMENT
3

### PH.221.663
GLOBALIZATION AND HEALTH: FRAMEWORK FOR ANALYSIS
3

### PH.309.670
COMPARATIVE HEALTH INSURANCE
3

### PH.221.617
Behavioral Economics in Health Decisions
2

### PH.221.651
ECONOMETRICS I
4

### PLAN OF STUDY EXAMPLE

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**Third Term**

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<td>4</td>
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<tr>
<td>PH.221.650</td>
<td>HEALTH POLICY ANALYSIS IN LOW AND MIDDLE INCOME COUNTRIES</td>
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<tr>
<td>PH.221.803</td>
<td>HEALTH SYSTEMS GRADUATE SEMINAR 3</td>
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<tr>
<td>PH.223.632</td>
<td>METHODS FOR PLANNING AND IMPLEMENTING EVALUATIONS OF LARGE-SCALE HEALTH PROGRAMS IN LOW AND MIDDLE INCOME COUNTRIES</td>
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**Credits**

**16**

**Fourth Term**

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<tr>
<td>PH.221.620</td>
<td>Applying Summary Measures of Population Health to Improve Health Systems</td>
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<tr>
<td>PH.221.661</td>
<td>PROJECT DEVELOPMENT FOR PRIMARY HEALTH CARE IN DEVELOPING COUNTRIES</td>
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<tr>
<td>PH.221.804</td>
<td>Health Systems Graduate Seminar 4</td>
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<td>PH.380.612</td>
<td>APPLICATIONS IN PROGRAM MONITORING AND EVALUATION</td>
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<td>PH.221.624</td>
<td>URBAN HEALTH IN DEVELOPING COUNTRIES</td>
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**Credits**

**15**

**Total Credits**

**68.5**

**Human Nutrition**

**Human Nutrition Course Requirements**

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

**IMPORTANT NOTE:** Courses taken to meet one group of requirements may NOT be used to meet another group of requirements.

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<tr>
<td>PH.220.600</td>
<td>INTERNATIONAL TRAVEL PREPARATION, SAFETY, &amp; WELLNESS</td>
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<tr>
<td>PH.222.840</td>
<td>SPECIAL STUDIES AND RESEARCH HUMAN NUTRITION</td>
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<tr>
<td>PH.222.860</td>
<td>Graduate Nutrition Seminar</td>
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<tr>
<td>PH.550.860</td>
<td>Academic &amp; Research Ethics at JHSPH</td>
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**Nutrition and Health**

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<tr>
<td>PH.222.641</td>
<td>Principles of Human Nutrition in Public Health</td>
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<td>PH.222.657</td>
<td>Food and Nutrition Policy</td>
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<tr>
<td>PH.222.642</td>
<td>ASSESSMENT OF NUTRITIONAL STATUS</td>
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<tr>
<td>PH.222.644</td>
<td>CELLULAR BIOCHEMISTRY OF NUTRIENTS</td>
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<td>PH.222.654</td>
<td>FOOD, CULTURE, AND NUTRITION</td>
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<td>PH.222.655</td>
<td>NUTRITION AND LIFE STAGES</td>
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<tr>
<td>PH.222.658</td>
<td>Critical Thinking in Nutrition</td>
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**Research Methods, Biostatistics:** Chose one of the following series for a total of 16 credits

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<td>PH.140.621</td>
<td>Statistical Methods In Public Health I</td>
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<tr>
<td>PH.140.622</td>
<td>STATISTICAL METHODS IN PUBLIC HEALTH II</td>
<td>4</td>
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<tr>
<td>PH.140.623</td>
<td>STATISTICAL METHODS IN PUBLIC HEALTH III</td>
<td>4</td>
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<tr>
<td>PH.140.624</td>
<td>STATISTICAL METHODS IN PUBLIC HEALTH IV</td>
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**OR**

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<th>Title</th>
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<tr>
<td>PH.140.651</td>
<td>Methods In Biostatistics I</td>
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<tr>
<td>PH.140.652</td>
<td>METHODS IN BIOSTATISTICS II</td>
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<td>PH.140.653</td>
<td>METHODS IN BIOSTATISTICS III</td>
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<td>Methods In Biostatistics IV</td>
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**Research Methods, Epidemiology:**

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<tr>
<td>PH.340.721</td>
<td>Epidemiologic Inference in Public Health I</td>
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**Environmental Health:** Choose one of the following

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<tbody>
<tr>
<td>PH.180.602</td>
<td>ENVIRONMENT AND HEALTH IN LOW AND MIDDLE INCOME COUNTRIES</td>
<td>2</td>
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<tr>
<td>PH.180.611</td>
<td>The Global Environment, Climate Change, and Public Health</td>
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<tr>
<td>PH.180.660</td>
<td>INTRODUCTORY PRINCIPLES OF ENVIRONMENTAL HEALTH</td>
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<tr>
<td>PH.180.601</td>
<td>Environmental Health</td>
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<tr>
<td>PH.182.640</td>
<td>FOOD- AND WATER- BORNE DISEASES</td>
<td>3</td>
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<tr>
<td>PH.187.610</td>
<td>Public Health Toxicology</td>
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**Budgeting, choose one of the following**

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<tr>
<td>PH.552.621</td>
<td>BASIC RESOURCES MANAGEMENT FOR PUBLIC HEALTH</td>
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<tr>
<td>PH.552.622</td>
<td>Creating, Implementing and Monitoring Budgets for Projects and Programs</td>
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**Management Sciences, choose one of the following**

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<tr>
<td>PH.312.600</td>
<td>MANAGING HEALTH SERVICES ORGANIZATIONS</td>
<td>4</td>
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<tr>
<td>PH.312.601</td>
<td>FUNDAMENTALS OF MANAGEMENT FOR HEALTH CARE ORGANIZATIONS</td>
<td>3</td>
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<tr>
<td>PH.312.655</td>
<td>ORGANIZATIONAL BEHAVIOR AND MANAGEMENT</td>
<td>2</td>
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<tr>
<td>PH.221.602</td>
<td>Applications in Managing Health Organizations in Low and Middle income Countries</td>
<td>3</td>
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<tr>
<td>PH.380.681</td>
<td>STRATEGIC LEADERSHIP PRINCIPLES AND TOOLS FOR HEALTH SYSTEM TRANSFORMATION IN DEVELOPING COUNTRIES</td>
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**Leadership and Interprofessional Practice**

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<tr>
<td>PH.552.625</td>
<td>BUILDING COLLABORATIONS ACROSS SECTORS TO IMPROVE POPULATION HEALTH</td>
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</table>
PH.552.623 Principles of Negotiation and Mediation for Public Health Professionals 0.5
PH.552.624 Applications Of Negotiation And Mediation For Public Health Professionals 0.5

Year 2

PH.222.810 Human Nutrition Practicum (Students must complete a minimum of 28 credits of practicum) 14
PH.222.810 Human Nutrition Practicum (Students must complete a minimum of 28 credits of practicum) 14
PH.222.850 MSPH Capstone Human Nutrition 4

Recommended Electives: 18-23 Credits

Food Systems and Production
PH.180.620 An Introduction to Food Systems and Public Health 4
PH.180.655 BALTIMORE FOOD SYSTEMS: A CASE STUDY OF URBAN FOOD ENVIRONMENTS 4
PH.180.606 CASE STUDIES IN FOOD PRODUCTION AND PUBLIC HEALTH 4

Nutrition
PH.222.647 NUTRITION EPIDEMIOLOGY 3
PH.221.611 FOOD SECURITY AND NUTRITION IN HUMANITARIAN EMERGENCIES 2
PH.222.649 INTERNATIONAL NUTRITION 3
PH.340.644 EPIDEMIOLOGY OF DIABETES AND OBESITY 2
PH.700.603 INTRODUCTION TO ETHICAL THEORY 3
PH.222.840 SPECIAL STUDIES AND RESEARCH HUMAN NUTRITION (Developing Skills in Clinical Nutrition) 1

Research Methods
PH.224.689 HEALTH BEHAVIOR CHANGE AT THE INDIVIDUAL, HOUSEHOLD AND COMMUNITY LEVELS 4
PH.340.722 EPIDEMIOLOGIC INFECTION IN PUBLIC HEALTH II 4
PH.223.664 DESIGN AND CONDUCT OF COMMUNITY TRIALS 4
PH.224.690 Qualitative Research Theory and Methods 3
PH.410.690 ETHNOGRAPHIC FIELDWORK 3
PH.221.660 SYSTEMS SCIENCE IN PUBLIC HEALTH: BASIC MODELING AND SIMULATION METHODS 3
PH.222.653 FOOD TECHNOLOGY AND HEALTH 3
PH.222.661 DESIGNING HEALTHY DIETS 2
PH.222.652 NUTRITION IN DISEASE TREATMENT AND PREVENTION 3
PH.224.691 QUALITATIVE DATA ANALYSIS 3

Plan of Study Example

Course Title Credits
First Year
First Term
PH.550.860 Academic & Research Ethics at JHSPH
PH.222.840 SPECIAL STUDIES AND RESEARCH HUMAN NUTRITION (IGA) 1
PH.222.860 Graduate Nutrition Seminar 1
PH.260.600 Introduction to the Biomedical Sciences 4
PH.222.641 Principles of Human Nutrition in Public Health 4
PH.222.658 Critical Thinking in Nutrition 1
PH.140.621 Statistical Methods In Public Health I 4

PH.340.721 Epidemiologic Inference in Public Health I 5
PH.552.625 BUILDING COLLABORATIONS ACROSS SECTORS TO IMPROVE POPULATION HEALTH 0.5

Second Term
PH.220.600 INTERNATIONAL TRAVEL PREPARATION, SAFETY, & WELLNESS 1
PH.222.860 Graduate Nutrition Seminar 1
PH.222.644 CELLULAR BIOCHEMISTRY OF NUTRIENTS 3
PH.222.642 ASSESSMENT OF NUTRITIONAL STATUS 3
PH.140.622 STATISTICAL METHODS IN PUBLIC HEALTH II 4
PH.312.603 Fundamentals of Budgeting and Financial Management 3
PH.552.623 Principles of Negotiation and Mediation for Public Health Professionals 0.5
PH.552.624 Applications Of Negotiation And Mediation For Public Health Professionals 0.5

Third Term
PH.222.860 Graduate Nutrition Seminar 1
PH.222.655 NUTRITION AND LIFE STAGES 3
PH.140.623 STATISTICAL METHODS IN PUBLIC HEALTH III 4
PH.182.640 FOOD- AND WATER- BORNE DISEASES 3

Fourth Term
PH.222.860 Graduate Nutrition Seminar 1
PH.222.654 FOOD, CULTURE, AND NUTRITION 4
PH.140.624 STATISTICAL METHODS IN PUBLIC HEALTH IV 4

Social and Behavioral Interventions

Program Requirements
A minimum total of 96 credits of coursework is required. Of these, 64 credits are associated with academic coursework, generally completed within the first year of the program. During the second year 28 credits are associated with a practicum experience and a minimum of 4 credits with a final capstone. Courses taken to fulfill program requirements must be taken for a letter grade unless, only offered Pass/Fail.

IMPORTANT NOTE: A course taken to meet a requirement may NOT be used to meet another requirement

Code Title Credits
Required Courses
Schoolwide
PH.550.860 Academic & Research Ethics at JHSPH
International Health
PH.220.601 Foundations of International Health (Students must take the on-campus version)
PH.220.600 INTERNATIONAL TRAVEL PREPARATION, SAFETY, & WELLNESS
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<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tr>
<td>PH.340.721</td>
<td>Epidemiologic Inference in Public Health I</td>
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<tr>
<td>PH.140.621</td>
<td>Statistical Methods In Public Health I</td>
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<td>STATISTICAL METHODS IN PUBLIC HEALTH III</td>
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<tr>
<td>PH.221.602</td>
<td>Applications in Managing Health Organizations in Low and Middle income Countries</td>
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<tr>
<td>PH.552.623</td>
<td>Principles of Negotiation and Mediation for Public Health Professionals</td>
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<tr>
<td>PH.552.624</td>
<td>Applications Of Negotiation And Mediation For Public Health Professionals</td>
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<tr>
<td>PH.552.626</td>
<td>SYSTEMS THINKING: CONCEPTS AND METHODS (if they take the One Health Course (185.600) for Env Hlth – the latter covers both Management and Leadership &amp; Environmental Health)</td>
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<tr>
<td>PH.224.840</td>
<td>SPECIAL STUDIES AND RESEARCH SOCIAL AND BEHAVIORAL INTERVENTIONS (IGA)</td>
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<td>PH.224.860</td>
<td>Social and Behavioral Interventions Program Seminar I:Applied Social Science &amp; Global Health</td>
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<tr>
<td>PH.224.861</td>
<td>SOCIAL AND BEHAVIORAL INTERVENTIONS PROGRAM SEMINAR II: PARTICIPATORY APPROACHES AND THE ROLE OF COMMUNITY</td>
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<td>PH.224.862</td>
<td>SOCIAL AND BEHAVIORAL INTERVENTIONS PROGRAM SEMINAR III: INTERVENTION CASE STUDIES</td>
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<td>HEALTH BEHAVIOR CHANGE AT THE INDIVIDUAL, HOUSEHOLD AND COMMUNITY LEVELS</td>
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<td>Qualitative Research Theory and Methods</td>
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<td>QUALITATIVE DATA ANALYSIS</td>
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<td>PH.224.697</td>
<td>QUALITATIVE RESEARCH PRACTICUM I: PARTNERSHIPS AND PROTOCOL DEVELOPMENT</td>
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<td>PH.224.698</td>
<td>QUALITATIVE RESEARCH PRACTICUM II: COLLECTING QUALITATIVE DATA</td>
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<td>PH.224.699</td>
<td>QUALITATIVE RESEARCH PRACTICUM III: ANALYZING AND WRITING QUALITATIVE FINDINGS</td>
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<td>PH.224.692</td>
<td>FORMATIVE RESEARCH FOR BEHAVIORAL AND COMMUNITY INTERVENTIONS</td>
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<tr>
<td>PH.224.810</td>
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<td>Food and Nutrition Policy</td>
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<td>Policy Interventions for Health Behavior Change</td>
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<td>VACCINE POLICY ISSUES</td>
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<td>UNDERSTANDING AND CHANGING INTERNATIONAL REPRODUCTIVE HEALTH POLICY</td>
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<td>SOCIOLOGICAL PERSPECTIVES ON HEALTH</td>
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<td>COMMUNICATION NETWORK ANALYSIS IN PUBLIC HEALTH PROGRAMS</td>
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<td>An Introduction to Food Systems and Public Health</td>
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<td>Applications to Gender Analysis Within Health Research and Interventions</td>
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<td>UNDERSTANDING AND PREVENTING VIOLENCE</td>
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<td>Qualitative and quantitative methods for mental health and psychosocial research in low resource settings</td>
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<td>PH.340.717</td>
<td>HEALTH SURVEY RESEARCH METHODS</td>
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<td>PH.380.720</td>
<td>MASCULINITY, SEXUAL BEHAVIOR &amp; HEALTH: ADOLESCENCE &amp; BEYOND</td>
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<td>RESEARCH DESIGN IN THE SOCIAL AND BEHAVIORAL SCIENCES</td>
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<td>PH.410.631</td>
<td>INTRODUCTION TO COMMUNITY-BASED PARTICIPATORY RESEARCH: PRINCIPLES AND METHODS</td>
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<td>Introduction to Persuasive Communications: Theories and Practice</td>
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<td>BIOETHICS, HUMAN RIGHTS, AND GLOBAL HEALTH</td>
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<td>BALTIMORE FOOD SYSTEMS: A CASE STUDY OF URBAN FOOD ENVIRONMENTS</td>
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<td>ADVANCES IN COMMUNITY-ORIENTED PRIMARY HEALTH CARE</td>
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<td>MENTAL HEALTH ASPECTS OF DISASTER: PUBLIC HEALTH PREPAREDNESS AND RESPONSE</td>
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<td>HEALTH POLICY ANALYSIS IN LOW AND MIDDLE INCOME COUNTRIES</td>
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<td>PH.221.688</td>
<td>Social and Behavioral Foundations of Primary Health Care</td>
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<td>MENTAL HEALTH INTERVENTION PROGRAMMING IN LOW AND MIDDLE-INCOME COUNTRIES</td>
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<td>PH.330.661</td>
<td>SOCIAL, PSYCHOLOGICAL, AND DEVELOPMENTAL PROCESSES IN THE ETIOLOGY OF MENTAL DISORDERS</td>
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<td>HUMAN RIGHTS IN PUBLIC HEALTH PRACTICE</td>
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<td>GENDER-BASED VIOLENCE RESEARCH, PRACTICE AND POLICY: ISSUES AND CURRENT</td>
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<td>FAMILY PLANNING POLICIES AND PROGRAMS</td>
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<td>PSYCHOSOCIAL FACTORS IN HEALTH AND ILLNESS</td>
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<td>PH.410.651</td>
<td>Health Literacy: Challenges and Strategies for Effective Communication</td>
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<td>PH.410.654</td>
<td>HEALTH COMMUNICATION PROGRAMS I: PLANNING AND STRATEGIC DESIGN</td>
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<td>CHILDREN, MEDIA, AND HEALTH</td>
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<td>HUMAN RIGHTS AND HEALTH SEMINAR</td>
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<td>ETHICS OF PUBLIC HEALTH PRACTICE IN DEVELOPING COUNTRIES</td>
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<td>FOOD, CULTURE, AND NUTRITION</td>
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<td>PH.300.652</td>
<td>Politics of Health Policy</td>
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<td>PH.301.645</td>
<td>HEALTH ADVOCACY</td>
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<td>PH.308.610</td>
<td>THE POLITICAL ECONOMY OF SOCIAL INEQUALITIES AND ITS CONSEQUENCES FOR</td>
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<td>HEALTH AND QUALITY OF LIFE</td>
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<td>PH.380.668</td>
<td>INTERNATIONAL PERSPECTIVES ON WOMEN, GENDER, AND HEALTH</td>
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<td>PH.380.747</td>
<td>International Adolescent Health</td>
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<td>PH.380.771</td>
<td>UNDERSTANDING AND CHANGING INTERNATIONAL REPRODUCTIVE HEALTH POLICY</td>
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<td>PH.410.630</td>
<td>IMPLEMENTATION AND SUSTAINABILITY OF COMMUNITY-BASED HEALTH PROGRAMS</td>
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<td>PH.410.655</td>
<td>HEALTH COMMUNICATION PROGRAMS II: IMPLEMENTATION AND EVALUATION</td>
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<td>PH.410.663</td>
<td>MEDIA ADVOCACY AND PUBLIC HEALTH: THEORY AND PRACTICE</td>
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<td>PH.410.721</td>
<td>TRANSLATING RESEARCH INTO PUBLIC HEALTH PROGRAMS AND POLICY</td>
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<td>COUNTRIES</td>
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<td>HEALTH SURVEY RESEARCH METHODS</td>
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<td>EPIDEMIOLOGIC INFERENCES IN PUBLIC HEALTH II</td>
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<td>EVALUATION METHODS FOR INJURY INTERVENTIONS</td>
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<td>HEALTH SYSTEMS RESEARCH AND EVALUATION IN DEVELOPING COUNTRIES</td>
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<td>PH.223.664</td>
<td>DESIGN AND CONDUCT OF COMMUNITY TRIALS</td>
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<td>RESEARCH AND EVALUATION METHODS FOR HEALTH POLICY</td>
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<td>STATISTICAL METHODS IN PUBLIC HEALTH IV</td>
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<td>Environmental Health, choose one of the following</td>
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<td>PH.180.609</td>
<td>Principles of Environmental Health</td>
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<tr>
<td>PH.180.611</td>
<td>The Global Environment, Climate Change, and Public Health</td>
<td>4</td>
</tr>
<tr>
<td>PH.182.640</td>
<td>FOOD- AND WATER- BORNE DISEASE</td>
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<td>PH.180.606</td>
<td>CASE STUDIES IN FOOD PRODUCTION AND PUBLIC HEALTH</td>
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<td>PH.185.600</td>
<td>ONE HEALTH TOOLS TO PROMOTE AND EVALUATE HEALTHY AND SUSTAINABLE COMMUNITIES</td>
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<td>(This course also fulfills the Management and Leadership requirement)</td>
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<td>Other International Health Electives to consider (none required)</td>
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<tr>
<td>PH.221.612</td>
<td>CONfronting the Burden of Injuries: A Global Perspective</td>
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<td>PH.221.627</td>
<td>ISSUES IN THE REDUCTION OF MATERNAL AND NEONATAL MORTALITY IN LOW INCOME</td>
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<td>COUNTRIES</td>
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<td>PH.221.639</td>
<td>Health Care in Humanitarian Emergencies</td>
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<td>PH.221.646</td>
<td>HEALTH SYSTEMS IN LOW AND MIDDLE INCOME COUNTRIES</td>
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<td>PH.380.681</td>
<td>STRATEGIC LEADERSHIP PRINCIPLES AND TOOLS FOR HEALTH SYSTEM TRANSFORMATION</td>
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<td>IN DEVELOPING COUNTRIES</td>
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<td>PH.221.605</td>
<td>HISTORY OF INTERNATIONAL HEALTH AND DEVELOPMENT</td>
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<td>PH.221.608</td>
<td>MANAGING NON-GOVERNMENT ORGANIZATIONS IN THE HEALTH SECTOR</td>
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<tr>
<td>PH.221.635</td>
<td>ADVANCES IN COMMUNITY-ORIENTED PRIMARY HEALTH CARE</td>
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<td>PH.221.650</td>
<td>HEALTH POLICY ANALYSIS IN LOW AND MIDDLE INCOME COUNTRIES</td>
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<td>PH.221.649</td>
<td>INTRODUCTION TO DIGITAL HEALTH IN LOW- AND MIDDLE-INCOME COUNTRIES</td>
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<td>PH.223.687</td>
<td>VACCINE POLICY ISSUES</td>
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<tr>
<td>PH.380.750</td>
<td>MIGRATION AND HEALTH: CONCEPTS, RATES, AND RELATIONSHIPS</td>
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<td>PH.221.616</td>
<td>ETHICS OF PUBLIC HEALTH PRACTICE IN DEVELOPING COUNTRIES</td>
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**Public Health Biology, choose one of the following**

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>PH.120.620</td>
<td>Fundamentals of Reproductive Biology</td>
<td>3</td>
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<tr>
<td>PH.222.641</td>
<td>Principles of Human Nutrition in Public Health</td>
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</tr>
<tr>
<td>PH.260.636</td>
<td>Evolution of Infectious Disease</td>
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<td>PH.340.646</td>
<td>Epidemiology and Public Health Impact of HIV and AIDS</td>
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<td>PH.550.630</td>
<td>Public Health Biology</td>
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<tr>
<td>PH.223.662</td>
<td>VACCINE DEVELOPMENT AND APPLICATION</td>
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<tr>
<td>PH.260.631</td>
<td>IMMUNOLOGY, INFECTION AND DISEASE</td>
<td>3</td>
</tr>
<tr>
<td>PH.182.640</td>
<td>FOOD- AND WATER- BORNE DISEASE</td>
<td>3</td>
</tr>
<tr>
<td>PH.223.663</td>
<td>INFECTIOUS DISEASES AND CHILD SURVIVAL</td>
<td>3</td>
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<td>PH.260.656</td>
<td>MALARIOSIS</td>
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<td>PH.380.760</td>
<td>CLINICAL ASPECTS OF REPRODUCTIVE HEALTH</td>
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<tr>
<td>PH.223.682</td>
<td>CLINICAL AND EPIDEMIOLOGIC ASPECTS OF TROPICAL DISEASE</td>
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<tr>
<td>PH.223.689</td>
<td>BIOLOGIC BASIS OF VACCINE DEVELOPMENT</td>
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<tr>
<td>PH.330.623</td>
<td>Brain And Behavior In Mental Disorders</td>
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<tr>
<td>PH.380.762</td>
<td>HIV INFECTION IN WOMEN, CHILDREN, AND ADOLESCENTS</td>
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**Environmental Health, choose one of the following**

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<thead>
<tr>
<th>Course Code</th>
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<tr>
<td>PH.180.609</td>
<td>Principles of Environmental Health</td>
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<td>The Global Environment, Climate Change, and Public Health</td>
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<td>PH.182.640</td>
<td>FOOD- AND WATER- BORNE DISEASE</td>
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<td>PH.180.606</td>
<td>CASE STUDIES IN FOOD PRODUCTION AND PUBLIC HEALTH</td>
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<td>PH.185.600</td>
<td>ONE HEALTH TOOLS TO PROMOTE AND EVALUATE HEALTHY AND SUSTAINABLE COMMUNITIES</td>
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</tr>
<tr>
<td></td>
<td>(This course also fulfills the Management and Leadership requirement)</td>
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**Other International Health Electives to consider (none required)**
Plan of Study Example

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<thead>
<tr>
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<th>Title</th>
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<tr>
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<td><strong>First Term</strong></td>
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<tr>
<td>PH.224.840</td>
<td>SPECIAL STUDIES AND RESEARCH SOCIAL AND BEHAVIORAL INTERVENTIONS (IGA )</td>
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<tr>
<td>PH.224.860</td>
<td>Social and Behavioral Interventions Program Seminar I:Applied Social Science &amp; Global Health</td>
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<tr>
<td>PH.550.860</td>
<td>Academic &amp; Research Ethics at JHSPH</td>
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<td>PH.220.601</td>
<td>Foundations of International Health</td>
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<td>Epidemiologic Inference in Public Health I</td>
<td>5</td>
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<td>PH.140.621</td>
<td>Statistical Methods In Public Health I</td>
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<tr>
<td>PH.221.602</td>
<td>Applications in Managing Health Organizations in Low and Middle income Countries</td>
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<td><strong>Second Term</strong></td>
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<tr>
<td>PH.224.861</td>
<td>SOCIAL AND BEHAVIORAL INTERVENTIONS PROGRAM SEMINAR II: PARTICIPATORY APPROACHES AND THE ROLE OF COMMUNITY</td>
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<td>PH.224.689</td>
<td>HEALTH BEHAVIOR CHANGE AT THE INDIVIDUAL, HOUSEHOLD AND COMMUNITY LEVELS</td>
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<td>QUALITATIVE RESEARCH PRACTICUM I: PARTNERSHIPS AND PROTOCOL DEVELOPMENT</td>
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<td>PH.410.668</td>
<td>Policy Interventions for Health Behavior Change</td>
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<td>HEALTH SURVEY RESEARCH METHODS</td>
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<td>SYSTEMS THINKING: CONCEPTS AND METHODS</td>
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<td>Principles of Negotiation and Mediation for Public Health Professionals</td>
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<td>Applications Of Negotiation And Mediation For Public Health Professionals</td>
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<td><strong>Third Term</strong></td>
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<tr>
<td>PH.224.862</td>
<td>SOCIAL AND BEHAVIORAL INTERVENTIONS PROGRAM SEMINAR III: INTERVENTION CASE STUDIES</td>
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**Fourth Term**

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<td>QUALITATIVE RESEARCH PRACTICUM II: COLLECTING QUALITATIVE DATA</td>
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<td>PH.182.640</td>
<td>FOOD- AND WATER- BORNE DISEASES</td>
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<td>FUNDAMENTALS OF PROGRAM EVALUATION</td>
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**Credits**

18

**Total Credits**

72.5

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**MSPH Departmental Requirements**

**Residency Requirement**

The total number of course credits to be earned depends upon individual program requirements. But, to meet the Residency requirement, students must complete a minimum of 64 credits of didactic courses in four consecutive terms. When general and program-specific requirements total less than 64, the difference may be made up in electives. Only those special studies earning credit that are part of a program's requirements (840 series) are admissible. The Residency requirement is usually fulfilled in a master's student's first year.

**General Requirements**

During the first term of enrollment, students will register for one credit of Special Studies (Individual Goals Analysis) with their adviser in order to define specific educational objectives and to work out a program of study consonant with those objectives.

Students must be continuously registered full-time until all requirements for the degree program have been satisfied. The Department requires full-time registration to be a minimum of 16 credits per term. Courses taken for audit do not count towards this 16-credit minimum. Failure to register for a term results in automatic withdrawal. A withdrawn student must be formally readmitted before resuming a program of study. Upon readmission, a student must be registered for a minimum of two consecutive terms prior to completing degree requirements.

Students must be registered in the term they complete their capstone. If a student does not complete all requirements by the last day of fourth term of their second year and wishes to graduate in August, they are required to register for 2 credits during the summer term. Students are responsible for their full tuition and fees during the summer. If students are unable to complete in August, the student must register full time in first term and in each term until they complete.
Ethics Requirement - All master's students are required to take course 550.860.82 Academic and Research Ethics at JHSPH in their first term of matriculation. Failure to complete this course will prevent students from matriculating for the next term and continuing their program.

Students who are being funded by an NIH training grant must also take one of the following two courses: 550.600 Responsible Conduct of Research offered first term, OR 306.665 Research Ethics and Integrity: US and International Issues, offered third term.

All students must complete the Online Human Subjects Training Module prior to the end of the 4th term. However, for students wishing to work on research projects part time for faculty during the academic year, it would be advisable to take this module in 1st term as the training is required for such research work. For information on the Training module go to http://www.jhsp.h edu/offices-andservices/institutional-review-board/training/.

International Travel Preparation, Safety and Wellness – All IH students are required to take this course (220.600.81) during their first year and before traveling overseas for any academic reason, and regardless of whether their research is conducted within or outside of the United States. This course is offered three times a year; students must only take it once.

Registration
MSPH students must register for a minimum of 16 credits of courses each term until they graduate to be a full-time student in the IH department. Students do not register for summer or winter intersession. Summer and winter intersession courses may be available to students with the understanding that students pay 100% of its tuition.

Important Information about Registration:

1. Registration below 16 credits is not allowed and violates the terms of a student’s tuition scholarship.
2. Any student registering below 16 credits during any term could be in violation of their scholarship requirements resulting in a loss of their tuition scholarship.
3. Courses taken for Audit do not count toward the 16 credits per term requirement.

During their 2nd year students register in their Program Area's MSPH Practicum course and for their Capstone requirements. When a student takes Special Studies, they must register for Special studies in their specific Program area. The following course numbers correspond to the different program areas:

Practicum
221.810 Health Systems Practicum
222.810 Human Nutrition Practicum
222.815 Human Nutrition Registered Dietitian Practicum
223.810 GDEC Practicum
224.810 SBI Practicum

Capstone
221.850 MSPH Capstone Health Systems
222.850 MSPH Capstone Human Nutrition (including RD)
223.850 MSPH Capstone GDEC
224.850 MSPH Capstone SBI

Special Studies
221.840 Special Studies in Health Systems
222.840 Special Studies in Human Nutrition
223.840 Special Studies in GDEC
224.840 Special Studies in SBI

These are pass/fail credits and a passing grade is only provided if program requirements are met within the corresponding term.

Students each term can register for 14-16 credits of Practicum or a combination of Practicum, Capstone and didactic courses. If you audit a course, you must have 16 additional credits for letter grade or pass/fail. Within a term, a maximum of 22 credits is allowed, combining Practicum, Capstone, and other didactic courses (audited courses are also counted within the 22 credit maximum). A sample schedule for year 2 is below.

SAMPLE SCHEDULE

- Complete at least 2 terms of practicum in the second year by completing at least 28 credits of practicum (22X.810). A student can register and earn more than 28 credits, but not less.
- Register for 22X.850 during the term in which you will complete your Capstone requirement. A student must register for a minimum of 4 credits.

Courses taken at other schools within the Johns Hopkins University must be considered carefully. If a student is interested in taking courses outside of the Bloomberg School of Public Health students must meet with the Senior Academic Coordinator (Audrey Lindahl) prior to registering to discuss if the credits count toward their degree and or toward registration requirements.

Time of Completion Requirements
Students are expected to complete all requirements for the degree within two years of matriculation. Delays may be considered in special circumstances but in no case may the time in the program exceed four years, regardless of the residence status of the student (other than a leave of absence). Responsibility for tracking and adhering to the graduation timelines belongs to the student. If requirements are not met by the dates posted (see graduation schedule), registration for subsequent terms is required.

Introduction to Online Learning
The School of Public Health offers courses in various formats, including a number of online classes. In order to be eligible to take an online course, students must complete the Introduction to Online Learning, which is offered through the Center for Teaching and Learning at the Johns Hopkins Bloomberg School of Public Health. This non-credit mini course is a pre-requisite for all courses offered by this division and must be completed prior to the start of the term in which a student wishes to enroll in an online course. Since the School does not permit conditional and/or concurrent enrollment (that is, you must take the online course prior to enrolling in a distance education class), we require all incoming students to take this non-credit course during the first term they enroll. For course dates and enrollment information, please visit the CoursePlus portal.
website: https://courseplus.jhu.edu/core/index.cfm/go/course.home/cid/90/.

Capstone
The culminating experience of the MSPH program is the production of an MSPH capstone that provides a meaningful contribution to knowledge of the health of underserved populations. The capstone is not a thesis in that it need not contain original research findings for review by an academic committee. However, it should provide tangible evidence of expertise on a specific applied topic of international health relevance. The capstone must be reviewed and approved by two faculty readers. Detailed, step by step, guidelines for the MSPH capstone content, format and submission for each program area can be found in the Final Capstone Guide.

Capstone Deadlines
Students must select one of four graduation timelines. Each task must be completed by the due dates indicated or students will be required to register for the next academic term until all requirements are met. For you to familiarize yourself with the deadlines the timeline for 2019-2020 (for 2nd year MSPH students) is included on page 79, even though we know that these particular dates are outdated for you. The timeline for your second year (Academic Year 2021-2022) will be distributed to you in May 2021.

MSPH Students must also abide by the complete list of additional tasks and deadlines which may be set by each program area and will be given to students by their respective Program Coordinators by the date of the Comprehensive Exam, end of May or early June 2021, along with the updated deadlines for the Capstone due during their second year.

Practicum
In addition to completing the requisite coursework, students must gain practical experience in the application of the principles and methods learned. Often the experience is acquired through field placement (practicum) in a work setting that may be the route to permanent employment, though such long-term implications are by no means essential. Alternatively, the student may undertake within the School environment the investigation and analysis of a significant issue related to health of underserved populations. Students begin their full-time practicum sometime between June and September of their second year. Practicum requirements are a minimum of two terms full time (4 months) and up to 8 months. Detailed information on the requirements for the practicum, including IRB requirements, can be found in the Practicum Guide.

Departmental Written Comprehensive Examination
Satisfactory performance is required on a written comprehensive examination. The date for the Departmental Comprehensive Exam TBA. The student should take the exam after completing required coursework, because questions will cover all required fields of study. Although most of the material for the exam is covered in specific courses, graduate education involves much more than the accumulation of specific course credits. Thus, students are responsible for the material on the exam regardless of the particular curriculum they have taken.

A minimum overall passing grade of 70/100 is required. Those scoring below this level may re-take the entire examination in January of the following year. A January examination sitting is offered only for students who fail the May examination. Only one re-examination is permitted. Students failing twice are terminated from the MSPH program.

Students must NOT pass along exam questions to future generations of students, NOT post questions and/or answers online, NOT seek, solicit, accept, or consult content from prior comprehensive exams, and NOT share or publicize any content from the comprehensive exam in any form with anyone at any time. Failure to adhere to these rules could result in termination from the program.

Master’s Degrees Specific Policy

Academic Advising Master’s Degrees
Master’s 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 experiences will address a student’s educational objectives. To assist with navigating this process, each student is assigned an academic faculty adviser who has the responsibility of serving as a guide and mentor. While these programs seem to be tightly scripted by the Department and School, it is the Department’s view that graduate degree programs must be owned by the student with the faculty acting as guides in the student’s own development as a scholar and practitioner. This section is intended to guide the student and the faculty member in making the adviser-advisee relationship as successful as possible.

The suggestions 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 information is dynamic and needs input from students and advisers as they use it. Please submit comments and concerns to the Sr. Academic Program Coordinator.

THE DEPARTMENT’S ADVISING PHILOSOPHY
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, based on the student’s individual goals. This purpose is driven by a set of core values:

1. Advisers are responsible to the students they advise.
   • Advising is an integral part of the educational process with both students and advisers benefiting from the relationship
   • Regular student-adviser communication allows advisers to maximize the student’s ability to develop life-long learning skills and for the adviser to act as an advocate for the student.
   • Advisers must recognize the diversity of student backgrounds and the opportunities provided by this diversity for maximizing educational achievement.
   • Advisers are responsible for connecting students with others in the academic community who can, when appropriate, assist in the advising process.
2. Advisers are responsible to the institution.
   • As faculty, advisers 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.
   • Advisers 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. Advisers are responsible to the community of higher education.
• Advisers must uphold the values of academic and intellectual freedom that characterize the university environment in the United States.
• As faculty, advisers are responsible for the training of the next generation of academic leaders in education, research, practice, and service.

4. Advisers are responsible to the public health community
• As faculty in a School of Public Health, advisers are committed to improving the health and well-being of populations everywhere in the world through education, research, practice and service.

The Adviser-Advisee Relationship

All students in the Department are assigned a faculty adviser who is a full-time member of the advising faculty in their program area. In addition, the MSPH Academic Coordinator for their program also serves as a back-up adviser to students. The adviser 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 adviser serves to direct the student to appropriate resources and research opportunities. The adviser 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 adviser lies with the student. Students should not expect advisers to seek them out for required appointments. The student bears the responsibility of consulting the adviser when necessary and arranging periodic appointments, even if there are no specific problems. In general, advisers and advisees should communicate at least once per term, preferably more often.

All course registrations must be approved by the adviser. The student is required to schedule a meeting in order to assure that the adviser has reviewed the student’s schedule and to plan any special studies projects or thesis research as needed with the adviser 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 MSPH Program Coordinator.

Student Feedback on Adviser 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 adviser evaluation process that includes input from students. The provision of honest information is required of all students twice per year and these adviser ratings are handled with complete confidentiality. At the completion of the 2nd and 4th terms each year, all students will complete an Academic adviser Evaluation Form (https://jhsph.co1.qualtrics.com/jfe/form/SV_8cvVZ1RanXU4PAN) (will be updated and sent to students twice a year) and submit it online. The survey results are analyzed to provide a body of information on advising style, content, and collective perception from multiple students advised by each faculty member over time, focusing on aggregate results accumulating over successive administrations of the survey. The Department Chair (David Peters), the Associate Chair for Academic Programs (Cyrus Engineer), and the Associate Chair for Student Matters (Maria Merritt) are the only faculty who may review individual survey responses, and each is excluded from reviewing responses naming themselves as adviser. The responses are also reviewed by the Academic Program Manager (Cristina Salazar) and Academic Program Coordinator (Audrey Lindahl), who may lead or participate in survey analysis. Survey responses about individual faculty members will be handled with complete confidentiality. Any feedback relayed to a faculty member from these surveys will be informed only by cumulative or aggregate survey results, will be communicated to faculty only in a manner that does not identify individual students (with due awareness of the faculty member’s overall number of advisees), and will be solely for the purpose of helping faculty prospectively improve their approach to advising as appropriate.

It is not the aim of this survey-based evaluation to intervene in specific individual situations that may be problematic. If you wish to discuss concerns about a specific individual situation, we encourage you to consult directly with your Degree Program Coordinator(s), the Senior Academic Coordinator, the Academic Program Manager, or the Associate Chair for Student Matters.

Advising FAQ’s

CHANGE OF Adviser

For a variety of reasons, a student may wish to change advisers. 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 adviser 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. Any request for changes must also be discussed and approved by the student’s Program Coordinator. Once approved the change should be sent to Audrey Lindahl who will update the students’ DIH academic file and inform the Records and Registration Office to update the student’s schoolwide file.

RESPONSIBILITIES OF adviser

• 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 adviser 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, health, 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 USBased graduate education program.
• To meet regularly with the student and to identify a mechanism for advising while traveling either through email or by identifying a back-up adviser for periods of extended travel.
RESPONSIBILITIES OF ADVISEE
• To arrange to meet with the adviser 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 adviser.
• To complete an Adviser Evaluation Form twice during the academic year, once at the end of 2nd term and again at the end of 4th term.

STUDENT EXPECTATIONS OF AdviserS
• Adviser’s approval and or recommendation on course registrations, course changes, pass/fail agreements, waiver requests, practicum approvals and on all petitions to the Curriculum and Credentials Committee.
• At least one meeting per term with the adviser.
• Oversight of the student’s overall academic program and sensitivity to any academic difficulties.
• Knowledge of and interest in the student’s career objectives including writing recommendation letters.
• 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.

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

YEAR ONE
Year One: First Term
• Minimum of two meetings with advisee
• Review with advisee competencies, departmental requirements, develop a written plan of courses and experiences to meet the student’s educational goals
• Review and approve Individual Goals Analysis (IGA) assignment
• Review administrative deadlines
• Identify other people and resources of which students should be aware
• Monitor progress after midterms and review transcript at end of term

Year One: Second Term
• One Meeting
• Monitor advisee’s progress, evaluate, discuss first term grades
• Begin discussion of possible internship opportunities
• Follow up on plan set out in first term
• Provide advice on courses advisee might take in third term
• Monitor progress after midterms and review transcript at end of term

Year One: Third Term
• One Meeting
• Monitor advisee’s progress; evaluate; discuss second term grades
• Continue discussion on internship opportunities
• Discuss preparation for comprehensive examination, student study groups
• Provide advice on courses advisee might take in fourth term
• Write letters of recommendation for practicum and scholarship applications
• Monitor progress after midterms and review transcript at end of term

Year One: Fourth Term
• One or two meetings
• Monitor student's progress; evaluate; discuss third term grades
• Encourage participation in study groups for comprehensive examination
• Finalize plans for practicum; review and approve practicum proposal/ sign approval form
• Review and approve travel plans and forms
• Students should begin working with the Career Services Office to explore options for post-graduation employment or further education
• Monitor progress after midterms, review transcript at end of term, and discuss year-end grades

YEAR TWO
Year Two: Practicum First term
• Communicate via email or Skype or in-person once a month
• Discuss MSPH capstone topic, readers, and graduation timeline
• Discuss post-graduation employment or further education
• Advisers who have December graduate advisees must follow corresponding deadlines from Graduation Deadline Table found in students CoursePlus library
• Adviser to review and approve advisee’s Portfolio Touchpoints
  • Identify Topics and Capstone readers
  • Declare intent to graduate Capstone outline for students completing in January

Year Two: Practicum & Capstone Second term
• Communicate via email or in-person once a month
• Continue discussions regarding post-graduation employment or further education
• Adviser to review and approve student’s Portfolio Touchpoints
  • Capstone outline
  • First draft
  • Final draft
• Other drafts and revisions should be conducted via email
• Follow up with advisee and second reader for timely feedback on drafts
• Make sure your advisee has completed or is in a practicum by this term
• For December graduates and January completers, submit grade for their capstone special studies
• Discuss post-graduation employment or further education

Year Two: Practicum & Capstone Third term
• Communicate via email or in-person once a month
• Make sure advisee has completed all course requirements or are registered to complete all course requirements
• Adviser to review and approve student’s Portfolio Touchpoints


• Capstone outline
• First draft
• Final draft
• Other drafts and revisions should be conducted via email
• Follow up with advisee and second reader for timely feedback on drafts
• For those finishing in third term, submit grade for their capstone special studies
• Discuss post-graduation employment or further education

Year Two: Practicum & Capstone Fourth term

• Communicate via email or in-person once a month
• Make sure advisee has completed all course requirements or are registered to complete all course requirements
• Adviser to review and approve student’s Portfolio Touchpoints
  • Capstone outline
  • First draft
  • Final draft
• Other drafts and revisions should be conducted via email
• Follow up with advisee and second reader for timely feedback on drafts
• For those finishing in third term, submit grade for their capstone special studies
• Discuss post-graduation employment or further education

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 to fulfill requirements. Students must receive satisfactory grades of C or higher in all required courses and continuously maintain a cumulative Grade Point Average (GPA) of at least 2.75 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. The Committee will establish the minimum conditions to be fulfilled in order to return to the “good standing” status and avoid termination. Typical cases with no conditions require that students improve their academic standing within 2 academic terms. In cases where conditions are imposed, the Committee will specify the maximum time allowed for satisfaction of the conditions. Failure to satisfy these conditions may result in termination from the program.

If students receive Federal Loans administered through the Financial Aid Office (http://www.jhsph.edu/offices-and-services/student-affairs/financial-aid) there are other academic standards that students must abide by in order to comply with Federal Loan requirements. Please check with the Financial Aid office or email them at JHSPH.finaid@jhu.edu to request more information. Any student below a 2.75 GPA at the end of their 1st year will automatically be disqualified from receiving the 75% tuition scholarship. At the beginning of each year students will be given

Masters Tuition Scholarship

All MSPH students will receive a 75% tuition scholarship in their second year of their MSPH degree. This scholarship is contingent on completing the Residency Requirement (page 28) continue to be registered full time in the second year of the MSPH degree and being in good academic standing. The 75% tuition scholarship can only be applied during terms 1-4 of the student’s second year. It does not apply for summer term or winter intersession.

Individualized Goals Analysis (IGA)

The IGA is a process of discussion with your adviser to help you plan your course and program goals. Students are required to enroll for one credit of Special Studies (22X.840) with their adviser during 1st term. Go to page 29 to find your specific Special Studies number.

Students will work on a written document that is uploaded to their Portfolio outlining the process below.

Part 1: Briefly explain what knowledge, skills, and experiences you bring to the program.

Part 2: Identify your goals for your education by explaining what you hope to gain in terms of knowledge, skills, personal and professional contacts, and other experiences while a student in the MSPH program. Review the list of MSPH core competencies with your adviser. You are encouraged to identify additional competencies particularly relevant to your professional future and/or academic stream. Describe one or more practicum assignments and potential capstone topics and indicate how these will be used to build your competencies and achieve your goals.

Part 3: Develop an MSPH Curriculum Planning and Tracking Sheet by developing a tentative course plan for your entire MSPH program. Identify what courses and special studies you intend to take and when you plan to complete your courses. Course descriptions in the catalog indicate when courses are generally offered. Your tracking sheet should include a tentative list of electives you plan to complete and the total credit hours. Carefully review your paper and tracking sheet with your adviser to ensure the proposed curriculum is not only feasible, but that it meets program requirements. Explain how your curriculum plan is aligned with the goals you identified in Part 2. A spreadsheet is often the best way to do this part.

Part 4: Upload your MSPH Curriculum Planning to your Portfolio by the end of 1st term and address the touchpoint to complete the requirement and for feedback from your Program Coordinators.

Tracking Sheet

Tracking sheets are used to track all course requirements from each student's program. All students are required to fill out and submit their tracking sheets once a year to Audrey Lindahl via their Portfolio. Approved waivers and substitutions must also be submitted with the tracking sheets. Students should use the tracking sheet when meeting with their advisers. Students will have access to their tracking sheets in their Portfolio libraries and will submit their completed sheet in March, by the end of 3rd term, to the required touchpoint.

Portfolio

All MSPH students have access to 'My Portfolio' in CoursePlus. The Portfolio provides students an easy way to receive feedback on progress from Advisers and Program Coordinators and allows them to provide “evidence” of assignments and completed tasks for their MSPH degree all in one convenient location.

The Portfolio will be used to allow students to reflect on and turn in assignments such as the Individual Goals Analysis and for assignments including the second year Capstone process and deadlines. Students will be responsible for uploading and adhering to all due dates as part of their MSPH program. At the beginning of each year students will be given
Instruction on how to use the Portfolio and will be expected to visit their Portfolio regularly for assignments and due dates.

**Travel Policy** ([http://e-catalog.jhu.edu/public-health/departments/international-health/#newitemtext](http://e-catalog.jhu.edu/public-health/departments/international-health/#newitemtext))

**Practicum Guide**

**Description and Requirements**

**Description:** In addition to completing the requisite coursework, students must gain practical experience in the application of the principles and methods learned. Often the experience is acquired through field placement in a work setting that may be the route to permanent employment, though such long-term implications are by no means essential. Alternatively, the student may undertake within the School environment the investigation and analysis of a significant issue related to health of underserved populations. The latter undertaking would usually involve the synthesis and appraisal of existing information from the field that has not yet been fully exploited.

**Learning Objectives:**

1. Integrate and apply knowledge, methods and skills learned in courses taken in the first year of the MSPH in a practical setting, to allow for the seamless transition from student to public health professional.

2. Develop new skills essential for functioning as an effective global health professional, in assuming responsibility on the ground and becoming a reliable and collaborative member of a project team, an effective communicator, writer, trainer and implementer.

3. Evaluate a program or field project as it relates to the socio-cultural and health context, behavioral and health impact, community involvement and program process.

4. Develop a proposal, and/or report, or other written document that analyzes and synthesizes public health data related to the practicum.

5. Take initiative, provide direction, and participate in the implementation, evaluation and/or analysis required to establish and achieve project goals.

6. Communicate effectively, manage relationships and participate in teams

**Practicum Requirements**

The following criteria reflect the minimum practicum requirements:

- Applies public health skills and competencies relevant to the student’s area of interest.
- Is framed and carried out within a public health practice context (includes population-level activities at an established organization or agency).
- Is supervised by a qualified preceptor who has experience and knowledge in the subject matter.
- Is a significant experience
- Is an evaluated experience

**Length of Time**

The practicum must be of at least two academic quarters duration (4 months), full time, during which a minimum of 28 credits is earned. A field placement could extend over a longer period during which time the student could register for credits that ultimately total at least 28. To receive the 75% tuition scholarship during your practicum terms, you must be registered for a minimum of 16 credits per term.

**Identification of Practicum Placement**

Students should spend some time considering types of practica from which they would enjoy learning according to what best suits their needs and interests. The practicum can be completed in a variety of settings, either domestically or internationally. Students can work in projects to apply their skills at Hopkins field sites with global or local partnerships, NGOs, and within government and other agencies to fulfill the requirement. There are many resources within the School to assist students with the process. These include the Office of Career Services (they have Handshake, Internship database, and résumé assistance), the Department Internship Resource and Research Guide, the Faculty Coordinator of the student’s program area, and the student’s adviser to name a few. Students will meet with their adviser at the beginning of the process to get ideas and develop a plan for securing their practicum. Students should have updated résumés or curriculum vitae and be prepared to write cover letters and to describe their skills and interests. They should have a high level of professionalism when communicating with potential preceptors and discussing the potential scopes of work for the practicum. The ultimate responsibility for finding a practicum is on the student.

**State-specific Information for Practicum Programs**

Students currently cannot conduct practicum placement activities in Kentucky. All other states are approved for practicum placements. Students should be aware of this restriction when deciding on a practicum opportunity.

**Practicum Approval Form**

Once a student has their practicum approved they will submit their Practicum Approval Form found in their My Portfolio touchpoints which includes information on the duration and location of the practicum, the organization with whom they will be working, the name of the mentor/PI who will supervise them, and their acknowledgement of their review of the IH Travel Policy. The Approval Form must be approved by the student’s academic adviser, PI and their MSPH Program Coordinator. The approved document should then be uploaded to the student’s Portfolio prior to beginning their practicum. If students are planning multiple practica, they must prepare a separate approval form for each practicum planned and secure approval for each one before making any travel arrangements. The PDF document is found in each student’s Portfolio Program Library and linked on the touchpoint. Every student must follow the IH Travel Policy outlined in this guide prior to any travel for their practicum. For more information read the Travel Policy for Students Traveling Abroad section.

**Student Preparation**

All MSPH students are required to complete an online training through CoursePlus ([https://courseplus.jhu.edu/core/index.cfm/go/course.home/cid/90](https://courseplus.jhu.edu/core/index.cfm/go/course.home/cid/90)) and submit all necessary documentation. We recommend that each student do background reading on the practicum organization, conduct an initial literature review of their topic and its cultural relevance, and develop specific learning objectives and identify potential Capstone topics.
Requirements and Expectations of Students

During the field placement year, students must:

a. Submit all required paperwork to the appropriate IH Program Area and Academic Department, prior to the start of the practicum.

b. Respond promptly to all correspondence from program coordinators and academic advisers.

c. Arrange a meeting (in-person or remote) with the academic adviser, organization’s preceptor and others as appropriate to discuss and finalize practicum proposal and approval.

d. Exercise initiative in providing the preceptor with feedback on assigned work and obtaining new work projects. It is important for students to be flexible as project priorities may shift due to external circumstances.

e. Send at least one update on the practicum experience to the adviser and program coordinator by the end of first term.

f. Submit a preceptor and placement evaluation form at the end of the practicum.

g. Include a field placement analysis chapter in their MSPH Capstone.

Practicum Preceptor

The preceptor is the individual in the practicum organization who will identify meaningful projects on which the student will work, set attainable goals for the student, and evaluate performance. He/she must be approved by the student adviser prior to their approval of the practicum placement. This approval is based on communication between the parties and discussion of available resources, safety, nature of the projects and expectations of the organization and student. The preceptor supervises the student’s progress in completing all goals, objectives, and associated activities throughout the practicum. In addition, the preceptor needs to be available to meet with the student on a regular basis, and when necessary discuss with the MSPH program coordinator, student’s adviser, and/or International Health academic program manager, of any problems that arise. The preceptor is required to submit an evaluation of the student’s performance at the completion of the practicum.

IRB Requirements

Students need to confirm if their practicum activity requires approval from the Institutional Review Board (http://phirst.jhsphs.edu), or the Committee on Animal Care (http://web.jhu.edu/animalcare). Consult the IRB Student Guide (http://www.jhsphs.edu/offices-and-services/institutional-review-board/student-projects) posted online. Outside organizations that may have their own IRB approval may sometimes be exempt from JHSPH IRB approval. Students must visit the website for more information. If the practicum does require approval, student must submit the necessary application prior to starting the practicum activity, and secure IRB approval before data collection may start.

All students must complete the Online Human Subjects Training Module prior to the end of the 4th term. However, for students wishing to work on research projects part time for faculty during the academic year, we advise students to take this module in 1st term as the training is required for such research. For information on the Training module (https://www.jhsphs.edu/offices-and-services/institutionalreview-board/training/index.html.html).

MSPH Practicum Opportunity Examples

1. JHSPH Center for Global Health: Field Placements and Field Research Awards (http://www.hopkinsglobalhealth.org/funding-opportunities/student-and-trainee-grants/ghefp) - Deadline: February Length of internship: Depends on the posting from faculty Location of internship: Depends on the posting from faculty Benefits: Grants of up to $3,500

   Contact: Anna Kalbarczyk, MPH Program Manager 410-502-9873
   akalbarc@jhu.edu

2. Fulbright US Student Program (https://studentaffairs.jhu.edu/fellowships/fulbright) - Deadline: September (JHSPH Deadline) Benefits: Round trip transportation to host country. Funding for room, board and incidental costs based on country cost of living. Health benefits. Country specific benefits also exist. Contact: follow the link (https://studentaffairs.jhu.edu/fellowships/fulbright) or contact nfp@jhu.edu

3. Program in Applied Vaccine Experience (PAVE) (https://www.jhsphs.edu/departments/international-health/current-students/Program-in-Applied-Vaccine-Experiences-PAVE): Deadline: January Length of Internship: 3-4 months Location of Internship: Geneva, Switzerland; Washington, DC; Atlanta, GA; New York, NY; depending on agency placement Benefits: Grants of up to $3,500 per month Contact: Jessica Atwell, PhD, MPH Program Manager jatwell@jhu.edu

Internships are currently offered with the following organizations: WHO, Gavi, UNICEF, PAHO and CDC


5. STAR Program (https://www.ghstar.org): Deadline: Dependent on Open Posting Due Dates (see website) Length of internship: work full or part time for up to six calendar months Location of internship: USAID offices in Washington, DC (the Agency’s headquarters), in the Agency’s missions throughout the world, or with Agency implementing partners (other government agencies, multilateral and non-governmental organizations).

6. Boren Fellowship (http://e-catalog.jhu.edu/public-health/departments/international-health/international-health-msph%20https://www.borenawards.org/fellowships/boren-fellowship-basics): Deadline: January Length of internship: a preference of 6 months or longer, absolute minimum of 3 months Location of internship: All over the globe—see website for complete listing Benefits: Language learning fellowship to combined with a practicum Contact: see website (https://www.borenawards.org)


9. Congressional Hunger Center (http://www.hungercenter.org/fellowships/emerson): Emerson Hunger Fellowship: Deadline: January - Length of internship: 1 year - Location of internship: Washington DC - Benefits: $16,000 annual living expenses, health insurance, travel insurance, housing during field placement, $4,000 housing subsidy in DC, $3,500 end of service award, relocation subsidies - Contact: Apply online.


12. World Bank (http://e-catalog.jhu.edu/public-health/departments/international-health/international-health-msph): Deadline: January 31st – summer internship & October 31st – winter internship - Length of internship: At least 4 weeks - Location of internship: Washington DC, but some positions are offered in country offices - Benefits: The Bank pays an hourly salary to all Interns and, where applicable, provides an allowance towards travel expenses. Interns are responsible for their own living accommodations. Contact: apply online (http://e-catalog.jhu.edu/public-health/departments/international-health/international-health-msph).

13. WHO internships (http://www.who.int/employment/internship/interns/en): Deadline: January 31st – summer internship & September 30th – winter internship - Length of internship: A minimum of 6 weeks to a maximum of 12 weeks on a full-time basis. Exceptionally, internships may be extended up to 24 weeks to respond to special academic requirements. Location of internship: Geneva, Switzerland (apply online).

**For internships at regional offices email directly:**

- WHO Regional Office for Africa: afroghorinterns@who.int
- WHO Regional Office for the Americas: intern@paho.org
- WHO Regional Office for Europe: interns@euro.who.int
- WHO Regional Office for the Eastern Mediterranean: emrgohrs@who.int
- WHO Regional Office for South-East Asia: seinterns@who.int
- WHO Regional Office for the Western Pacific: interns@wpro.who.int

WHO Headquarters also accepts interns in the following out-posted offices:

- WHO Global Service Centre: gso@who.int
- WHO Kobe Office: wk@wkc.who.int

Benefits: WHO internships are not paid, and no travel expenses are available.

**Contact:** apply online or with email addresses above

**See list of previous/current student practicums and essays/capstones for ideas and contact**

*No practicum is currently permitted in the state of Kentucky*

**Capstone Guide**

**Description and Requirements**

The culminating experience of the MSPH program is the production of an MSPH capstone that provides a meaningful contribution to knowledge of the health of underserved populations. The paper is not a thesis in that it need not contain original research findings for review by an academic committee. However, it should provide tangible evidence of expertise on a specific applied topic of international health relevance. The Capstone must be reviewed and approved by two faculty readers. Each program has additional specific instructions listed in the following pages. These are general guidelines.

**Guidelines for the MSPH Capstone Content, Format and Submission**

1. Discussions between student and adviser about the nature and topic of the MSPH Capstone should begin before the student leaves for his/her practicum. This will enable the student to conduct relevant literature searches early since some field placements do not offer easy access to the internet. Examples of types of capstones include, but are not limited to the following:

   a. Descriptive case study papers on the work of the agency and experiences during the practicum.

   b. A critical and comparative literature review of programs and interventions similar to those associated with the student’s practicum.

   c. Original research where the student collects and analyzes his/her own data as part of the practicum.

   d. Secondary analysis of data collected by the agency or faculty associated with the student’s practicum.

2. The student and adviser should identify an appropriate second reader for the capstone at least 3 months prior to turning in the final version of the capstone. Any member of JHU faculty can serve as a second reader including those with adjunct appointments, as may be the case of a mentor at the internship site.

3. At least 3 months prior to turning in the final version of the MSPH capstone, the student must submit a 3-5 page detailed outline of the capstone for approval of the adviser and second reader. Frequent revisions of the outline are needed.

4. Based on the term in which the student plans to complete the program, the student is required to complete and submit a 1st version of their capstone to their adviser for review by the indicated date. This allows the adviser sufficient time to give the student feedback, and enough time for the student to make corrections. Students are encouraged to submit their capstone prior to this deadline to avoid delays. Once first edits are done, students are required to submit version 2 to their adviser and identified second reader by the indicated date. Subsequent versions...
can be submitted for review to both readers allowing for a minimum of 2 weeks for review.

**Students must check the MSPH Capstone Deadlines for specific submission dates according to the term they intent to graduate and must follow the deadlines specified in the table for their first and subsequent capstone versions.**

5. If the student is conducting data collection as part of the practicum and/or capstone, appropriate institutional/country approval must be obtained for all such data collection; at a minimum this means obtaining local IRB approval and JHSPH IRB approval. The student will need to work with their adviser to be sure that such an approval is obtained in a timely manner. Note that the process of obtaining JHSPH IRB approval is more challenging when the student is in the field. The JHSPH IRB will NOT approve a project AFTER the data have been collected. Therefore, if a project may require data collection, the student should aim to complete the IRB approval process prior to leaving Baltimore.

6. In general, students are expected to write a concise, cohesive capstone. In many cases it is related to the topic that the student was involved in during their practicum. The student must demonstrate command of the literature in the area of that topic/issue. An alternative approach, especially if the student has written reports of scientific research for publication in the peer-reviewed literature during their time as a student, is to use such manuscripts as the MSPH Capstone with additional text as appropriate to provide context.

7. The end result is more than just a review of the literature. It should be placed in context, be a contribution that synthesizes the relevant literature on their topic and addresses current approaches to the problem in the field as well as the experiences of the student.

8. This should not be a report of the student's internship experience. It is not a diary of the practicum experience or solely a data report, although selected data may be incorporated for illustrative purposes.

9. **MSPH capstone length:** The capstone should be approximately 30-50 pages double-spaced including any appendices. This is approximately equivalent to two course term papers. Appendices can include maps, graphs, tables, training manuals, manuals of operations, software products or other documents to support your capstone. If this is intended for publication, it should meet the journal specifications.

10. This is a written assignment, but the format of the capstone can take many different forms, depending on the type of practicum and the products required by the practicum mentor.

11. The student must submit a final version as an electronic PDF to their Portfolio for approval for graduation by Audrey Lindahl. Students must indicate on the cover page of their Final Capstone Approval Form if they agree to have their capstone posted on the secure DIH intranet (http://e-catalog.jhu.edu/public-health/departments/international-health/international-health-msph/my.jhshp.edu/IH) for review by future students.

12. If you have completed your capstone, but wish to remain registered as a student, please send an email to your Program Coordinator and Audrey Lindahl to hold notification to the registrar. When you are ready to complete, and following the deadline table, let Audrey Lindahl know and she will submit the appropriate paperwork.

13. **Selected prior capstone examples can be found on the JHSPH Intranet** (https://my.jhsph.edu/sites/IH/MHS%20Essays/Forms/AllItems.aspx). There is a list of essay/capstone titles and some essays/capstones are linked. Sort by program. Student approval is needed to post all capstones. If you are interested in an essay/capstone that isn't hyperlinked, contact your Program Coordinator.

**Authorship Guidelines**

The Department expects and encourages scholarly student authorship. This is part of the educational process and career development that we hope will occur during the degree program. There may be opportunities for students to publish research with faculty separately from the capstone/practicum work, as well as publication of capstone results. This is a guide to help students understand what to expect regarding authorship of scientific publications.

**Note to MSPH and MHS students:** Even though these guidelines are tailored to doctoral students, the principles in this document apply to all students doing research and publishing with faculty members.

**General guidelines for authorship:** The International Committee of Medical Journal Editors (ICMJE) recommends authorship based on the following criteria: “Substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work; AND Drafting the work or revising it critically for important intellectual content; AND Final approval of the version to be published; AND Agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.” Please see ICMJE (http://www.icmje.org) for further details.

**Role of first author:** The first author is usually responsible for drafting the paper and will usually take primary responsibility for the content of the paper and analysis, along with the senior author (last author). The first author may be the corresponding author, or the senior author (or another co-author) may play this role. The corresponding author provides the email where correspondence regarding the paper from submission to final publication (and fielding of any correspondence from readers following publication) is sent. The first author is also typically responsible for obtaining input from co-authors, submitting the materials to the journal, and making the first draft of responses to reviewers (with subsequent input from co-authors), and resubmissions and proofing the final version prior to publication (along with co-authors). Of course, all authors have to approve the paper prior to submission and approve any subsequent revisions.

**Distinguishing between authorship and non-authorship contributions:** Some forms of contribution to the production of a manuscript are meaningful, yet do not rise to the level of authorship. Examples include one-off conversations about themes and ideas, reading through a draft to offer helpful comments, and suggesting light edits to correct typographical errors or stylistic infelicities. Typically, the proper way to recognize these sorts of contributions is to list them in a separate acknowledgments section: for instance, “The authors are grateful to [names] for their [valuable discussion of / helpful comments on / critical readings of] earlier versions of this manuscript.”

**Publications not included in the doctoral thesis:** When starting to discuss research projects in which a student may participate, students should feel comfortable raising the issue of authorship with faculty, and vice versa. This allows students to be proactive in asking whether the work they may do could merit authorship if the conditions above are met. It is important to have this conversation prior to starting work on a project, although decisions about adding authors and/or order of authorship may change over time. This is because intellectual input of investigators may
change as the project progresses. Even for publications that are team-written, the person who will function as lead author should be identified as early as possible in the project timeline to avoid confusion.

The decision on authorship inclusion should be guided by the principal investigator (PI) of the project. However, it is the responsibility of the PI to discuss any anticipated authorship changes with all authors, including students, in a timely manner. Please note, especially in international health work, that there may be local investigators who merit authorship but whose role in the research the student may not be aware of. Please be aware that some journals have restrictions on the number of people who can be listed as authors on a publication. The ICMJE also provides guidance on acknowledgements versus named authorships. See the above link to the guidance. When draft manuscripts are circulated to coauthors for comments, it is reasonable for the first author (including students) to set deadlines for feedback, but these should allow time for busy faculty and collaborators to review thoroughly and carefully.

Publications arising from the doctoral thesis: For students who fulfill their thesis requirement using the "papers" option, as described in the Academic Guide, the thesis includes "a minimum of three separate papers based on the thesis research," with each paper "stand[ing] on its own merits" and "the papers together...embody[ing] a recognizable unifying theme." Because the papers taken together "should contain as much substantive information as is usually expected in a traditional thesis," they may each be longer than the more compact version that would be submitted under the tight word-count restrictions typical of scholarly journals. These papers are embedded in the thesis and may be published verbatim from the thesis chapters in a modified format for their respective target journals. In preparing a thesis-derived manuscript for submission to a journal, the student as first author (in consultation with their adviser) may seek to orchestrate additional unique contributions from other researchers, which could not have been included in the thesis itself as written solely by the student. For students who fulfill their thesis requirement using the traditional option, as described in the Academic Guide, the thesis will consist of a set 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."

Typically, three or more distinct papers suitable for submission to peer-reviewed journals can be developed from the materials presented in the traditional thesis, either in parallel with thesis composition or as soon as possible after the student successfully defends the thesis.

Under either the "papers" option or the traditional option, the papers based on the students’ thesis research should be written by the student and published with the student as the first author. This is the expectation. If faculty have a concern about 1st authorship of thesis-derived papers require care, judgment, and good-faith compliance with the ICMJE authorship criteria, all supported by explicit discussion as early as possible in the process of composing the papers based on the student's thesis research.

Additional papers arising more broadly from a student thesis project, but not based on material in the thesis itself, may be published by the student or by others after the student has graduated. The adviser/PI of the project should discuss authorship of additional papers with the student/graduate as soon as publication topics are identified, but note that authorship may also change for such papers as the project progresses.

Further Guidance: It is important to acknowledge that in most instances these matters are decided in advance and without confusion. However, there can be instances of misunderstanding and miscommunication that make authorship decisions challenging. Under those circumstances, it is recommended that the student have a frank, collegial discussion with the adviser/PI to try and clarify these issues. If that is not satisfactory, the student should approach the relevant program director and seek advice. The section below also contains links to good resources.

In the end the production of a paper should always be a collaborative, exciting and respectful exercise and help everyone involved.

Useful Resources:

Capstone Deadlines
Students must select one of four graduation timelines. Each task must be completed by the due dates indicated or students will be required to register for the next academic term until all requirements are met. Students must also abide by the complete list of additional tasks and deadlines set by each program area, which will be given to students by their respective Program Coordinators by the date of the Comprehensive Exam, end of May or early June 2021, along with updated deadlines for the MSPH Capstone. If deadlines are not met for 4th term graduation, student must register for summer term to receive their diploma at the end of August.
An option to Graduate in December and receive the diploma exists, but it is mainly for doctoral and MPH students. The deadlines are very strict, and much earlier; for example, students must submit a complete draft of their capstone by first term.

Key Dates: Students are required to complete all portfolio touchpoints and adhere to all key dates including program specific requirements.

### December Graduation Capstone Deadlines

<table>
<thead>
<tr>
<th>Key Dates</th>
<th>Task/Event</th>
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<tbody>
<tr>
<td>September 14, 2020</td>
<td>Declare intent to Graduate</td>
</tr>
<tr>
<td>September 14, 2020</td>
<td>Identify confirmed Capstone Readers</td>
</tr>
<tr>
<td>September 25, 2020</td>
<td>Capstone Outline Due</td>
</tr>
<tr>
<td>October 19, 2020</td>
<td>Capstone Version 1 Due (requires table of contents, introduction, full chapters and conclusion)</td>
</tr>
<tr>
<td>November 16, 2020</td>
<td>Capstone Version 2 Due (submit additional versions to readers as needed to address comments &amp; edits)</td>
</tr>
<tr>
<td>December 11, 2020</td>
<td>Submit FINAL, Complete, and Approved Capstone</td>
</tr>
<tr>
<td>December 17, 2020</td>
<td>Submit Faculty Signed Approval Form</td>
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### JANUARY COMPLETION (Not an option for Non-US citizens per OIS)

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<tr>
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<tr>
<td>September 14, 2020</td>
<td>Identify confirmed Capstone Readers</td>
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<tr>
<td>October 5, 2020</td>
<td>Capstone Outline Due</td>
</tr>
<tr>
<td>November 9, 2020</td>
<td>Capstone Version 1 Due (requires table of contents, introduction, full chapters and conclusion)</td>
</tr>
<tr>
<td>December 15, 2020</td>
<td>Capstone Version 2 Due (submit additional versions to readers as needed to address comments &amp; edits)</td>
</tr>
<tr>
<td>January 15, 2021</td>
<td>Submit FINAL, Complete, and Approved Capstone</td>
</tr>
<tr>
<td>January 22, 2021</td>
<td>Submit Faculty Signed Approval Form</td>
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### Third Term Completion

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<thead>
<tr>
<th>Key Dates</th>
<th>Task/Event</th>
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<tbody>
<tr>
<td>September 14, 2020</td>
<td>Declare intent to Graduate</td>
</tr>
<tr>
<td>September 14, 2020</td>
<td>Identify confirmed Capstone Readers</td>
</tr>
<tr>
<td>December 4, 2020</td>
<td>Capstone Outline Due</td>
</tr>
<tr>
<td>January 11, 2021</td>
<td>Capstone Version 1 Due (requires table of contents, introduction, full chapters and conclusion)</td>
</tr>
<tr>
<td>February 8, 2021</td>
<td>Capstone Version 2 Due (submit additional versions to readers as needed to address comments &amp; edits)</td>
</tr>
</tbody>
</table>

### May Graduation

<table>
<thead>
<tr>
<th>Key Dates</th>
<th>Task/Event</th>
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<tbody>
<tr>
<td>September 14, 2020</td>
<td>Declare intent to Graduate</td>
</tr>
<tr>
<td>December 4, 2020</td>
<td>Identify confirmed Capstone Readers</td>
</tr>
<tr>
<td>January 8, 2021</td>
<td>Capstone Outline Due</td>
</tr>
<tr>
<td>February 19, 2021</td>
<td>Capstone Version 1 Due (requires table of contents, introduction, full chapters and conclusion)</td>
</tr>
<tr>
<td>March 24, 2021</td>
<td>Capstone Version 2 Due (submit additional versions to readers as needed to address comments &amp; edits)</td>
</tr>
<tr>
<td>April 22, 2021</td>
<td>Submit FINAL, Complete, and Approved Capstone</td>
</tr>
<tr>
<td>April 28, 2021</td>
<td>Submit Faculty Signed Approval Form</td>
</tr>
</tbody>
</table>

### Global Disease Epidemiology and Control MSPH Capstone Overview and Instructions

Described below are 8 basic steps (A-H) that are needed to complete your capstone.

#### A. Begin by choosing a Topic

The capstone topic is typically related to your practicum. The capstone should describe a public health problem, a population of interest, and have a defined geographic scope. For each of these you can be either broad or narrow, but you do need to define them. Your practicum may be research related or program related. If research related you may include data analysis and results (it is not necessary to publish the results in a peer-reviewed journal; they may be exploratory). If it is a program or practice-based practicum, you can consider a program evaluation format.

The capstone is about 1 topic. If you do 2 practicums, you write on one only.

#### B. Write a Problem Statement

The capstone format will vary slightly for all students. BUT, all capstones are based on a public health problem and must have a problem statement. It should include:

- a. public health problem
- b. population
- c. place
- d. intervention/program/evaluation (i.e. this is not simply a descriptive paper)

#### C. Choose 2 Readers

- a. Two JHU faculty members are needed to read and advise you about your capstone.
1) One of the readers is typically your adviser.

2) 2nd reader is a JHU faculty member from ANY of the JHU Schools or Departments including faculty at all levels (research associates, scientists, lecturers, professors, adjuncts). The reader should be an expert in the field or familiar with the project/program, i.e. someone that can provide substantive feedback.

3) An additional local or co-PI mentor may be a third reviewer to ensure accuracy of content. This person does not sign and does not need a Hopkins faculty appointment.

b. Ask each reader in person or via email

c. Explain that they will be asked to review the literature review, outline and structure of the capstone throughout the process through the CoursePlus Portfolio.

d. Give readers a copy of the deadlines and discuss your preferred time-line to complete your degree.

e. Coordinate a reading and comment sequence. Establish if one will read first or if both readers will read concurrently. A brief call or skype meeting with all of you may be helpful.

f. The student will post reader names, affiliations and email in the portfolio touchpoint and upload an email from each reader to verify that the reader has agreed to serve. The readers will then be assigned to capstone related touchpoints to provide feedback on all capstone related activities.

D. Comprehensive Literature Review

The literature review for your paper will be based on your draft problem statement. The literature review is a step to facilitate your knowledge on the topic. Don’t only select papers that support your hypothesis, select papers that contradict to help you investigate all sides of the issues.

You may not find publications that match your narrow problem statement, so expand. Find publications that get as close as possible to your topic and describe how these papers might relate to your topic. Think about the format/structure of your capstone paper to determine the types of literature you’ll need. Read the literature, don’t just list them in a spreadsheet.

Create an Excel Spreadsheet and include:

a. Search terms for search strategy

b. Databases searched

c. Date of searches

d. Create an excel spreadsheet or table of at least 30 references (20 or more from peer reviewed journals), summarized with regard to main findings/appropriate readings related to the topic statement. Indicate how each reference may contribute to your paper.

e. Submit to portfolio touchpoint. Readers must approve and may provide additional feedback.

E. Develop a Detailed Capstone Outline

• The outline will serve as the framework for the capstone.
• The more detailed an outline is the easier it is to write an excellent capstone. Work out the major kinks in the outline first.
• The outline will be reviewed by both readers and both are REQUIRED to approve it on Portfolio touchpoint before he/she begins to write.
• The components of the outline are the same as the capstone below

Detailed Capstone Outline Submission:

1. Upload this detailed outline to the portfolio touchpoint. This will be your draft but should be a solid attempt at a full outline.

2. Work with your readers to get an approved outline. Use the portfolio comment section for discussion with your readers to make sure you all agree on the direction and organization of the paper.

3. Upload the final outline to the Portfolio touchpoint once your readers have approved it. This should be within a few weeks of the Capstone outline due date.

Detailed Capstone Outline Structure:

The capstone outline AND actual capstone will include the following major components:

a. Title Page

• Title: Succinct and well-worded giving a clear indication of the topic and scope of the paper
• Author, degree, date, names of your two readers

b. Table of Contents

• Organize material by section numbers and headings (1.0, 1.1; 2.0, 2.1 etc.)
• Include page numbers in TOC (remember to “insert page” in footer)

c. An introduction/executive summary

• Explain the paper as a whole

d. Practicum Description (short)

• Includes information about your role in the practicum and how it relates to this topic.
• Context of the paper and learning experience. IRB information included here.
• Practicum Description and Public Health Implications are the only sections to use first person.

e. Background

The literature review you submitted is the foundation for writing your background section. You may need to expand your literature search as you develop your paper. This section should:

• Provide a thorough summary of and theoretical background to the public health problem, according to the current scientific understanding. Address all topics covered in the capstone. If utilizing a theoretical model or framework, provide background the literature related to the framework to demonstrate your understanding.
• States the specific aspect of the public health problem that the paper will explore. Summarizes the epidemiology, disease burden and trends in the public health problem according to current literature
• Clearly states the scope of the paper. States a specific research question and how it addresses a knowledge gap that is important for public health. States the specific hypothesis that will be tested.

  Citations: All information and claims made in the text throughout the paper that are not the author's own ideas are cited with superscript Arabic numerals. Cite the primary source. For example, data in Countdown 2015 (http://www.countdown2015mnh.org/country-profiles), you should reference the author(s) and/or entity that collected and reported the original data (The primary source).

• DHS does the surveys and is therefore a primary source.

• If you are referencing data and conclusions presented in a review paper or supplement, cite the review paper AND the primary sources of data reviewed.

  f. Methods of this paper
  • Analytic methods used in this paper. Describe any combination of data analysis (quantitative or qualitative) from primary study (if available) and/or from publicly available data.
  • Types of methodological approaches:
    • Analysis of primary data (Statistical/quantitative or qualitative) (primary data may or may not be available during the time you write your capstone)
    • Situational Analysis based on secondary data o Comparative analysis (interventions in 2 populations for example)
    • Reporting of novel strategies or techniques to address a public health problem o Program evaluation approaches
    • Other (discuss with readers)
  • Anchor your methods into the large context of your project
    • Describe the program or research as they relate to your paper
    • Describe the larger context of the project in detail
    • Describe the population and setting of the project/research
    • Link the project / research to the public health problem, population, and geography.
    • May include maps and other graphical illustrations of the population

  g. Results and analysis section:
  • If the capstone relates to a research project, present selected results that apply to the capstone topic. If results from primary project aren’t available when you are writing, select other methodologies to explore for your capstone. There is always a plan B.
  • If the capstone relates to a professional practice project, the results of an intervention or program evaluation should be included.
  • Present data in tables and figures when possible with clear titles and labels.
  • Explain data from these tables and figures in the text
  • Create your own tables and use tables and figures from published/other sources sparingly. If tables/figures must be lifted from another published document, cite and gain permission as is appropriate.

  h. Conclusion/Discussion: A summary of the findings of the project/analysis.

• Include the contribution to public health knowledge that this project / paper provides
• Limitations and gaps of the paper.
• Next steps

  i. Public Health implications of the project:
    • The “So what?” section of your capstone. Go beyond the conclusion of the paper.
    • Give personal assessment of the project and conclusions based on knowledge learned through literature review, key observations from the field, experience with analysis, etc.
    • What are next steps you suggest for the project / research or field
    • What are public health implications of the capstone?
    • What are your recommendations about advancing the program or research?
    • What worked? What didn’t?
    • Dig deep. Have insight. Demonstrate that you understand the topic, have thoughts about the research /program within the broader scope of public health
    • Wow you reader with your critical analysis and assessment
    • Back your critical analysis with REFERENCES when possible

  j. References
  • All references should be current and relevant
  • Referencing should be throughout (the standard of a peer reviewed manuscript) not just in the background section. (i.e. if you use STATA to do an analysis, you need to reference the STATA program)
  • At least 30 references
    • ≥ 20 from peer-reviewed publications
    • Additional references can come from a variety of sources (books, websites, reports and peer review journals)
    • Periodicals available online are not considered websites

  Format: Follow AMA style and abbreviate names of journals according to the journal’s list in PubMed. List all authors and/or editors up to 6; if more than 6, list the first 3 followed by “et al.”

  Note: If citing an online source, list the author first. If the online source does not list an author’s name, the author is the institution that runs the website. Give data of publication and date accessed. Provide link to the page you used, not the general link.

  Journal references should include the issue number in parentheses after the volume number. For examples see: http://jama.jamanetwork.com/public/instructionsForAuthors.aspx#ManuscriptPreparation andSubmissionRequirements

  k. Appendices: Appendices can include anything from summary table, timelines, photos, maps, consent forms, instruments, etc.
Capstone Length: The body of the capstone (i.e. c-k above) will be no less than 30 pages double spaced. Title pages, references, appendices etc., are not counted in the page minimum requirement.

F. Capstone Review Process:

See Deadline schedule and submit according to your anticipated graduation timeline

a. This is a process. It involves multiple drafts and reviews.

b. Communicate with readers throughout writing. If you are stuck, let your readers help you. Revisit the problem statement, literature review and outline. You may need to change focus.

c. Expect at LEAST 3 drafts and rounds of review (complicated capstones often need more)

d. Readers need at least 2 weeks between drafts. They will provide feedback on each revision on portfolio. Please use track changes in Word when providing draft revisions and send revised document to both readers

e. Use common sense. You want your readers on your side. Treat them with the courtesy and respect you think they might appreciate.
   • Acknowledge receipt of their comments and thank them for getting back to you
   • Upload subsequent drafts as soon as possible, but make sure it’s substantially improved in quality. If you do not understand comments or really disagree, set up a time to meet face-to-face. Do not argue online

f. The common goal is the development of a strong capstone paper that can be uploaded in your portfolio and serve as a writing sample for you.

G. Submit final, complete and approved capstone to Portfolio

This is the capstone in final approval form after addressing all the comments from readers in earlier version. It is a final version when readers have indicated the previous review addressed the major comments and revisions. There should be no more changes and edits required on this version.

• Upload final capstone to portfolio touchpoint

H. Submit signed Capstone Approval Form

1. MSPH Approval Form: The final requirement for graduation is the completion and submission of a signed MSPH Approval Form in your Portfolio touchpoint.

• A PDF fillable form is in the Portfolio Online Library. Complete all sections including your name, capstone title and the section at the bottom indicating if you approve the posting of your capstone for future students to see on our secure internal portal.

Signatures:

• Your readers can sign this form electronically by clicking on the red arrow. Instructions will pop up for them to create and insert an electronic signature.

• If your readers have difficulty signing the form, the following are options
   1. He/she can print and sign and send a scanned signed copy to you.
   2. He/she can send approval via email. In this situation, you need to attach the emails to the MSPH approval form and upload a SINGLE DOCUMENT in the touchpoint

Registration Requirements

Registration Requirements: You must be continuously registered until you complete your practicum requirements AND have an approved capstone with a signed approval form.

Time-line: Follow the deadlines provided to complete the degree according to your planned graduation date. You can complete these steps earlier and continue to remain a student until you tell us to notify the registrar.

Stopping registration: If your capstone is approved and you are then ready to stop registration, let Victoria Chou, Yvonne Tam and Audrey Lindahl know. Audrey will submit your graduation information to the registrar signaling the completion of your degree. At that time, you will not need to (or be able to) register for future terms and your status as a student will end.

Once the registrar is notified of completion:

• That student can no longer
   • Take courses
   • Serve as a Teaching Assistant (TA) or
   • Work as a student at JHU
   • Remain in the U.S. - If on a visa. International students must talk with Audrey Lindahl and OIS

Transcripts: Your transcript will indicate the term in which the registrar is notified you completed the degree. (December, January, March or May)

What happens if deadlines are missed?

• If you miss the deadline and do not have your capstone approved with a signed approval form by the two reviewers, you will need to register for the next term.

• If you do not have a final signed approval by the May graduation time-line, you will not graduate in time and will be required to register for the summer term.

Health Systems Program MSPH Capstone Overview and Instructions

MSPH Capstone Outline

The student must submit a 3-5 page detailed outline of the capstone for approval to the adviser and second reader by the deadline specified for the term s/he intends to graduate. MSPH capstone allows a variety of capstone types including original research, secondary data analysis, conceptual work, and case studies. At minimum, the outline should include the capstone topic, and sections on background, method, results, conclusion and the public health significance of the results. The outline will serve both as the framework and guide for developing the capstone. Students are also required by the Health Systems Division to submit their outline to their Portfolio or any other computer interface that may be required by the program. Frequently, revisions of the outline are needed.
It is preferable that second readers are selected from within faculty at JHSPH with relevant knowledge on the topic of interest.

MSPH Capstone Draft

The student must submit a complete rough draft of their capstone to their adviser for first review by the deadline specified for the term s/he intends to graduate. This allows the adviser sufficient time to give the student feedback, and enough time for the student to make corrections before the end of the term. Students are encouraged to submit their capstone prior to this deadline to avoid delays in feedback and in time needed to meet required departmental deadlines for graduation. Once first edits are done, the revised capstone should be submitted to the adviser and the identified second reader with a minimum of 2 weeks for review. The revised capstone must have fully developed sections as described under the outline and should include all relevant references.

Final, Complete and Approved MSPH Capstone

The final version of the capstone must be submitted by the deadline specified for the term s/he intends to graduate. The final version must include a summary of the student’s experience during the practicum/practica including a description of the project(s) and main activities the student was involved in, the student’s role, lessons learned and challenges. The second part of the final version of the capstone should focus on the main topic and have all the relevant sections described under the outline. Students may include any other relevant information in an appendix to the capstone, including questionnaires, consent forms, and photos. The appendix must however be well-linked to the main capstone or summary of the student’s experience. Student must obtain final approval on the capstone from both their adviser and second reader and a PDF copy must be submitted to the students Portfolio by the date indicated for the term in which they intend to graduate.

Final Approval Form

Once the final version of the capstone is approved a signed approval form must be uploaded to the students Portfolio as a PDF by the date indicated.

Human Nutrition MSPH / MSPH-RD Capstone Overview and Instructions

Described below are 8 basic steps (A-H) that are needed to complete your capstone.

A. Begin by choosing a Topic

The capstone topic is typically related to your practicum. The capstone must describe a public health nutrition problem.

B. Write a Problem Statement

The capstone format will vary slightly for all students. BUT, all capstones are based on a public health nutrition problem and must have a problem statement. It should include:

- Public health nutrition problem
- Population
- Place

C. Choose 2 Readers

- Two JHU faculty members are needed to read and advise you about your capstone.

D. Literature Review

The literature review for your paper will be based on your draft problem statement. The literature review is a step to facilitate your knowledge on the topic.

E. Develop a Detailed Capstone Outline

- The outline will serve as the framework for the capstone.
- The more detailed an outline is the easier it is to write an excellent capstone.
- The outline will be reviewed by your first reader (e.g. your adviser). Your first reader is REQUIRED to approve it on your Portfolio Touch Point before you begin to write.
- The components of the outline are below

Below is a general outline for the Human Nutrition MSPH /MSPH-RD Capstone. Student must obtain the specific outline requirements from Dr. Laura Caulfield (requirements may vary, given type of practicum).

1. Title Page

- Come up with a succinct, creative, informative and well-worded title that gives a clear indication of the topics and scope of the capstone.
- Author, degree, date, names of your two readers
- Acknowledgment section (funder, collaborators, organization)
- Consider adding photos or graphics to make the page visually appealing.

2. Table of Contents with page numbers

3. Abstract/ Executive Summary (1 pages).

- This section outlines (in narrative form) the capstone as a whole and includes a brief description of the student’s role in the practicum and how it relates to their capstone public health nutrition topic of interest.

4. Introduction /Background

- Includes a literature review of the topic/topics covered in the capstone. Pay particular attention to proper sourcing of information in the background section.
- Provide a through summary of the background to the public health nutrition problem, according to current scientific understanding. Summarize the epidemiology, disease burden and trends in the public health problem according to current literature.
- For MSPH-RD ONLY: Include relevant clinical information, treatment, information regarding medical
costs, etc. Relate to coursework, clinical and food related rotations as appropriate.
• Clearly state the scope of the capstone, including the specific aspects of the problem that the capstone will explore

5. Context and Activities
• Describe the program’s design, history to provide context, and any methods (quantitative and/or qualitative) and/or activities undertaken during the practicum. In this section, describe the larger context of the project/organization, but highlight aspects of the project relevant to your work.

6. Products /Results /Findings
• Activities, products, research findings, evaluation findings should be included as appropriate.
• Present data in tables and figures when possible with clear titles and labels.
• Explain data from these tables and figures in the text.
• Create your own tables and use tables and figures from published/other sources sparingly. If tables/figures must be lifted from another published document, cite and gain permission as is appropriate.

7. Discussion /Conclusion: A summary of the findings of the project/analysis/activities.
• Include the contribution to public health knowledge that this project / set of activities provides
• Give personal assessment of the project and conclusions based on knowledge learned through literature review, key observations from the field, experience with analysis, etc.
• What are next steps for the project, for you, for the field
• What are public health nutrition implications of the capstone?

References - The capstone should be well referenced. References can come from a variety of sources (books, websites, reports and peer review journals).

Appendices - Appendices can include anything from consent forms, instruments, summary table, timelines, photos, maps, etc.

Capstone Length: The body of the capstone will be no less than 30 pages double-spaced. Title pages, references, appendices etc., are not counted in the page minimum requirement. Please see Dr. Laura Caulfield for guidance on the organization of your capstone based on your specific practicum.

F. Capstone Review Process:
See Deadline schedule and submit according to your anticipated graduation timeline

• This is a process. It involves multiple drafts and reviews.
• Communicate with readers throughout writing. If you are stuck, let your readers help you. Revisit the problem statement, literature review and outline. You may need to change focus.

• Expect at LEAST 3 drafts and rounds of review (complicated capstones often need more)

G. Submit final, approved, capstone as a PDF to Portfolio by the date indicated

H. Submit signed approval form as a PDF to Portfolio by the date indicated

Social and Behavioral Interventions MSPH Capstone Overview and Instructions
1. Before you start writing your capstone, write an outline and get it approved by your adviser and second reader.

2. In SBI we allow one of your readers to be your on-site supervisor, even if they are not Hopkins faculty. This is because they will want to read and comment on your document anyway. Please, note that your reader may have programmatic or organization-specific comments to make, important to your host organization, while your Hopkins faculty reader may require additional information on theory, literature, implications, etc., in line with your learnings from your first year of study, not necessarily of interest to your second reader. You have to satisfy all your readers’ comments, even if the capstone is a white paper/ programmatic document. Observe the various timelines mentioned, to get the capstone approved by both readers during your desired academic term. Note that 4th term has a special deadline for the capstone grade to be submitted, which is usually in late April and not the last day of the term.

3. Upon capstone approval, all readers sign the approval form found in your Portfolio Document Library. Ask non-faculty readers to add their full job title and affiliation for tracking purposes. Post approved capstone and capstone approval form to the respective Portfolio as PDF documents by the dates indicated.

GUIDELINES FOR THE MSPH CAPSTONE IN THE SOCIAL AND BEHAVIORAL INTERVENTIONS (SBI) PROGRAM

1. Students in the SBI program often conduct some data collection as part of their practicum. Appropriate institutional / country approval must be obtained for all such data-gathering at a minimum this usually means that the host organization obtains local IRB approval to cover the data collection of the intern. If the host organization is JHU, the intern needs to be added to the existing IRB approval as student investigator. The student will need to work with their adviser to be sure that appropriate approval is obtained in a timely manner.

2. The MSPH capstone should be focused on a particular topic/issue. The student must demonstrate command of the literature in the area of that topic/issue. The capstone should have a fairly complete and up-to-date set of references. This means that the students doing fieldwork should bring along sufficient references to at least get started on the literature review.

3. The capstone should tie in either theoretical or methodological (ideally both) content from the social sciences – from perspectives such as health psychology, medical anthropology, or medical sociology.

4. The student’s practicum experience should be tied to the MSPH capstone. This may be accomplished in several different ways:

a) as a case study illustrating key concepts and methods described in the main body of the capstone;

b) as a distinct section of the capstone, on linkages between the practicum and the topic;
5. The end result should be more than just a review of the literature. It should be a contribution synthesizing the relevant literature, social science perspectives and approaches, and substantive experiences of the student regarding a topic of international health significance.

6. It is not merely a report of the student’s practicum experience. It is not only a data report (although selected data should be incorporated).

7. MSPH Capstone Length. The MSPH capstone in our program should be about 30-40 pages in length double-spaced, not including appendices and references. This is approximately equivalent to a 4-credit course term paper.

8. Below is a sample outline for the MSPH capstone where data are collected. It is NOT the only way to organize such a capstone, and of course the practicum may not involve data collection:

   a. Introduction (2-3 pp). Problem statement, how practicum fits in, main aims or research questions
   b. Literature review (6-10 pp). Develops a theoretical framework; Identifies gaps in the literature that you intend to address
   c. Methods (3-5 pp). Describes methods you used, and why you selected certain methods
   d. Results (10-15 pp). Describes how you addressed gaps in the literature on your topic; Presents selected results to illustrate
   e. Discussion and Conclusions (3-5 pp). New directions for research/information gathering; Significance of work conducted; Summative statements on the practicum
   f. The intern’s role in the work described and contribution to the host organization
   g. Appendices. Copies of project deliverables e.g. training manual, white paper, print materials developed, etc., data collection instruments, consent forms, additional data, references

9. Examples of types of practica and associated capstones:

   • Practicum: Primary Research – students often work on an ongoing research project. This may include conducting qualitative or quantitative data collection, and/or analysis of data from a research project. Often students have their own unique project, but frequently they are working on a larger team-managed research study.
   
   • Capstone: Capstones for this fit the most traditional model of a research report. The capstone would normally include sections on: (a) background and literature review, (b) methods, (c) results with associated tables and figures, (d) conclusion and discussion, and (e) the role that the student played in the project. If the internship involves collecting data for a larger study it is helpful to discuss with the study Principal Investigator what piece of it you will analyze and write up prior to initiating the internship. It is imperative that appropriate IRB clearances be gained for collection of data from human subjects.
   
   • Practicum: Training – in the past many students have conducted training for research projects and intervention activities.
   
   • Capstone: Capstones for this type of practicum should address the following: (a) background and literature review on the health topic addressed in the training, (b) the specific goals of the training, (c) a description of the population being trained, (d) a review of the theory that grounds the training, (e) description of how training materials and modules were developed, (f) description of the actual training, including positive and negative aspects, (g) your role in the training, (h) recommendations for modifications of the training, (i) reflection on the theoretical basis of the training, (j) conclusions and discussion.

   • Practicum: Developing a Professional Document – students in the past have also taken positions where they develop professional documents for agencies involved in international health. These have included policy documents summarizing a health issue, research proposals, dissemination reports, and theoretical pieces to guide programs.

   • Capstone: Capstones for this type of practicum would primarily include the document itself, plus: (a) a summary of the theoretical issues that emerged in the development of the document, (b) the role of the student on the project, (c) lessons learned from the process, and (d) conclusions and discussion on the process of developing the materials. Thus, the document produced for the practicum is the core of the capstone, but the student should bolster this with reflection and commentary on the process itself.

   • Practicum: Secondary Data Analysis – rarer but possible, along with a direct field experience

   • Capstone: The capstone would be similar in format to that for primary research described above. It is important that the student assure that the requisite IRB clearances are in place for this activity. Include a section on your field experience and its linkages with the secondary data that you are writing about.

Note – this is not an exhaustive list. Rather, it exemplifies the most common types of practica that students have taken in the past. If you have found a practicum that does not neatly fit any of these models you should consult with your adviser on the expected capstone that you will produce. Do this prior to leaving for the practicum.

Program Objectives

Global Disease Epidemiology and Control

1. Evaluate and execute intervention strategies and approaches that address major public health problems of underserved populations, with emphasis on infectious diseases and vaccines, in the context of culture, communities and health policies

2. Incorporate the epidemiology, biology, pathophysiology, and/or modes of transmission, to analyze, recommend, or create appropriate strategies for prevention and control of the major infectious diseases of public health importance to resource-poor environments

3. Apply management principles to programs for health systems and health services in developing countries

4. Identify major environmental health problems and communicate some solutions in detail with an emphasis on issues of water and sanitation

5. Analyze and synthesize relevant public health data and develop and implement prevention, control, and evaluation plans employing epidemiological methods to address disease burdens of public health importance
6. Address problems of global disease burden within its biological, cultural, and behavioral context
7. Evaluate a field research or public health program from conception of ideas through design, management, monitoring, data collection, interpretation, and analysis
8. Conduct a statistical analysis of disease burden or program evaluation data, and provide a reasoned interpretation of the results to contribute to program improvement and/or public health literature
9. Produce written reports of research and/or programmatic findings and communicate them via oral presentations, posters, briefs, peer-reviewed articles, or other official documents, intended for public health professionals and/or policy makers

**Health Systems**
1. Interpret knowledge of public health problems pertinent to disadvantaged populations and approaches to their assessment, management, and control;
2. Apply concepts and principles of management and finance to the operation of health systems in resource-poor settings;
3. Analyze and synthesize data relevant to the management and control of health problems of public health importance in resource-poor settings;
4. Produce written and oral reports for public health professionals and policy makers.

**Human Nutrition**
1. Identify and interpret public health nutrition problems and characterize these problems in terms of measurable indicators
2. Analyze relevant nutrition data and interpret scientific evidence to develop and implement prevention, control, and evaluation plans
3. Design, manage, and evaluate nutrition related research or programs in a field, laboratory or clinical experience from conception of ideas through data collection, and analysis, to inform guidelines
4. Communicate through written reports, oral presentations and other media nutrition information of high technical quality and program or policy relevance.

**Social and Behavioral Interventions**
1. Identify, define and address major global health problems of underserved populations in lower income contexts, using appropriate indicators and current best practice
2. Identify and utilize epidemiologic and biostatistics tools relevant to assessing the scope of a global health problem and/or the impact of public health action on a given condition
3. Assess and apply global health response options, guided by the biological mechanisms and/or clinical manifestations of disease impacting the health of underserved communities
4. Assess and apply global health response options, guided by the environmental influences on health outcomes and appropriate risk assessment
5. Propose management techniques to implement and evaluate global health programs including organizational and financial best practices
6. Apply relevant theories and concepts drawn from anthropology, sociology and psychology to design effective theory-driven social and behavioral interventions to improve the health and well-being of underserved communities
7. Use appropriate and rigorous qualitative research methods to understand the social context of health and inform public health action
8. Use multi-method formative research to develop locally-appropriate social and behavioral intervention strategies to improve health, including development of appropriate communication interventions in support of those strategies
9. Identify, plan and implement appropriate social and behavioral interventions for different resource-restricted contexts, guided by corresponding best practice approaches
10. Propose, conduct and assess process and outcome evaluations of social and behavioral interventions in global health
11. Produce written reports of programmatic findings and/or research and communicate them via oral presentations, posters, briefs, or other official documents, intended for public health professionals and/or policy makers
International Health, MSPH/RD

Program Coordinator: Vanessa Garcia-Larsen, MSc MEd PhD

Requirements for Admission

The program seeks to attract and train future experts in public health nutrition across a range of professional interests and background. Entry into the Master of Science in Public Health (MSPH) program in Human Nutrition requires, at a minimum, a bachelor's degree or its equivalent, preferably in nutrition, biology, health or social sciences, public health, health, economics, or health policy. For more information please go to the MSPH-RD homepage (https://www.jhsph.edu/departments/international-health/global-health-masters-degrees/master-of-science-in-public-health/registered-dietician-program).

Educational Objectives

The MSPH program in Human Nutrition is designed to train professionals to focus on understanding and solving public health problems in food and nutrition across a diverse societal landscape. The MSPH degree in Human Nutrition prepares students to assume professional, technical, and management positions within public health nutrition programs or government, international or non-governmental agencies, universities, hospitals and private industry. The program also offers a broad public health nutrition component that complements dietetics skills acquired in the combined MSPH-RD program (see below). The MSPH program also prepares students with a foundation of knowledge and skills for carrying out subsequent doctoral studies and research in the field of human nutrition, or training in medicine.

Overall Program Goal

There are four overarching academic competencies that students are expected to master during the course of their masters’ degree program. Students should:

- Demonstrate knowledge of public health nutrition problems and characterize these problems in terms of measurable indicators
- Identify nutrition problems of public health importance; analyze and synthesize relevant data; and develop and implement prevention, control, and evaluation plans
- Participate in a field, laboratory or clinical experience related to nutrition research or programs from conception of ideas through design, management, monitoring, data collection, and analysis
- Communicate through written reports, oral presentations and other media nutrition information of high technical quality and program or policy relevance

Advising Faculty

- Laura Caulfield
- Vanessa Garcia-Larsen

Program Requirements

Students will be expected to enroll each term, satisfy the educational requirements, and successfully complete a practicum experience and write a capstone. Students must also pass a written comprehensive exam. A minimum of 16 total credits of coursework per term is required. Of these, approximately 64 credits are associated with directed coursework usually completed in the first year, a minimum of 28 credits are associated with a practicum experience, and minimum of 4 credits with a capstone usually completed during the second year.

Students are required to take specific courses in each of four core content areas in order to develop specific competencies: Nutrition and Health, Biochemistry and Metabolism, Research Methods, and Professional Skills. Approximately 53 course credits are associated with these core content areas common to all MSPH students. MSPH-RD students are required to take an additional 12 credits of required coursework. Within these required classes, all students must complete coursework in environmental health and management sciences. To complete the remainder of their coursework requirements, students will choose elective coursework and special studies in conjunction with their advisor, depending on their unique career goals.

Nutrition Practicum

The MSPH-RD practicum in collaboration with the dietetics program at the Johns Hopkins Bayview Medical Center (JHBMOC) offers students the opportunity to earn both the MSPH degree and complete the dietetics practicum in preparation for obtaining the RD credential. The integrated program has been granted accreditation status by The Accreditation Council for Education in Nutrition and Dietetics (ACEND) of The Academy of Nutrition and Dietetic (A.N.D.) 120 South Riverside Plaza, Suite 2000, Chicago, Illinois 60606-6995, 1-800-877-1600, ext. 5400.

For those accepted for this option, a $500 deposit is required by March 1st, 2020 to secure placement for the practicum, which occurs from June 2020 through February 2021. See the Bayview MSPH/RD Program http://www.hopkinsmedicine.org/johns_hopkins_bayview/education_training/additional/master_science_public_health_registered_dietitian_program/ The $7500 clinical training fee for the practicum is due September 1st, 2020 (with second year first term tuition). Like all MSPH students, those in the RD practicum program, must also complete the MSPH capstone.

Human Nutrition Course Requirements

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

IMPORTANT NOTE: Courses taken to meet one group of requirements may NOT be used to meet another group of requirements

<table>
<thead>
<tr>
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<th>Title</th>
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<tr>
<td>PH.220.600</td>
<td>INTERNATIONAL TRAVEL PREPARATION, SAFETY, &amp; WELLNESS</td>
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<tr>
<td>PH.222.840</td>
<td>SPECIAL STUDIES AND RESEARCH HUMAN NUTRITION</td>
<td>1</td>
</tr>
<tr>
<td>PH.222.860</td>
<td>Graduate Nutrition Seminar</td>
<td>1</td>
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<tr>
<td>PH.550.860</td>
<td>Academic &amp; Research Ethics at JHSPH</td>
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<th>Title</th>
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<tr>
<td>PH.222.641</td>
<td>Principles of Human Nutrition in Public Health</td>
<td>4</td>
</tr>
<tr>
<td>PH.222.657</td>
<td>Food and Nutrition Policy</td>
<td>2</td>
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<tr>
<td>PH.222.642</td>
<td>ASSESSMENT OF NUTRITIONAL STATUS</td>
<td>3</td>
</tr>
<tr>
<td>PH.222.644</td>
<td>CELLULAR BIOCHEMISTRY OF NUTRIENTS</td>
<td>3</td>
</tr>
<tr>
<td>PH.222.654</td>
<td>FOOD, CULTURE, AND NUTRITION</td>
<td>4</td>
</tr>
<tr>
<td>PH.222.655</td>
<td>NUTRITION AND LIFE STAGES</td>
<td>3</td>
</tr>
<tr>
<td>PH.222.658</td>
<td>Critical Thinking in Nutrition</td>
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Research Methods, Biostatistics: Chose one of the following series for a total of 16 credits

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<td>PH.140.621</td>
<td>Statistical Methods In Public Health I</td>
<td>4</td>
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<tr>
<td>PH.140.622</td>
<td>STATISTICAL METHODS IN PUBLIC HEALTH II</td>
<td>4</td>
</tr>
<tr>
<td>PH.140.623</td>
<td>STATISTICAL METHODS IN PUBLIC HEALTH III</td>
<td>4</td>
</tr>
<tr>
<td>PH.140.624</td>
<td>STATISTICAL METHODS IN PUBLIC HEALTH IV</td>
<td>4</td>
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<tr>
<td>OR</td>
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<tr>
<td>PH.140.651</td>
<td>Methods In Biostatistics I</td>
<td>4</td>
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<tr>
<td>PH.140.652</td>
<td>METHODS IN BIOSTATISTICS II</td>
<td>4</td>
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<td>METHODS IN BIOSTATISTICS III</td>
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<tr>
<td>PH.140.654</td>
<td>Methods In Biostatistics IV</td>
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Research Methods, Epidemiology:

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<tr>
<td>PH.340.721</td>
<td>Epidemiologic Inference in Public Health I</td>
<td>5</td>
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Environmental Health: Choose one of the following The courses not chosen may be used to satisfy the elective requirement

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<tbody>
<tr>
<td>PH.180.602</td>
<td>ENVIRONMENT AND HEALTH IN LOW AND MIDDLE INCOME COUNTRIES</td>
<td>2</td>
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<tr>
<td>PH.180.611</td>
<td>The Global Environment, Climate Change, and Public Health</td>
<td>4</td>
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<tr>
<td>PH.180.660</td>
<td>INTRODUCTORY PRINCIPLES OF ENVIRONMENTAL HEALTH</td>
<td>3</td>
</tr>
<tr>
<td>PH.180.601</td>
<td>Environmental Health</td>
<td>5</td>
</tr>
<tr>
<td>PH.182.640</td>
<td>FOOD- AND WATER- BORNE DISEASES</td>
<td>3</td>
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<tr>
<td>PH.187.610</td>
<td>Public Health Toxicology</td>
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Budgeting, choose one of the following

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<td>BASIC RESOURCES MANAGEMENT FOR PUBLIC HEALTH</td>
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<tr>
<td>PH.552.622</td>
<td>Creating, Implementing and Monitoring Budgets for Projects and Programs</td>
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Management Sciences, choose one of the following The courses not chosen can be used to satisfy the elective requirement

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<td>PH.312.600</td>
<td>MANAGING HEALTH SERVICES ORGANIZATIONS</td>
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<td>PH.312.601</td>
<td>FUNDAMENTALS OF MANAGEMENT FOR HEALTH CARE ORGANIZATIONS</td>
<td>3</td>
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<tr>
<td>PH.312.655</td>
<td>ORGANIZATIONAL BEHAVIOR AND MANAGEMENT</td>
<td>2</td>
</tr>
<tr>
<td>PH.221.602</td>
<td>Applications in Managing Health Organizations in Low and Middle Income Countries</td>
<td>3</td>
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<tr>
<td>PH.380.681</td>
<td>STRATEGIC LEADERSHIP PRINCIPLES AND TOOLS FOR HEALTH SYSTEM TRANSFORMATION IN DEVELOPING COUNTRIES</td>
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Leadership and Interprofessional Practice

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<td>PH.552.625</td>
<td>BUILDING COLLABORATIONS ACROSS SECTORS TO IMPROVE POPULATION HEALTH</td>
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<tr>
<td>PH.552.623</td>
<td>Principles of Negotiation and Mediation for Public Health Professionals</td>
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<tr>
<td>PH.552.624</td>
<td>Applications Of Negotiation And Mediation For Public Health Professionals</td>
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Additional MSPH/Registered Dietitian Required Courses:

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<tr>
<td>PH.260.600</td>
<td>Introduction to the Biomedical Sciences</td>
<td>4</td>
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<td>PH.182.640</td>
<td>FOOD- AND WATER- BORNE DISEASES</td>
<td>3</td>
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<tr>
<td>PH.222.651</td>
<td>NUTRIENTS IN BIOLOGICAL SYSTEMS</td>
<td>2</td>
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<tr>
<td>PH.222.652</td>
<td>NUTRITION IN DISEASE TREATMENT AND PREVENTION</td>
<td>3</td>
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<tr>
<td>PH.222.661</td>
<td>DESIGNING HEALTHY DIETS</td>
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<td>PH.222.840</td>
<td>SPECIAL STUDIES AND RESEARCH HUMAN NUTRITION (Developing Skills in Clinical Nutrition) Terms 1-4</td>
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<td>PH.552.621</td>
<td>BASIC RESOURCES MANAGEMENT FOR PUBLIC HEALTH</td>
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Year 2 Requirements

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<tr>
<td>PH.222.815</td>
<td>Human Nutrition - Registered Dietitian (Rd) Program Practicum</td>
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<tr>
<td>PH.222.850</td>
<td>MSPH Capstone Human Nutrition</td>
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Recommended Electives (18-23 Credits)

Food Systems and Production

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<tbody>
<tr>
<td>PH.180.620</td>
<td>An Introduction to Food Systems and Public Health</td>
<td>4</td>
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<tr>
<td>PH.180.655</td>
<td>BALTIMORE FOOD SYSTEMS: A CASE STUDY OF URBAN FOOD ENVIRONMENTS</td>
<td>4</td>
</tr>
<tr>
<td>PH.180.606</td>
<td>CASE STUDIES IN FOOD PRODUCTION AND PUBLIC HEALTH</td>
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Nutrition

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<tr>
<td>PH.222.647</td>
<td>NUTRITION EPIDEMIOLOGY</td>
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<tr>
<td>PH.221.611</td>
<td>FOOD SECURITY AND NUTRITION IN HUMANITARIAN EMERGENCIES</td>
<td>2</td>
</tr>
<tr>
<td>PH.222.649</td>
<td>INTERNATIONAL NUTRITION</td>
<td>3</td>
</tr>
<tr>
<td>PH.340.644</td>
<td>EPIEDEMIOLOGY OF DIABETES AND OBESITY</td>
<td>2</td>
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<tr>
<td>PH.700.603</td>
<td>INTRODUCTION TO ETHICAL THEORY</td>
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<tr>
<td>PH.222.840</td>
<td>SPECIAL STUDIES AND RESEARCH HUMAN NUTRITION (Developing Skills in Clinical Nutrition) Terms 1-4</td>
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Research Methods

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<td>PH.223.664</td>
<td>DESIGN AND CONDUCT OF COMMUNITY TRIALS</td>
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<td>PH.224.690</td>
<td>Qualitative Research Theory and Methods</td>
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<td>PH.410.690</td>
<td>ETHNOGRAPHIC FIELDWORK</td>
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<tr>
<td>PH.221.660</td>
<td>SYSTEMS SCIENCE IN PUBLIC HEALTH: BASIC MODELING AND SIMULATION METHODS</td>
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<td>PH.222.653</td>
<td>FOOD TECHNOLOGY AND HEALTH</td>
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<td>DESIGNING HEALTHY DIETS</td>
<td>2</td>
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<td>PH.222.652</td>
<td>NUTRITION IN DISEASE TREATMENT AND PREVENTION</td>
<td>3</td>
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<td>PH.224.691</td>
<td>QUALITATIVE DATA ANALYSIS</td>
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International Health and Disease

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<td>ISSUES IN THE REDUCTION OF MATERNAL AND NEONATAL MORTALITY IN LOW INCOME COUNTRIES</td>
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<td>INFECTIOUS DISEASES AND CHILD SURVIVAL</td>
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<td>FOOD SECURITY AND NUTRITION IN HUMANITARIAN EMERGENCIES</td>
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Population, Behavior and Health

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<td>PH.380.604</td>
<td>LIFE COURSE PERSPECTIVES ON HEALTH</td>
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MSPH REGISTERED DIETITIAN PROGRAM JOHNS HOPKINS BAYVIEW MEDICAL CENTER CLINICAL NUTRITION DEPARTMENT DIETETIC EDUCATION CLINICAL ROTATION

The start date for the program is June 2021 and the completion date is 3rd term AY 21-22. The Clinical Nutrition Department will arrange for RD students to attend the Johns Hopkins Bayview Medical Center orientation on June 10th and June 21st. The public health rotations will tentatively start January 6, 2020. Three weeks of vacation are scheduled around Thanksgiving (1 week) and the end of December/beginning of January (2 weeks).

To participate in the nutrition practicum students will need to:

- Provide official transcripts for any prerequisites completed after application submitted to JHSPH
- Provide proof of immunizations including
  - Hepatitis B Vaccination*
  - Measles, Mumps, & Rubella Vaccination*
  - Varicella Vaccination*
  - Tetanus & Diphtheria Vaccination*
- Receive an influenza vaccine at JHSPH (Fall 2020)*
- Provide proof of current health insurance coverage through March of 2021
- Provide proof of car insurance coverage through March of 2021 (only if using a car for transportation in program)
- Complete a physical at the JHBMC Occupational Department*
- Have a TB test* or provide a current lung x-ray
- Consent to a Criminal Background Check
- Join the Academy of Nutrition and Dietetics (student membership)
- Provide proof of car insurance coverage through March of 2021
- Complete a physical at the JHBMC Occupational Department*
- Have a TB test* or provide a current lung x-ray
- Consent to a Criminal Background Check
- Join the Academy of Nutrition and Dietetics (student membership)

* Included in the RD Practicum course fee in the 2nd year.

MSPH/RD Public Health Rotation Objectives

1. Perform ethically and professionally in accordance with the values of the Academy of Nutrition and Dietetics and Johns Hopkins Bayview Medical Center when speaking, writing and interacting with patients and other health care professionals.
2. Use current technologies for information and communication avenues for nutrition information.
3. Conduct an assessment of current public health problems associated with nutrition.

You should spend some time considering what types of practicum from which they would enjoy learning and exploring potential opportunities. The practicum can be completed in a variety of settings; however, at this time the public health rotation for the dietetics practicum needs to be completed locally within the Baltimore/Washington/Northern VA area. Students can work with Hopkins field sites, NGOs, and within government agencies, for example, to fulfill the requirement. This wide range of options allows students to seek out which will best suit their needs and interests, and there are many resources within the School to assist students with the process. These include the Office of Career Services (for resume assistance), the Department Internship Resource and Research Guide, the Faculty Coordinator of the student’s program area, and the student’s advisor to name a few. At minimum, students should meet with their advisor at the beginning of the process to get ideas and develop a plan for securing their practicum. However, it is ultimately the student’s responsibility to identify and secure the opportunity

1. Identify the major problems of public health importance to the underserved populations
2. Perform literature review on public health problem
3. Identify sources of data relevant to a public health problem
4. Use data to assess the magnitude of a public health problem
5. Evaluate an identified public health problem in terms of its biological, cultural, and behavioral context.
6. Collaborate in the development of prevention and control plans for key public health problems.
7. Participate in methods of assessing nutritional status to characterize a sample population.
8. Integrate epidemiology into problems of public health and nutrition.
9. Manage data collection and analysis in a research project.
10. Complete self-assessment as part of professional development and evaluation.

MSPH/RD Public Health Rotation

The 8-week Public Health rotation should be chosen following the same guidelines as are given for the JHSPH Practicum Activity.
that will be most rewarding to them based on their interests and career goals.

The Public Health rotation must be nutrition-related. One contact person or primary preceptor must be identified for this rotation. This individual must be a professional who is licensed in the field in which they practice, if applicable, and must agree to help facilitate your completion of the rotation objectives and competencies (attached). In addition, there needs to be an RD or dietetics professional at the site or as a supervisor/preceptor of the rotation. You are expected to accumulate at least 320 hours (8 weeks, 40 hrs per week) of supervised practice during this rotation.

The Public Health rotation must be approved by the JHBMC Practicum staff. Rotation options should be identified by the student at the beginning of the dietetics practicum, with final approval by August 15th. All sites will need to enter into a legal agreement with JHBMC prior to the student beginning the rotation. Any JHSPH rotation sites will be excluded from agreement necessity.

Once an appropriate practicum is selected, the student should complete the Public Health Rotation Site Identification form.

Primary Preceptor is defined as the following: Individual in the supervised practice facility who oversees the practical experience and training provided to a student/intern for a particular rotation(s), maintains appropriate contact with the program director and student/intern to coordinate planned learning experiences and assignments and conducts the student/intern evaluation. Contact with a preceptor with less than one year of professional or technical experience should be only for observation or times when specific learned activities identified by the primary preceptor are being practiced.

Supervised practice is defined as the following: Planned learning experiences in which knowledge, understanding and theory are applied to real-life situations; may be augmented by role-playing, simulation, case studies and/or other experiences in which students/interns actually perform tasks that contribute to acquisition of the competencies.

Public Health Rotation Sample Sites

- American Institute for Cancer Research
- Food Supplement Nutrition Education Program
- International Food Information Council Foundation
- Program for the Introduction and Adaptation of Contraceptive Technology
- NIH Division of Nutrition Research Coordination
- JHSPH Dept. of Pharmacology and Molecular Science (Dr. Fahey)
- JHSPH Dept. of International Health (Dr. Gittelsohn)
- JHSH WIC (Dr. Gross)
- Baltimore City Public Schools
- U MD Extension Expanded Food and Nutrition Education Program
- Northrop Grumman
- University of MD, School of Medicine, Challenge (Dr. Black)
- MD Dept. of Aging, Health Promotion Program
- Moveable Feast • Maryland DHMH, Center for Chronic Disease Prevention and Control
- Baltimore City Office of Sustainability, Baltimore Food Policy Initiative
- • Office of the State Superintendent of Education, DC
- • Arlington County Health Department, Office of Parks and Recreation, Office of Community Health
- • CareFirst BlueCross BlueShield
- • Academy of Nutrition and Dietetics Legislation and Policy
- • American Heart Association • Center for Science in the Public Interest
- • NIH/National Kidney Disease Education Program
- • Partnership for a Healthier America
- • Additional sites available pending JHBMC approval

Public Health Rotation Written Projects

1. The student will review and identify nutrition problem in within public health location or organization, lists barriers associated with improving this issue, and potential solutions to overcoming these barriers. Summarizes in written assignment using the Written Project Evaluation Form. The paper will be submitted to the preceptor on location prior to the completion of rotation. Not to exceed 5 typed pages double spaced.

2. In public health rotations, student will observe interdisciplinary work at a group meeting and investigates the role of at least two other disciplines (other than nutrition) in a prevention and control project in public health. Student will present findings in a written report using the Written Project Evaluation Form. The paper will be submitted to the preceptor on location prior to the completion of rotation. Not to exceed 5 typed pages double spaced.

3. In public health rotations, student researches the history and creation of the chosen site/project and projects the magnitude of the public health issue. Discusses findings in a written report using the Written Project Evaluation Form. The paper will be submitted to the preceptor on location prior to the completion of rotation. Not to exceed 5 typed pages double spaced.

4. The student will describe their public health rotation experience in a written summary not to exceed five typed pages. The student should evaluate the strengths and areas for development for the location or organization that sponsored the student’s public health experience. The paper will also summarize the activities completed during the rotation. The paper will be submitted to the MSPH/RD Program Coordinator, who will grade the report using the Written Project Evaluation Form.

Departmental Practicum and Capstone (http://e-catalog.jhu.edu/public-health/departments/international-health/international-health-msph/#programpoliciestext) Policy and Guidelines

INTERNATIONAL HEALTH, PHD

Doctor of Philosophy (PhD)
The PhD prepares students to become independent investigators in academic and non-academic research institutions, and emphasizes contributions to theory and basic science.

Students interested in a doctoral research degree must apply to one of the Department’s four concentrations.

Program Concentrations
Global Disease Epidemiology and Control

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
- Agbessi Amouzou
- Smisha Agarwal
- Naor Bar-Zeev
- Abdullah Baqui
- Chris Beyrer (joint)
- Robert Black
- Richard Chaisson (joint)
- Priya Duggal (joint)
- Anna Durbin
- Christine Marie George
- Robert Gilman
- Jonathan Golub (joint)
- Amita Gupta (joint)
- Laura Hammitt
- Christopher Heaney (joint)
- Ruth Karron
- Joanne Katz
- Alain Labrique
- Melissa Marx
Health Systems

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
• Joseph Ali
• Olakunle Alonge
• Abdullah Baqui
• Abdul Bachani
• Sara Bennett
• Stan Becker (joint)
• David Bishai (joint)
• William Brieger
• Andreea Creanga
• Shannon Doocy
• Azadeh Farzin (joint)
• Alain Labrique
• Maria Merritt
• Bryan Patenaude
• David Peters
• Ligia Paina
• Krishna Rao
• Courtland Robinson
• Mathuram Santosham
• Jeremy Shiffman
• Anthony So
• Paul Spiegel
• Antonio Trujillo

Human Nutrition

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 adviser.
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, scholarly publishing, 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. Development of these competencies occur through the academic process of the degree rather than through didactic coursework per se.

To support students in transitioning from coursework to thesis research, Dr. Caulfield leads the Doctoral Seminar in Proposal Development. Through the sequence, HN doctoral students (or those in other programs with research interests in nutrition) are engaged in career planning, identifying opportunities at Johns Hopkins, speaking and communicating their research ideas, persuasive written communication to various audiences, seeking research funding, and grant writing and budgeting. By the end of the sequence (2nd quarter of year 2), students are expected to have a solid draft of their research proposal and are planning for completion of the proposal and their oral exams. To support this process, and to reflect the academic work involved, students also sign up for varying credits of special studies with their adviser.

We encourage students to write and publish peer-reviewed scientific papers in addition to their thesis throughout their doctoral program. Dr. Gittelsohn offers a 2-quarter special studies course designed to assist students in writing his/her first research article for publication, or students may sign up for special studies with their adviser.

Advising Faculty
- Robert Black
- Laura Caulfield
- Vanessa Garcia Larsen
- Joel Gittelsohn
- Jean Humphrey
- Kristen Hurley
- Yeeli Mui
- Amanda Palmer
- Keith P. West Jr.

Co-Advisers
- Jed Fahey
- Jessica Fanzo

Social and Behavioral Interventions
Requirements for Admission
Entrants into the program must have: professional experience and a master’s degree in the health or social sciences.

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

Advising Faculty
- William Brieger
- Svea Closser
- Julie Denison
- Joel Gittelsohn
- Steven Harvey
- Caitlin Kennedy
- Victoria O’Keefe
- Haneefa Saleem
Program Specific Requirements and Courses

Global Disease Epidemiology and Control

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.

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<td>PH.220.605</td>
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<td>PH.220.606</td>
<td>DOCTORAL SEMINAR IN INTERNATIONAL HEALTH II</td>
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<td>PH.220.842</td>
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<td>Psychological and Behavioral Factors That Affect A Population's Health</td>
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Ethics

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<tr>
<td>PH.306.665</td>
<td>RESEARCH ETHICS AND INTEGRITY. U.S. AND INTERNATIONAL ISSUES</td>
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International Health

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Biostatistics, choose one of the series for a total of 16 credits

**Series Option 1**

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<tr>
<td>PH.140.624</td>
<td>STATISTICAL METHODS IN PUBLIC HEALTH IV</td>
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**Series Option 2**

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<td>PH.140.653</td>
<td>METHODS IN BIOSTATISTICS III</td>
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<tr>
<td>PH.140.654</td>
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Epidemiology

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<td>EPIDEMIOLOGIC METHODS 1</td>
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<td>PH.340.752</td>
<td>EPIDEMIOLOGIC METHODS 2</td>
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<tr>
<td>PH.340.753</td>
<td>EPIDEMIOLOGIC METHODS 3</td>
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Environmental Health choose one of the following courses

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<td>ENVIRONMENT AND HEALTH IN LOW AND MIDDLE INCOME COUNTRIES</td>
<td>2</td>
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<tr>
<td>PH.180.611</td>
<td>The Global Environment, Climate Change, and Public Health</td>
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PH.182.626   | ISSUES FOR WATER AND SANITATION IN TROPICAL ENVIRONMENTAL HEALTH     | 2       |

Social and Behavioral Sciences, choose one of the following

<table>
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<tr>
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<td>HEALTH BEHAVIOR CHANGE AT THE INDIVIDUAL, HOUSEHOLD AND COMMUNITY LEVELS</td>
<td>4</td>
</tr>
<tr>
<td>PH.410.620</td>
<td>Program Planning for Health Behavior Change</td>
<td>3</td>
</tr>
<tr>
<td>PH.410.630</td>
<td>IMPLEMENTATION AND SUSTAINABILITY OF COMMUNITY-BASED HEALTH PROGRAMS</td>
<td>3</td>
</tr>
<tr>
<td>PH.410.650</td>
<td>Introduction to Persuasive Communications: Theories and Practice</td>
<td>4</td>
</tr>
<tr>
<td>PH.410.651</td>
<td>Health Literacy: Challenges and Strategies for Effective Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

Nutrition, choose one of the following courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PH.222.642</td>
<td>ASSESSMENT OF NUTRITIONAL STATUS</td>
<td>3</td>
</tr>
<tr>
<td>PH.222.647</td>
<td>NUTRITION EPIDEMIOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>PH.222.649</td>
<td>INTERNATIONAL NUTRITION</td>
<td>3</td>
</tr>
<tr>
<td>PH.222.655</td>
<td>NUTRITION AND LIFE STAGES</td>
<td>3</td>
</tr>
</tbody>
</table>

Vaccines, choose one of the following

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>PH.223.662</td>
<td>VACCINE DEVELOPMENT AND APPLICATION</td>
<td>4</td>
</tr>
<tr>
<td>PH.223.687</td>
<td>VACCINE POLICY ISSUES</td>
<td>3</td>
</tr>
<tr>
<td>PH.223.689</td>
<td>BIOLOGIC BASIS OF VACCINE DEVELOPMENT</td>
<td>3</td>
</tr>
</tbody>
</table>

Population/Family Planning, choose one of the following

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PH.380.600</td>
<td>PRINCIPLES OF POPULATION CHANGE</td>
<td>4</td>
</tr>
<tr>
<td>PH.380.603</td>
<td>DEMOGRAPHIC METHODS FOR PUBLIC HEALTH</td>
<td>4</td>
</tr>
<tr>
<td>PH.380.758</td>
<td>DEMOGRAPHIC ESTIMATION FOR DEVELOPING COUNTRIES</td>
<td>4</td>
</tr>
</tbody>
</table>

Although students take several biostatistics and epidemiology courses in this program, 340.694.81 Power and Sample Size for the Design of Epidemiological Studies is a highly recommended course online in 3rd term that is helpful in preparing for the comprehensive examinations and in preparing proposals.

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)

Health Systems

Health Systems Course Requirements

All required courses must be taken for a letter grade with the exception of courses only offered pass/fail. Any application to waive courses must be made in writing (with an approval from the adviser) 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.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PH.221.646</td>
<td>HEALTH SYSTEMS IN LOW AND MIDDLE INCOME COUNTRIES</td>
<td>3</td>
</tr>
<tr>
<td>PH.221.620</td>
<td>Applying Summary Measures of Population Health to Improve Health Systems</td>
<td>3</td>
</tr>
<tr>
<td>PH.221.638</td>
<td>HEALTH SYSTEMS RESEARCH AND EVALUATION IN DEVELOPING COUNTRIES</td>
<td>4</td>
</tr>
<tr>
<td>PH.552.608</td>
<td>Biologic, Genetic and Infectious Bases of Human Disease</td>
<td>0.5</td>
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<tr>
<td>PH.220.842</td>
<td>Doctoral Independent Goals Analysis - International Health</td>
<td>1</td>
</tr>
</tbody>
</table>

**Biostatistics** choose one of the series options

- **Series option 1**
  - PH.140.621 Statistical Methods In Public Health I                                                                 | 4       |
  - PH.140.622 STATISTICAL METHODS IN PUBLIC HEALTH II                                                                   | 4       |
  - PH.140.623 STATISTICAL METHODS IN PUBLIC HEALTH III                                                                   | 4       |
  - PH.140.624 STATISTICAL METHODS IN PUBLIC HEALTH IV                                                                   | 4       |

- **Series option 2**
  - PH.140.651 Methods In Biostatistics I                                                                                | 4       |
  - PH.140.652 METHODS IN BIOSTATISTICS II                                                                                | 4       |
  - PH.140.653 METHODS IN BIOSTATISTICS III                                                                               | 4       |
  - PH.140.654 Methods in Biostatistics IV                                                                               | 4       |

**Epidemiology**

- PH.340.751 EPIDEMIOLOGIC METHODS 1                                                                                     | 5       |
- PH.340.752 EPIDEMIOLOGIC METHODS 2                                                                                     | 5       |

**Seminars**

- PH.221.801 Health Systems Program Seminar I                                                                             | 1       |
- PH.221.802 HEALTH SYSTEMS GRADUATE SEMINAR 2                                                                            | 1       |
- PH.221.861 Doctoral Seminar in Health Systems (Terms 3-4 of 1st year, and terms 1-2 of second year)                     | 1       |

**Ethics**

- PH.550.860 Academic & Research Ethics at JHSPH                                                                          | 1       |
- PH.550.600 LIVING SCIENCE ETHICS - RESPONSIBLE CONDUCT OF RESEARCH                                                    | 1       |
  - or PH.306.665 RESEARCH ETHICS AND INTEGRITY: U.S. AND INTERNATIONAL ISSUES                                            | 1       |

**General Elective Courses**

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

**Health Systems Management**

- PH.221.604 CASE STUDIES IN MANAGEMENT DECISION-MAKING                                                                     | 3       |
- PH.221.608 MANAGING NON-GOVERNMENTAL ORGANIZATIONS IN THE HEALTH SECTOR                                                    | 3       |
- PH.221.610 PHARMACEUTICALS MANAGEMENT FOR UNDER-SERVED POPULATIONS                                                       | 3       |
- PH.221.722 Quality Assurance Management Methods for Developing Countries                                                  | 4       |
- PH.312.604 Quantitative Tools for Managers                                                                               | 3       |
- PH.312.610 Foundations of Organizational Leadership                                                                      | 3       |
- PH.312.617 Fundamentals of Financial Accounting                                                                       | 3       |
- PH.312.621 Strategic Planning                                                                                           | 3       |

- PH.312.603 Fundamentals of Budgeting and Financial Management                                                           | 3       |

**International Health Topics**

- PH.180.620 An Introduction to Food Systems and Public Health                                                            | 4       |
- PH.182.626 ISSUES FOR WATER AND SANITATION IN TROPICAL ENVIRONMENT                                                      | 2       |
- PH.221.612 CONFRONTING THE BURDEN OF INJURIES: A GLOBAL PERSPECTIVE                                                     | 3       |
- PH.221.613 Introduction to Humanitarian Emergencies                                                                      | 3       |
- PH.221.616 ETHICS OF PUBLIC HEALTH PRACTICE IN DEVELOPING COUNTRIES                                                     | 2       |
- PH.221.627 ISSUES IN THE REDUCTION OF MATERNAL AND NEONATAL MORTALITY IN LOW INCOME COUNTRIES                           | 4       |
- PH.221.635 ADVANCES IN COMMUNITY-ORIENTED PRIMARY HEALTH CARE                                                          | 4       |
- PH.221.639 Health Care in Humanitarian Emergencies                                                                       | 3       |
- PH.221.661 PROJECT DEVELOPMENT FOR PRIMARY HEALTH CARE IN DEVELOPING COUNTRIES                                           | 4       |
- PH.221.624 URBAN HEALTH IN DEVELOPING COUNTRIES                                                                          | 3       |
- PH.221.637 HEALTH INFORMATION SYSTEMS                                                                                  | 3       |
- PH.224.689 HEALTH BEHAVIOR CHANGE AT THE INDIVIDUAL, HOUSEHOLD AND COMMUNITY LEVELS                                     | 4       |
- PH.410.610 HEALTH AND HOMELESSNESS                                                                                      | 3       |

**Health Policy**

- PH.221.614 INTERNATIONAL POLITICAL SCIENCE FOR PH PRACTITIONERS                                                        | 2       |
- PH.221.650 HEALTH POLICY ANALYSIS IN LOW AND MIDDLE INCOME COUNTRIES                                                    | 3       |
- PH.223.687 VACCINE POLICY ISSUES                                                                                       | 3       |
- PH.300.652 Politics of Health Policy                                                                                   | 4       |
- PH.300.712 FORMULATING POLICY: STRATEGIES AND SYSTEMS OF POLICYMAKING IN THE 21ST CENTURY                              | 3       |
- PH.300.713 RESEARCH AND EVALUATION METHODS FOR HEALTH POLICY                                                          | 3       |
- PH.300.714 POLICY ANALYSIS IN PRACTICE                                                                                  | 3       |
- PH.308.610 THE POLITICAL ECONOMY OF SOCIAL INEQUALITIES AND ITS CONSEQUENCES FOR HEALTH AND QUALITY OF LIFE            | 3       |

**Research/Analytical Methods Electives**

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

- **Quantitative Methods**
  - PH.140.646 Essentials Of Probability And Statistical Inference I: Probability                                     | 4       |
  - PH.140.647 ESSENTIALS OF PROBABILITY AND STATISTICAL INFERENCE II: STATISTICAL INFERENCE                           | 4       |
  - PH.330.657 Statistics for Psychosocial Research: Measurement                                                      | 4       |
  - PH.340.606 METHODS FOR CONDUCTING SYSTEMATIC REVIEWS AND META-ANALYSES                                           | 4       |
Although students take several biostatistics and epidemiology courses in this program, 340.694.81 Power and Sample Size for the Design of Epidemiological Studies is a highly recommended course online course in the 3rd term that is helpful in preparing for the comprehensive examinations and in preparing proposals.

The Health Systems Program also offers a Health Economics "specialization" which tracks with school wide standards set out by the interdepartmental PhD Program in Health Economics. For further information on these courses, see the Health Systems Program Coordinators.

### Human Nutrition Requirements

Students are expected to take 6 quarters and at least 96 credits of coursework to satisfy the educational requirements for the Human Nutrition program, 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 (about 64 credits). 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 adviser. 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 adviser, 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 Course Requirements

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

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>PH.221.641</td>
<td>Principles of Human Nutrition in Public Health</td>
<td>4</td>
</tr>
<tr>
<td>PH.222.657</td>
<td>Food and Nutrition Policy</td>
<td>2</td>
</tr>
<tr>
<td>PH.222.655</td>
<td>NUTRITION AND LIFE STAGES</td>
<td>3</td>
</tr>
<tr>
<td>PH.222.654</td>
<td>FOOD, CULTURE, AND NUTRITION</td>
<td>4</td>
</tr>
<tr>
<td>PH.221.611</td>
<td>FOOD SECURITY AND NUTRITION IN HUMANITARIAN EMERGENCIES</td>
<td></td>
</tr>
<tr>
<td>PH.222.649</td>
<td>INTERNATIONAL NUTRITION</td>
<td></td>
</tr>
<tr>
<td>PH.222.661</td>
<td>DESIGNING HEALTHY DIETS</td>
<td></td>
</tr>
<tr>
<td>PH.222.652</td>
<td>NUTRITION IN DISEASE TREATMENT AND PREVENTION</td>
<td></td>
</tr>
<tr>
<td>PH.222.630</td>
<td>Nutrition, Infection And Immunity</td>
<td></td>
</tr>
<tr>
<td>PH.700.630</td>
<td>GLOBAL FOOD ETHICS</td>
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### Code and Title

#### Nutrition and Health: Required

<table>
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<tr>
<th>Code</th>
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</thead>
<tbody>
<tr>
<td>PH.221.644</td>
<td>ECONOMIC METHODS FOR EVALUATION OF HEALTH PROGRAMS</td>
<td>4</td>
</tr>
<tr>
<td>PH.221.652</td>
<td>FINANCING HEALTH SYSTEMS FOR UNIVERSAL HEALTH COVERAGE</td>
<td>3</td>
</tr>
<tr>
<td>PH.313.601</td>
<td>Economic Evaluation I</td>
<td>3</td>
</tr>
<tr>
<td>PH.313.602</td>
<td>Economic Evaluation II</td>
<td>3</td>
</tr>
<tr>
<td>PH.313.603</td>
<td>ECONOMIC EVALUATION III</td>
<td>3</td>
</tr>
<tr>
<td>PH.313.604</td>
<td>ECONOMIC EVALUATION IV</td>
<td>3</td>
</tr>
<tr>
<td>PH.313.641</td>
<td>INTRODUCTION TO HEALTH ECONOMICS</td>
<td>3</td>
</tr>
<tr>
<td>PH.313.643</td>
<td>HEALTH ECONOMICS</td>
<td>3</td>
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<tr>
<td>PH.313.644</td>
<td>INTERMEDIATE HEALTH ECONOMICS</td>
<td>3</td>
</tr>
<tr>
<td>PH.221.662</td>
<td>GLOBALIZATION AND HEALTH: ECONOMIC DEVELOPMENT</td>
<td>3</td>
</tr>
<tr>
<td>PH.221.663</td>
<td>GLOBALIZATION AND HEALTH: FRAMEWORK FOR ANALYSIS</td>
<td>3</td>
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### Biochemistry and Metabolism: Required

<table>
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<th>Code</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>PH.260.600</td>
<td>Introduction to the Biomedical Sciences (taken the summer before matriculation)</td>
<td>4</td>
</tr>
<tr>
<td>PH.222.644</td>
<td>CELLULAR BIOCHEMISTRY OF NUTRIENTS</td>
<td>3</td>
</tr>
</tbody>
</table>
## Research Methodology: Required

### Biostatistics, choose one of the following series

**Series option 1**
- PH.140.621 Statistical Methods In Public Health I 4
- PH.140.622 STATISTICAL METHODS IN PUBLIC HEALTH II 4
- PH.140.623 STATISTICAL METHODS IN PUBLIC HEALTH III 4
- PH.140.624 STATISTICAL METHODS IN PUBLIC HEALTH IV 4

**Series option 2**
- PH.140.651 Methods In Biostatistics I 4
- PH.140.652 METHODS IN BIOSTATISTICS II 4
- PH.140.653 METHODS IN BIOSTATISTICS III 4
- PH.140.654 Methods in Biostatistics IV 4

### Epidemiology, choose one of the following series

**Series option 1**
- PH.340.721 Epidemiologic Inference in Public Health I 5
- PH.340.722 EPIDEMIOLOGIC INFERENCE IN PUBLIC HEALTH II 4

**Series option 2**
- PH.340.751 EPIDEMIOLOGIC METHODS 1 5
- PH.340.752 EPIDEMIOLOGIC METHODS 2 5
- PH.340.753 EPIDEMIOLOGIC METHODS 3 5

### Research Methods
- PH.222.642 ASSESSMENT OF NUTRITIONAL STATUS 3
- PH.222.647 NUTRITION EPIDEMIOLOGY 3
- PH.222.861 Doctoral Seminar in Proposal Development 1
- PH.222.840 SPECIAL STUDIES AND RESEARCH HUMAN NUTRITION (Special studies in HN each quarter to complement 222.861. Students should sign up for credits with their advisor to reflect time spent in development of their research ideas and thesis project) 2-6

### Professional Skills: Required
- PH.220.600 INTERNATIONAL TRAVEL PREPARATION, SAFETY, & WELLNESS 1
- PH.222.658 Critical Thinking in Nutrition 1
- PH.220.842 Doctoral Independent Goals Analysis - International Health 1
- PH.222.860 Graduate Nutrition Seminar 1

### Ethics
- PH.550.860 Academic & Research Ethics at JHSPH 1
- PH.550.600 LIVING SCIENCE ETHICS - RESPONSIBLE CONDUCT OF RESEARCH or PH.306.665 RESEARCH ETHICS AND INTEGRITY: U.S. AND INTERNATIONAL ISSUES

### Research Methods: Suggested Electives
- PH.140.641 Survival Analysis 3
- PH.140.655 ANALYSIS OF LONGITUDINAL DATA 4
- PH.223.664 DESIGN AND CONDUCT OF COMMUNITY TRIALS 4
- PH.224.690 Qualitative Research Theory and Methods 3
- PH.224.691 QUALITATIVE DATA ANALYSIS 3
- PH.224.692 FORMATIVE RESEARCH FOR BEHAVIORAL AND COMMUNITY INTERVENTIONS 4
- PH.313.601 Economic Evaluation I 3
- PH.313.602 Economic Evaluation II 3
- PH.313.603 ECONOMIC EVALUATION III 3
- PH.313.604 ECONOMIC EVALUATION IV 3
- PH.340.696 SPATIAL ANALYSIS I: ARCGIS 3
- PH.340.697 SPATIAL ANALYSIS II: SPATIAL DATA TECHNOLOGIES 2
- PH.140.698 SPATIAL ANALYSIS III: SPATIAL STATISTICS 4
- PH.140.699 SPATIAL ANALYSIS IV: SPATIAL DESIGN AND APPLICATION 3
- PH.340.717 HEALTH SURVEY RESEARCH METHODS 4
- PH.330.657 Statistics for Psychosocial Research: Measurement 4
- PH.140.658 STATISTICS FOR PSYCHOSOCIAL RESEARCH: STRUCTURAL MODELS 4
- PH.221.660 SYSTEMS SCIENCE IN PUBLIC HEALTH: BASIC MODELING AND SIMULATION METHODS 3

### Other Suggested Electives

#### International Health and Disease
- PH.220.605 Doctoral Seminar in International Health I 3
- PH.220.606 DOCTORAL SEMINAR IN INTERNATIONAL HEALTH II 3
- PH.221.627 ISSUES IN THE REDUCTION OF MATERNAL AND NEONATAL MORTALITY IN LOW INCOME COUNTRIES 4
- PH.223.663 INFECTIOUS DISEASES AND CHILD SURVIVAL 3
- PH.223.680 GLOBAL DISEASE CONTROL PROGRAMS AND POLICIES 4

#### Population, Behavior, and Health
- PH.224.689 HEALTH BEHAVIOR CHANGE AT THE INDIVIDUAL, HOUSEHOLD AND COMMUNITY LEVELS 4
- PH.380.611 FUNDAMENTALS OF PROGRAM EVALUATION 4
- PH.380.604 LIFE COURSE PERSPECTIVES ON HEALTH 4
- PH.380.623 ADOLESCENT HEALTH AND DEVELOPMENT 3
- PH.380.642 CHILD HEALTH AND DEVELOPMENT 3
- PH.380.600 PRINCIPLES OF POPULATION CHANGE 4
- PH.180.601 Environmental Health 5
- PH.182.640 FOOD- AND WATER- BORNE DISEASES 3
- PH.187.610 Public Health Toxicology 4
- PH.180.620 An Introduction to Food Systems and Public Health 4

Although students take several biostatistics and epidemiology courses in this program, 340.694.81 Power and Sample Size for the Design of Epidemiological Studies is a highly recommended online course in 3rd term that is helpful in preparing for the comprehensive examinations and in preparing proposals.

### Social and Behavioral Interventions

#### Requirements and courses

During the 1st and 2nd term of each academic year each doctoral student should develop a course plan. This can be done through discussions with the adviser and through the individualized Goals Analysis that will be part of the Special Studies requirement for Educational Program Development. This should be reviewed and discussed with the student's adviser. If changes are needed the student is requested to discuss and get approval from their adviser.
If students have particular interests that cannot be met through existing course offerings, requirements for these topic areas can be met through special studies courses after students have requested permission to substitute course requirements using the Course Waiver Form. Such courses, when carefully developed, are an excellent way for doctoral students to gain requisite knowledge and skills, and they 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 agreed upon by the academic advisers. Once substitutions are approved the Course Waiver Form should be completed and submitted with the student’s tracking sheet via CoursePlus. Students are given access to the tracking course at the beginning of each year by the Senior Academic Coordinator. 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: https://sis.jhu.edu/classes/.

**SBI CURRICULUM**

Unless otherwise specified 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.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PH.220.605</td>
<td>Doctoral Seminar in International Health I</td>
<td>3</td>
</tr>
<tr>
<td>PH.220.606</td>
<td>DOCTORAL SEMINAR IN INTERNATIONAL HEALTH II</td>
<td>3</td>
</tr>
<tr>
<td>PH.220.600</td>
<td>INTERNATIONAL TRAVEL PREPARATION, SAFETY, &amp; WELLNESS</td>
<td>1</td>
</tr>
<tr>
<td>PH.552.608</td>
<td>Biologic, Genetic and Infectious Bases of Human Disease</td>
<td>0.5</td>
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</table>

*Choose one of the three epidemiology series options below*

**Series option 1**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tr>
<td>PH.340.721</td>
<td>Epidemiologic Inference in Public Health I</td>
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<tr>
<td>PH.340.722</td>
<td>EPIDEMIOLOGIC INFEERENCE IN PUBLIC HEALTH II</td>
<td>4</td>
</tr>
<tr>
<td>PH.340.769</td>
<td>PROFESSIONAL EPIDEMIOLOGY METHODS</td>
<td>4</td>
</tr>
<tr>
<td>PH.340.770</td>
<td>Public Health Surveillance</td>
<td>3</td>
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**Series option 2**

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<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>PH.340.751</td>
<td>EPIDEMIOLOGIC METHODS 1</td>
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<tr>
<td>PH.340.752</td>
<td>EPIDEMIOLOGIC METHODS 2</td>
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</tr>
<tr>
<td>PH.340.753</td>
<td>EPIDEMIOLOGIC METHODS 3</td>
<td>5</td>
</tr>
</tbody>
</table>

**Series option 3**

3 course series in Advanced Epidemiology (This option requires advanced permission from the SBI Program Coordinator)

**Biostatistics, choose one of the following series (a total of 16 credits)**

**Series option 1**

<table>
<thead>
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<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>PH.140.621</td>
<td>Statistical Methods In Public Health I</td>
<td>4</td>
</tr>
<tr>
<td>PH.140.622</td>
<td>STATISTICAL METHODS IN PUBLIC HEALTH II</td>
<td>4</td>
</tr>
<tr>
<td>PH.140.623</td>
<td>STATISTICAL METHODS IN PUBLIC HEALTH III</td>
<td>4</td>
</tr>
<tr>
<td>PH.140.624</td>
<td>STATISTICAL METHODS IN PUBLIC HEALTH IV</td>
<td>4</td>
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</table>

**Series option 2**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>PH.140.651</td>
<td>Methods In Biostatistics I</td>
<td>4</td>
</tr>
<tr>
<td>PH.140.652</td>
<td>METHODS IN BIOSTATISTICS II</td>
<td>4</td>
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<tr>
<td>PH.140.653</td>
<td>METHODS IN BIOSTATISTICS III</td>
<td>4</td>
</tr>
<tr>
<td>PH.140.654</td>
<td>Methods in Biostatistics IV</td>
<td>4</td>
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</tbody>
</table>

**B. SBI Program Course Requirement**

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.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PH.140.658</td>
<td>STATISTICS FOR PSYCHOSOCIAL RESEARCH: STRUCTURAL MODELS (Can be taken pass/fail)</td>
<td>4</td>
</tr>
<tr>
<td>PH.224.689</td>
<td>HEALTH BEHAVIOR CHANGE AT THE INDIVIDUAL, HOUSEHOLD AND COMMUNITY LEVELS</td>
<td>4</td>
</tr>
<tr>
<td>PH.224.690</td>
<td>Qualitative Research Theory and Methods</td>
<td>3</td>
</tr>
<tr>
<td>PH.224.691</td>
<td>QUALITATIVE DATA ANALYSIS</td>
<td>3</td>
</tr>
<tr>
<td>PH.224.697</td>
<td>QUALITATIVE RESEARCH PRACTICUM I: PARTNERSHIPS AND PROTOCOL DEVELOPMENT</td>
<td>2</td>
</tr>
<tr>
<td>PH.224.698</td>
<td>QUALITATIVE RESEARCH PRACTICUM II: COLLECTING QUALITATIVE DATA</td>
<td>2</td>
</tr>
<tr>
<td>PH.224.699</td>
<td>QUALITATIVE RESEARCH PRACTICUM III: ANALYZING AND WRITING QUALITATIVE FINDINGS</td>
<td>2</td>
</tr>
<tr>
<td>PH.224.692</td>
<td>FORMATIVE RESEARCH FOR BEHAVIORAL AND COMMUNITY INTERVENTIONS</td>
<td>4</td>
</tr>
<tr>
<td>PH.220.842</td>
<td>Doctoral Independent Goals Analysis - International Health</td>
<td>1</td>
</tr>
<tr>
<td>PH.224.866</td>
<td>SOCIAL AND BEHAVIORAL INTERVENTIONS DOCTORAL PROPOSAL DEVELOPMENT SEMINAR</td>
<td>2</td>
</tr>
<tr>
<td>PH.224.860</td>
<td>Social and Behavioral Interventions Seminar I: Applied Social Science &amp; Global Health</td>
<td>1</td>
</tr>
<tr>
<td>PH.224.863</td>
<td>Doctoral Seminar in Research Methods in Applied Medical Anthropology I</td>
<td>4</td>
</tr>
<tr>
<td>PH.224.864</td>
<td>DOCTORAL SEMINAR IN RESEARCH METHODS IN APPLIED MEDICAL ANTHROPOLGY II</td>
<td>4</td>
</tr>
<tr>
<td>PH.330.657</td>
<td>Statistics for Psychosocial Research: Measurement</td>
<td>4</td>
</tr>
</tbody>
</table>

Doctoral students who were Master’s students in SBI and have already taken PhD required courses can apply for a waiver for SBI program core requirements. If students have taken more than three years off between degrees, they will still have to earn at least 64 credits during the PhD program. For students who have taken a similar course at other schools, waivers will be evaluated on a case by case basis (upon submission of the relevant syllabus and, in some cases, an exam on the content area).

Although the SBI program seminar in the 2nd and 3rd terms (224.861 and 224.862) is not required for PhD students, they are encouraged to register or informally attend sessions as a way to connect to the rest of the SBI cohort or to get information relevant to specific doctoral interests.

**C. School-wide Doctoral Requirements**

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

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>PH.550.860</td>
<td>Academic &amp; Research Ethics at JHSPH</td>
<td></td>
</tr>
<tr>
<td>PH.306.665</td>
<td>RESEARCH ETHICS AND INTEGRITY: U.S. AND INTERNATIONAL ISSUES</td>
<td></td>
</tr>
</tbody>
</table>
E. Social and Behavioral Sciences (9-12 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 can be substituted with permission of the PhD Program Coordinator.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>PH.221.605</td>
<td>HISTORY OF INTERNATIONAL HEALTH AND DEVELOPMENT</td>
<td>2</td>
</tr>
<tr>
<td>PH.222.624</td>
<td>URBAN HEALTH IN DEVELOPING COUNTRIES</td>
<td>3</td>
</tr>
<tr>
<td>PH.222.654</td>
<td>FOOD, CULTURE, AND NUTRITION</td>
<td>4</td>
</tr>
<tr>
<td>PH.224.605</td>
<td>INDIGENOUS HEALTH</td>
<td>2</td>
</tr>
<tr>
<td>PH.308.610</td>
<td>THE POLITICAL ECONOMY OF SOCIAL INEQUALITIES AND ITS CONSEQUENCES FOR HEALTH AND QUALITY OF LIFE</td>
<td>3</td>
</tr>
<tr>
<td>PH.313.643</td>
<td>HEALTH ECONOMICS</td>
<td>3</td>
</tr>
<tr>
<td>PH.313.641</td>
<td>INTRODUCTION TO HEALTH ECONOMICS</td>
<td>3</td>
</tr>
<tr>
<td>PH.330.607</td>
<td>PREVENTION OF MENTAL DISORDERS: PUBLIC HEALTH INTERVENTIONS</td>
<td>3</td>
</tr>
<tr>
<td>PH.330.661</td>
<td>SOCIAL, PSYCHOLOGICAL, AND DEVELOPMENTAL PROCESSES IN THE ETOLOGY OF MENTAL DISORDERS</td>
<td>3</td>
</tr>
<tr>
<td>PH.340.705</td>
<td>ADVANCED SEMINAR IN SOCIAL EPIDEMIOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>PH.410.600</td>
<td>FUNDAMENTALS OF HEALTH, BEHAVIOR AND SOCIETY</td>
<td>4</td>
</tr>
<tr>
<td>PH.410.612</td>
<td>SOCIOLOGICAL PERSPECTIVES ON HEALTH</td>
<td>3</td>
</tr>
<tr>
<td>PH.410.613</td>
<td>PSYCHOSOCIAL FACTORS IN HEALTH AND ILLNESS</td>
<td>3</td>
</tr>
<tr>
<td>PH.410.650</td>
<td>Introduction to Persuasive Communications: Theories and Practice</td>
<td>4</td>
</tr>
<tr>
<td>PH.410.651</td>
<td>Health Literacy: Challenges and Strategies for Effective Communication</td>
<td>3</td>
</tr>
<tr>
<td>PH.410.679</td>
<td>GLOBAL COMMUNICATION AND SOCIAL CHANGE</td>
<td>3</td>
</tr>
<tr>
<td>PH.410.863</td>
<td>DOCTORAL SEMINAR IN SOCIAL AND BEHAVIORAL RESEARCH AND PRACTICE</td>
<td>1</td>
</tr>
<tr>
<td>PH.410.654</td>
<td>HEALTH COMMUNICATION PROGRAMS: PLANNING AND STRATEGIC DESIGN</td>
<td>4</td>
</tr>
<tr>
<td>PH.410.655</td>
<td>HEALTH COMMUNICATION PROGRAMS: IMPLEMENTATION AND EVALUATION</td>
<td>4</td>
</tr>
</tbody>
</table>

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 advisers should include in their course plan which of the two options below the student will pursue:

**Option 1** 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 2** requires enrollment in a special studies course plan (minimum of 6 credits; student enrolls in credit requirement all at one time) with the student’s adviser. The special studies should integrate a pre-approved reading list and attendance or participation in at least three cultural, ethnographic, historical, or political activities related to the country or field site for the student’s dissertation. 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 two 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.

### General PhD Requirements

**Residency & Outside Department Course Requirements**

The total number of course credits to be earned depends upon individual program requirements. But, to meet the Residency requirement, students must complete a minimum of 64 credits of didactic courses in four consecutive terms. When general and program-specific requirements total less than 64, the difference may be made up in electives. Thesis Research (820 series) may not be included in the count, but special studies earning credit that is part of a program’s requirements only (840 series) are admissible.

The School also requires that 18 credits must be satisfactorily completed in formal courses outside of the IH Department. Among those 18 credits, no fewer 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.

**Teaching Assistant Requirement**

All PhD students matriculating in AY19-20 are required to TA a minimum of four courses administered by the International Health Department of at least 2-credit hours each. Students will be compensated for the work done as TA’s. This requirement must be completed by the end of their third year.

**Departmental Written Comprehensive Examination**

The written comprehensive exam is offered annually soon after the end of the Second or Fourth Terms, depending on the program, and is two days in length. 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. Students in the GDEC and Health Systems programs will take the comprehensive exam at the end of their first year. Students in the SBI program are responsible for the material, regardless of the particular curriculum followed. Students in the SBI program are responsible for the material, regardless of the particular curriculum followed. The dates of the exam are to be announced.

A minimum overall grade of 75% is required. Those scoring below this level must re-take the entire examination at a specially arranged offering 6 months later. 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 of graduation or retake the exam and pass it again.
Students should plan to take the exam when coursework 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, students may have to take the exam before the final completion of coursework. While the exam may be taken whenever the student and adviser feel prepared, the timing does not affect the breadth and depth of coverage of course material. Not taking the exam with the rest of the cohort will delay a student's timeline to completion and will likely lengthen their time to completion for the program.

Students must **NOT** pass along exam questions to future generations of students, **NOT** post questions and/or answers online, **NOT** solicit, accept, or consult content from prior comprehensive exams, and **NOT** share or publicize any content from the comprehensive exam in any form with anyone at any time.

Students who require exam accommodations must get the accommodations approved by Disability Support Services at the Bloomberg School of Public Health (https://www.jhsph.edu/offices-andservices/student-affairs/disability-support-services).

**Thesis Advisory Committee (TAC)**

In order to undertake research leading to a thesis the student must prepare a research protocol acceptable to a Thesis Advisory Committee (TAC). The objective of the TAC is to provide continuity in the evaluation of the progress and development of the student’s thesis work. The TAC is expected to: counsel the student in protocol preparation; determine the protocol’s acceptability as a basis for actually carrying out the research; and provide guidance during the conduct of the research and the writing of the thesis.

The TAC 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 and no later than when the student takes their Preliminary Oral Exam. The student and their adviser decide on the composition of this committee. The Committee will have at least 3 members: the adviser, a second faculty member with advising privileges in the student's department, and at least one faculty member(s) from another program or department. We encourage students to consider adding a fourth and even a fifth member if they provide needed expertise to advise the student appropriately on their thesis topic. Students should have no more than five members total. TAC members from outside of JHU can be approved for example, a project PI) after consultation with the student's adviser about the composition of the student's TAC. For such requests to be approved a student must have three members of their TAC within JHU, of whom one is their adviser, and their 4th member can be from outside of JHU. At least two of the TAC members must be tenure-track faculty eligible to serve on School examining committees. The proposed members must be approved by the adviser and the relevant PhD Program Coordinator. Students will complete the Thesis Research Documentation Form (PDF) and upload it to their Portfolio once they have selected a TAC and no later than at the time of their Preliminary Oral Exam.

The TAC (3-5 members), the departmental oral examination committee (4 members), the Preliminary Oral Examination Committee (POE) (5 members), and the Committee of Final Readers (CFR) (4 members) are four separate entities. Although it is desirable to provide for overlapping membership, the Adviser is the only individual who must be a member of all four committees.

The first meeting of the TAC should occur when the student is developing their thesis proposal. A written progress report should be submitted to the TAC by the student at the time of the meeting and then should be uploaded to the student's Portfolio. This progress report, and all subsequent progress reports, should follow the format described in the following section. Following the meeting, the adviser will discuss this evaluation with the student and will then approve the report in the student's Portfolio as part of the student's academic file.

It is a requirement that the student meet at least every 6 months (either in-person or via phone/skype) with the entire TAC during the thesis phase of the program. Students will submit written progress reports, which will be read and evaluated by the TAC. It is the responsibility of the Department to provide administrative oversight of the TAC to ensure that the student meets and submits reports. Although a once yearly meeting and report is required by the school, the DIH department requires students meet with the TAC more frequently, ideally every 6 months during the conduct of their thesis research, and to prepare a progress report with any questions for the TAC for each meeting. Students who are working outside of the country or at distant sites within the country are not required to return in person for annual TAC meetings, although in-person participation is desirable.

**Progress Report Template for TAC Meetings**

**FIRST TAC REPORT TEMPLATE (During Proposal Development)**

A. Describe your likely thesis topic (150 words).

B. What options have you identified for funding your thesis research?

C. What funding challenges remain? Please describe

D. What is the anticipated process for obtaining IRB approval for your thesis project?

E. What is your anticipated timeline for completing oral exams and conducting your thesis research?

F. What are your goals for the next 6 months?

G. Do you have any course requirements or other degree requirements outstanding? If so, please describe

**ALL SUBSEQUENT REPORTS (After Oral Exams)**

A. Please describe your thesis topic (150 words).

B. Type of analysis list all that apply: e.g. Primary, Secondary, or Both

C. Have you filed the Thesis Proposal Approval form? If not, when do you anticipate doing so?

D. What options have you identified for funding your thesis research?

E. What funding challenges remain? Please describe

F. Have you obtained IRB approval for your thesis project?

G. What is your anticipated timeline for conducting your thesis research and defending your thesis?

H. Have you decided whether to take the papers approach or the traditional thesis approach?
I. Have you discussed with your adviser, thesis project PI and appropriate others regarding authorship of papers for publication?

J. Please review goals you stated in your most recent report. Have you accomplished your goals or made tangible progress toward accomplishing them?

K. What are your goals for the next twelve months?

L. Discuss scientific progress and challenges, and document decision made with the approval of the TAC to address these.

M. If you had any outstanding course or degree requirements as of your most recent report, have you completed them?

Non-Thesis Related Research Experience

All PhD students must complete a research experience in addition to their doctoral thesis work. This is typically conducted with the student’s adviser 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. It is also possible to fulfill this requirement through an internship or practicum with a foundation, nongovernmental organization, or government or private industry entity, provided it includes a significant research training component. The PhD is a research degree and obtaining a variety of practical training in research is an integral part of the learning process. Once this experience is completed please fill out the Non-Thesis Related Research PDF Form found in the Portfolio library and upload it to the indicated Portfolio touchpoint.

THESIS PROPOSAL APPROVAL

Regardless of the mode and timing of general presentation of the proposal, the TAC members will provide continuing guidance in its development. After the student has passed the University Preliminary Oral Exam and before the student begins field work on the dissertation, the TAC should be satisfied that the proposal is of acceptable quality to be implemented, at which point the student must obtain the TAC members’ signatures on the Thesis Proposal Approval Form found in the Portfolio library and should be uploaded to the student’s Portfolio touchpoint. After approving the thesis proposal, the TAC is expected to continue offering suggestions for further improvement, especially in light of unexpected difficulties encountered in the field.

Realistically, it is not always possible for the student to carry out in the field the specific study designed and presented at the preliminary oral exam. In such cases when the topic of the study changes entirely or if the proposed research undergoes substantial changes, the student must submit a new thesis proposal to the TAC. The TAC approves the proposal and the student will then submit a new Thesis Proposal Approval Form to their Portfolio. If the student’s TAC changes, the student will need to submit a new Thesis Research Documentation Form and a new Thesis Proposal Approval Form.

ORAL EXAMS AND DEFENSE

Departmental Oral Exam

The purpose of the departmental oral examination is to determine whether the student is adequately prepared to conduct 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 Adviser, identifies at least four IH faculty (two faculty must be at least at the level of Associate Professor or Professor to serve as the chair and subchair for the exam of which the adviser cannot serve either role) of the committee. At least two faculty must have primary appointments in the International Health Department, of whom one can be the student’s Adviser. The other two faculty must at least have a joint appointment with IH. One member with a primary appointment in IH must be from the student’s program area. One faculty member should be identified as an alternate and cannot count as one of the two required faculty with a primary appointment in IH. Two scientist track faculty are able to sit in the departmental exam committee at the same time. If the student’s adviser does not have a primary appointment with IH then at least two other faculty on the committee, excluding the alternate, must have a primary appointment with IH.
- Copies of a research proposal are to be circulated to all participating faculty at least 2 weeks in advance of the exam.
- Departmental Orals must be taken at least 30 days before the University Preliminary Oral Exam. When planning this, students should first meet with the Audrey Lindahl, the Senior Academic Coordinator, to discuss requirements for both exams and timing. The most senior faculty member other than the Adviser 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 a maximum of two hours.
- 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.
- Students must formally schedule their Departmental Oral Exam with Audrey Lindahl at least 2 weeks in advance.

Schoolwide Preliminary Oral Exam

The University Preliminary Oral Examination must be taken no later than the end of the student’s second year in the PhD program. Students must have completed their ethics requirement before taking the Preliminary Oral Exam. Students should keep in prior to taking this exam they should have passed the Departmental Oral Examination.

All members of the examining committee represent the department of their primary appointment except the student’s adviser who would represent IH if they have a joint appointment. The committee of five members includes the student’s Thesis Adviser, one other IH faculty member, and three members from at least two other departments in the University, of whom one must be from JHSPH. The most senior faculty member from outside the student’s department will serve as the chair and must hold the rank of full or Associate Professor. One adjunct faculty, one scientist track faculty or one visiting professor may serve on the committee but may not serve as the chair or adviser. Exceptions to this only apply if a student had an adviser assigned to them prior to having their rank changed in which case they can continue to advise the student.
and can serve on the committee. Two alternates should be identified. One alternate is a DIH faculty while the other is from outside the student’s department. Students should be aware that an alternate 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 the student 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 reexamination. In case the examining committee fails to set time limits, they will be established by the IH Curriculum and Credentials Committee. In no case may the time allowed exceed one year. Only one reexamination is permitted. Students failing the University Preliminary Oral Examination twice will be terminated from the doctoral program.

For both the Departmental and University Preliminary 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 University Preliminary Oral Examination must be submitted (37 days) prior to the date of the exam.** Students must meet with Audrey Lindahl to learn about the necessary forms and other considerations when forming an examination committee.

**Thesis Readers and Final Oral Defense**

The thesis topic acceptable to the TAC 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 held on the same day with the seminar being conducted first, followed immediately by the closed defense. Thesis readers should have at least 30 days to read the final thesis prior to the Final Oral defense. The Dissertation Approval Form will be sent to the committee by the student along with a copy of their final thesis at the time of the defense. The Dissertation Approval Form will be sent to the Final Oral defense committee members. After the exam the Committee of Readers must accept the thesis as satisfactory and, in addition, the Committee Chair and the Thesis Adviser must write a letter of acceptance to the Associate Dean for Academic Affairs.

**If a student defends any time after the last day of 4th term and before the first day of Summer Term, the student must register for three credits of Thesis Research during the Summer Term. The only time PhD students are allowed to register during summer term is when they are defending in the summer. Tuition scholarship is not applied in the summer term.**

International students must notify OIS at least two months before defending to determine if there are any issues with their visa. OIS must also be notified that the student is planning on defending, outside of the typical academic year. Any student on a visa must communicate with OIS, and have approval to proceed in the summer, before a student can register and work with Audrey Lindahl to schedule their exam and submit the required forms.

If a student defends after the last day of Summer Term, the student must register for 1st term as a full time student.

**Selecting the Committee of Readers**

Students must follow instructions on selecting committee members and readers stated in the Appointment of Thesis Readers and Final Oral Exam form found in the Portfolio library. The Associate Dean for Academic Affairs shall, upon recommendation of the student’s Department Chair or Associate Chair for Academic Programs, approve a committee of four readers, including the student’s thesis adviser, who serves as a departmental reader. The readers should be at the rank stated on Page 15, “Advising and Exam Committee Composition by Faculty Rank”. 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. All faculty serve on the Committee representing the department of their primary faculty appointment except when the faculty member serves in their capacity as the student’s adviser. The most senior faculty member without a primary appointment in the student’s Department will serve as Chair of the Committee and MUST hold the rank of Associate or full Professor. A second reader not in the student’s department will serve as the Sub-Chair of the Committee and must also hold the rank of Associate or full Professor. With the approval of the Dean for Academic Affairs, the Department may nominate an individual from outside the University to serve as a 5th non-voting member.

**PhD Program Policy**

**PhD Schoolwide Policy**

Department of International Health (IH) candidates for the degree Doctor of Philosophy (PhD) must fulfill all School requirements, as specified in the PhD Schoolwide Policy (https://my.jhsph.edu/Resources/PoliciesProcedures/ppm/PolicyProcedureMemoranda/Academic_Progr%20ams_03_Doctor_Of_Philosophy_Degree_071717.pdf) last revised July 17, 2017. These include, but are not limited to, a minimum of four consecutive academic terms at the School in full-time residency (some programs require 6 terms), continuous registration throughout their tenure as a PhD student, satisfactory completion of a Departmental Written Comprehensive Examination, satisfactory performance on a University Preliminary Oral Examination, readiness to undertake research, and preparation and successful defense of a thesis based upon independent research. Furthermore, all doctoral students must complete
a non-thesis related research experience in addition to their doctoral thesis.

Additional IH requirements are specified herein and require that full-time registration be a minimum of 16 credits per term of courses taken for letter grade or pass/fail. Courses taken for audit do not count toward the 16-credit registration minimum.

Students having already earned credit at JHSPH within the past three years for any of the listed courses may be able to use them toward satisfaction of doctoral course requirements. Refer to section “Students with a master’s degree from JHSPH” for more information. Students who have completed similar courses elsewhere may consider requesting a course waiver. Refer to page 26 for more information.

Completion of Requirements

While the University places a seven-year maximum limit upon the period of doctoral study, IH students are expected to complete all requirements within a period of 4 years (16 terms maximum). Formal leaves of absence may extend this time.

Introduction to Online Learning

The Bloomberg School of Public Health offers courses in various formats, including a number of online classes. In order to be eligible to take an online course, students must complete the Introduction to Online Learning, which is offered through the Center for Teaching and Learning at the Bloomberg School. This non-credit mini course is a prerequisite 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 Introduction to Online Learning course prior to enrolling in an online 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 CoursePlus website (http://e-catalog.jhu.edu/public-health/departments/international-health/international-health-phd/https://courseplus.jhu.edu/core/index.cfm/go/course.home/cid/90).

Ethics (2 courses) - All doctoral students must take two general ethics courses. The first, PH.550.860 Academic & Research Ethics at JHSPH, is an online course for 0 credits that every student is required to take prior to or during the student’s first term of matriculation. Failure to complete this course will prevent students from registering in the following term. For the second course, PhD students must take PH.550.600 LIVING SCIENCE ETHICS - RESPONSIBLE CONDUCT OF RESEARCH offered first term, OR PH.306.665 RESEARCH ETHICS AND INTEGRITY, U.S. AND INTERNATIONAL ISSUES offered third term. Students will not be allowed to take their University Preliminary oral exam if their two general ethics course requirements are not complete.

Doctoral Seminar in International Health – PhD students in GDEC, Health Systems and SBI 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. This seminar series is not a requirement for PhD Human Nutrition students but is highly recommended.

International Travel Preparation, Safety and Wellness – All IH students are required to take this course (220.600.81) during their first year and before traveling overseas for any academic reason. IH students are required to take this course regardless of whether their research is conducted within or outside of the United States. Please refer to the Department of International Health Travel Policy.

Doctoral Independent Goals Analysis – Students will enroll for one credit of 220.842 with their adviser in first term every year until students complete their degree. Students will develop a course and academic plan, which will be done through discussion with their adviser and through their Independent Goals Analysis (IGA) that will be part of their requirement in first term of each year in the doctoral program. The IGA is a process of discussion with the adviser resulting in a written document that is then uploaded to the student’s Portfolio in CoursePlus and reviewed during the student’s semi-annual review. Students will also review their course tracking sheet/course plan with their advisers during this time. All doctoral students will have access to ‘My Portfolio’ in CoursePlus to upload their course tracking sheet documents due by the end of 1st term each year. This is a guide for students and advisers, but the independent goals analysis should be modified as the student progresses through the program.

Students are required to discuss changes to their course plan with their adviser and update their IGA by uploading these to “My Portfolio” at least once a year, by the end of 1st term.

Standards of Academic Performance

Minimum GPA

All required courses must be taken for letter grade unless courses are only offered pass/fail. Courses may be counted only once when fulfilling requirements. Students must receive satisfactory grades of B or higher in all required courses and continuously maintain a cumulative Grade Point Average (GPA) of at least 3.0 in order to remain a candidate in good standing. Any student who receives a C or below in a required course must repeat the course and achieve at least a B or attain a B or higher in a subsequent course in the sequence of course (e.g. In Biostatistics 622 one must get a B, if one received a C in 621).

Academic Progress

Students are required to meet their academic milestones in a timely manner. These milestones and time frames are specified in the table students can reference in their CoursePlus My Portfolio program library. Students are reviewed twice a year in the fall and the spring by the Curriculums and Credentials Doctoral Subcommittee to monitor students’ progress through their doctoral program and identify any major barriers to meeting milestones. Specifically, the Subcommittee will review students’ academic progress, whether they are able to meet research deadlines, and are regularly communicating with their advisers.

Anyone not meeting academic performance standards will be placed on probationary status pending action by the Department’s Curriculum and Credentials Committee. In all cases, the maximum time allowed for the student to come out of probationary status will be no more than two consecutive terms following the term in which the student’s GPA fell below the required minimum. The Committee will review scholarship eligibility and establish the minimum conditions to be fulfilled in order to return to the “good standing” status and avoid termination. If conditions are imposed, the Committee will specify the maximum time allowed to satisfy these conditions. Failure to satisfy these conditions may result in termination from the program.

Consistent academic probation status (defined as two or more terms) will result in a reconsideration of tuition and stipend support and possible termination.
If students receive Federal Loans administered through the Financial Aid Office (http://e-catalog.jhu.edu/public-health/departments/international-health/international-health-phd/%20https://www.jhsph.edu/offices-and-services/student-affairs/financial-aid), there are other academic standards that students must abide by in order to comply with Federal Loan requirements. Please check with the Financial Aid office or email them at JHSPH.fnaid@jhu.edu to request more information.

Students with a Master's Degree from JHSPH

PhD students who received a master's degree from JHSPH within 1 year of starting their doctoral degree can waive out of the residency requirement but must still complete 18 credits of formal coursework outside of the department. Students also qualify for a waiver of certain course requirements completed as a master's student. Students are required to request waivers for these courses at the beginning of their PhD program and are required to complete all other program specific requirements.

PhD students who completed a master's degree from JHSPH and have more than 1 year between the start of their PhD program and the completion of their master's degree cannot waive out of the residency requirement. Students who fall into this category are required to meet all credit totals for the program and graduation as well as the 18 outside the department credit requirement. Students can however request waivers to count courses taken during their master's program. There are no guarantee waivers will be accepted if there are five years or more between degrees. Students who are granted waivers are not excused from the total credit requirements for their program, graduation and/or the residency requirement.

Thesis Research

After completing oral exams, students engaged in the planning or conduct of their thesis research will register for credit (pass/fail) in 22X.820, "Thesis Research [Program Area]". In order to receive credit for this work a specified deliverable must be submitted to the Adviser before the end of each academic quarter of such registration. In the absence of a deliverable the Adviser is expected to assign a grade of "F" or "Incomplete." All grades of "Incomplete" automatically convert to "F" if not made up within 120 days from the end of the term in which assigned. Students should not register for thesis research until they have completed their Preliminary Oral Exam. Prior to the completion of that exam, and while preparing for their orals, students should only register for Special Studies (22X.840).

Tracking Sheet

Tracking sheets are used to track all course requirements from each student's program. All students are required to fill out and submit their tracking sheets at least once a year, by the end of 3rd term for all continuing students, to Audrey Lindahl via their CoursePlus Portfolio. Approved waivers and substitutions must also be submitted with the tracking sheets. Students should use the tracking sheet when meeting with their advisers.

Tuition Scholarship

Doctoral students who matriculate in AY 20-21 will receive 100% of tuition scholarship up until their 16 term of enrollment. Health insurance, dental insurance, and UHS clinic fee are covered for up to 16 terms of full time enrollment, and satisfactory academic performance. Students who have not completed their degree by the end of the fourth year will be responsible for 100% of their tuition, health insurance, and UHS clinic fee, and must still register full-time. Students who need more time to complete their PhD degree must request an appeal to the Associate Chair of Student Matters in writing with a timeline for completion and an endorsement letter from their adviser. The department would consider additional tuition scholarship support in only on a case by case basis. Leaves of absence are not counted in the four-year plan.

A student’s tuition scholarship support is contingent on satisfactory academic progress during their degree. This progress is reviewed twice a year by the Curriculum and Credentials committee.

Withdrawals

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 the student wants to be readmitted. Upon readmission, a student must register for a minimum of two consecutive terms prior to completing degree requirements.

Timeline to Completion

A suggested timeline of the sequence to completion in 4 years is located in the students CoursePlus My Portfolio program library for each student's reference. Any questions regarding requirements should be discussed with the student's adviser and with the Senior Academic Coordinator, Audrey Lindahl.

ACADEMIC ADVISING PHD DEGREE

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 adviser 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 adviser-advisee relationship as successful as possible.

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

THE DEPARTMENT'S ADVISING PHILOSOPHY

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. Advisers are responsible to the students they advise
   • Advising is an integral part of the educational process with both students and advisers benefiting from the relationship.
   • Regular student-adviser communication allows advisers to maximize the student's ability to develop life-long learning skills and for the adviser to act as an advocate for the student.
   • Advisers must recognize the diversity of student backgrounds and the opportunities provided by this diversity for maximizing educational achievement.

2. Students are responsible for their own education
   • Students are required to take an active role in their own development as a scholar and practitioner.
   • Students must be proactive in seeking guidance and support from their advisers and the department.

3. The academic advising relationship is dynamic and needs input from students and advisers as they use it.
   • The academic advising relationship is iterative and evolves over time as students and advisers gain a better understanding of each other's perspectives.
   • The academic advising relationship is a partnership between students and advisers and requires ongoing communication and feedback.

4. The academic advising relationship is confidential
   • The confidentiality of student-adviser interactions is maintained to ensure trust and open communication.
   • Confidential information shared with the department is handled with care and only shared on a need-to-know basis.

5. The academic advising relationship is time-limited
   • The academic advising relationship is time-limited and has a finite end.
   • The academic advising relationship is designed to be a temporary relationship that supports students during their time at JHSPH.
• Advisers are responsible for connecting students with others in the academic community who can, when appropriate, assist in the advising process.

2. Advisers are responsible to the institution.
• As faculty, advisers 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.
• Advisers 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. Advisers are responsible to the community of higher education.
• Advisers must uphold the values of academic and intellectual freedom that characterize the university environment in the United States.
• As faculty, advisers are responsible for the training of the next generation of academic leaders in education, research, practice, and service.

4. Advisers are responsible to the public health community.
• As faculty in a School of Public Health, advisers are committed to improving the health and wellbeing of populations everywhere in the world through education, research, practice and service.

The Adviser-Advisee Relationship

All students in the Department are assigned a faculty adviser 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 adviser to students. The adviser 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 adviser serves to direct the student to appropriate resources and research opportunities. The adviser 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 adviser lies with the student. Students should not expect advisers to seek them out for required appointments. The student bears the responsibility of consulting the adviser when necessary and arranging periodic appointments, even if there are no specific problems. In general, advisers and advisees should communicate at least once per term, preferably more often, especially at certain critical times during their doctoral research progress.

All course registrations must be approved by the adviser. The student is required to schedule a meeting in order to assure that the adviser has reviewed the student’s schedule and to plan any special studies projects or thesis research as needed with the adviser 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.

Student Feedback on Adviser 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 adviser evaluation process that includes input from students. The provision of honest information is required of all students twice per year and these adviser ratings are handled with complete confidentiality. At the completion of the 2nd and 4th terms each year, all students will complete an Academic Adviser Evaluation Form (https://jhsph.co1.qualtrics.com/jfe/form/SV_8cvVZ1RanXU4PAN) (will be updated and sent to students twice a year) and submit it online. The survey results are analyzed to provide a body of information on advising style, content, and collective perception from multiple students advised by each faculty member over time, focusing on aggregate results accumulating over successive administrations of the survey. The Department Chair (David Peters), the Associate Chair for Academic Programs (Cyrus Engineer), and the Associate Chair for Student Matters (Maria Merritt) are the only faculty who may review individual survey responses, and each is excluded from reviewing responses naming themselves as adviser. The responses are also reviewed by the Academic Program Manager (Cristina Salazar) and Senior Academic Coordinator (Audrey Lindahl), who may lead or participate in survey analysis. Survey responses about individual faculty members will be handled with complete confidentiality.

Any feedback relayed to a faculty member from these surveys will be informed only by cumulative or aggregate survey results, will be communicated to faculty only in a manner that does not identify individual students (with due awareness of the faculty member’s overall number of advisees), and will be solely for the purpose of helping faculty prospectively improve their approach to advising as appropriate.

It is not the aim of this survey-based evaluation to intervene in specific individual situations that may be problematic. If you wish to discuss concerns about a specific individual situation, we encourage you to consult directly with your Degree Program Coordinator(s), the Senior Academic Coordinator, the Academic Program Manager, or the Associate Chair for Student Matters.

REGISTRATION

PhD students must register for a minimum of 16 credits of courses continuously each term to be a fulltime student in the IH department. Students do not register for summer or winter intersession. Summer and winter intersession courses are exempt from tuition scholarship. Students must understand they pay 100% of the tuition for those courses.

Important Information about Registration:

1. Registration below 16 credits is not allowed and violates the terms of a student’s tuition scholarship.

2. Any student registering below 16 credits during any term could be in violation of their scholarship requirements resulting in a loss of their tuition scholarship.

3. Courses taken for Audit do not count toward the 16 credits per term requirement.

Courses taken at other schools within the Johns Hopkins system must be considered carefully. If a student is interested in taking courses outside of the School of Public Health, students must meet with the Senior Academic Coordinator (Audrey Lindahl) prior to registering to discuss
whether the credits count toward their degree and, if so how. There is a separate calculation for courses taken in schools on semesters, and some courses (e.g. language courses) do not count for credit.

Students registering for Special Studies or Thesis research must do so in their specific program area. The following course numbers correspond to the different program areas:

**Thesis Research:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PH.221.820</td>
<td>THESIS RESEARCH HEALTH SYSTEMS</td>
<td>1 - 22</td>
</tr>
<tr>
<td>PH.222.820</td>
<td>THESIS RESEARCH HUMAN NUTRITION</td>
<td>1 - 22</td>
</tr>
<tr>
<td>PH.223.820</td>
<td>THESIS RESEARCH DISEASE CONTROL</td>
<td>1 - 22</td>
</tr>
<tr>
<td>PH.224.820</td>
<td>THESIS RESEARCH SOCIAL AND BEHAVIORAL INTERVENTIONS</td>
<td>1 - 22</td>
</tr>
</tbody>
</table>

**Special Studies:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PH.221.840</td>
<td>SPECIAL STUDIES AND RESEARCH HEALTH SYSTEMS</td>
<td>1 - 22</td>
</tr>
<tr>
<td>PH.222.840</td>
<td>SPECIAL STUDIES AND RESEARCH HUMAN NUTRITION</td>
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</tbody>
</table>

**THESIS RESEARCH**

After completing oral exams, students engaged in the planning or conduct of their thesis research will register for credit (pass/fail) in 22X.820, "Thesis Research [Program Area]". In order to receive credit for this work a specified deliverable must be submitted to the Adviser before the end of each academic quarter of such registration. In the absence of a deliverable the Adviser is expected to assign a grade of "F" or "Incomplete." All grades of "Incomplete" automatically convert to "F" if not made up within 120 days from the end of the term in which assigned. Students should not register for thesis research until they have completed their Preliminary Oral Exam. Prior to the completion of that exam, and while preparing for their orals, students should only register for Special Studies (22X.840).

**SEMI-ANNUAL REVIEWS**

All students are required to maintain regular and sustained progress towards completion of their doctoral program. Twice per academic year a review of past progress and future expectations will be carried out as follows:

1. Students without a TAC (during proposal development and before oral exams are complete)
   a. PH.220.842 Doctoral Independent Goals Analysis - International Health
   b. The adviser will write a brief report of their advisee's academic progress twice during the academic year.
2. Students with a TAC Formed (after oral exams)
   a. PH.220.842 Doctoral Independent Goals Analysis - International Health
   b. The report submitted to the TAC at each meeting and then uploaded to the students Portfolio.
   c. The adviser will write a brief report of their advisee's academic progress twice during the academic year.

The Curriculum and Credentials Committee will review the students’ progress and supporting documentation. Continued enrollment in the doctoral program is contingent upon a satisfactory review by the Committee.

Students not making adequate progress may receive warning letters or requests for specific plans to move ahead with their programs. The IGA, TAC reports and Adviser Reports will become part of the official student record maintained by the Senior Academic Coordinator.

**CRITERIA AND PREPARATION FOR DOCTORAL THESIS RESEARCH AND DISSERTATION**

The final authority for requirements for the Doctor of Philosophy degree is held by the Graduate Board of Johns Hopkins University. The following description of the doctoral thesis is taken from Electronic Theses & Dissertation from the Sheridan Libraries (https://www.library.jhu.edu/library-services/electronic-theses-dissertations):

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; 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 PhD 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, is crucial that an individual student’s contribution be precisely delineated. Whether the collaboration is between faculty or student, or among students, PhD 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 adviser who must be named as Principal Investigator of the IRB protocol. If the student is working within a research project of a faculty member other than their adviser, the Principal Investigator (PI) of that project may be the person named as PI on 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.

**PRIMARY DATA COLLECTION**

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.

**TRADITIONAL VS. “PAPERS” OPTION**

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 outlined on the Sheridan Library. 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 adviser 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.

If following the “papers” option, the department strongly recommends that each paper be formatted for journal submission with additional analyses and information that would be part of the online supplemental materials for the paper being included in the thesis appendices. This makes it more likely that graduates can submit their thesis research for publication as soon after the defense as possible. Publication of thesis research as soon as possible after thesis completion is strongly encouraged. It also fulfills the ethical requirement to share research findings that provide benefit to research participants and/or society that balances the risks assumed by participants.

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. However, the adviser and TAC members will read and provide advice to the student on their thesis and/or papers. 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 Thesis Advisory Committee (TAC) will appraise the adequacy of the research proposal and the appropriateness of the option selected for presenting the results. They will also advise and approve the appropriate “chaptering” of the student’s thesis.

If a student commits an academic ethics violation (including plagiarism) on the thesis, the Department will recommend dismissal from the PhD program, regardless whether it is the student’s first offense.

AUTHORSHIP GUIDELINES

The Department expects and encourages scholarly student authorship. This is part of the educational process and career development that we hope will occur during the degree program. There may be opportunities for students to publish research with faculty separately from the thesis work, as well as publication of thesis results. This is a guide to help students understand what to expect regarding authorship of scientific publications.

GENERAL GUIDELINES FOR AUTHORSHIP

The International Committee of Medical Journal Editors (ICMJE) recommends authorship based on the following criteria: “Substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work; AND Drafting the work or revising it critically for important intellectual content; AND Final approval of the version to be published; AND Agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.” Please click this link for further details (http://www.icmje.org/recommendations/browse/roles-and-responsibilities/defining-the-role-of-authors-and-contributors.html).

ROLE OF FIRST AUTHOR

The first author is usually responsible for drafting the paper and will usually take primary responsibility for the content of the paper and analysis, along with the senior author (last author). The first author may be the corresponding author, or the senior author (or another co-author) may play this role. The corresponding author provides the email where correspondence regarding the paper from submission to final publication (and fielding of any correspondence from readers following publication) is sent. The first author is also typically responsible for obtaining input from co-authors, submitting the materials to the journal, and making the first draft of responses to reviewers (with subsequent input from co-authors), and re-submissions and proofing the final version prior to publication (along with co-authors). Of course, all authors have to approve the paper prior to submission and approve any subsequent revisions.

DISTINGUISHING BETWEEN AUTHORSHIP AND NON-AUTHORSHIP CONTRIBUTIONS

Some forms of contribution to the production of a manuscript are meaningful, yet do not rise to the level of authorship. Examples include one-off conversations about themes and ideas, reading through a draft to offer helpful comments, and suggesting light edits to correct typographical errors or stylistic infelicities. Typically, the proper way to recognize these sorts of contributions is to list them in a separate acknowledgments section: for instance, “The authors are grateful to [names] for their [valuable discussion of / helpful comments on / critical readings of] earlier versions of this manuscript.”

PUBLICATIONS NOT INCLUDED IN THE DOCTORAL THESIS

When starting to discuss research projects in which a student may participate, students should feel comfortable raising the issue of authorship with faculty, and vice versa. This allows students to be proactive in asking whether the work they may do could merit authorship if the conditions above are met. It is important to have this conversation prior to starting work on a project, although decisions about adding authors and/or order of authorship may change over time. This is because intellectual input of investigators may change as the project progresses. Even for publications that are team-written, the person who will function as lead author should be identified as early as possible in the project timeline to avoid confusion.

The decision on authorship inclusion should be guided by the principal investigator (PI) of the project. However, it is the responsibility of the PI to discuss any anticipated authorship changes with all authors, including students, in a timely manner. Please note, especially in international health work, that there may be local investigators who merit authorship but whose role in the research the student may not be aware of. Please be aware that some journals have restrictions on the number of people who can be listed as authors on a publication. The ICMJE also provides guidance on acknowledgements versus named authorships. See the above link to the guidance. When draft manuscripts are circulated to coauthors for comments, it is reasonable for the first author (including students) to set deadlines for feedback, but these should allow time for busy faculty and collaborators to review thoroughly and carefully.

PUBLICATIONS ARISING FROM THE DOCTORAL THESIS

For students who fulfill their thesis requirement using the “papers” option, as described in the Academic Guide, the thesis includes “a minimum of three separate papers based on the thesis research”, with each paper “standing on its own merits” and “the papers together...embod[y] a recognizable unifying theme.” Because the papers taken together should contain as much substantive information as is usually expected in a traditional thesis, they may each be longer than the more compact version that would be submitted under the tight word-count restrictions typical of scholarly journals. These papers are embedded in the thesis and may be published verbatim from the thesis chapters or in a modified format for their respective target journals. In preparing a thesis-derived manuscript for submission to a journal, the student as first author (in consultation with their adviser) may seek to orchestrate additional unique contributions from other researchers, which could not have been included in the thesis itself as written solely by the student. For students who fulfill
their thesis requirement using the traditional option, as described in the Academic Guide, the thesis will consist of a set 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.” Typically, three or more distinct papers suitable for submission to peer-reviewed journals can be developed from the materials presented in the traditional thesis, either in parallel with thesis composition or as soon as possible after the student successfully defends the thesis.

Under either the “papers” option or the traditional option, the papers based on the students’ thesis research should be written by the student and published with the student as the first author. This is the expectation. If faculty have a concern about 1st authorship of thesis work embedded in larger research projects, these topics should not be considered for a student thesis.

Faculty members’ eligibility for co-authorship on a student’s 1st-authored papers based on thesis research should generally be determined by the ICMJE guidelines cited above. Co-authorship is not automatically guaranteed merely by being named a thesis adviser. Rather, it is earned by fully performing the function of thesis adviser by providing sustained, substantial intellectual guidance to the advisee to an extent that would typically qualify one to serve as co-author of the manuscripts based on the advisee’s thesis research.

Often, the student’s work is embedded in a larger collaborative project and the adviser may be the PI who is responsible for funding, IRB approval, and intellectual conceptualization. Although the adviser does not directly write any part of the thesis, which must be written entirely by the student, the adviser provides comments on the thesis and may suggest ways to reword for improved understanding. It is typically the adviser’s intellectual contribution to sustaining the overall project that merits co-authorship on the student’s thesis-derived papers. Similar contributions by others – such as helping to conceptualize the project, obtaining funding, helping with study design, data management and analysis, training of data collectors, and lab analysis – may also merit co-authorship as per ICMJE guidelines and in discussion with the adviser and/or PI of the larger project.

Authorship should not be a presumed or quid pro quo expectation of faculty for service on a student’s Thesis Advisory Committee or Committee of Final Readers, so far as the faculty member’s committee service involves only reading the thesis, providing comments, and assessing the readiness of the thesis for approval. In general, such advice should be seen as an educational contribution to the student rather than authorship. Committee service might lead to authorship, however, where the faculty member makes additional substantive contributions so as to meet the ICMJE authorship criteria.

In sum, determinations of faculty co-authorship on the student’s thesis-derived papers require care, judgment, and good-faith compliance with the ICMJE authorship criteria, all supported by explicit discussion as early as possible in the process of composing the papers based on the student’s thesis research.

Additional papers arising more broadly from a student thesis project, but not based on material in the thesis itself, may be published by the student or by others after the student has graduated. The adviser/PI of the project should discuss authorship of additional papers with the student/graduate as soon as publication topics are identified but note that authorship may also change for such papers as the project progresses.

**FURTHER GUIDANCE**

It is important to acknowledge that in most instances these matters are decided in advance and without confusion. However, there can be instances of misunderstanding and miscommunication that make authorship decisions challenging. Under those circumstances, it is recommended that the student have a frank, collegial discussion with the adviser/PI to try and clarify these issues. If that is not satisfactory, the student should approach the relevant program director and seek advice. The section below also contains links to good resources.

In the end the production of a paper should always be a collaborative, exciting and respectful exercise and help everyone involved.

**USEFUL RESOURCES**


**Adviser Specific CHANGE OF Advisor**

For a variety of reasons, a student or a faculty member may wish to have the student change advisers. 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 adviser 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. Any request for changes must also be discussed and approved by the students Program Coordinator. Once approved the change request letter and email approval from the students Program Coordinator should be sent to Audrey Lindahl via email. Once approved Audrey will update the student’s DIH academic file and inform the Records and Registration Office to update the student’s schoolwide file.

Although visiting faculty have full-time appointments, they may not serve as doctoral advisers. Sr. Research associates, research associates, and Instructors, cannot be doctoral advisers, or coadvisors.

**RESPONSIBILITIES OF 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 adviser 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 or more as needed is recommended) and to identify a mechanism for advising
while traveling either through email/skype or by identifying a back-up adviser for periods of extended travel or sabbatical.

RESPONSIBILITIES OF ADVISEE
- To arrange to meet with the adviser 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 adviser.

STUDENT EXPECTATIONS OF THEIR Advisor
- Adviser’s review and advise 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 or more frequently as needed with the adviser.
- 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.
- Advice and feedback on the development of a thesis/research proposal, assistance and feedback on IRB approvals, oversight of the implementation of the thesis research project, feedback on the thesis document and public final oral defense presentation.

PHD ADVISER/ADVISEE MEETING GUIDELINES
The guidelines here are the absolute minimum interactions students and advisers 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.

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

YEAR ONE
- Student: Schedule at least one meeting per term
- Student and Adviser: Review academic guide, competencies, departmental requirements, and administrative deadlines.
- Student and Adviser: Develop a written plan of courses and experiences to meet the student’s educational goals (IGA assignment due in 1st term).
- Student: Discuss possible research topics for thesis and non-thesis related research at every meeting.
- Student and Adviser: Discuss course registration for the following term.
- Student: Notify Adviser of possible letters of recommendation student will need in next few months (must give adviser 2 weeks notice if recommendation letter is needed).
- Adviser: Identify other people and resources of which students should be aware.

YEAR TWO
- Student: Schedule at least one meeting per term.
- Student: Complete non-thesis related research experience.
- Student: Select a topic and a project, draft thesis proposal.
- Student and Adviser: If taking comprehensive exams in January, discuss preparation for exams, student study groups.
- Student: Prepare for oral exams through meetings with TAC and mock orals.
- Student: Form Departmental and Preliminary Oral exam committees and take exams.
- Student: Apply for funding opportunities.
- Student: Form a Thesis Advisory Committee.
- Adviser: Review and advise on course registrations, course changes, pass/fail agreements, waiver requests, and on all petitions to the Curriculum and Credentials Committee.
- Adviser: Write an evaluation of student’s progress and development, discuss courses left to take.
- Adviser: Help student prepare for exams, and help student form a TAC.
- Adviser: Write letters of recommendation for student.

YEAR THREE
- Student: Schedule meeting with adviser every few weeks (could be via skype or email). Frequency to be discussed with adviser.
- Student: Obtain funding for research.
- Student: Obtain IRB approvals for thesis research.
- Student: Conduct thesis research, gather data, finish data collection.
- Student: Write Thesis Progress Report and deliver to TAC.
- Student: Decide if thesis will be a three-paper format or a large thesis.
- Student: At least one meeting with full TAC.
- Adviser and TAC: Assess student’s progress and give feedback.
- Adviser: Write an evaluation of student’s progress and development, discuss with student, and submit evaluation to the academic program office.
- Adviser: write letters of recommendation for student.

YEAR FOUR
- Student: Schedule meeting with adviser every few weeks (could be via skype or email). Frequency to be discussed with adviser.
- Student: Data analysis and thesis writing.
- Student: Write Thesis Progress Report and deliver to TAC.
- Student: At least one meeting with full TAC.
- Student: Distribute full thesis draft to TAC.
- Student: Schedule exam to meet May graduation.
- Student: Give defense seminar and final oral exam, make requested changes to thesis and submit to library, adviser and chair of defense write completion letter to registrar/dean.
- Adviser and TAC: Assess student’s progress and give feedback.
- Adviser: Write an evaluation of student’s progress and development, discuss with student, and submit evaluation to the academic program office.
- Adviser and TAC: approve final thesis.
- Student and Adviser: work on identifying final exam committee.

Departmental Travel Policy (http://e-catalog.jhu.edu/public-health/departments/international-health/#newitemtext)
Program Concentration Learning Outcomes
Global Disease Epidemiology and Control
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
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
3. Design a cost-effective intervention program that takes into consideration the environment and public health services including nutrition, immunization, and family planning programs
4. Formulate an epidemiological research question with specific goals and study aims
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
6. Develop a research proposal, complete with sample size justification and budget, and implement, manage and monitor the study’s progress and data quality
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
8. Produce an appropriate statistical analysis of collected data and provide a reasoned interpretation of these results
9. Place the research findings in the context of current knowledge, identify limitations, specify further areas for research and analyze policy implications and public health significance of the findings
10. Disseminate research findings through oral and poster presentations, writing manuscripts for peer-reviewed literature, and teaching students
11. 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

Health Systems
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
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
3. 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
4. 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
5. Implement and manage a research project, monitor progress of the study and the quality of data collected
6. 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
7. Produce data analysis and provide a reasoned interpretation of the results
8. Place 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
9. Communicate scientific findings through written and oral methods to scientific audiences and peers
10. Perform a leadership role in health systems (e.g. research coordinator, program manager, policy adviser) to address health problems in disadvantaged populations in low and middle income countries

Human Nutrition
1. Master and apply core principles and concepts in human nutrition, biochemistry and metabolism
2. Investigate the epidemiology and underlying causes and public health consequences of key nutritional problems
3. Place public health nutrition problems in their biological, social, cultural, and behavioral context
4. Design, test, and implement population-based food and nutrition interventions and strategies for prevention and treatment of global nutritional problems
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
6. Frame research question to address specific aims, in the context of existing knowledge
7. Design and conduct field research from conception of ideas through proposal development, implementation, analysis and publication of findings
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
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
10. Communicate scientific findings through written and oral methods to scientific audiences and peers, and teach students
11. Produce an appropriate statistical analysis of collected data and provide a reasoned interpretation of the results
12. Implement and manage a research project, monitor progress of the study and the quality of data collected

Social and Behavioral Interventions
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
2. Identify and describe the determinants and behaviors associated with major causes of disease and disability most prevalent among underserved populations
3. Assess the effectiveness of current behavioral interventions for major causes of disease and disability
4. Evaluate and critique the relevant literature on a topic and frame a research question in terms of study goals and specific aims
5. Design, implement and evaluate community-based behavioral health initiatives
6. Design, implement, and manage a theoretically-grounded research study on social, cultural, and behavioral aspects of health, differentiating between qualitative and quantitative designs
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
8. Use formative research data to design the content of a behavioral or community intervention
9. Analyze data in terms of policy implications and public health significance of the findings
10. Communicate effectively through oral presentations and written materials like publishable manuscripts, with the scientific community, researchers, policy makers and key stakeholders
11. Place research findings in the context of existing knowledge, identify limitations, specify further areas for research, and analyze the policy implications and public health significance of the findings