



HARVARD SCHOOL OF PUBLIC HEALTH

Department of Epidemiology

Student Handbook 2011-12

Harvard School of Public Health



Department of Epidemiology

677 Huntington Avenue
Boston, MA 02115

Telephone 617-432-1055
Fax 617-566-7805

Website www.hsph.harvard.edu
Email epidept@hsph.harvard.edu

For a map of the Longwood Medical area click [here](#).

This handbook describes the academic requirements, policies and programs in the Department of Epidemiology. The contents of this handbook are a supplement to the official [Harvard School of Public Health Student Handbook](#). Epidemiology students are responsible for general knowledge of, and adherence to, the policies and requirements described in the Official Register and the departmental handbook.

Where school-wide and departmental policies overlap, the Harvard School of Public Health Catalog takes precedence (<http://www.hsph.harvard.edu/catalog/pdf/catalog.pdf>). The Department of Epidemiology reserves the right to update the information published in the Handbook as necessary. All information correct at time of publication ©2011

Department Administration



Dr. Michelle Williams
Chair, Department of Epidemiology
Phone: 617.432.6477
E-mail: mawilliams@hsph.harvard.edu

Dr. E. Francis Cook
Deputy Chair, Department of Epidemiology
Phone: 617.525.6716
E-mail: ecook@partners.org

Ms. Colleen Keller
Assistant to the Chair
Phone: 617.432.6477
E-mail: ckeller@hsph.harvard.edu

Ms. Jackie Craigue
Director of Administration
Phone: 617.432.1301
E-mail: jcraigue@hsph.harvard.edu

Mr. John Paulson
Assistant Director of Graduate Studies
Phone: 617.432.1055
E-mail: jpaulson@hsph.harvard.edu

Associated web links:

[Harvard University](http://www.harvard.edu) www.harvard.edu

[Harvard Medical School](http://www.hms.harvard.edu) www.hms.harvard.edu

[Harvard School of Dental Medicine](http://www.hsdm.harvard.edu) www.hsdm.harvard.edu

[Channing Laboratory](http://www.channing.harvard.edu) www.channing.harvard.edu

[Brigham and Women's Hospital](http://www.brighamsandwomens.org) www.brighamsandwomens.org

[Beth Israel Deaconess Medical Center](http://www.bidmc.org) www.bidmc.org

[Dana Farber](http://www.dana-farber.org) www.dana-farber.org

Epidemiology at the Harvard School of Public Health

Epidemiology, the study of the frequency distribution, and determinants of disease in humans, is a fundamental science of public health. Epidemiologists use many approaches, but the ultimate aim of epidemiologic research is the prevention of human disease.

Epidemiology has been a part of the public health studies at the Harvard School of Public Health since 1958. Four of the five previous department chairpersons are still active in the department, and we warmly welcome Dr Michelle Williams, who is in her inaugural year as Chairperson.

The Department of Epidemiology is considered the largest department within the school in terms of the number of faculty, students and research support, including over 100 faculty and researchers. The department works closely with other school departments, however special relationships with Biostatistics and Nutrition were developed to promote training opportunities, teaching and research. The department has active research grants supporting pre-doctoral and post-doctoral students, as well as faculty.

The department has become known for the numerous cohort studies and population studies conducted, the most notable being the [Nurses' Health Study \(parts I, II\)](#). Other studies include: the Health Professionals Follow Up study (1986), the Growing Up Today Study (1996), Physician's Health Study (1982), and the Woman's Health Study (1993) which all helped expand research from prevention trials to resource for observational study.

The curriculum within the department includes over 70 courses alone, a combination of core, methods, substantive, and seminar type courses. The department is surrounded by a rich academic environment not only at the School of Public Health, but in close proximity to the Harvard Medical and Dental Schools. The Longwood Medical Area community boasts many research laboratories, teaching hospitals and professionals investigating various topics.

Students attend Harvard University from all over the world, and so our Epidemiologic studies have become global too. Globalization has only encouraged the department to initiate cohort studies in Africa (Tanzania, Nigeria, South Africa, Uganda), Asia (China) and Europe (Scandinavia).

The department has a tradition of teaching excellence awards and community recognition. Graduates of our Masters and Doctoral programs, when surveyed, consistently report that they are well-trained for the workforce and are recognized as leaders in their field. They find employment in academia, research organizations, private and public organizations, and international agencies.

Important Dates 2011-12

Academic Dates 2011-12		
Summer 2011 <i>July 7-August 19</i>	Fall 2011 <i>August 31-December 16</i>	Spring 2012 <i>January 3-May 11</i>
Summer 1 <i>July 7-July 29</i>	Fall 1 <i>August 31-October 28</i>	WinterSession <i>January 3-January 20</i>
Summer 2 <i>August 1-August 19</i>	Fall 2 <i>October 31-December 16</i>	Spring 1 <i>January 23-March 9</i>
		Spring 2 <i>March 19-May 11</i>

The most current and complete academic calendar can be found [here](#).

Holidays and Events		
Summer 2011	Fall 2011	Spring 2012
Monday July 4-Independence Day	Monday September 5-Labor Day	Monday January 16-Martin Luther King Day
July 6-MS-1 Information Session	Monday October 10-Columbus Day	Monday February 20-President's Day
Sunday August 28-Tuesday August 30-New Student Orientation	Friday November 11 Veterans Day	Monday March 12-Friday March 16 Spring Recess
	November 24/25-Thanksgiving Recess	TBA-Cutter Lecture
	TBA-Cutter Lecture	Thursday May 24-Commencement
	Monday December 19-Monday January 2 Winter Recess	

For more information regarding the Epidemiology Seminar Series, click [here](#)

Degree Candidacy Dates		
For Diploma Date	Degree Applications Due	Dissertations Due
November 2011	September 11, 2011	September 30, 2011
March 2012	January 6, 2012	January 20, 2012
May 2012	February 17, 2012	April 30, 2012

Table of Contents

Section One

General Academic Information

Admission Policies and Requirements.....	1
Advisors.....	1
Course Waivers and Requirements.....	2
Financial Aid and Graduate Funding.....	2
Independent Study Contracts	2
Teaching Assistant Experience.....	3
Training Grants.....	3
WinterSession.....	4

Section Two

Master of Science Program (Summer)

Introduction	5
Program Competencies.....	5
Requirements.....	5
Supervised Research EPI 315.....	6
Electives.....	6
Schedule.....	5

Section Three

Master of Science Program (One-year)

Introduction.....	8
Program Competencies.....	8
Course Completion.....	8
Requirements/Schedule.....	9

Section Four

Master of Science Program (Two-year)

Introduction.....	10
Program Competencies.....	10
Master's Thesis Requirements and Guidelines.....	11
Requirements.....	12
Schedule.....	13

Section Five

Doctor of Science Program (DS, DPH)

Introduction.....	14
Program Competencies.....	14
Guidelines for Completion	15
Thesis Requirements.....	15
Additional Requirements.....	16
Ordinal Credit Requirements.....	17
Prospective/Final Program.....	18-19
Written Exam.....	20
Oral Exam.....	21
Research Committee and Doctoral Thesis.....	22
Requirements/Schedule.....	23

Section Six

Concentrations and Areas of Interest

Inter-Disciplinary Concentration.....	25
Areas of Interest	26

Section Seven

Course Listings and Sample Schedules

Epidemiology Course Listing	27
-----------------------------------	----

Section Eight

Student Resources and Information

Committees.....	30
Alumni and Post-Doctoral Services: Staying Connected.....	32

Section One

General Academic Information

Admission Policies and Requirements

Applicants apply to the Schools of Public Health Application Service ([SOPHAS](#)). The Department of Epidemiology adheres to all Office of Admissions deadlines and policies, and review of applications is conducted by the department. Admittance to a master's or doctoral program does not guarantee transfer or acceptance to another program within the school or department, and students must meet admission requirements.

More information about the Admissions process for prospective students can be found [here](#).

Admission to the Master of Science or Master of Public Health programs- Current Doctoral Students

Epidemiology doctoral students have the option to complete requirements for the Master of Science or Master of Public Health degree (while pursuing a Doctor of Science degree). Students must submit a completed General Petition Form to the Admissions Office to apply. Once approved, students also submit an Application Form, two new letters of recommendation, and a statement of purpose. Students will be notified of the department decision by the Office of Admissions.

Admission to the Doctoral Program-Current Masters Students

Epidemiology master's candidates are welcome to apply to the doctoral program during the normal admissions cycle. Students are required to submit an electronic application through the Schools of Public Health Application Service ([SOPHAS](#)) online during the next admissions season and will be notified of the decision from the Office of Admissions.

Two-year master of science students must complete all graduation requirements on schedule, even if they will be matriculating to the doctoral program at the end of the second year.

Admission to the Master or Doctor of Science

Students adding or changing department

Students from other departments at the School of Public Health may apply for dual major or apply to change department affiliation to Epidemiology. In either case, students submit a completed General Petition Form to the Admissions Office to apply. Once approved, students submit an Application Form, two new letters of recommendation, and a statement of purpose. Students are notified of the decision by the Office of Admissions.

Advisors

The Epidemiology Department appoints a faculty advisor who is working in an area related to the student's field of interest. The advisor provides the student with academic guidance, information, and general assistance. The advisor and the advisee must meet at least twice during the academic year (before the start of the fall and spring semesters) to discuss the student's proposed course of study and any procedural or personal issues relevant to the student's academic experience. For more information on advising refer to the [HSPH student handbook](#).

Course Waivers

School-Wide Core Course (EPI201): Epidemiology students wishing to waive EPI201 must submit a *Waiver of Core Course* Form (obtained from the registrars office), and signed by the relevant instructor. Students must present a transcript and a copy of the course description to the Assistant Director of Graduate Studies to verify appropriate coursework. If the request to waive a core course is approved, the student will not be required to enroll in the core course. However, because of the strong integration between EPI 201 and EPI 202, Epidemiology students are not advised to waive EPI 201, even if they have taken an introductory Epidemiology course elsewhere.

EPI Department Required Courses: Students wishing to request a waiver for other departmental required courses must submit the *EPI Requirement Waiver Form* (obtained from the Epidemiology department). This form should be submitted to the Assistant Director of Graduate Studies along with a copy of the syllabus and a transcript from the institution where the course was taken. The student and their academic advisor will be notified of the decision on the waiver and a copy will be placed in the student's academic file.

Physicians are not required to take the physiology or pathophysiology courses. Such students should consult with their advisor at the start of their program and notify the Assistant Director of Graduate Studies. Other students with relevant coursework completed (before entering the program) in these areas may petition to waive this requirement.

Financial Aid and Graduate Funding

Funding for graduate programs can come from a variety of sources, including but not limited to:

- Departmental (partial awards on a yearly basis for new and returning students)
- Doctoral training grant stipend/tuition awards (NIH funding through department)
- Non-institutional awards (selective private/partial awards specific criteria for eligibility)
- Loans and grants through the office of Financial Aid
- Loans/scholarships that may be available from the student's home country or state

While the department makes every effort to secure as many funding opportunities for new and returning students, there is no guarantee that every student will receive funding. Students are encouraged to seek out as many different sources of funding as early as possible.

Independent Study/Tutorial (EPI 300)

Registration for an independent study/tutorial represents an agreement between the student and a faculty member that the student will work on a specific project, which will be supervised, by the faculty member. A student may also register for EPI 300 credit while preparing for the written exam. Contact the Assistant Director of Graduate Studies for more information.

Teaching Assistant Experience

Doctoral students are strongly encouraged to gain teaching experience by serving as teaching assistants. This will help consolidate the understanding of the material and provide valuable experience in teaching. Often, faculty who write reference letters are asked to comment on teaching experience and skills. Teaching assistant positions are available throughout the terms in the academic year and during the summer session. Teaching assistants for core epidemiology courses are typically limited to students who have passed the departmental written exam.

Responsibilities (designated by the instructor) may include: attending lectures and organizational meetings, grading homework and exams, designing assignments and answer keys, holding office hours, updating the course site and coordinating room bookings/media requests, and running labs/leading seminars. Teaching Assistants are expected to respect confidentiality and privacy of student information. New Teaching Assistants should participate in training at the beginning of the academic year. Interested students should contact the Assistant Director of Graduate Studies.

Training Grants

The Department of Epidemiology has a long tradition of excellence in research and training. Through support from the National Institutes of Health, pre- and post- doctoral fellowships are available in areas such as Cardiovascular Epidemiology, Cancer Epidemiology, Environmental and Occupational Epidemiology, Reproductive Epidemiology and Nutritional Epidemiology of Cancer. These fellowships are only available to citizens and permanent residents of the United States.

Application and Eligibility

Trainee positions open when current trainees graduate or leave the program. Candidates are reviewed selectively by the faculty and administration throughout the year. For more information on fellowships available through the Department of Epidemiology contact the Assistant Director of Graduate Studies.

Student Responsibilities and Expectations

Any doctoral student receiving a fellowship funded by the National Institutes of Health must cite the granting agency on any papers or presentations based on work done as part of the training and the principal investigator can provide the appropriate wording for the citation. Some training grants require students supported by that grant to answer the substantive questions in that area; students are responsible for meeting this requirement.

WinterSession

All full-time students are expected to participate in WinterSession activities, whether for credit or not for credit, on-campus or off-campus, in accordance with their individual needs and interests. WinterSession is optional for part-time students.

The Epidemiology Department requires that each full-time student formulate a plan (or request an exemption) for the WinterSession. All full-time students must complete the WinterSession contract, which must be approved and signed by the advisor. The original signed copy of the form must be submitted by December 1 to the Assistant Director of Graduate Studies. Questions and concerns are presented to the department chair for adjudication.

Acceptable activities might include courses, tutorials/independent study projects (with faculty members who are willing to take on this role), travel tutorials, field placements, practica, community service projects, courses organized and taught by students, and skill-building workshops sponsored by administrative departments of the school. Approved activities need not be located on campus.



Section Two**42.5 Credit Master of Science Program (Summer)****Introduction**

The Summer only, 42.5 credit SM is designed primarily for clinicians and other health care professionals who wish to develop the quantitative and analytic skills needed for clinical research. The sequence of courses taken by a student to satisfy this degree's requirement depends on whether the student begins training with the [Summer Program in Clinical Effectiveness](#) or with the [Summer Session for Public Health Studies](#).

Epidemiology 42.5-credit degree Competencies

At the end of the program, the student will be able to:

- Demonstrate basic skills in core public health sciences of epidemiology and biostatistics.
- Develop comprehensive knowledge of the role of epidemiology as a basic science for public health and clinical medicine to provide a quantitative approach to addressing public health and clinical problems.
- Interpret descriptive epidemiologic results in order to develop hypotheses of possible risk factors for a disease.
- Critically evaluate public health and medical literature through knowledge gained of the basic principles and methods of epidemiology, including disease (outcome) measures, measures of association, study design options, bias, confounding, and effect measure modification.
- Develop a foundation for designing valid and efficient protocols to address public health and clinical problems.

Requirements for the Master of Science One Year Summer Only Program

Master of Science Program in Clinical Effectiveness	Master of Science Session in Public Health Studies
EPI 208	EPI 500
BIO 206	EPI 202
BIO 207 or BIO 208 or BIO 209	BIO 202
EPI 236	BIO 203
EPI 202 or BIO 214	EPI 236
Or EPI 295	
BIO 224 or BIO 501	BIO 214 or EPI 295
EPI 315 (5-12.5 cr)	BIO 224 or BIO 501
Electives (10-17.5 cr)	EPI 315 (5-12.5 cr)
Total 42.5 credits	Electives (10-17.5 cr)
	Total 42.5 credits

Electives

Elective courses can be chosen from any course offered in the Summer Session or the Winter-Session at HSPH. Students in the Summer-Only, 42.5 credit Master of Science Program are not allowed to take courses at HSPH during the Fall or Spring semesters.

Supervised Research—EPI 315

All students in the Master of Science Summer Program are required to complete a supervised research project (Master's Thesis) prior to graduation. A potential proposal for a supervised research project is required with the application to HSPH. The application should also include a letter from local mentor indicating that the mentor has read the proposal and agrees to supervise the student on the project. In addition, a Harvard faculty member (ideally from the Department of Epidemiology) is identified by the end of the second summer of course work to be the supervisor of the project. The Harvard faculty member determines when the project is completed (typically when there is a manuscript suitable for publication).

Students should register for EPI 315 in the Summer session if the project is to be completed in time for a November graduation date. Registration in EPI 315 during Winter Session is required for a March graduation date, or Spring Semester for a May graduation date.



Sample Schedules for Students Entering the Master of Science Degree

Master of Science Entry from the Clinical Effectiveness Program		
Year One		
EPI 208	Introduction to Clinical Epi (5)	Summer I, II
BIO 206	Introductory Statistics for Medical Research (2.5)	Summer I
BIO 207 or BIO 208 or BIO 209	Statistics for Medical Research II or Statistics for Medical Research Advanced or Statistics for Medical Research, Translational (2.5)	Summer II
Electives	(5)	Summer I, II
Year Two		
EPI 236	Analytical Aspects in Clinical Epidemiology (5)	Summer I
EPI 202 or BIO 214 or BIO 295	Elements of Epidemiologic Research (2.5) Principles of Clinical Trials or Pharmacoepidemiology: an Introduction (2.5)	Summer II
BIO 224 or BIO 501	Survival Methods in Clinical Research or Linear and Longitudinal Regression (2.5)	Summer II
Electives	(5)	Summer I, II
Program Total		42.5 cr

Master of Science Entry from the Public Health Studies Program		
Year One		
EPI 500	Fundamentals of Epidemiology (2.5)	Summer I
BIO 202	Principles of Biostatistics I (2.5)	Summer I
EPI 202	Elements of Epidemiologic Research (2.5)	Summer II
BIO 203	Principles of Biostatistics II (2.5)	Summer II
Year Two		
EPI 236	Analytical Aspects in Clinical Epidemiology (5)	Summer I
BIO 214 or EPI 295	Principles of Clinical Trials or Pharmacoepidemiology: an Introduction (2.5)	Summer II
BIO 224 or BIO 501	Survival Methods in Clinical Research or Linear and Longitudinal Regression (2.5)	Summer II
Electives	(5)	Summer I, II
Year Three		
Electives	(5)	Summer I,II
Program Total		42.5 cr
<i>*The second year of course work can be done part-time over 2 consecutive summers.</i>		

More information about the Summer Program Degree Plan can be found [here](#).

Section Three *42.5 Credit Master of Science Program (Academic Year)*

Introduction

The Academic Year, 42.5 credit SM provides students with basic skills in epidemiologic and quantitative methods in computing, in preparation for research or academic careers. This degree program is open to applicants with a medical degree or master's-level background in biology.

Course Completion

When pursuing the Academic Year, 42.5 credit Master of Science degree, students typically begin in the Fall semester, beginning in the summer session is also possible though not recommended. At least one course must be taken in the Fall and Spring semesters. Students are not required to write a thesis.

Epidemiology 42.5 credit degree Competencies

At the end of the program, the student will be able to:

- Demonstrate basic skills in core public health sciences of epidemiology and biostatistics.
- Develop comprehensive knowledge of the role of epidemiology as a basic science for public health and clinical medicine to provide a quantitative approach to addressing public health and clinical problems.
- Interpret descriptive epidemiologic results in order to develop hypotheses of possible risk factors for a disease.
- Critically evaluate public health and medical literature through knowledge gained of the basic principles and methods of epidemiology, including disease (outcome) measures, measures of association, study design options, bias, confounding, and effect measure modification.
- Develop a foundation for designing valid and efficient protocols to address public health and clinical problems.

Academic Year, 42.5 Credit Master of Science Requirements

EPI 201 *	Introduction to Epidemiology (2.5)
EPI 202	Elements of Epidemiologic Research (2.5)
EPI 204	Analysis of Case-Control and Cohort Studies (2.5)
BIO 201	Introduction to Statistical Methods (5)
BIO 210 or 213	Analysis of Rates and Proportions (5) or Applied Regression for Clinical Research (5)

Strongly Recommended Courses

EPI 203	Study Design in Epidemiologic Research (2.5)
---------	--

Credit Requirements

42.5	Total Credits Earned
30/42.5	Ordinal Credits
10	Ordinal Credits in Epidemiology
10	Ordinal Credits in Biostatistics

* Students beginning the program in the Summer can replace EPI 201 with either EPI 208 or EPI 500. In this case it is advisable to read the course notes and text for EPI 201 prior to taking EPI 202.

Academic Year, 42.5 Credit Master of Science Suggested Schedule		
Fall Semester		
EPI 201	Introduction to Epidemiology	Fall I
EPI 202	Elements of Epidemiologic Research	Fall II
BIO 201	Introduction to Statistical Methods	Fall
Electives	10 Credits in Area of Interest	
Spring Semester		
EPI 204	Analysis of Case-Control and Cohort Studies	Spring II
EPI 203	Study Design in Epidemiologic Research	Spring II
BIO 210	Analysis of Rates and Proportion	Spring
Electives	10 Credits in Area of Interest	Spring

Section Four

80 Credit Master of Science Program

Introduction

The 80 credit master's degree program is typically completed over two academic years and provides students with basic skills in epidemiologic and quantitative methods as well as computing, in preparation for research and academic careers. This degree program is primarily intended for students who expect to continue toward a doctoral degree. It is designed for individuals who hold a bachelor's degree and have a strong background in biology and mathematics. In addition to epidemiology and statistics courses, students study the basic medical sciences and the biological aspects of public health problems.

Epidemiology 80-credit SM degree Competencies

At the end of the program, the student will be able to:

- Demonstrate basic skills in core public health sciences of epidemiology and biostatistics as listed in the [MPH Curriculum Guide](#).
- Develop comprehensive knowledge of the role of epidemiology as a basic science for public health and clinical medicine to provide a quantitative approach to addressing public health and clinical problems.
- Interpret descriptive epidemiologic results in order to develop hypotheses of possible risk factors for a disease.
- Critically evaluate public health and medical literature through knowledge gained of the basic principles and methods of epidemiology, including disease (outcome) measures, measures of association, study design options, bias, confounding, and effect measure modification.
- Develop and apply quantitative skills to analyze and synthesize epidemiologic data related to public health issues.
- Apply knowledge of the physiology and pathophysiology of human disease to epidemiologic studies.
- Develop the skills to interpret the methods for disease screening.
- Develop substantive knowledge of the epidemiology of infectious and chronic disease and apply this knowledge to public health issues.
- Design an epidemiologic investigation (Master's Thesis) resulting in a publishable manuscript or grant application.

Master's Thesis Requirements and Guidelines:

In addition to the course requirements, candidates in the 80 credit SM program must complete a master's thesis. Master's candidates who apply and matriculate in the EPI doctoral program can utilize the master's thesis as one of their doctoral thesis papers. This requirement can be fulfilled in one of two ways:

1. Presentation of a published or publishable manuscript on any topic in epidemiology.
2. Presentation of a feasible study protocol in the general form of an R01 grant application, or playing a major role in preparing such a grant for submission.

The text of the manuscript or protocol should be about 2500 - 3500 words in length and must not exceed 6000 words. The thesis must be the result of work done after matriculation in the department, but may also draw on earlier efforts. The paper may have several authors, but the student must legitimately be the first author. If a research protocol is submitted for the thesis requirement, the student need not be principal investigator, but must have a major role in preparing at least one section of the proposal. Students must present an acceptable plan for preparing the thesis to the academic advisor no later than the end of the fifth academic quarter of study. The Chair of the Department must also accept the plan. The thesis must be submitted to the advisor, or another Harvard faculty member whom the student and the advisor agree to designate as reader, by the beginning of the quarter preceding graduation. It must then be approved by the advisor or reader and submitted to the Assistant Director of Graduate Studies, along with the Thesis Submission Form, by May 11, 2012.

A good starting point for the thesis may be a term paper. Careful revision according to the original instructor's comments, and expansion in consultation with that instructor or the advisor can lead to the finished product. There are no standard format requirements for the thesis.

Students may wish to dedicate a tutorial (EPI300) to this effort, but are not required to do so. For part-time SM candidates, the timeline applies to the 3rd and 4th years of study. Failure to submit the thesis by the deadline will result in non-compliance with a departmental requirement and will lead to ineligibility for graduation. In the past, students have had to postpone graduation by failing to meet the deadline.

80 Credit Master of Science Thesis Timeline

Year One

Fall Begin to consider the topic for master's thesis and consult with advisor.

Spring Choose designated reader.

Year Two

Fall Master's thesis topic should be formalized and submitted to the advisor for approval and then to the Department of Epidemiology Chair for approval. The submission to the Chair need only be one page outlining the paper's hypothesis in addition to describing the research methods and data to be employed. After receiving approval from your advisor email your proposal to the Assistant Director of Graduate Studies and cc your advisor. It must be submitted before the end of the Fall 1 term. The Chair will review all submissions and send an e-mail of approval or disapproval of the topic with revision suggestions if not approved.

Spring Master's thesis must be submitted to the reader by the beginning of the Spring 2 term. If the advisor is not the reader, the reader's comments on the thesis must be submitted to the advisor. The advisor or reader must submit the thesis and approval form to the Assistant Director of Graduate Studies by May 11, 2012.

80 Credit Master of Science Requirements

EPI 201	Introduction to Epidemiology (2.5)
EPI 202	Elements of Epidemiologic Research (2.5)
EPI 204	Analysis of Case-Control and Cohort Studies (2.5)
EPI 289	Causal Inference (2.5)
EPI 507	Genetic Epidemiology (2.5)
BIO 201	Introduction to Statistical Methods (5)
BIO 210 or BIO 213	Analysis of Rates and Proportion (5) or Applied Regression for Clinical Research (5)

Strongly Recommended Courses

EPI 203	Study Design in Epidemiologic Research (2.5)
---------	--

Recommended Non-Epidemiology Courses

BIO 210	Analysis of Rates and Proportion (5)
BIO 211	Regression and Analysis of Variance in Experimental Research (5)
BIO 213	Applied Regression for Clinical Research (5)
BIO 222	Basics of Statistical Inference (5)
BIO 223	Applied Survival Analysis & Discrete Data (5)
BIO 226	Applied Longitudinal Analysis (5)
EH 205	Human Physiology (5)
EH 504	Principles of Toxicology (2.5)
EH 208	Pathology of Human Disease (2.5)

Credit Requirements

80	Total Credits Earned
60/80	Ordinal Credits
30	Epidemiology Credits
25/30	Ordinal Epidemiology Credits
15	Ordinal Biostatistics Credits

80 Credit Master of Science Suggested Schedule		
Year One Fall Semester		
EPI 201	Introduction to Epidemiology (2.5)	Fall I
EPI 202	Elements of Epidemiologic Research (2.5)	Fall II
BIO 201	Introduction to Statistical Research (5)	Fall
Electives	10 Credits in Area of Interest	
Spring Semester		
EPI 204	Analysis of Case-Control and Cohort Studies (2.5)	Spring I
EPI 289	Causal Inference (2.5)	Spring I
<i>EPI 203</i>	<i>Study Design in Epidemiologic Research (2.5)</i>	<i>Spring II</i>
BIO 210	Analysis of Rates and Proportion (5)	Spring
Electives	7.5 credits in Area of Interest	Spring
THESIS	Begin work on Topic/Research	Spring
Year Two Fall Semester		
EPI 507	Genetic Epidemiology (2.5)	Fall II
Electives	17.5 credits in Area of Interest and Biostatistics	Fall
THESIS	Work on thesis	Fall
Spring Semester		
Electives	20 credits in Area of Interest and Biostatistics	Spring
THESIS	Work on Thesis	Spring I
THESIS	Submit to Advisor and Dept Academic Advisor at the beginning of Spring I	Spring I

**Courses in italic are strongly recommended, but not required*

Sample Master of Science Schedule can be found [here](#).

Section Five

Doctor of Science Program (SD, DPH)

Introduction

The doctoral programs are designed for students who plan careers primarily in epidemiologic research and teaching and for those who aspire to leadership roles in the health professions. Applicants to the SD program should hold at least a bachelor's degree and have a strong background in biology and mathematics. For these individuals, the degree generally takes four to five years to complete. The DPH degree is available to students holding a prior advanced degree in the field of public health and an MPH degree. The curricular requirements for the DPH degree are identical to that of the SD degree.

Unless one is entering the doctoral program having earned a master's degree at HSPH within the previous 5 years, most of the first two years are devoted to coursework. In addition, doctoral candidates must pass the departmental written examination and the school-wide oral qualifying examination; adhere to the doctoral timetable for maintaining satisfactory progress; complete, defend, and submit a thesis; and gain experience in teaching and research.

Epidemiology doctoral program Competencies

At the end of the program, the student will be able to:

- Demonstrate basic skills in core public health sciences of epidemiology and biostatistics (listed in the [MPH Curriculum Guide](#)).
- Develop comprehensive knowledge of the role of epidemiology as a basic science for public health and clinical medicine to provide a quantitative approach to addressing public health and clinical problems.
- Interpret descriptive epidemiologic results in order to develop hypotheses of possible risk factors for a disease.
- Critically evaluate public health and medical literature through knowledge gained of the basic principles and methods of epidemiology, including disease (outcome) measures, measures of association, study design options, bias, confounding, and effect measure modification.
- Develop a foundation for designing valid and efficient protocols to address public health and clinical problems.
- Apply quantitative skills to analyze and synthesize epidemiologic data related to public health issues.
- Apply knowledge of the physiology and pathophysiology of human disease to epidemiologic studies.
- Apply knowledge of classical and modern epidemiologic methods to study design.
- Develop the skills to interpret the methods for disease screening.
- Develop substantive knowledge of the epidemiology of infectious and chronic disease and apply this knowledge to public health issues.
- Design and present an epidemiologic investigation (Dissertation) resulting in a publishable manuscript or grant application.

Guidelines for Completion of the Doctoral Degree

The requirements for the doctoral degree, and the necessary steps towards meeting those requirements, are written in detail in the [HSPH student handbook](#). These supplementary guidelines are specific to the Department of Epidemiology, and add to, but do not replace, the rules in the Student Handbook and other listed epidemiology department requirements. The purpose of these guidelines is to standardize expectations across the doctoral students' experience while simultaneously maintaining a vital flexibility in the program. If a student or faculty member believes these guidelines are not met, the department chair should be consulted.

Doctor of Science Thesis Requirements

The doctoral thesis in the Department of Epidemiology at Harvard School of Public Health should reflect the ability of the student to perform independent, high quality, original epidemiologic research.

Doctoral Thesis Content and Completion: Normally the thesis consists of at least three high quality original papers for publication (deviations subject to approval of the department chair). These should revolve around some common theme, but need not be closely linked. The goal is to establish expertise in the area under study. One of the thesis papers may be a qualitative or quantitative review paper if this review results in a novel and compelling hypothesis (subject to approval of the thesis committee).

All papers included in the thesis must be in a form ready to submit for publication. "Ready to submit" means that the content and analysis have been approved by the thesis committee and that the student and the advisor believe the manuscript is ready to be submitted to a journal in its present form, even though it may be awaiting comments from co-authors or other sign-offs. At least one of the thesis papers must be submitted by the time of the defense. All thesis committee members must approve all thesis papers before scheduling the defense. To make most efficient use of faculty and student time, no paper should be circulated to the entire committee until a committee member (usually the advisor) has reviewed the draft, and comments have been incorporated. It is expected that committee members review thesis papers in a timely fashion (usually within 2 weeks).

Authorship on Thesis Papers: Authorship of the papers to be included in the thesis should be discussed by the faculty advisor and student prior to the start of the thesis. If the student conducts the data analysis and writes the major parts of the paper, the student should be the first author of the paper. Generally, the student will be first author on all three papers included in the doctoral thesis.

Prior Work as Part of the Thesis: Work done prior to the written examination or even before formal entry to the program can be used as part of the thesis (subject to the approval of the thesis committee), as long as that work was performed under the supervision of HSPH epidemiology faculty. Thus, for example, papers written at HSPH as part of the master's degree program could be included in the doctoral thesis if appropriate.

Data Collection: All doctoral students must have adequate experience in data collection. The data collection requirement is part of the research or tutorial credits. This experience can be collecting the data for their own thesis or for another project, as agreed with the advisor. The goal is to provide a meaningful, practical learning experience (outside of class) but not to impose an undue burden. Examples of data collection projects that fulfill the requirement are:

- Collecting data for a new substudy or a validation study
- Supervising data collection in an ongoing study
- Developing/documenting a new disease outcome in a cohort study or new exposure in a case-control study
- Conducting the laboratory component of a project
- Designing and distributing a questionnaire

The wintersession might be utilized to engage in data collection. Students with previous primary data collection experience might be able to apply this experience towards fulfillment of the requirement (subject to approval of advisor or department chair).

Additional Recommendations

Paper Writing: Students are encouraged to write additional papers even if they are not part of their doctoral thesis. This will strengthen their experience and record of productivity.

All of the usual authorship guidelines hold for students. Thus, if students are paid for work on a project or for data analysis, the resulting paper can still be part of the thesis. One potential difficulty is that students supported on an NIH training grant may work part-time on another NIH-funded project only if that other project is not formally part of their training. This would restrict use of some of that work for the doctoral thesis. Individual consultation with the advisor and training grant PI is clearly important in that situation.

Paying students for analyses does not justify their exclusion as an author if they are otherwise qualified, but authorship is not guaranteed. Payment for work and qualifying for authorship are independent.

Grant Writing: Students are strongly encouraged to gain experience in helping to write one or more grant proposals. Courses and seminars may be available for guidance and are posted on the website.

Presentation Skills: Students are encouraged to present their findings at seminars, and national and international meetings to develop their presentation skills. Courses and seminars may be available for guidance and are posted on the website.

Ordinal Credit Requirements

Each doctoral candidate is required to have a minimum of 40 ordinal credits. Candidates with one major must have 20 ordinal credits in the major field of Epidemiology, and 10 ordinal credits in each of 2 minor fields, one of which must be biostatistics.

Candidates with dual majors must have 20 ordinal credits in each major field and 10 credits in a minor field. For more information refer to your *HSPH student handbook*.

In addition to the ordinal credit requirements, each candidate is also required to meet all of the departmental course requirements.

Prospective/Final Program

All doctoral candidates are required to submit both a prospective and final program to the registrar's office, with the exception of students transferring directly in from the SM in Epidemiology at HSPH who are allowed to submit a combined prospective/final program. When filling out the prospective program please remember that the introductory Epidemiology courses (EPI200, EPI201, EPI208, EPI500, EPI 505, ID 538) cannot be used towards fulfilling the 20 credits required in your major. Likewise, the introductory biostatistics course (BIO200 or BIO201) cannot be used towards the 10 credits required for the biostatistics minor. See the HSPH Student Handbook for further details and deadlines.

A list of Epidemiology students whose submission of the final program, typically submitted by the end of the third semester, will be delayed, due to the scheduling of the written exam, will be forwarded to the Registrar's Office by the Epidemiology Department. This will serve as permission to delay submission of the final program until the end of Fall 1 in the 5th semester, in lieu of the General Petition Form.



PROSPECTIVE / FINAL PROGRAMName: Joann AlexanderHarvard ID: 01234567Major Field 1: Epidemiology

Major Field 2: _____

Minor Field 1: AgingMinor Field 2: Biostatistics

Please Check One:

Prospective Program ☐Final Program ☒Prospective/Final Program ☐Advisor: Dr Francine Grodstein**Major Field Title:** Epidemiology

Course Code	Course Title	Credit Units	Grade	Semester/Year
EPI 202	Elements of Epidemiologic Research	2.5	A	Fall 2002
EPI 203	Design of Cohort and Case Control	2.5	A	Spring 2003
EPI 204	Analysis of Case Control and Cohort	2.5	A	Spring 2003
EPI 207	Advanced Epidemiologic Methods	2.5	A-	Fall 2003
EPI 247	Epi Methods Development	2.5	A-	Fall 2003
EPI 294	Principles of Screening	2.5	A	Spring 2004
ID 214	Nutritional Epi	2.5	A-	Spring 2004
EPI 205	Practice of Epidemiology	2.5	A	Fall 2004

Total Credits: 20**Minor Field 1 or Major Field 2:** Aging

Course Code	Course Title	Credit Units	Grade	Semester/Year
EPI 254	Epidemiology of Aging	1.25	B+	Spring 2003
EPI 284	Epidemiology of Neurologic Diseases	2.5	A	Spring 2003
EPI 223	Cardiovascular Epidemiology	2.5	A-	Fall 2003
EPI 213	Cancer Epidemiology	2.5	A	Spring 2003
EPI 250	Molecular Epi	1.25	A-	Fall 2003

Total Credits: 10**Minor Field 2:** Biostatistics


Course Code	Course Title	Credit Units	Grade	Semester/Year
BIO 210	Analysis of Rates & Proportions	5	B+	Spring 2003
BIO 213	Applied Regression for Clinical Research	5	A	Fall 2003

Total Credits: 10

Harvard ID: 01234567

Required Courses: Please indicate below the courses you have taken to fulfill the Biostatistics and Epidemiology requirements.

EPIDEMIOLOGY: Check one

EPI200a, Semester and Year EPI201a, Semester and Year ☒ Fall 2002

BIOSTATISTICS: List two intermediate level courses:

Courses Code and Title: BIO 213 Applie Regression

Semester and Year: Fall 2003

Courses Code and Title: BIO 223 Applied Survival

Semester and Year: Spring 2004

Complete this section only if this is your FINAL PROGRAM:

Nominations for Oral Qualifying Examination Committee:

Research Advisor: Walter Willett

Nominees (Please Print):

Nominee Will Examine in:

HSPH Faculty Member 1

Epidemiology

HSPH Faculty Member 2

Epidemiology

HSPH Faculty Member 3

Aging

HSPH Faculty Member 4

Biostatistics

Statement of Goals and Objectives (attach an additional sheet if necessary). Also note any changes from your approved Prospective Program:

Comments

Faculty Advisor's Comments (include comments on Qualifying Committee in relation to the proposed research):

Comments

Required Signatures of Approval (To be completed for the Prospective and Final Programs):

Adviser Approval

Date _____

Department Chair Approval

Date _____

Department Chair Approval (Dual Degree Candidates Only)

Date _____

CAD Action:

Your Prospective Program *has been approved* by the Doctoral Subcommittee of the CAD.

Your Prospective Program *has not been approved* by the Doctoral Subcommittee of the CAD.

Your Final Program *has been approved* by the Doctoral Subcommittee of the CAD.

_____ has been appointed Chair of your Examining Committee.

Your Final Program *has not been approved* by the Doctoral Subcommittee of the CAD.

Comments: _____

Doctoral Subcommittee of the CAD

Date _____

Written Examination

The written examination is divided into two portions. The first session covers methods, including aspects of study design, analysis, and causal inference. As a guideline, a student should not attempt this exam until she or he has completed all of the following courses:

Courses to complete before attempting the Written Exam

BIO 200 or BIO 201	EPI 207
BIO 210 or BIO 213	EPI 247
EPI 200 or EPI 201	EPI 289
EPI 202	EPI 294
EPI 204	

The second session covers substantive knowledge of epidemiology. Candidates are expected to be familiar with at least three disease-defined or exposure-defined areas, at levels of coverage given in the department's related courses. Candidates are encouraged to keep current with important recent developments in the topics they plan to select by regularly reading the major journals. Areas included in recent examinations are based on the department's [twelve areas of interest](#).

Procedure of the Examination

The examination is offered once a year, in May or June. Candidates are asked to notify the Assistant Director of Graduate Studies of their intention to sit for the exam prior to spring break. Additionally, participants are asked to submit a list of three substantive areas in which they wish to be examined. Regardless of the choices made on this list, however, students can choose to answer any five questions in the substantive portion of the examination. Some training grants may require students supported by that grant to answer the substantive questions in that area; students are responsible for meeting this requirement.

The examination is closed book. Calculators are provided for use during the exam. Prior to the exam, copies of previous years' exams will be available for review. Keep in mind that each year's exam is different and that previous exams should only be utilized to assist you in taking this type of an exam.

The written examination is graded blindly. Once the exams are graded, the decision of pass or fail of the written exam represents the consensus of the faculty, and may take into account the student's overall academic performance. The department endeavors to notify students in writing of the results two weeks after the exam.

Any student who fails the written exam is allowed, subject to faculty approval, a second and final attempt during the next examination period. The methods and substantive portions are graded separately; students who pass one portion but not the other on the first attempt are only required to retake the portion that they failed. Any student whose performance on the written exam does not show a clear proficiency in the key quantitative and epidemiologic concepts will be closely evaluated during the oral exam.

Oral Exam

Prior to taking the Oral Exam, students must complete all course work listed on their final program, but the list need not include all the required courses. It will be appropriate for many doctoral students to avoid listing EPI205 on their final program.

When submitting the final program, students will also provide the nominees for the oral examination committee. Typically, members of the examination committee must hold an HSPH faculty appointment in disciplines representing the major field(s) as well as the minor field(s).

The student's advisor may not serve on the oral examination committee. The advisor may be present during the examination, but may not speak during the examination, and has no vote. At the discretion of the examining committee, the advisor may be invited to participate in the discussion after the examination. Students must complete the oral examination no later than 9 months after passing the written examination. Exceptions will be considered only upon written petition to the department chair.

Oral Exam Thesis Proposal

Before the oral examination, the student distributes a thesis proposal to the committee. The format will vary depending on the student's level of progress at the time. Ordinarily, students should present plans for their principal thesis papers. It is not necessary to present preliminary data. The written thesis proposal should be a draft, or drafts of papers, or a detailed outline for the plans for papers, including background material that would become the introduction to one or more of the papers. The goal is not to produce a finished polished document, but rather a springboard towards advancing the thesis papers, and a starting point for the examination.

Oral Exam and Committee

The Committee on Admissions and Degrees (CAD) appoints the chair of the oral exam committee at the time of the approval of the final program. Upon notification by the Registrar's office of your committee chair, you must submit an *oral exam scheduling form* to the Assistant Director of Graduate Studies for departmental approval. The scheduling form, along with your proposal, must be submitted to the Registrar's office at least 3 weeks prior to the examination date.

Epidemiology students cannot schedule their oral exam until they have passed the departmental written exam. Students can, however, submit their final program and nominate their orals committee if they have completed all of the necessary coursework for the final program.

Research Committee

Upon successful completion of the oral examination, students must nominate the research committee. The research committee may include members of the oral examination committee, but this is not required. Typically, the academic advisor serves on the research committee as chair. The research advisor must hold a primary or secondary appointment in the Epidemiology department. However, members of the research committee may include faculty members outside HSPH.

Doctoral Thesis

The doctoral thesis represents a contribution of knowledge through original scholarly research. Specific thesis requirements and procedures are outlined in detail in the [HSPH student handbook](#). Supplemental guidelines for doctoral candidates are provided below.

The department requires that students notify the chair's office when they have scheduled their thesis defense and submit a copy of the thesis defense scheduling form to the Assistant Director of Graduate Studies to ensure proper announcement of the defense within the department.

More information about applying for dual degree status can be found [here](#).

Sample Doctor of Science/Doctor of Public Health Schedule can be found [here](#).



Doctor of Science—Requirements

EPI 201	Introduction to Epidemiology (2.5)
EPI 202	Elements of Epidemiologic Research (2.5)
EPI 204	Analysis of Case-Control and Cohort Studies (2.5)
EPI 205	Practice of Epidemiology (2.5)
EPI 207	Advanced Epidemiologic Methods (2.5)
EPI 247	Epidemiologic Methods Development (2.5)
EPI 289	Causal Inference (2.5)
EPI 507	Genetic Epidemiology
EPI 294	Screening (2.5)
BIO 201	Introduction to Statistical Methods (5)
BIO 210 or BIO 213	The Analysis of Rates and Proportions (5) or Applied Regression for Clinical Research (5)
BIO 223 or BIO 226	Applied Survival Analysis and Discrete Data Analysis (5) or Applied Longitudinal Analysis (5)
EH 205	Human Physiology (5)
EH 208	Pathophysiology of Human Disease (2.5)

Strongly Suggested Courses

EPI 203	Study Design in Epidemiologic Research (2.5)
---------	--

Recommended Non-Epidemiology Courses

BIO 210	Analysis of Rates and Proportion (5)
BIO 211	Regression and Analysis of Variance in Experimental Research (5)
BIO 213	Applied Regression for Clinical Research (5)
BIO 222	Basics of Statistical Inference (5)
BIO 223	Applied Survival Analysis & Discrete Data (5)
BIO 226	Applied Longitudinal Analysis (5)
EH 504	Principles of Toxicology (2.5)

Credit Requirements

10	Substantive Credit
40	Ordinal credit
20/40	Above EPI intro-level courses (above EPI 200, 201)
10/40	Credits above intro-level courses (above BIO 200, 201) for your first minor
10/40	Credits in 2nd minor

KEY TO SAMPLE DOCTORAL SCHEDULE ON FOLLOWING PAGE

- * Double the time allowed for Part-Time Students
- # Epidemiology Students do not have to complete the Departmental Written Exam before scheduling the Oral Exam as indicated in the HSPH Handbook.
- Progress Reports must be submitted six months after passing the Oral Exam, and twice a year after that until the dissertation defense.
- @ Application for Degree must be submitted to the registrar's office on time-[see this page for deadlines.](#)

Doctor of Science | Doctor of Public Health | Suggested Schedule (Full-Time)

Year One | Fall Semester

EPI 201	Introduction to Epidemiology (2.5)	Fall 1
EPI 202	Elements of Epidemiologic Research (2.5)	Fall 2
BIO 201	Introduction to Statistical Research (5)	Fall
EH 205	Human Physiology (5)	Fall
Electives	5 Credits	Fall

Spring Semester

EPI 289	Causal Inference (2.5)	Spring 1
EPI 204	Analysis of Case-Control and Cohort Studies (2.5)	Spring 2
<i>EPI 203</i>	<i>Study Design in Epidemiologic Research (2.5)</i>	<i>Spring 2</i>
BIO 210	Analysis of Rates and Proportion (5)	Spring
EH 208	Pathophysiology of Human Disease (5)	Spring
PROGRAM	Submit Prospective Program Form	End of 2nd Semester *

Year Two | Fall Semester

EPI 207	Advanced Epidemiologic Methods (2.5)	Fall 1
EPI 247	Epidemiologic Methods Development –Past/Present (2.5)	Fall 2
EPI 507	Genetic Epidemiology (2.5)	Fall 2
EH 205	Human Physiology (5)	Fall
Electives	10 Credits in Area of Interest	Fall

Spring Semester

BIO 226	Applied Longitudinal Analysis (5)	Spring
Electives	20 credits in your Area of Interest and Independent Study	Spring
WRITTEN EXAM	Preparation for Written Exam/Take Written Exam	Spring
THESIS	Begin work on Research	Spring

Year Three | Fall Semester

EPI 205	Practice of Epidemiology	Fall
Electives	17.5 credits of courses and Independent Study	Fall
PROGRAM	Submit Final Program Form (HSPH requires submission end of 3rd Semester but EPI students may submit this form after the Written Exam)	TBA
PROGRAM	Final Program and Chair of the Oral Exam Committee is approved	TBA

Spring Semester

Electives	20 credits (including credit for thesis)	Spring
ORAL EXAM	Submit Oral Qualifying Exam Scheduling Form 3 weeks before you wish to take the exam	TBA
DEFENSE	After the Oral Exam, nominate the research committee	TBA

Years Four and Five

EPI 350	20 credits of research and Thesis work	TBA
DISSERTATION DEFENSE	Schedule Dissertation Defense (End of 5th year for full-timers, end of 7th year for Part-Timers)	TBA

Section Five**Concentrations and Areas of Interest****Academic Concentrations**

Inter-disciplinary concentrations are non-degree programs completed with a degree program.

Infectious Disease Epi

The interdisciplinary concentration in the epidemiology of infectious disease focuses on population studies incorporating both epidemiologic and laboratory methods. This academic concentration is intended for degree-seeking students who desire careers in research and teaching in infectious disease.

More information about the Infectious Disease Epi program can be found [here](#).

Genetic and Molecular Epi

The purpose of the Academic Concentration in Molecular and Genetic Epidemiology is to address the pedagogical needs of students considering public health careers in the field of genetics. Accordingly, the goal of the concentration is to significantly prepare students to become world leaders in this arena by equipping them with the requisite expertise in the theories, topics, and skills related to public health practice and research in genetic and molecular biology.

More information about the Genetic and Molecular Epi program can be found [here](#).

Women, Gender and Health Concentration

This interdisciplinary concentration is geared toward students who desire careers in research, teaching, and programs related to women, gender, and health. Addressing issues of women, gender, and health requires the study of the health of women and girls--and men and boys--throughout the life course, with gender, gender equality, and biology understood as important and interacting determinants of well-being and disease.

More information about the Women, Gender and Health Epi program can be found [here](#).

Research Areas

Additional Research Areas in the Department of Epidemiology that focus on research.

Cardiovascular Research Area

The Program in Cardiovascular Epidemiology promotes and advances research collaboration and discussion among investigators with expertise in cardiovascular disease research. Program members' interests include nutrition, pharmacoepidemiology, aging, women's health, genetics, basic science, biostatistics, policy and risk analysis, social and environmental epidemiology, international health, pediatrics, and methods.

More information about the Cardiovascular Research program can be found [here](#).

Causal Inference Research Area

The Causal Inference Program was established to foster education, research, and collaboration in the development and application of statistical methods for the causal analysis of complex longitudinal data in epidemiology and its methodologically allied sciences, such as biostatistics, health services research, sociology, education, health and social behavior, economics, computer science, artificial intelligence, and philosophy.

More information on the Causal Inference Research Program can be found [here](#).

Areas of Interest

Students in any of the Epidemiology programs (Master of Science, Doctor of Science and Doctor of Public Health) select from twelve areas of interest. For more information regarding our Areas of Interest, including recommended courses and suggested schedules, please visit our website at: <http://www.hsph.harvard.edu/departments/epidemiology/areas-of-interest/>



CORE EPI COURSES

EPI200 Principles of Epidemiology	Fall 1
EPI201 Introduction to Epidemiology	Fall 1
EPI202 Elements of Epidemiologic Research	Fall 2, Sum 2
EPI203 Study Design in Epidemiologic Research	Spq 2
EPI204 Analysis of Case-Control and Cohort Studies	Spq 2
EPI208 Introduction to Clinical Epidemiology	Sum
EPI500 Fundamentals of Epidemiology	Fall 1, Sum 1
EPI 505 Epidemiologic Methods for Global Health	Sum 1

METHODOLOGY COURSES

EPI207 Advanced Epidemiologic Methods	Fall 1
EPI215 Advanced Topics in the Analysis of Case-Control and Cohort Studies	Fall 1
EPI233 Research Synthesis & Meta-Analysis	Spq
EPI236 Analytical Aspects of Clinical Epidemiology	Sum 1
EPI241 Measuring Health Status	Fall 2
EPI244 Genetic Epidemiologic Methods for Psychiatric and Other Disorders	Spq 2
EPI247 Epidemiologic Methods Development - Past and Present	Fall 2
EPI271 Propensity Score Analysis: Theoretical & Practical Considerations	WS
EPI288 Data Mining and Prediction	WS
EPI289 Causal Inference	Spq 2
EPI293 Analysis of Genetic Association Studies Using Unrelated Subjects	WS
EPI294 Screening	Spq 2
EPI 515 Measurement Error and Misclassification in Epidemiology	Spq 1

INTERDEPARTMENTAL COURSES

ID206 Scientific Writing in Nutrition and Epidemiology	Spq
ID214 Nutritional Epidemiology*	Spq
ID215 Environmental and Occupational Epidemiology*	Spq/Sum 1
ID221 Nutritional Epidemiology II*	Fall
ID236 Social Epidemiology*	Spq 1
ID269 Respiratory Epidemiology*	Fall 2
ID271 Advanced Regression for Environmental Epidemiology	Spq 1
ID278 Mental Health of Children and Adolescents	Spq 1
ID283 EPI Investigation of Social and Environmental Risks for Psych. Disorders*	Spq 2
ID510 Nutritional Epidemiology of Cancer*	Fall 2
ID520 Advanced Topics in Nutrition and Cancer	Fall 2
ID521 Developmental Epidemiology of Adult Psychiatric Disorders*	Fall 1
ID537 Obesity Epidemiology*	Fall
ID538 Foundations of Public Health	Fall
ID540 Life Course Epidemiology	Spq 1
ID 542 Methods for Mediation and Interaction*	Spq 1
WGH200 Women, Gender and Health	Spq 1
WGH207 Advanced Topics in Women, Gender and Health	Spq 2
WGH211 Women, Gender and Health: Introductory Perspectives	Fall 1
WGH220 Sexuality and Public Health	Fall 1
WGH304 Issues in Mental Health: Independent Study	TBA

SUBSTANTIVE COURSES

EPI213 Epidemiology of Cancer	Spg 1
EPI216 Epidemiology in Public Health Practice	Spg 1
EPI219 Assessment concepts and Methods in Psychiatric Epidemiology	Fall 2
EPI220 Psychiatric Diagnosis -Clinic and Community Populations	Spg 2
EPI221 Pharmacoepidemiology	Fall 2
EPI222 Genetic Epidemiology of Diabetes and its Complications	Spg 2
EPI223 Cardiovascular Epidemiology	Fall 2
EPI224 Cancer Prevention	Spg 2
EPI228 Global Oral Epidemiology	Spg 2
EPI229 Ophthalmic Epidemiology	Fall 2
EPI235 Health Services Epidemiology	Spg 2
EPI240 Use of Biomarkers in Epidemiological Research	Spg 2
EPI245 Cardiovascular Epidemiology II	Spg
EPI246 Applied Biomarkers in Cancer Epidemiology	Fall 2
EPI249 Molecular Biology for Epidemiologists	Fall 1
EPI252 Infections and Cancer	Spg 2
EPI254 Epidemiology of Aging	Spg 2
EPI255 EPI of HIV Part I: Etiology, Natural History and Transmission	Spg 1
EPI256 EPI of HIV, Part II: Therapeutic & Prevention Intervention	Spg 2
EPI260 Mathematical Modeling of Infectious Disease	Spg 2
EPI269 Epidemiological Research in Obstetrics and Gynecology	Fall 2
EPI284 Epidemiology of Neurologic Diseases	Spg 1
EPI286 Advanced Pharmacoepidemiology	Spg 2
EPI295 Pharmacoepidemiology: Introduction	Sum 2
EPI501 Dynamics of Infectious Diseases	Fall 2
EPI502 BIO & EPI of Antibiotic Resistance	WS
EPI 504 Epi of Disorders And Diseases Of Childhood and Young Adulthood	Spg 1
EPI 506 Translational Research Methods	WS
EPI 507 Genetic Epidemiology	Fall 2
EPI 508 Pathology for Epidemiologists	WS
EPI 509 Evidence Based Epidemiology	WS
EPI 510 Global Cancer Epidemiology	WS
EPI 511 Advanced Population and Med Genetics	Spg 1
EPI 513 Issues in Reporting Clinical Trials	WS
EPI 516 Global Epi Study Design and Conditions	Spg 1
EPI 517 Issues in Frailty	Spg 1
EPI 518 Infections and Cancer	Fall 2

SEMINAR COURSES

EPI205 Practice of Epidemiology	Fall
EPI242 Seminar in Applied Research in Clinical Epidemiology	Fall/Spg
EPI257 Advanced Seminar in Cancer Epidemiology	Fall 2
EPI270 Advanced Reproductive Epidemiology	Spg 2
EPI296 Bridging Psychiatric Morbidity and Reproductive Outcomes	WS
EPI 298 Case-Based Seminars on Drug Safety	Spg 1
ID320 Summer MPH Practicum for CLE	Sum 2
ID520 Advanced Topics in Nutrition and Cancer	Fall 2

Interdepartmental courses with an asterisk can be used towards meeting the substantive credit requirements.

Courses in green are only open to students participating in the summer program. Course listings are subject to change.

Alternative means the courses are offered every other year.

The most current course schedules by semester/department can be found [here](#).

Student Resources and Information

Epidemiology Department Student Advisory Committee

This student committee was formed to serve as a liaison with the Chair of the Department and the Assistant Director of Graduate Studies. The goals of the committee are to provide feedback and to discuss relevant issues on behalf of the EPI student body. The committee consists of representatives from each degree program. Members of the committee, with the exception of SM1 students, will serve for a 2-year period.

Please feel free to bring any concerns that you would like addressed by the Student Advisory Committee to the Chair of the Department, the Assistant Director of Graduate Studies or any of the student representatives. Students interested in serving on the committee should submit their names to any current SAC member or the Assistant Director of Graduate Studies.

The Green Team

The Department of Epidemiology is interested in energy conservation and ecological preservation. A small committee is coordinated each year and participates in events to raise money, as well as awareness. The general expectations would be coming to a monthly meeting (when possible) and volunteering occasionally for events (helping people compost, etc.) Students interested in joining the committee can contact [David Havelick](#), Executive Assistant to the Chair.

The Epidemiology Buddy System

Each year new students to the two-year masters and doctoral programs are paired with a current student who takes time to answer questions and assist with concerns related to the new student's academic career. Contact the Assistant Director of Graduate Studies for more information. .

HSPH Student Coordinating Committee

The Student Coordinating Committee (SCC) is the Harvard School of Public Health's student government. Currently, the SCC has 21 officers. SCC works closely with faculty and administration on important school-wide issues. It also organizes and sponsors social, educational,

More information on the school's student government can be found [here](#).

For the most recent edition the Department Newsletter Epitome, click [here](#)

Resources

Every effort is made to provide Epidemiology students with physical and academic resources to support academic goals.

The [Epitome](#) Newsletter

The highly-regarded Epidemiology Department Newsletter is a resource for applicants, students, alumni and faculty to stay up-to-date on current activities, awards, and epidemiology-related news. All are invited to submit news of interest to [Rebecca Cantor](#), Newsletter Editor.

Copying/Fax/Scanning

Copy, Fax and Scanning capability is provided on a very limited basis in the department. Large print jobs should be sent to the print shop so the machine is available during office hours. Students can check with the Office Manager for usage.

Copyright and Reproduction of Articles/Publications for research conducted on campus

Students are advised to comply with all school policies regarding copying of articles and journal publications whether they are published on or off-campus.

Mailboxes and Communication

Epidemiology doctoral and 80 credit masters students who are here for two years or more, are allocated mailboxes in the department, in addition to the mailboxes allocated by HSPH on the ground floor in Kresge.

HSPH e-mail addresses will be used for communication from the Epidemiology department as well as regular mail. Students are responsible for checking all allocated mailboxes and e-mail for information.

Desk Space for Doctoral Students

Desk Space, in room 911, is currently assigned to doctoral and post-doctoral students on a first come-first served basis. Doctoral students will only be considered after passing the departmental written exam. Desks usually become available when students graduate or find alternative arrangements.

Graduate School Funding

The Epidemiology Department can assist new and current students with inquiries about departmental and training grant funding opportunities. Inquiries about loans, scholarships and awards can be directed to the Office of Financial Services.

Room Reservations

Epidemiology students are welcome to use the library (Kresge, Room 907) and the faculty suite (Kresge, Room 902) for group meetings or study sessions. Both must be reserved in advance by calling 617 432 1050. If rooms are unavailable students can check other departments for rooms or contact the Office Manager, [Jessica Bugg](#) for more information.

Alumni Services

Alumni are valuable to the department and are invited to stay connected to the department and faculty. During the graduation process, the department invites your feedback concerning our curriculum, as well as your overall experience in the department through a survey. Career support and advice is available through the alumni portal at the [Office of Student Services](#).

Post-Doctoral Services

Post-Doctoral Fellows and Researchers are a vital part of our department's success. Post-doctoral research fellows are trainees working in an apprenticeship mode in preparation for a career as scientific professionals. Post-doctoral fellows are provided with mentors and assume responsibility for the development of their research and careers. Upon seeking advice of the mentor and other faculty members, fellows perform required research.

Staying connected

Alumni, Post-Doctoral Researchers associated with the Epidemiology department as well as the School of Public Health, are encouraged to stay connected to the department by:

- [Volunteer time](#) to speak with prospective applicants about your experiences
- Sharing your research and experiences at scheduled [seminars and workshops](#)
- Applying for pre/post doctoral fellowships and training grants [Fellowships and Funding](#)
- Contributing to the departmental newsletter [Epitome](#)
- Keeping us informed of your research and career achievements [Contact Us](#)
- Updating your contact information to stay tuned on job and funding opportunities [Contact Us](#)

