



HARVARD T.H. CHAN
SCHOOL OF PUBLIC HEALTH

MASTER OF PUBLIC HEALTH PROGRAM

MPH-45 Curriculum Guide

2017 – 2018

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hsph.me/mph-oed

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Office of Education
Harvard T.H. Chan School of Public Health
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Enclosed is information about the Master of Public Health (MPH) program for 45 credits. Students must select one of seven fields of study to focus their studies and to gain depth in particular areas of interest. This guide includes the basics for the MPH degree, required core courses, and requirements for each of the fields of study, including the practicum and culminating experience.

NOTE: This curriculum guide does not include information regarding the MPH in Epidemiology online/on-campus degree program. For the MPH in EPI Curriculum Guide, please visit: www.hsph.harvard.edu/online-mph-epidemiology. For inquiries regarding the MPH in EPI program, please contact: mphepi@hsph.harvard.edu

NOTE: Every effort is made to ensure the information contained in this guide is accurate at the time of printing. However, the Harvard T.H. Chan School of Public Health reserves the right to make changes in degree requirements, courses of instruction, faculty, and other information contained herein. For any questions about fulfilling degree requirements or changing fields of study, please contact the MPH Program Office, housed in the Office of Education, Kresge G-29.

This version of the MPH-45 Curriculum Guide is effective for all students beginning degree enrollment as of July or August 2017. Students whose degree enrollment began prior to 2017 are “grandparented” under the rules in place at the time they began their MPH degree enrollment.

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MPH Steering Committee 2017 – 2018

The names and contact information for the field of study leaders are listed below. These same faculty members also make up the MPH Steering Committee, which meets monthly to review policies and compliance with accreditation requirements. Information about faculty members and their research interests can be found at: www.hsph.harvard.edu/faculty

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<u>CLE</u> Summer-Only & MPH-EPI	Fran Cook	1620 Tremont St., One Brigham Circle, 3 rd Floor	ecook@bwh.harvard.edu
<u>EH</u>	Francine Laden	SPH1 – 13 th Floor	francine.laden@channing.harvard.edu
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<u>HM</u>	Linda Cyr	SPH3 – 3 rd Floor	lcyr@hsph.harvard.edu
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SCHOOL-WIDE RESOURCES

In addition to the MPH Curriculum Guide, students at the Harvard T.H. Chan School of Public Health should become familiar with the following resources found on the School's website or by visiting the appropriate office:

Registrar's Office

www.hsph.harvard.edu/registrar

Email: registrar@hsph.harvard.edu

Phone: 617.432.1032

Harvard University Course Catalog

<https://courses.my.harvard.edu>

Cross-Registration

www.hsph.harvard.edu/registrar/cross-registration

2017-2018 Academic Calendar

www.hsph.harvard.edu/registrar/academic-calendar

Harvard Chan School Student Handbook

www.hsph.harvard.edu/student-handbook

Harvard Chan School Photo Directory

www.hsph.harvard.edu/people

Office of Admissions

www.hsph.harvard.edu/admissions

Email: admissions@hsph.harvard.edu

Office of Financial Aid

www.hsph.harvard.edu/osfs

Email: osfs@hsph.harvard.edu

Office for Student Affairs

www.hsph.harvard.edu/student-affairs

Email: studentaffairs@hsph.harvard.edu

Office of Diversity and Inclusion

www.hsph.harvard.edu/diversity

Email: odi@hsph.harvard.edu

Office for Alumni Affairs and Career Advancement

www.hsph.harvard.edu/careers

Email: careers@hsph.harvard.edu

<http://alumni.sph.harvard.edu>

Email: alumni@hsph.harvard.edu



OVERVIEW

The MPH degree is the most widely recognized professional credential for leadership in public health. The program emphasizes active, student-directed learning, problem solving, and the acquisition of skills essential to the practice of public health. The program is organized around seven career-oriented fields of study and a core curriculum. Each field of study offers electives that allow students to explore in depth areas relevant to their personal career goals.

We encourage you to carefully review the field of study requirements and consult with faculty advisors to choose elective courses that are best suited to your needs. There are some similarities across the fields of study, and it is important to choose classes that provide both depth and breadth in your chosen area, and assist you in developing expertise in a focus area relevant to your professional interests.

The overall objectives of the MPH program are:

- (i) to provide training in public health to qualified health professionals and to other individuals whose prior training and experience prepares them to play a leadership role in public health;
- (ii) to adapt MPH training to the diverse backgrounds and anticipated future careers of students;
- (iii) to award the MPH degree to individuals who have acquired a particular depth of knowledge in public health sciences and who have demonstrated the following capacities to:
 - understand the distribution of major determinants of health in populations relevant to the candidate's anticipated career course,
 - effectively contribute to the management of health services,
 - analyze risks and devise strategies for a healthier environment, a safer workplace, and fewer injuries,
 - identify ways in which changes in behavior and social structures may affect the health of populations;
- (iv) to lead students to achieve these capacities in a setting that demands that the students query, learn, persuade, and communicate in active interchange with their peers, with faculty, and with practitioners outside the School.

2017 – 2018 MASTER OF PUBLIC HEALTH 45-CREDIT PROGRAM

GENERAL MPH-45 GUIDELINES

The MPH program is housed in the Office of Education (OED). In order to complete the program, all MPH-45 students must fulfill the following requirements regardless of their field of study:

1. 45 credits minimum**
 2. **MPH-45 students matriculating in July or August 2017 may not take more than 12.5 credits total as Pass/Fail**
 - i. Be sure to check if core or field of study requirements are listed as Pass/Fail *only*
 - ii. Please note that all independent studies are *only* available as Pass/Fail
 3. Successful completion of all courses required by your particular field of study
 4. Practicum and Culminating Experience
 5. Cumulative grade point average of at least 2.7
- Academic year (residential) students are limited to a maximum of 3.75 online credits in any semester. Summer-only students are limited to a maximum of 5 online credits in any semester. Both academic year (residential) and summer-only students are limited to a maximum of 10 online credits overall of the required 45 credits for the MPH degree.
 - While the Harvard Chan School does not accept courses in transfer, students who have taken equivalent courses at another School of Public Health may petition to waive a requirement. All MPH-45 students must fulfill the 45 credit minimum requirement at the Harvard Chan School in order to graduate. Please contact the OED/MPH Office at mph@hsph.harvard.edu for specific information about waivers.
 - **Advising:** Assignment of academic advisors is guided by the student's interests. Students may request a change of advisor once the term begins and should contact the OED/MPH Office with any advising concerns. In addition, students have access to a variety of resources for advising about their academic programs. Faculty advisors, field of study leaders, other faculty with particular areas of expertise, and administrative advisors are valuable in guiding specific interests and issues. Students should check with the OED/MPH Office for questions related to core courses and requirements for graduation.
 - **Graduation:** Completion of core and field of study requirements for the MPH degree is monitored by the OED/MPH Office. This office has the most current information on requirements, options, and course alternatives. In addition to meeting with your faculty advisors, please check with the OED/MPH Office to be sure your planned curriculum choices meet all MPH requirements. This office also has information about options that previous students have selected. This is your responsibility.
 - All graduating MPH students receive a Master of Public Health degree regardless of field of study.
 - **Preventive Medicine/Occupational Medicine:** Students preparing for Board Certification in Preventive Medicine/Occupational Medicine should check with the OED/MPH Office regarding requirements. Additional information can be found on the American Board of Preventive Medicine website: www.theabpm.org

***For students who began their degree program in the 2015-2016 academic year only:** Master of Public Health (MPH) students are required to complete a minimum of 45 credits for the MPH degree program. These students may complete an additional 5 credits during their degree program at no extra charge. However, students who elect to take any or all of the 5 additional credits must use them during their enrollment in the MPH degree program and may not use the additional credits to extend their expected graduation date. Students will be billed on a per credit basis until they have reached the required 45 credits.

***For incoming students and students who began their degree program in the 2016-2017 academic year:** MPH-45 students will be assessed a flat tuition charge per semester based on degree program and full- or part-time status that will include all registration for that semester. Students may elect to complete additional credits beyond the required 45, but must do so during their enrollment in the MPH degree program and may not use the additional credits to extend their expected graduation date.

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CORE REQUIREMENTS

MPH core requirements are developed in accordance with the guidelines established by the Council on Education for Public Health (CEPH) and the MPH Steering Committee. The CEPH establishes core areas required of all students receiving a professional degree in public health at accredited institutions. Courses required to fulfill the core may vary for each field of study. Students are responsible for reviewing the specific guidelines for their chosen field of study and the options listed in this guide.

FIELDS OF STUDY

A field of study provides students with a focus during an intense period of study. In addition to the basic core, a field of study may require or recommend courses particularly valuable to its relevant area of focus. All core and additional required courses must be taken to fulfill the requirements of the field of study and the MPH degree.

REQUIRED AND RECOMMENDED COURSES WITHIN A FIELD OF STUDY

MPH students are expected to take a sufficient number of courses within their chosen field of study in order to provide **depth in a specific area**. Graduates who can demonstrate skill and training in a particular area offer an employer greater strength than graduates whose education is broad but lacks depth.

ELECTIVES BEYOND CORE AND FIELD OF STUDY REQUIREMENTS

The courses at the Harvard Chan School provide a rich selection for students, permitting very broad choices. Students are not restricted in their selection of elective courses; however, planning ahead wisely is strongly advised. Students should review all current course offerings at <https://courses.my.harvard.edu>. Harvard Chan students with particular interests also have the opportunity to select courses at any of the other Harvard Graduate Schools, Massachusetts Institute of Technology (MIT), and Tufts Fletcher School of Law and Diplomacy or Friedman School of Nutrition Science and Policy. To learn more about cross-registration, visit www.hsph.harvard.edu/registrar/cross-registration. Students are responsible for reviewing and confirming cross-registered course options and credits.

Please be aware that some elective courses have prerequisites that must be taken before enrolling. At the beginning of the term and in consultation with their advisor and/or field of study leader, students should consult the recommendations established by their field of study and develop a careful plan by reviewing the course descriptions provided in the course catalog. Please note: some courses are only offered alternate years.

FIELD OF STUDY CHANGES

Students considering a change in field of study must submit their request to the MPH Program Office, housed in the Office of Education, (mph@hsph.harvard.edu) **no later than 9:00 a.m. on Friday, September 1, 2017**, to ensure that the request can be considered by the relevant field of study admissions committee in sufficient time for the committee to make a decision before the end of the add/drop period for Fall and Fall 1 courses.

2017 – 2018 MPH-45 CORE REQUIREMENTS: ALL FIELDS OF STUDY

This section contains the basic MPH-45 core requirements for all fields of study (FoS). For each core area there may be a variety of courses that will fulfill the core. Please be sure to check the section relevant to your field of study to determine if there are specific courses that your field of study requires to fulfill a particular core area. The abbreviation for a specific field of study is noted in parentheses if that field of study requires a specific course to fulfill a particular core area.

In general, at least one course under each core heading is required for each field of study. Please review the options and the specific field of study requirements, particularly those where more than one course is required to fulfill that core requirement.

For ANY questions and signatures regarding core requirements, please check with the MPH Program Office, housed in the Office of Education, in Kresge G-29.

CREDITS AND SEMESTERS

Students typically take around 22.5 credits in a given semester. The semester is divided into two terms, e.g. Fall 1 and Fall 2 or Spring 1 and Spring 2, indicating when a course is offered. Each semester's registration should include all courses planned for the fall semester or the spring semester. Courses meeting during the whole semester are designated as "Fall" or "Spring." Courses meeting half of a semester are indicated by a 1 or 2 (e.g. "Fall 1", "Spring 2"). The Registrar's Office lists these segments by date ranges for each course. A summary is on the back of this document.

The January "Winter Session" courses are listed under the spring semester schedule and also under the Winter Session schedule. Credits for Winter Session courses are counted in the spring total. The Summer Session for Public Health Studies includes the "Summer 1" and "Summer 2" terms. Please check with the OED/MPH Office to ensure you are completing the necessary core and field of study requirements.

Course length does not necessarily determine course credit and vice versa. Courses that are 2.5 credits may span one or both terms of a semester, depending on the number of times the course meets per week. For example, SBS 201 [Fall 1] is worth 2.5 credits and meets twice per week during Fall 1, whereas ID 215 [Spring] is also worth 2.5 credits and meets only once per week during the entire spring semester. All Summer Session courses meet five days per week during Summer 1 or Summer 2.

MPH-45 CORE REQUIREMENTS: ALL FIELDS OF STUDY
(Please note specific designations)

BIostatistics – collection, storage, retrieval, analysis, and interpretation of health data; design and analysis of health-related surveys and experiments; and concepts and practice of statistical data analysis.

BIostatistics CORE COMPETENCIES

- Demonstrate the roles biostatistics serves in the discipline of public health.
- Interpret graphical and descriptive techniques commonly used to summarize public health data.
- Describe basic concepts of probability, random variation, and commonly used statistical probability distributions.
- Apply common statistical methods for estimation and inference and use them appropriately according to underlying assumptions and type of study design.
- Interpret the results of statistical analyses to provide evidence within the context of public health, health care, biomedical, clinical, and population-based studies and research.
- Develop basic skills for utilizing statistical computing software for performing data analyses.

Biostatistics Courses Fulfilling the Core		
Minimum 5.0 credits		
ID 201 [Fall] (GH, HM, HP, HSB, OEH) or	Core Principles of Biostatistics and Epidemiology for Public Health Practice	7.5
BST 201 [Fall] (QM) or	Introduction to Statistical Methods	5.0
BST 206 [Summer 1] (CLE) <u>and</u>	Introductory Statistics for Medical Research	} 5.0
BST 207 [Summer 2] or	Statistics for Medical Research II	
BST 208 [Summer 2] (CLE) or	Statistics for Medical Research, Advanced	
BST 202 [Summer 1] <u>and</u> BST 203 [Summer 2] [†]	Principles of Biostatistics I and II	5.0

[†]Students in GH, HM, HP, HSB, and OEH may use BST 202 [Summer 1] and BST 203 [Summer 2] and EPI 500 [Summer 1] in place of ID 201 [Fall].

EPIDEMIOLOGY – distributions and determinants of disease, disabilities, and death in human populations; the characteristics and dynamics of human populations; and the natural history of disease and the biologic bases of health.

EPIDEMIOLOGY CORE COMPETENCIES

- Describe the role of epidemiology as a quantitative approach to address problems in public health and clinical medicine.
- Describe and apply the basic principles and methods of epidemiology including: disease measures, association and causation, bias, confounding and effect modification, and susceptibility.
- Interpret descriptive epidemiologic results in order to develop hypotheses of possible risk factors of a disease.
- Develop a foundation for designing valid and efficient epidemiologic studies to address public health problems including: understanding the strengths and limitations of descriptive, observational, and experimental studies.
- Become a critical reader of epidemiologic literature by analyzing the appropriateness of study design, quality of data, methodological strategies, and interpretation of results.

Epidemiology Courses Fulfilling the Core		
Minimum 2.5 credits		
ID 201 [Fall] (GH, HM, HP, HSB, OEH) or	Core Principles of Biostatistics and Epidemiology for Public Health Practice	7.5
EPI 201 [Fall 1] (QM) <u>and</u>	Introduction to Epidemiology: Methods I	} 5.0
EPI 202 [Fall 2] (QM) or	Epidemiologic Methods 2: Elements of Epidemiologic Research	
EPI 208 [Summer] (CLE) or	Introduction to Clinical Epidemiology	5.0
EPI 500 [Summer 1]‡	Fundamentals of Epidemiology	2.5

‡Students in GH, HM, HP, HSB, and OEH may use BST 202 [Summer 1] and BST 203 [Summer 2] and EPI 500 [Summer 1] in place of ID 201 [Fall].

ENVIRONMENTAL HEALTH SCIENCES – *environmental factors including biological, physical, and chemical factors that affect the health of a community.*

ENVIRONMENTAL HEALTH SCIENCES CORE COMPETENCIES

- Characterize the human health effects, both acute and chronic, of major environmental and occupational hazards such as: air pollution, metals, organic pollutants, microbial contamination of drinking water, and physical hazards.
- Analyze sources, pathways, and routes of exposure to these environmental and occupational hazards [and safety], and determine the populations with a high risk of exposure.
- Assess the factors that can modify the overall impact of environmental and occupational hazards on a population (e.g., age, genetic polymorphisms, nutritional, and disease states).
- Apply risk assessment and risk management concepts to develop effective guidelines and policies to mitigate and manage environmental and occupational hazards and improve health outcomes.

Environmental Health Sciences Courses Fulfilling the Core*
Minimum 2.5 credits

EH 201 [Summer 2] <i>or</i>	Introduction to Environmental Health	2.5
EH 202 [Spring 1] <i>or</i>	Principles of Environmental Health	2.5
EH 232 [Spring] <i>or</i>	Intro. to Occupational and Environmental Medicine	2.5
EH 278 [Spring 2] <i>or</i>	Human Health and Global Environmental Change	2.5
ID 215 [Spring] or [Summer 1]	Environmental and Occupational Epidemiology	2.5

**For students in the OEH field of study, the Environmental Health Sciences core is included in the field of study requirements.*

HEALTH SERVICES ADMINISTRATION – *planning, organization, administration, management, evaluation, and policy analysis of health and public health programs.*

HEALTH SERVICES ADMINISTRATION CORE COMPETENCIES

The Health Services Administration (HSA) core courses are classified into three groups for purposes of core competencies: health management, health economics, and health policy and politics. Students are required to fulfill the core competencies for one of these groups and in the cross-cutting HSA competencies.

Most students fulfill the HSA core competencies by taking one HSA core course and through their practicum project and culminating experience.

A. Health Management

- Interpret financial statements to discern the financial health of a unit, organization, or system.
- Change and leverage cultural and contextual factors to achieve desired organizational outcomes.
- Work effectively within and across teams in multiple roles, including both leader and follower.
- Manage organizational decision-making processes effectively and make credible, defensible managerial decisions despite uncertainty, controversy, or time pressure.

B. Health Economics

- Articulate the functions of supply and demand.
- Assess the extent to which real markets diverge from perfect markets.
- Apply models of rational choice to markets.
- Assess the effects of financial and payment incentives on the behavior of individuals and organizations.
- Apply these tools of economic analysis to new policy issues and proposals.

C. Health Policy and Politics

- Demonstrate the capacity to apply a conceptual framework for understanding political and policy processes in health care.
- Explain how political institutions and processes influence resource allocation in health care.
- Understand basic organization, financing, and delivery of health services and public health systems.
- Discuss the policy process for improving the health status of populations.

For students in the Global Health, Health Management, Health Policy, and Occupational and Environmental Health fields of study, the Health Services Administration core is included in the field of study requirements (see next page for details). Students in other fields of study may select from these courses or from the other options indicated here. Carefully review the selections and be sure to consult with your advisor, the field of study leader, and the OED/MPH Office for ANY questions you may have about this core.

Health Services Administration Courses Fulfilling the Core*
Minimum 2.5 credits

HEALTH MANAGEMENT

HPM 219 [Fall 1]**	Financial Transactions and Analysis	2.5	} [HM FoS Req.]
HPM 220 [Fall 2]**	Financial Management and Control	2.5	
HPM 539 [Spring 2]	Health Care Organizations and Organizational Behavior	2.5	
EH 231 [Spring]	Occupational Health Policy and Administration	2.5	[OEH FoS Req.]

HEALTH ECONOMICS

HPM 206 [Fall]	Economic Analysis	5.0	[HP FoS Req.]
HPM 209 [Summer 2]	Economics for Health Policy	2.5	
GHP 230 [Fall 1]	Intro. to Economics with Applications to Health & Development	2.5	[GH FoS Req.]

HEALTH POLICY AND POLITICS

GHP 244 [Fall 2]	Health Sector Reform: A Worldwide Perspective	2.5
GHP 269 [Spring 2]	The Political Economy of Global Health	2.5
HPM 210 [Fall 1]	United States Health Policy	2.5
HPM 247 [Spring]	Political Analysis and Strategy for U.S. Health Policy	5.0

Limited Option: Students in the **Quantitative Methods and Clinical Effectiveness** fields of study only may also select from these courses to fulfill the HSA core requirement:

GHP 532 [Spr 1] or [Sum 1]***	Introduction to Global Health Care Delivery	2.5
HPM 253 [Summer 2]	Improvement in Quality of Health Care	2.5
HPM 506 [Spring – Online]	Practical Scientific Methods for Improving Health & Health Care	2.5
RDS 202 [Spring – Online]●	Decision Science for Public Health	2.5
RDS 280 [Fall 2]	Decision Analysis for Health and Medical Practices	2.5
RDS 286 [Summer 1]	Decision Analysis in Clinical Research	2.5

*For students in the Global Health, Health Management, Health Policy, and Occupational and Environmental Health fields of study, the Health Services Administration core is included in the field of study requirements as noted.

**MPH-Health Management students are required to take both HPM 219 and 220. However, students in the HSB, QM, or CLE fields of study may fulfill the HSA core requirement by taking either HPM 219 or 220; it is not required to take both.

***Space limited

●Not offered in 2017-18

SOCIAL AND BEHAVIORAL SCIENCES – *concepts and methods of social and behavioral sciences relevant to the identification and solution of public health problems.*

SOCIAL AND BEHAVIORAL SCIENCES CORE COMPETENCIES

- Compare social, developmental, and behavioral theories of health, health behavior, and illness, and analyze their applicability to different types of health problems.
- Formulate social and behavioral change interventions based on these theories that are appropriate and responsive to the social and cultural context.
- Develop program and policy implementation skills, including communication, advocacy, and engaging the media.
- Design and implement program evaluations using qualitative and quantitative methods.
- Critique the validity of basic behavioral and evaluation research.
- Identify individual, organizational, and community concerns, assets, resources, and deficits for social and behavioral science interventions.

Social and Behavioral Sciences Courses Fulfilling the Core*
Minimum 2.5 credits

SBS 201 [Fall 1] or [Summer 2] (HSB) or	Society and Health	2.5
SBS 207 [Spring 1]** or	Race, Ethnicity, and Health	2.5
SBS 250 [Summer 2] or	Research on Social and Behavioral Health	2.5
SBS 281 [Fall 2] or	Principles of Social and Behavioral Research	2.5
SBS 503 [Spring 2] or	Explaining Health Behavior: Insights from Behavioral Economics	2.5
SBS 506 [Fall 1]	An Intro. to History, Politics, & Public Health: Theories of Disease Distribution & Health Inequities	2.5

**For students in the HSB field of study, the Social and Behavioral Sciences core is included in the field of study requirements.*

***Next offered in 2018-2019*

ETHICS – application of moral and political philosophical principles and processes of moral reasoning to resolve dilemmas arising in public health policy and practice.

MPH ETHICS REQUIREMENT: CORE COMPETENCIES

- Develop aptitude for analyzing the ethical assumptions and components underlying health policy decisions.
- Develop proficiency in examining critically the basic vocabulary and concepts of the main alternative lines of argument in areas of moral philosophy relevant to public health.
- Develop and apply philosophical ideas and arguments to practical problems underlying public health challenges.
- Develop ability to criticize and defend ethical arguments that are applied to public health challenges.
- Develop attention to how arguments for and against positions on public health dilemmas are sensitive to changes in evidence, circumstance, or one’s assumptions.

Ethics of Public Health Practice 0 – 2.5 credits

Academic year* MPH-45 students may fulfill the Ethics core requirement in one of three ways:

For-Credit Options:

- 1) Enrolling in ID 216, Critical Thinking and Action for Public Health Professionals (see p. 15)
- 2) Selecting one of the approved individual Ethics core courses:

ID 250 [Fall 1]	Ethical Basis of the Practice of Public Health	2.5
or		
ID 251 [Summer 1]	Ethical Basis of the Practice of Public Health	2.5
or		
GHP 293 [Fall 2]	Individual and Social Responsibility for Health	2.5

*Summer-only MPH students are required to take ID 251 to fulfill the Ethics core.

Non-Credit Option:

3) Academic year MPH-45 students may also fulfill the Ethics core requirement by completing an alternative non-credit option. Completing the non-credit option will require students to complete a series of 5 online modules (including some short online discussion questions), attend a 3-hour in-person interactive session, and complete a short written assignment. To accommodate the schedule of as many students as possible, the in-person interactive session will be offered on two dates (Friday, November 3 and Saturday, November 4, 2017). To demonstrate that they have acquired the required core competencies, students will be required to satisfactorily complete all components, including actively participating in the in-person interactive session.

PRACTICE AND CULMINATING EXPERIENCE

Credits and grade mode are specific to each field of study – see FoS requirements

Each field of study in the MPH program requires 1) a practicum, and 2) a culminating experience, which are components of a practice course or seminar course for each field of study. The following guidelines may vary slightly by field of study.

Practicum

The practicum, or field placement, is completed by working on a project under the guidance of a preceptor at an outside organization or agency. The objectives of the practicum are to help you integrate, synthesize, and apply the knowledge and competencies from your program coursework to a real world public health problem or issue; explore a substantive public health topic that is of interest to you; and enhance the skills needed to function in a professional public health setting.

Timeline for Practicum (varies by field of study):

MPH-45: 120 hours minimum

September – October: Identify practicum and preceptor

November – March: Conduct practicum. Students may consider using Winter Session to complete a significant portion of this time requirement, if appropriate.

April – May: Develop and submit final deliverables for practice course (e.g. poster, presentation)

Learning Agreement:

Prior to starting a practicum, students must complete a Learning Agreement which outlines the scope, deliverables, work plan, and timeframe for the project. After review by faculty, Learning Agreements are submitted through the CareerConnect web portal and electronically signed by the student, the preceptor, and the practice course instructor.

Resources for Identifying a Practicum:

- Practica and abstracts from previous years: <https://tinyurl.com/HSPHpriorpractica>
- CareerConnect: <https://hsph-harvard-csm.symplcity.com/students>

Culminating Experience

The culminating experience focuses on self-assessment and critical reflection on students' professional growth and mastery of core competencies throughout the program as a whole. Core competencies specific to each field of study are outlined in this guide and are achieved through successful coursework, field practice, extracurricular activities, and other learning opportunities that students identify independently.

- All students complete a baseline and endpoint survey to self-assess their MPH competencies
- A reflection paper, presentation, class-based activity, and/or other assignments are determined by each field of study

Note: Part-time students must arrange their practicum after completing a significant amount of required coursework, with approval of their practice course instructor.

For More Details

Field Practice website: www.hsph.harvard.edu/public-health-practice-resources

MPH Field Practice Office email: mph-practice@hsph.harvard.edu

**INTEGRATED PUBLIC HEALTH CORE COURSE:
*ID 216 Critical Thinking and Action for Public Health Professionals***

Course Description

ID 216 Critical Thinking and Action for Public Health Professionals is a full fall semester, 5-credit course that is being offered this fall 2017 to 150 academic year MPH students (50 students per section). ID 216 integrates the core competencies of Environmental Health, Health Services Administration (which includes both health management and health policy), Social and Behavioral Sciences, and Ethics, as well as explores issues in Life Sciences, Communication, and Global Health.

ID 216 is designed as an active learning classroom experience which uses discussion, case studies, group work, and other hands-on activities that enable students to synthesize and apply the knowledge and skills of multiple disciplines to solving real-world public health challenges. Taught by leading Harvard Chan faculty experts in their respective fields, the course's six modules explore different public health topics. This curriculum approach builds integrated knowledge, cross-cutting skills, and professional competencies students need to approach complex problems systematically and comprehensively, i.e. to think and act like public health professionals.

Important Course Notes

- MPH students are selected to participate in ID 216 via randomized lottery.
- ID 216 satisfies four MPH core requirements: Environmental Health, Health Services Administration, Social and Behavioral Sciences, and Ethics.
- ID 216 does not replace or fulfill a field of study requirement.
- ID 216 is offered in the fall semester only, and must be taken during a student's first fall semester on campus. There are three sections.

SUMMER @ THE HARVARD CHAN SCHOOL

To learn more about Summer @ The Harvard Chan School, visit: <https://www.hsph.harvard.edu/hsph-summer>

Summer Course Offerings Fulfilling Core Requirements for the MPH Program

<p><u>Biostatistics:</u> BST 202 Principles of Biostatistics: Part I -and- BST 203 Principles of Biostatistics: Part II</p> <p>BST 206 Introductory Statistics for Medical Research -and- BST 207 or BST 208 (PCE only)</p> <p><u>Epidemiology:</u> EPI 500 Fundamentals of Epidemiology</p> <p>EPI 208 (PCE only) Introduction to Clinical Epidemiology</p> <p><u>Environmental Health:</u> EH 201 Introduction to Environmental Health</p> <p>ID 215 Environmental and Occupational Epidemiology</p>	<p><u>Health Services Administration:</u> HPM 209 Economics for Health Policy</p> <p>GHP 532 Introduction to Global Health Care Delivery* HPM 253 Improvement in Quality of Health Care* RDS 286 Decision Analysis in Clinical Research* (*fulfills Health Services Administration core for QM and CLE only)</p> <p><u>Social and Behavioral Sciences:</u> SBS 201 Society and Health</p> <p>SBS 250 Research on Social and Behavioral Health</p> <p><u>Ethics:</u> ID 251 Ethical Basis of the Practice of Public Health</p>
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INDIVIDUAL FIELD OF STUDY OUTLINES:

GLOBAL HEALTH FIELD OF STUDY: MPH-45

The Global Health (GH) field of study is intended to prepare health professionals with prior relevant global health experience for leadership and management roles in global health at subnational, national, or international levels. The program explores the emerging professional and academic domain of global health, emphasizing the development of analytical and methodological skills to effectively address important population health challenges in a global context. Students will enhance their ability to apply epidemiological, economic, political, and managerial analysis to the design, implementation, monitoring, and evaluation of health policies and programs.

Graduates will work in provincial or national ministries of health, intergovernmental organizations, donor aid agencies, nongovernmental (or nonprofit) organizations, and entrepreneurial initiatives, as well as in proprietary organizations.

Curriculum

Students learn from MPH program-wide core courses in public health as well as required courses in global health challenges and strategies, economic and political analysis, and health system reform. While “global” is understood to include environments of all types, including highly developed economies, the primary focus of courses included in this curriculum is on lower- and middle-income countries. In addition, students must complete an approved practicum and culminating experience project. And they have some credits available for elective courses, which may be taken at the Harvard Chan School or by cross-registering at other Harvard Graduate Schools, MIT, and Tufts Fletcher School of Law and Diplomacy or Friedman School of Nutrition Science and Policy.

Students are encouraged to choose electives that will help them develop an area of interest and expertise. They can select courses that: 1) comprise an organized school-wide interdisciplinary concentration in topical areas such as Humanitarian Studies, Ethics, and Human Rights or Women, Gender, and Health, or 2) are part of a GHP cluster such as Population and Family Health or Global Health Systems, or 3) strengthen skills in disciplines such as political science, economics, management, or demography.

GLOBAL HEALTH FIELD OF STUDY COMPETENCIES: MPH-45

Faculty in the Department of Global Health and Population (GHP) have identified three competency domains, listed below, that they use to plan and evaluate curriculum for MPH students who have selected Global Health as their primary field of study.

- The **Knowledge Domain** reflects the belief that all students should have a basic understanding of global health problems, as well as underlying causes and potential solutions.
- The **Methods, Analysis, and Synthesis Domain** reflects the belief that most global health solutions require multidisciplinary approaches to the population-based challenges they are designed to address. Students will enhance their competencies in this domain via study in a wide variety of disciplines, including epidemiology, biostatistics, environmental health science, demography, economics, ethics, management, medicine, and political science.
- The **Translation and Execution Domain** reflects the belief that successful global health interventions require more than a deeper understanding of problems, causes and interventions and enhanced analytical skills. Managers and leaders must also be able to implement evidence-based solutions in complex health systems, a difficult organizational challenge in public health which is focused on population rather than individual health.

After completion of the master's degree, students will be able to:

A. Knowledge Domain

Competency 1: Identify global health problems and underlying causes, and be able to explain those problems to specialist as well as non-specialist audiences;

Competency 2: Describe historical changes in fertility, mortality, causes of death, and the burden of disease;

Competency 3: Explain key demographic and health transitions;

Competency 4: Identify interventions to address global health problems in particular sub-national, national, and global contexts;

Competency 5: Provide arguments to support prioritizations of interventions at the sub-national, national, and global level; and,

Competency 6: Explain how health care, and the social, economic, legal, and political environments in which people live affect population health outcomes.

B. Methods, Analysis, and Synthesis Domain

Competency 7: Analyze a problem in global health and population drawing concurrently from a variety of disciplines, including epidemiology, biostatistics, environmental health science, demography, economics, ethics, management, medicine, and political science, characterizing the current state of understanding; and,

Competency 8: Generate novel, testable hypotheses relevant to global health problems, including both policy and program dimensions.

C. Translation and Execution Domain

Competency 9: Use state-of-the-art methods for improving health system and organizational performance to achieve a positive global health result;

Competency 10: Effectively implement a global health program or intervention by designing processes to enable positive, substantial and sustainable health system and organizational change;

Competency 11: Communicate effectively with groups and individuals across status and cultural differences both within health systems and organizations to create a positive environment for work and collaboration, and externally, to achieve organizational goals;

Competency 12: Apply social justice and human rights principles in the design, implementation, and evaluation of public health policies and programs; and,

Competency 13: Apply policy development skills to contribute to the formulation and implementation of positive global health-related policies.

SECTION 1: MPH Program-Wide Public Health Core Requirements (12.5 – 15 credits)

(i) Biostatistics and Epidemiology

7.5 credits

ID 201 [Fall]*
or

Core Principles of Biostatistics and Epidemiology for Public Health Practice

Other Approved Options as Appropriate (see pp. 7-8)

*This integrated course will fulfill both the Biostatistics and Epidemiology core requirements.

Other Public Health Core:

5 – 7.5 credits

- (ii) Environmental Health Sciences**
- (iii) Health Services Administration****
- (iv) Social and Behavioral Sciences**
- (v) Ethics of Public Health Practice**

The School is continuing to transition to an integrated public health core. In fall 2017, some students will take a 5-credit integrated MPH core course, **ID 216, Critical Thinking and Action for Public Health Professionals** (see p. 15 for more information). Other students will take the individual public health core courses separately (see pp. 9-13 for approved options).

**The Health Services Administration core is included in the Global Health field of study requirements.

SECTION 2: MPH-45 Global Health – Field of Study Requirements (17.5 credits)

Note: Courses are listed under the domain that best reflects their principle coverage of the competencies listed earlier. In fact, most, if not all of the following courses address multiple domains and competencies.

MPH-45 Global Health students must complete the following field of study-specific requirements:

1. Knowledge Domain

GHP 557 [Fall] Fundamentals of Global Health 5.0

2. Methods, Analysis, and Synthesis Domain

GHP 230 [Fall 1]* Intro. to Economics with Applications to Health & Development 2.5

*Fulfills Health Services Administration core requirement

3. Translation and Execution Domain

GHP 244 [Fall 2] Health Sector Reform: A Worldwide Perspective 2.5

4. GHP Electives

To provide students with depth in topic areas such as Humanitarian Studies, Ethics, and Human Rights; Population and Family Health; Global Health Systems; and Program Monitoring and Evaluation, **students must complete a minimum of 5 elective credits within the Department of Global Health and Population.** In addition, students may choose to pursue an interdisciplinary concentration or otherwise identify a group of courses that specialize in a particular area (see following page).

5. Practice and Culminating Experience

GHP 530 [A – Fall] & [B – Spring]^ Practice and Culminating Experience for Global Health 2.5

GHP 530 is the practice and culminating experience for the global health field of study. Students are required to complete a project with an outside organization or agency and attend various class sessions. The objectives of the course are to help students to integrate, synthesize, and apply the knowledge and skills from their coursework to a real world public health problem or issue, explore a substantive public health topic that is of interest to them, enhance the competencies and skills students need to function in a professional public health setting, and engage in professional self-assessment and critical reflection.

^GHP 530A meets during Fall 1 and GHP 530B meets during Spring 2. A detailed course schedule will be provided with the syllabus at the beginning of the course.

SECTION 3: Electives (12.5 – 15 credits)

Students are free to choose remaining electives from other elective courses at the Harvard Chan School. Students also have the additional option of cross-registering for graduate-level courses at other Harvard Graduate Schools, MIT, and Tufts Fletcher School of Law and Diplomacy or Friedman School of Nutrition Science and Policy.

School-Wide Interdisciplinary Concentrations:

MPH students have the option of pursuing school-wide interdisciplinary concentrations in addition to the global health field of study. These concentrations are non-degree programs designed to deepen students' experience in academic or professional areas aligned with their career goals. Please see p. 62 for more information.

GHP Departmental Educational and Research Clusters:

Faculty members in the Department of Global Health and Population have organized their educational and research activities within three clusters which can help guide students' elective selections. Although some students may decide not to formally join an interdisciplinary concentration, with the guidance of their academic advisor, they may utilize the courses listed for each concentration and create their own group of courses in a specialized area.

- A. Humanitarian Studies, Ethics, and Human Rights**
- B. Population and Family Health**
- C. Global Health Systems**

A. Humanitarian Studies, Ethics, and Human Rights

Students interested in the Humanitarian Studies, Ethics, and Human Rights cluster are encouraged to consider the HuSEHR interdisciplinary concentration (see p. 62).

B. Population and Family Health

Students interested in the Population and Family Health cluster should explore the subspecialties offered in the interdisciplinary concentrations such as Epidemiology of Infectious Disease; Nutrition and Global Health; Maternal and Child Health; and Women, Gender, and Health (see pp. 62-64).

C. Global Health Systems

Students who would like to specialize in Global Health Systems are directed to the Public Health Leadership interdisciplinary concentration (see p. 63).

MPH-45 Global Health Degree Requirements

MPH Program-Wide Public Health Core Requirements	<u>Credits</u>
Biostatistics & Epidemiology	7.5
Other Public Health Core*	<u>5 – 7.5</u>
	12.5 – 15 credits
MPH-45 Global Health – Field of Study Requirements	
Fundamentals of Global Health	5.0
Introduction to Economics with Applications to Health and Development	2.5
Health Sector Reform: A Worldwide Perspective	2.5
GHP electives	5.0
Practice & Culminating Experience	<u>2.5</u>
	17.5 credits
Electives	12.5 – 15 credits**
Total Requirements	45 credits

*The School is continuing to transition to an integrated public health core. In fall 2017, some students will take a 5-credit integrated MPH core course, ID 216, Critical Thinking and Action for Public Health Professionals (see p. 15 for more information). Other students will take the individual public health core courses separately (for MPH-GH, 2.5 credits in Environmental Health, 2.5 credits in Social and Behavioral Sciences, and 2.5 credits in Ethics or completion of the alternative non-credit option – see pp. 9-13). The Health Services Administration core is included in the Global Health field of study requirements.

**Incoming MPH-45 students will be assessed a flat tuition charge per semester based on degree program and full- or part-time status that will include all registration for that semester. Students may elect to complete additional credits beyond the required 45, but must do so during their enrollment in the MPH degree program and may not use the additional credits to extend their expected graduation date.

HEALTH MANAGEMENT FIELD OF STUDY: MPH-45

The Health Management (HM) field of study prepares students for management careers in the unique environment of health care. Students who choose the management field of study select from courses providing practical management skills, such as accounting, finance, operations, marketing, quality improvement, leadership and management of people, and strategy. Students will learn to analyze and take actions to improve organizational performance using the skills and frameworks learned in coursework and through field experiences.

Program graduates have filled many management, consulting, and leadership roles in health care organizations, including public or private sector health delivery systems, health insurance plans, and supply sector organizations. Others have pursued successful careers in government and academic medicine.

Curriculum

The curriculum for the health management field of study consists of the required MPH program-wide core courses in public health as well as required courses in financial analysis, management control, strategy, innovation, marketing, organizational behavior, and operations. Students also will be required to participate in a structured field placement. In addition, elective credits may be taken at the Harvard Chan School or by cross-registering at other Harvard Graduate Schools, MIT, and Tufts Fletcher School of Law and Diplomacy or Friedman School of Nutrition Science and Policy.

HEALTH MANAGEMENT FIELD OF STUDY COMPETENCIES: MPH-45

Through successful completion of the field of study curriculum including coursework, practicum, and a culminating experience, graduates will develop a distinctive set of competencies and corresponding skills.

Knowledge of Health Care Environment

- Demonstrate knowledge of health care systems and the environment in which health care managers and providers function.

Business Knowledge and Skills

- Apply fundamental management and business principles as well as advanced skills in specific sub-disciplines of health management (e.g., finance, operations, organizational behavior, systems thinking, marketing, strategy, risk management, and quality improvement) to the health care environment.
- Make sound managerial decisions and provide recommendations informed by assessment of the situation, identification and evaluation of alternative courses of action and their ethical implications, and use of appropriate financial and other evidence-based management principles and concepts.

Communication and Relationship Management

- Clearly and concisely communicate within and outside of a health care organization/agency in order to facilitate and maintain constructive interactions.

Analysis

- Critically evaluate organizational structures, processes, and performance in managerial terms.
- Apply appropriate, evidence-based management principles and concepts to address organizational issues.

Professionalism

- Align personal and organizational conduct with ethical and professional standards including responsibility to individuals and communities.

Leadership

- Exhibit awareness of the impact of one's own actions and behaviors on others and act accordingly.
 - Generate a shared vision and approach to effectuate change in an organization.
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SECTION 1: MPH Program-Wide Public Health Core Requirements (12.5 – 15 credits)

(i) Biostatistics and Epidemiology

7.5 credits

ID 201 [Fall]*
or

Core Principles of Biostatistics and Epidemiology for Public Health Practice

Other Approved Options as Appropriate (see pp. 7-8)

*This integrated course will fulfill both the Biostatistics and Epidemiology core requirements.

Other Public Health Core:

5 – 7.5 credits

- (ii) Environmental Health Sciences**
- (iii) Health Services Administration****
- (iv) Social and Behavioral Sciences**
- (v) Ethics of Public Health Practice**

The School is continuing to transition to an integrated public health core. In fall 2017, some students will take a 5-credit integrated MPH core course, **ID 216, Critical Thinking and Action for Public Health Professionals** (see p. 15 for more information). Other students will take the individual public health core courses separately (see pp. 9-13 for approved options).

**The Health Services Administration core is included in the Health Management field of study requirements.

SECTION 2: MPH-45 Health Management – Field of Study Requirements (20 credits)

MPH-45 Health Management students must complete the following field of study-specific requirements:

A. Financial Analysis/Management Control*

HPM 219 [Fall 1]	Financial Transactions and Analysis	2.5
and		
HPM 220 [Fall 2]	Financial Management and Control	2.5

*Fulfills Health Services Administration core requirement

B. Strategy (one of the approved options below):

DRPH 270 [Fall 1]	Strategic Management in Global Settings	2.5
<i>or</i>		
HPM 231 [Fall 2]	Competitive Strategy	2.5

C. Innovation

HPM 557(1) [Fall 2]	Innovation and Entrepreneurship in Health Care (Section 1 of HPM 557 is more domestically focused and the course will meet at the Harvard i-lab.)	2.5
<i>or</i>		
HPM 557(2) [Fall 2]	Innovation and Entrepreneurship in Health Care (Section 2 of HPM 557 is more globally focused and the course will meet at the Harvard Chan School.)	2.5

D. Marketing

HPM 233 [Spring]	Strategic Marketing Management in Health Systems	2.5
<i>or</i>		
HPM 282 [Spring 2]	Innovative Problem Solving & Design Thinking in Healthcare	2.5

E. Organizational Behavior

HPM 539 [Spring 2]	Health Care Organizations and Organizational Behavior	2.5
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F. Operations/Process Improvement (one of the approved options below):

HPM 253 [Summer 2]	Improvement in Quality of Health Care	2.5
<i>or</i>		
HPM 268 [Fall 2]	Methods and Tools for Quality Improvement	2.5
<i>or</i>		
HPM 232 [Spring 2]	Operations Management in Service Delivery Organizations	2.5
<i>or</i>		
HPM 516 [Spring 2]	Health Care Quality and Safety	2.5

G. Practice and Culminating Experience

ID 267 [A – Fall] & [B – Spring]	Practice and Culminating Experience for Health Management	2.5
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ID 267 is the practice and culminating experience for the health management field of study. Students are required to complete a project with an outside organization or agency and attend various class sessions. The objectives of the course are to help students to integrate, synthesize, and apply the knowledge and skills from their coursework to a real world public health problem or issue, explore a substantive public health topic that is of interest to them, enhance the competencies and skills students need to function in a professional public health setting, and engage in professional self-assessment and critical reflection.

SECTION 3: Electives (10 – 12.5 credits)

Students are free to choose electives at the Harvard Chan School or by cross-registering for graduate-level courses at other Harvard Graduate Schools, MIT, and Tufts Fletcher School of Law and Diplomacy or Friedman School of Nutrition Science and Policy.

Electives that may be of interest to students in the Health Management field of study are grouped by areas of focus below:

Finance

HPM 222 [Spring 2]	Financial Management of Health Care Organizations	2.5
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Insurance and Payment

HPM 255 [Spring 2]	Payment Systems in Healthcare	2.5
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HPM 261 [Spring 1]	Health Care Information Technology Management	2.5
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Leadership

HPM 245 [Winter]	Public Health Leadership Skills	2.5
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HPM 503 [Winter]	Understanding Public Health Leadership: From Frameworks to Practice	1.25
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HPM 513 [Fall 2]	Writing Persuasively about Public Health	2.5
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Negotiation

HPM 252 [Spring 2]	Negotiation	2.5
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HPM 278 [Spring 1]	Skills and Methods of Health Care Negotiation and Conflict Resolution	1.25
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Public Speaking

HPM 223 [Fall 2] or [Spring 2]	Public Speaking for Managers	1.25
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Social Entrepreneurship

HPM 295 [Fall]	Design of Social Innovation	5.0
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ID 511 [Spring 1]^	Social Entrepreneurship	2.5
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^Next offered in 2018-2019

MPH-45 Health Management Degree Requirements

MPH Program-Wide Public Health Core Requirements	<u>Credits</u>
Biostatistics & Epidemiology	7.5
Other Public Health Core*	<u>5 – 7.5</u>
	12.5 – 15 credits
MPH-45 Health Management – Field of Study Requirements	
Financial Analysis/Management Control	5.0
Strategy course	2.5
Innovation	2.5
Marketing course	2.5
Organizational Behavior	2.5
Operations/Process Improvement course	2.5
Practice & Culminating Experience	<u>2.5</u>
	20 credits
Electives	10 – 12.5 credits**
Total Requirements	45 credits

*The School is continuing to transition to an integrated public health core. In fall 2017, some students will take a 5-credit integrated MPH core course, ID 216, Critical Thinking and Action for Public Health Professionals (see p. 15 for more information). Other students will take the individual public health core courses separately (for MPH-HM, 2.5 credits in Environmental Health, 2.5 credits in Social and Behavioral Sciences, and 2.5 credits in Ethics or completion of the alternative non-credit option – see pp. 9-13). The Health Services Administration core is included in the Health Management field of study requirements.

**Incoming MPH-45 students will be assessed a flat tuition charge per semester based on degree program and full- or part-time status that will include all registration for that semester. Students may elect to complete additional credits beyond the required 45, but must do so during their enrollment in the MPH degree program and may not use the additional credits to extend their expected graduation date.

For student resources, please visit:

- Office of Education’s Master of Public Health section: hsph.me/mph-oed
- Department of Health Policy and Management’s “For Students” section: hsph.me/hpm-student-resources

HEALTH POLICY FIELD OF STUDY: MPH-45

The Health Policy (HP) field of study is for students who wish to develop skills in applying economic, legal, and political analysis to the design, implementation, and evaluation of health care and public health policies. Through the study of biostatistics, epidemiology, and other quantitative disciplines, they also acquire skill in interpreting and evaluating scientific evidence to inform their policy work. Students are encouraged to choose elective courses that will help them develop an area of interest and expertise, such as access to care, health care quality, pharmaceutical policy, injury prevention, or health care financing.

This field of study prepares students for policy positions in the public, nonprofit, and private sectors. Graduates serve as policymakers, policy analysts, advocates, and consultants, as well as in policymaking positions in other public health and health care organizations.

Curriculum

The curriculum for the health policy field of study consists of the required MPH program-wide core courses in public health as well as required courses in economics, U.S. health policy, political analysis and strategy, and analytical methods. Students must also complete an approved practicum and culminating experience project. Students have some credits available for elective courses, which may be taken at the Harvard Chan School or by cross-registering at other Harvard Graduate Schools, MIT, and Tufts Fletcher School of Law and Diplomacy or Friedman School of Nutrition Science and Policy.

HEALTH POLICY FIELD OF STUDY COMPETENCIES: MPH-45

Through coursework and field experiences, students in the Health Policy field of study will develop competencies in four domains: Knowledge of the U.S. Health Care System, Policy Disciplinary Perspectives, Analytical Methods, and Communication.

Upon successful completion of the program, students will be able to:

Knowledge of the U.S. Health Care System

- Assess the health care and public health policy sectors in the U.S. in terms of the major players and their relationships and agendas.
- Define the major public health policy challenges facing the United States and other high income countries.
- Assess how the structure, organization, delivery, and financing of the U.S. health care system affect system performance in terms of efficiency, quality, equity, and effectiveness.
- Analyze the key relationships between the public health and health care systems in the U.S., and how the interaction between the two systems affects population health.
- Compare and contrast the major structural features and performance of the U.S. health care system and the health care systems in other countries, including organization, financing, delivery, and regulation.

Policy Disciplinary Perspectives

- Evaluate policy options to address health policy challenges facing the U.S., including economic, legal, and political implications.
- Recommend a course of action for addressing a health policy challenge, including the likely impact on efficiency, quality, effectiveness, costs, and equity.
- Design an effective political strategy to achieve a desired health policy outcome.

SECTION 2: MPH-45 Health Policy – Field of Study Requirements (20 credits)

MPH-45 Health Policy students must complete the following field of study-specific requirements:

1. Knowledge of the U.S. Health Care System

HPM 210 [Fall 1] [▲]	United States Health Policy	2.5
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[▲]Or, in lieu of HPM 210, students with international health policy interests may request (see p. 31) to take:

GHP 244 [Fall 2]	Health Sector Reform: A Worldwide Perspective	2.5
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2. Policy Disciplinary Perspectives

HPM 206 [Fall] [*]	Economic Analysis	5.0
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and

HPM 247 [Spring] [▲]	Political Analysis and Strategy for U.S. Health Policy	5.0
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[▲]Or, in lieu of HPM 247, students with international health policy interests may request (see p. 31) to take:

GHP 269 [Spring 2]	The Political Economy of Global Health	2.5
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^{*}Fulfills Health Services Administration core requirement

and

(Select one of the approved options below):

HPM 211 [Fall 2]	The Health Care Safety Net and Vulnerable Populations	2.5
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or

HPM 520 [Fall 2]	Organizing Consumer and Community Interests in the Health System	2.5
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or

HPM 502 [Spring 1]	Federal Public Policy and Population Health	2.5
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or

HPM 213 [Spring 2]	Public Health Law	2.5
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or

HPM 544 [Spring 2]	The Law and Clinical Medicine	1.25
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3. Analytical Methods (optional for students matriculating in fall 2017):

Any RDS course (RDS 280, 282, 284, 285)

Any intermediate or advanced biostatistics or epidemiology course offered at Harvard Chan (beyond ID 201, BST 201, and EPI 201/202)

GHP 504 [Spring 1]	Qualitative Research Methods for Global Health	2.5
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GHP 525 [Fall]	Econometrics for Health Policy	5.0
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GHP 537 [Spring 1]	Field Methods in Humanitarian Crises I	1.25
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HPM 242 [Spring 1]	Data Analysis for Professionals	2.5
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HPM 543 [Spring 2]●	Quantitative Methods in Program Evaluation	2.5
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SBS 281 [Fall 2]	Principles of Social and Behavioral Research	2.5
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SBS 501 [Fall 2]	Community-Based Participatory Action Research	2.5
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SBS 513 [Spring 2]	Measuring and Reporting Health Disparities	2.5
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HGSE EDU S052 [Spring]	Applied Data Analysis	5.0
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HKS API 206 [Spring]	Fundamentals of Program and Policy Evaluation	5.0
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●Not offered in 2017-2018

4. Practice and Culminating Experience

ID 266 [A – Fall] & [B – Spring] Practice and Culminating Experience for Health Policy 2.5

ID 266 is the practice and culminating experience for the health policy field of study. Students are required to complete a project with an outside organization or agency and attend various class sessions. The objectives of the course are to help students to integrate, synthesize, and apply the knowledge and skills from their coursework to a real world public health problem or issue, explore a substantive public health topic that is of interest to them, enhance the competencies and skills students need to function in a professional public health setting, and engage in professional self-assessment and critical reflection.

^Substitution/Waiver Requests for Required Field of Study Courses

Students may request substitutions or waivers of field of study required courses as noted. Students must email their request to the MPH-45 Health Policy field of study leader, Anna Sinaiko, asinaiko@hsph.harvard.edu. If the request is approved, the student must forward the email documenting the approval to Jen Moltoni, jmoltoni@hsph.harvard.edu **and** Cleo Hereford, chereford@hsph.harvard.edu

SECTION 3: Electives (10 – 12.5 credits)

Students are free to choose electives at the Harvard Chan School or by cross-registering for graduate-level courses at other Harvard Graduate Schools, MIT, and Tufts Fletcher School of Law and Diplomacy or Friedman School of Nutrition Science and Policy.

Electives that may be of interest to students in the Health Policy field of study are grouped by areas of focus below:

Decision Sciences

RDS 282 [Spring 2]	Economic Evaluation of Health Policy and Program Mgmt.	2.5
RDS 284 [Fall]	Decision Theory	5.0
RDS 285 [Spring 1]	Decision Analysis Methods in Public Health and Medicine	2.5

Global Health Policy

GHP 244 [Fall 2]	Health Sector Reform: A Worldwide Perspective	2.5
GHP 269 [Spring 2]	The Political Economy of Global Health	2.5
GHP 272 [Fall]	Foundations of Global Health and Population	5.0
ID 552 [Fall 2]	Innovation and Global Health Systems	2.5

Health Care Payment and Financing

HPM 235 [Spring 1]	Managing Health Care Costs	2.5
HPM 255 [Spring 2]	Payment Systems in Healthcare	2.5

Health Economics

HPM 227 [Fall]	The Economics of Health Policy	5.0
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Leadership

HPM 245 [Winter]	Public Health Leadership Skills	2.5
HPM 503 [Winter]	Understanding Public Health Leadership: From Frameworks to Practice	1.25
HPM 513 [Fall 2]	Writing Persuasively about Public Health	2.5

Mental Health

EPI 217 [Fall 1]**	Epidemiology of Adult Psychiatric Disorders	2.5
HPM 552 [Spring 1]	Health Policy and Leadership: Governors and Mental Health	1.25
SBS 219 [Spring 2]	High-Risk Behavior: Epidemiology and Prevention Strategies	2.5
SBS 504 [Fall 1]	Substance Abuse and Public Health	2.5
WGH 210 [Fall 2]	Women, Gender, and Health: Critical Issues in Mental Health	1.25
WGH 304 [Fall 2]*	Issues in Mental Health – Independent Study	1.25

(*Also requires enrollment in WGH 210)

Quality and Patient Safety

HPM 268 [Fall 2]	Methods and Tools for Quality Improvement	2.5
HPM 516 [Spring 2]	Health Care Quality and Safety	2.5

Vulnerable Populations and Disparities

HPM 211 [Fall 2]	The Health Care Safety Net and Vulnerable Populations	2.5
HPM 520 [Fall 2]	Organizing Consumer & Community Interests in the Health Sys.	2.5
SBS 207 [Spring 1]**	Race, Ethnicity, and Health	2.5
SBS 513 [Spring 2]	Measuring and Reporting Health Disparities	2.5
SBS 514 [Fall 2]	Reducing Socioeconomic and Racial/Ethnic Inequalities in Health: Concepts, Models, Effective Strategies	2.5

**Next offered in 2018-2019

Women, Children, and Families

SBS 222 [Fall 2]	Social Services for Children, Adolescents and Families	2.5
SBS 246 [Fall 2]	Issues in Maternal and Child Health Programs and Policies	2.5
WGH 207 [Spring 2]	Advanced Topics in Women, Gender, and Health	1.25
WGH 211 [Fall 1]	Gender and Health: Introductory Perspectives	2.5
WGH 250 [Winter]	Embodying Gender: Public Health, Biology, and the Body Politic	2.5

MPH-45 Health Policy Degree Requirements

MPH Program-Wide Public Health Core Requirements	<u>Credits</u>
Biostatistics & Epidemiology	7.5
Other Public Health Core*	<u>5 – 7.5</u>
	12.5 – 15 credits
MPH-45 Health Policy – Field of Study Requirements	
United States Health Policy	2.5
Economic Analysis	5.0
Political Analysis and Strategy	5.0
Policy Disciplinary Perspectives additional course	2.5
Analytical Methods course (optional)	2.5
Practice & Culminating Experience	<u>2.5</u>
	20 credits
Electives	10 – 12.5 credits**
Total Requirements	45 credits

*The School is continuing to transition to an integrated public health core. In fall 2017, some students will take a 5-credit integrated MPH core course, ID 216, Critical Thinking and Action for Public Health Professionals (see p. 15 for more information). Other students will take the individual public health core courses separately (for MPH-HP, 2.5 credits in Environmental Health, 2.5 credits in Social and Behavioral Sciences, and 2.5 credits in Ethics or completion of the alternative non-credit option – see pp. 9-13). The Health Services Administration core is included in the Health Policy field of study requirements.

**Incoming MPH-45 students will be assessed a flat tuition charge per semester based on degree program and full- or part-time status that will include all registration for that semester. Students may elect to complete additional credits beyond the required 45, but must do so during their enrollment in the MPH degree program and may not use the additional credits to extend their expected graduation date.

For student resources, please visit:

- Office of Education’s Master of Public Health section: hsph.me/mph-oed
- Department of Health Policy and Management’s “For Students” section: hsph.me/hpm-student-resources

HEALTH AND SOCIAL BEHAVIOR FIELD OF STUDY: MPH-45

The Health and Social Behavior (HSB) field of study is devoted to understanding health disparities and promoting health. Coursework emphasizes theoretical and analytical strategies for characterizing health problems in populations and the development of interventions. In addition, communication, advocacy, and policy formation in the public sector are addressed. Beyond the MPH core requirements, students are encouraged to develop expertise in either planned social change or social determinants of health and disparities. Guidance is provided to develop a more in-depth understanding of specific health problems and vulnerable groups.

This field of study prepares students to work in diverse spheres, including federal, state, and local government; advocacy groups; voluntary health organizations; and community-based primary care settings in the United States and other countries. Posts filled by graduates include state health director; medical director of programs for child, adolescent, and women's health; health policy analyst; and health educator. Other graduates have gone on to academic positions.

Curriculum

The curriculum for the health and social behavior field of study consists of the required MPH program-wide core coursework in public health as well as required field of study-specific courses. All students must take an introductory course in society and health, one theoretical and one applied course in interventions (planned social change), one theoretical and one applied course in characterizing health problems in populations (social determinants of health and disparities), and complete additional required coursework in the Department of Social and Behavioral Sciences. Students must also complete an approved practicum and culminating experience project. Students have some credits available for elective courses, which may be taken at the Harvard Chan School or by cross-registering at other Harvard Graduate Schools, MIT, and Tufts Fletcher School of Law and Diplomacy or Friedman School of Nutrition Science and Policy.

HEALTH AND SOCIAL BEHAVIOR FIELD OF STUDY COMPETENCIES: MPH-45

Planned Social Change

The competencies for implementing planned social change are:

- Apply the theories underlying behavioral and social change to the development of interventions, including community organizing
- Analyze the context of change, including community and culture, and how that influences outcomes
- Demonstrate how to use a range of strategies for effecting change from individual programs, behavioral economics, policy, and communication
- Develop the elements of evaluation of interventions in context

Social Determinants of Health and Disparities

The competencies for understanding and defining social determinants of health and disparities are:

- Analyze how social and behavioral factors determine health
 - Analyze the role of social and behavioral factors in creating disparities
 - Use concepts related to social determinants and disparities to inform data collection, measurement, and approaches
 - Compare and contrast approaches to measuring disparities
 - Develop inquiries that examine social determinants and disparities
-

SECTION 1: MPH Program-Wide Public Health Core Requirements (12.5 – 15 credits)

(i) Biostatistics and Epidemiology

7.5 credits

ID 201 [Fall]*
or

Core Principles of Biostatistics and Epidemiology for Public Health Practice

Other Approved Options as Appropriate (see pp. 7-8)

*This integrated course will fulfill both the Biostatistics and Epidemiology core requirements.

Other Public Health Core:

5 – 7.5 credits

- (ii) Environmental Health Sciences**
- (iii) Health Services Administration**
- (iv) Social and Behavioral Sciences****
- (v) Ethics of Public Health Practice**

The School is continuing to transition to an integrated public health core. In fall 2017, some students will take a 5-credit integrated MPH core course, **ID 216, Critical Thinking and Action for Public Health Professionals** (see p. 15 for more information). Other students will take the individual public health core courses separately (see pp. 9-13 for approved options).

**The Social and Behavioral Sciences core is included in the Health and Social Behavior field of study requirements.

- 4. Practice and Culminating Experience** (course must be taken for an ordinal grade)
 ID 264 [A – Fall] & [B – Spring] Practice and Culminating Experience for Health and Social Behavior 2.5

ID 264 is the practice and culminating experience for the health and social behavior field of study. Students are required to complete a project with an outside organization or agency and attend various class sessions. The objectives of the course are to help students to integrate, synthesize, and apply the knowledge and skills from their coursework to a real world public health problem or issue, explore a substantive public health topic that is of interest to them, enhance the competencies and skills students need to function in a professional public health setting, and engage in professional self-assessment and critical reflection.

Sample List of Additional SBS Course Offerings:

Planned Social Change

SBS 212 [Fall]	Developmental Disabilities I: Evaluation, Assessment, and Systems	2.5
SBS 214 [Spring]	Developmental Disabilities II: Values, Policy, and Change	2.5
SBS 222 [Fall 2]	Social Services for Children, Adolescents, and Families	2.5
SBS 231 [Spring 1]	Community Intervention Research Methods	2.5
SBS 246 [Fall 2]	Issues in Maternal and Child Health Programs and Policies	2.5
SBS 288 [Fall 1]	Qualitative Research Methods in Public Health	2.5
SBS 299 [Fall]	Driving Science-Based Innovation in Early Childhood Practice and Policy	5.0
SBS 504 [Fall 1]	Substance Abuse and Public Health	2.5
SBS 511 [Winter]	Social Policy and Health in International Perspective	2.5
SBS 515 [Fall 1]	Health Literacy: Measuring Accessibility of Health Information	2.5
SBS 516 [Fall 2]	Measures of the Health Literacy Environment	1.25
SBS 519 [Spring 2]	Patient-Centered Communication and Health Equity – Challenges and Opportunities in the Digital Era	2.5
SBS 550 [Winter]	Program Evaluation	2.5

Social Determinants of Health and Disparities

SBS 208 [Fall 1]	Adolescent Health	2.5
SBS 219 [Spring 2]	High Risk Behavior: Epidemiology and Prevention Strategies	2.5
SBS 220 [Spring 1]	Society and Its Effects on Child Health	2.5
SBS 288 [Fall 1]	Qualitative Research Methods in Public Health	2.5
SBS 296 [Fall]	Leadership in Minority Health Policy	2.5
SBS 514 [Fall 2]	Reducing Socioeconomic & Racial/Ethnic Inequalities in Health: Concepts, Models, Effective Strategies	2.5
SBS 519 [Spring 2]	Patient-Centered Communication and Health Equity – Challenges and Opportunities in the Digital Era	2.5
WGH 220 [Spring 1]	Sexuality and Public Health	2.5
WGH 250 [Winter]	Embodying Gender: Public Health, Biology, & the Body Politic	2.5

SECTION 3: Electives (7.5 – 10 credits)

Students are free to choose electives at the Harvard Chan School. Students also have the additional option of cross-registering for graduate-level courses at other Harvard Graduate Schools, MIT, and Tufts Fletcher School of Law and Diplomacy or Friedman School of Nutrition Science and Policy.

Please note: Students in HSB who are funded through the Maternal and Child Health (MCH) training grant MUST meet with Trish Lavoie at the beginning of the fall term to ensure that they meet the requirements of the training grant.

Trish Lavoie, MCH Coordinator
 Department of Social and Behavioral Sciences, Kresge 624A
 Phone: 617-432-0964 Email: tlavoie@hsph.harvard.edu

<u>MPH-45 Health and Social Behavior Degree Requirements</u>	
MPH Program-Wide Public Health Core Requirements	<u>Credits</u>
Biostatistics & Epidemiology	7.5
Other Public Health Core*	<u>5 – 7.5</u>
	12.5 – 15 credits
MPH-45 Health and Social Behavior – Field of Study Requirements	
Society and Health	2.5
Theory and Applied courses in Planned Social Change	5.0
Theory and Applied courses in Social Determinants of Health and Disparities	5.0
Additional SBS courses	7.5
Practice & Culminating Experience	<u>2.5</u>
	22.5 credits
Electives	7.5 – 10 credits**
Total Requirements	45 credits

*The School is continuing to transition to an integrated public health core. In fall 2017, some students will take a 5-credit integrated MPH core course, ID 216, Critical Thinking and Action for Public Health Professionals (see p. 15 for more information). Other students will take the individual public health core courses separately (for MPH-HSB, 2.5 credits in Environmental Health, 2.5 credits in Health Services Administration, and 2.5 credits in Ethics or completion of the alternative non-credit option – see pp. 9-13). The Social and Behavioral Sciences core is included in the Health and Social Behavior field of study requirements.

**Incoming MPH-45 students will be assessed a flat tuition charge per semester based on degree program and full- or part-time status that will include all registration for that semester. Students may elect to complete additional credits beyond the required 45, but must do so during their enrollment in the MPH degree program and may not use the additional credits to extend their expected graduation date.

OCCUPATIONAL AND ENVIRONMENTAL HEALTH FIELD OF STUDY: MPH-45

The Occupational and Environmental Health (OEH) field of study focuses on workplace and environmental hazards, the physiological and biomechanical aspects of work, the risks posed by the interaction of genetic and environmental factors, and a practical approach to solving health problems in various work and community settings. Students may choose one of two areas of interest: **Occupational Health (OH)** or **Environmental Health (EH)**.

The program is designed for physicians and other professionals who intend to practice occupational/environmental medicine or to hold responsible positions in occupational and/or environmental policy and management. The occupational health area fulfills the coursework requirements of the two-year Occupational and Environmental Medicine Residency (for specific guidelines, see the resident handbook at hsph.me/oemr). This field of study is also intended for physicians who wish to satisfy the didactic requirements of the American Board of Preventive Medicine for certification in occupational and environmental medicine.

Curriculum

The curriculum for the occupational and environmental health field of study consists of the required MPH program-wide core courses in public health as well as required courses in occupational/environmental health. These required courses within the OEH field of study will depend on whether the student chooses the occupational health track or the environmental health track. Occupational Medicine residents must choose the occupational track and also consult the residency's requirements. All students must complete an approved practicum and culminating experience project. Students have some credits available for elective courses, which may be taken at the Harvard Chan School or by cross-registering at other Harvard Graduate Schools, MIT, and Tufts Fletcher School of Law and Diplomacy or Friedman School of Nutrition Science and Policy.

OCCUPATIONAL AND ENVIRONMENTAL HEALTH FIELD OF STUDY COMPETENCIES: MPH-45

Upon successful completion of this program, students will be able to:

- Acquire an accurate and relevant history, including occupational history related to workplace or environmental exposures; and begin formulation of the differential diagnosis
- Describe individual factors that impact susceptibility to adverse health effects from environmental exposures
- Identify potential population health effects from exposure to chemical, physical, and biological hazards
- Address environmental and occupational health issues using core foundation knowledge of toxicological principles, including: toxicokinetics, routes of exposure and absorption, preclinical and clinical effects of toxins, evaluation and treatment of acute or chronic exposure to occupational or environmental chemical agents, screening and surveillance for exposed populations, and use and interpretation of relevant scientific literature and databases
- Address environmental and occupational health issues using core principles of industrial hygiene, ergonomics, occupational safety, and risk/hazard control and communication (e.g., recognition of regulatory standards and guidelines)
- Work with a team to evaluate and identify workplace or environmental causes of injury or illness and recommend controls or programs to reduce exposure, and to enhance the health and productivity of workers under minimal supervision
- Apply the principles of toxicology, epidemiology, and risk analysis to public policy and the actions of regulatory agencies

SECTION 1: MPH Program-Wide Public Health Core Requirements (10 – 12.5 credits)

(i) Biostatistics and Epidemiology

7.5 credits

ID 201 [Fall]*
or

Core Principles of Biostatistics and Epidemiology for Public Health Practice

Other Approved Options as Appropriate (see pp. 7-8)

*This integrated course will fulfill both the Biostatistics and Epidemiology core requirements.

Other Public Health Core:

2.5 – 5 credits

(ii) Environmental Health Sciences**

(iii) Health Services Administration**

(iv) Social and Behavioral Sciences

(v) Ethics of Public Health Practice

**The Environmental Health Sciences core and the Health Services Administration core are included in the OEH field of study requirements.

The School is continuing to transition to an integrated public health core. In fall 2017, some students will take a 5-credit integrated MPH core course, **ID 216, Critical Thinking and Action for Public Health Professionals** (see p. 15 for more information). Other students will take the individual public health core courses separately (see pp. 9-13 for approved options). All OEMR students should enroll in and complete the individual public health core courses.

SECTION 2: MPH-45 OEH – Field of Study Requirements (22.5 – 27.5 credits)

MPH-45 OEH students must complete the following field of study-specific requirements:

1. **Introductory Environmental Health*** (select one of the approved options below):

EH 201 [Summer 2]*	Introduction to Environmental Health	2.5
<i>or</i>		
EH 202 [Spring 1]*	Principles of Environmental Health	2.5
<i>or</i>		
EH 262 [Fall]▪	Introduction to the Work Environment	2.5

*EH 201, EH 202, or EH 262 fulfill the Environmental Health Sciences core requirement

▪OH Track; *EH Track

2. **Ergonomics/Human Factors/Safety**

EH 243 [Fall]	Ergonomics/Human Factors	2.5
<i>and/or</i>		
EH 241 [Spring]	Occupational Safety and Injury Prevention	2.5

3. **Principles of Toxicology**

EH 504 [Fall]**	Principles of Toxicology	2.5 or 5.0
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**Available to physicians as a 2.5 credit option

4. **Occupational Health Policy and Administration**

EH 231 [Spring]***	Occupational Health Policy and Administration	2.5
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***Fulfills Health Services Administration core requirement

5. **Introduction to Occupational and Environmental Medicine**

EH 232 [Spring]	Introduction to Occupational and Environmental Medicine	2.5
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6. **Environmental and Occupational Epidemiology**

ID 215 [Spring] or [Summer 1]	Environmental and Occupational Epidemiology	2.5
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7. **Optional**

EH 523 [Winter] (every other year)▫	Work, Health, Productivity: Sustainability and Human Capital	2.5
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▫Required for OEM Residents

May be taken for credit or audited:

HPM 548 [Fall 1] or [Spring 1]#	Responsible Conduct of Research	1.25
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#Required for students on NIOSH training grant

8. **Practice and Culminating Experience**

ID 263 [Spring]▪♦	Practice of Occupational Health	5.0
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ID 263 focuses on the assessment of workplace and community-based hazards, the physiology and biomechanical aspects of work, and a multi-disciplinary problem-solving approach to health problems in various work and community settings. Students are required to complete a project with an outside organization or agency and attend various class sessions. The objectives of the course are to help students to integrate, synthesize, and apply the knowledge and skills from their coursework to a real world public health problem or issue, explore a substantive public health topic that is of interest to them, enhance the competencies and skills students need to function in a professional public health setting, and engage in professional self-assessment and critical reflection.

AND

EH 300 [Spring]■ * Independent Practice & Culminating Experience Option for EH 2.5

Students in the OH and EH tracks should discuss a practice and culminating experience option with the field of study leader by the start of Fall 2.

■OH Track; *EH Track

9. Additional Possible EH Core Credits

For students in the EH track, 10 of the 20 OEH field of study required credits may be selected in consultation with the student's academic advisor from the list below:

EH 263 [Spring]	Analytic Methods and Exposure Assessment	5.0
EH 278 [Spring 2]	Human Health and Global Environmental Change	2.5
EH 279 [Fall]	Radiation Environment: Its Identification, Evaluation, & Control	2.5
EH 292 [Spring]	Properties and Behavior of Airborne Particles	2.5
EH 298 [Fall 1]	Environmental Epigenetics	2.5
EH 330 [Winter]	Field Experience in International Occupational Health & Safety	2.5
EH 510 [Fall]	Fundamentals of Human Environmental Exposure Assessment	2.5
RDS 500 [Spring 2]	Risk Assessment	2.5

SECTION 3: Electives (5 – 12.5 credits)

Students are free to choose electives from the previous list of additional possible EH core credits or from other elective courses at the Harvard Chan School. Students also have the additional option of cross-registering for graduate-level courses at other Harvard Graduate Schools, MIT, and Tufts Fletcher School of Law and Diplomacy or Friedman School of Nutrition Science and Policy.

SECTION 4: Information for OEM Residents and Harvard-NIOSH Education and Research Center Awardees
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Additional Field of Study-Specific Requirements

EH 232 [Spring] <i>and</i>	Introduction to Occupational and Environmental Medicine	2.5
EH 241 [Spring]*	Occupational Safety and Injury Prevention	2.5
<i>or</i>		
EH 243 [Fall]*	Ergonomics/Human Factors	2.5

*Both EH 241, Occupational Safety and Injury Prevention, and EH 243, Ergonomics/Human Factors are required for students in the OEM Residency.

EH 504 [Fall]**	Principles of Toxicology	2.5 or 5.0
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NOTE: Only OEM Residency students and other physicians can opt for the 2.5 credit option for EH 504, Principles of Toxicology.

**Both EH 262, Introduction to the Work Environment, and 2.5 credits of EH 504, Principles of Toxicology, are required for students in the OEM Residency.

EH 523 [Winter] (every other year)	Work, Health, Productivity: Sustainability and Human Capital	2.5
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Requirements of the Occupational Environmental Medicine Residency (OEMR) Program for MPH Degree Candidates

1) MPH students in the Occupational Environmental Medicine Residency (OEMR) must take the following courses/credits for an **ordinal grade** at the Harvard Chan School:

- The first 5 credits of biostatistics (or ID 201, Core Principles of Biostatistics and Epidemiology for Public Health Practice, 7.5 credits)
- The first 5 credits of epidemiology (or ID 201, Core Principles of Biostatistics and Epidemiology for Public Health Practice, 7.5 credits)
- Introduction to Occupational and Environmental Medicine (EH 232)
- Practice of Occupational Health (ID 263)

2) ANY requests for Pass/Fail status in any courses must have the signed approval of an Environmental and Occupational Medicine and Epidemiology Program (EOME) faculty member.

In the event that the deadline is close and no faculty member is available to sign the form in person, verbal or email permission to have Anne Occhipinti sign the form may be given by an EOME faculty member or by Ann Backus.

MPH-45 Occupational and Environmental Health Degree Requirements

MPH Program-Wide Public Health Core Requirements	<u>Credits</u>
Biostatistics & Epidemiology	7.5
Other Public Health Core*	<u>2.5 – 5</u>
	10 – 12.5 credits
MPH-45 Occupational and Environmental Health– Field of Study Requirements	
Introductory Environmental Health	2.5
Ergonomics/Human Factors/Safety	2.5
Principles of Toxicology	2.5 – 5.0
Occupational Health Policy and Administration	2.5
Introduction to Occupational and Environmental Medicine	2.5
Environmental and Occupational Epidemiology	2.5
Optional (HPM 548/EH 523)	1.25 – 2.5
Practice & Culminating Experience	<u>7.5</u>
	22.5 – 27.5 credits
Electives	5 – 12.5 credits**
Total Requirements	45 credits

*The School is continuing to transition to an integrated public health core. In fall 2017, some students will take a 5-credit integrated MPH core course, ID 216, Critical Thinking and Action for Public Health Professionals (see p. 15 for more information). Other students will take the individual public health core courses separately (for MPH-OEH, 2.5 credits in Social and Behavioral Sciences, and 2.5 credits in Ethics or completion of the alternative non-credit option – see pp. 9-13). The Environmental Health Sciences core and the Health Services Administration core are included in the OEH field of study requirements. All OEMR students should enroll in and complete the individual public health core courses.

**Incoming MPH-45 students will be assessed a flat tuition charge per semester based on degree program and full- or part-time status that will include all registration for that semester. Students may elect to complete additional credits beyond the required 45, but must do so during their enrollment in the MPH degree program and may not use the additional credits to extend their expected graduation date.

QUANTITATIVE METHODS FIELD OF STUDY: MPH-45

The Quantitative Methods (QM) field of study, sponsored jointly by the Departments of Epidemiology and Biostatistics, provides students with the necessary quantitative and analytical skills to approach and solve problems in public health and clinical research and practice. This field of study emphasizes study design, data analysis, and the application of quantitative methods within the context of epidemiology, biostatistics, decision sciences, demography, and program evaluation. The competency-based curriculum is designed to provide health professionals with the analytical and statistical knowledge and skills required for successful public health practice and research. It is appropriate for both midcareer health professionals or research scientists and those in the early stages of their careers.

In addition to providing broad perspectives on general aspects of public health, this program prepares graduates for professional positions in clinical and population-based health research in government, health care institutions, and private industry. It also provides an excellent foundation for those interested in pursuing academic careers in the health sciences.

Curriculum

The curriculum for the quantitative methods field of study consists of the required MPH program-wide core courses in public health as well as introductory and intermediate courses in epidemiology and biostatistics. Students also take more advanced coursework in relevant quantitative areas such as epidemiology, biostatistics, demography, econometrics, quality improvement, and decision sciences. Students must also complete an approved practicum and culminating experience project that is completed in the context of an interdepartmental practice course and an additional practice course in an area such as survey research, meta-analysis, clinical trials, decision science, or other relevant quantitative research areas. Students also have credits available for elective courses.

QUANTITATIVE METHODS FIELD OF STUDY COMPETENCIES: MPH-45

In the context of clinical and public health research and interventions, graduates will be able to:

- Evaluate the effectiveness of public health and clinical interventions using epidemiologic and statistical methods, including crude, stratified and standardized analyses, and regression methods.
- Critically evaluate the results of observational and experimental research studies relevant to public health research and practice.
- Calculate and interpret measures of health and disease status encountered in epidemiologic research, health services research, comparative effectiveness research, and public health practice.
- Design and conduct valid and efficient epidemiologic investigations, including cohort and case-control studies, relevant to public health and clinical applications.
- Apply appropriate biostatistical methods, using software packages (e.g., STATA, SAS, or R) to perform and interpret crude and adjusted analyses of data.

Academic year QM field of study requirements – See Section 2
Summer-only QM field of study requirements – See Section 3

SECTION 1: MPH Program-Wide Public Health Core Requirements (5 – 10 credits)

(i) Biostatistics and Epidemiology

The Biostatistics and Epidemiology cores are included in the Quantitative Methods field of study requirements.

Other Public Health Core:

5 – 10 credits**

(ii) Environmental Health Sciences

(iii) Health Services Administration

(iv) Social and Behavioral Sciences

(v) Ethics of Public Health Practice

****For Academic Year QM Students:**

The School is continuing to transition to an integrated public health core. In fall 2017, some students will take a 5-credit integrated MPH core course, **ID 216, Critical Thinking and Action for Public Health Professionals** (see p. 15 for more information). Other students will take the individual public health core courses separately (see pp. 9-13 for approved options). (5 – 10 credits)

****For Summer-Only QM Students:**

Summer-only students will take the individual public health core courses separately (see pp. 9-13 for approved summer options). (10 credits)

SECTION 2: MPH-45 Quantitative Methods – Academic Year Field of Study Requirements (25 credits)
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MPH-45 academic year Quantitative Methods students must complete the following field of study-specific requirements:

1. Introductory Biostatistics

BST 201 [Fall]	Introduction to Statistical Methods	5.0
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BST 202 [Summer 1] and BST 203 [Summer 2] may also fulfill this requirement.

2. Epidemiology

EPI 201 [Fall 1]	Introduction to Epidemiology: Methods I	2.5
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and

EPI 202 [Fall 2] or [Summer 2]	Epidemiologic Methods 2: Elements of Epidemiologic Research	2.5
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or

EPI 500 [Summer 1]	Fundamentals of Epidemiology	2.5
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and

EPI 202 [Fall 2] or [Summer 2]	Epidemiologic Methods 2: Elements of Epidemiologic Research	2.5
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If academic year QM students begin in summer, they may take EPI 500 instead of EPI 201.

3. Regression (select one of the approved options below):

BST 210 [Fall] or [Spring]	Applied Regression Analysis	5.0
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or

BST 213 [Fall]	Applied Regression for Clinical Research	5.0
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or

Other Approved Alternative

4. Upper Level QM Courses

Academic year QM students are required to take 5 additional credits of intermediate and advanced courses in epidemiology, biostatistics, demography, decision sciences (RDS), or other approved quantitative science.

If students use an upper level QM course to fulfill an MPH program-wide core or field of study requirement, they may not double count the course as also fulfilling part of the required 5 credits of upper level QM courses.

5. Practice and Culminating Experience

ID 360 [A – Fall] & [B – Spring]	Practice and Culminating Experience for Quantitative Methods (Academic Year)	2.5
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ID 360 is designed to equip the student with the analytical skills necessary to address current problems in public health through lectures, case studies, and student projects. Problems focus on the conceptual, informational, design, and data analysis issues facing the public and private sectors and the increasing demand to quantify, process, and evaluate the effectiveness, quality, and value of disease prevention, health care promotion, and medical care services and technologies.

and

Additional Spring Practice Course	2.5
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Students choose from a selection of courses relevant to QM in order to provide further practice experience in managing quantitative issues in public health. See list of spring practice course options on next page.

or

Field of Study-Approved Research Project	2.5
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Additional Spring Practice Course Options (2.5 credits minimum):

BST 212 [Spring]	Survey Research Methods in Community Health	2.5
BST 214 [Spring 1] or [Sum 2]	Principles of Clinical Trials	2.5
BST 225 [Summer 2]	Intro. to Systematic Reviews and Meta-Analysis Methods	2.5
EPI 233 [Spring]	Research Synthesis and Meta-Analysis	2.5
HPM 516 [Spring 2]	Health Care Quality and Safety	2.5
ID 240 [Spring 1]	Principles of Injury Control	2.5
RDS 282 [Spring 2]*	Economic Evaluation of Health Policy and Program Mgmt.	2.5
RDS 285 [Spring 1]*	Decision Analysis Methods in Public Health and Medicine	2.5

*Both RDS 282 and RDS 285 have a pre-requisite of either RDS 280 [Fall 2] or RDS 286 [Summer 1].

SECTION 3: MPH-45 Quantitative Methods – Summer-Only Field of Study Requirements (25 credits)
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MPH-45 summer-only QM students must fulfill the MPH program-wide public health core requirements as noted on p. 46. Additionally, summer-only QM students must complete the following field of study-specific requirements:

1. Introductory Biostatistics

BST 202 [Summer 1]	Principles of Biostatistics: Part I	2.5
<i>and</i>		
BST 203 [Summer 2]	Principles of Biostatistics: Part II	2.5

2. Epidemiology

EPI 500 [Summer 1]	Fundamentals of Epidemiology	2.5
<i>and</i>		
EPI 202 [Summer 2]	Epidemiologic Methods 2: Elements of Epidemiologic Research	2.5

3. Regression (select from the approved options below):

EPI 236 [Summer 1]	Analytical Clinical Epidemiology	5.0
<i>or</i>		

BST 215 [Sum 2] or [Spr – Online]	Linear and Longitudinal Regression	2.5
<i>and</i>		
BST 224 [Summer 2]	Survival Methods in Clinical Research	2.5

or

BST 213(2) [Fall – Online]	Applied Regression for Clinical Research	5.0
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or

Other Approved Alternative

4. Upper Level QM Courses

Summer-only QM students are required to take 5 additional credits of intermediate and advanced courses in epidemiology, biostatistics, demography, decision sciences (RDS), or other approved quantitative science. See list on following page.

If students use an upper level QM course to fulfill an MPH program-wide core or field of study requirement, they may not double count the course as also fulfilling part of the required 5 credits of upper level QM courses.

5. Practice and Culminating Experience

ID 370 [Winter] or [Summer]	Practice and Culminating Experience for Quantitative Methods (Summer-Only)	5.0
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Summer-only MPH program students develop an off-site practicum at their home institution under the supervision of a local mentor and a member of the faculty at the Harvard Chan School. This practicum may include aspects of biostatistics, epidemiology, decision sciences, or other quantitative aspects of public health. Students should apply the competencies learned in core courses to an actual investigation. Following the first QM summer coursework, students must submit a written proposal for the practicum along with a letter of support from an investigator from the student's home site, indicating an agreement to act as the local mentor for the project. This proposal is reviewed and a Harvard Chan faculty supervisor is identified. Students ordinarily will write a paper suitable for publication, a grant proposal, or a technical report. This exercise will culminate with a presentation in the final summer of the student's program.

All students are expected to present their ID 370 project in the third summer of their studies. Students who do not complete all preparatory material by the established deadlines jeopardize completion of the degree.

Summer-Only Upper Level QM Courses (5 credits minimum):

Upper level QM courses for summer-only students include many options, such as those listed below:

BIOSTATISTICS

BST 214 [Summer 2]	Principles of Clinical Trials	2.5
BST 215 [Sum 2] or [Spring - Online]*	Linear and Longitudinal Regression	2.5
BST 224 [Summer 2]*	Survival Methods in Clinical Research	2.5
BST 225 [Summer 2]	Intro. to Systematic Reviews and Meta-Analysis Methods	2.5

**If summer-only QM students use BST 215 and BST 224 to fulfill the regression field of study requirement (see p. 49), they may not double count the courses as also fulfilling the required 5 credits of upper level QM courses.*

EPIDEMIOLOGY

EPI 210 [Summer 1]	Study Design in Clinical Epidemiology	2.5
EPI 231 [Spring - Online]●	Readings in Global Health	2.5
EPI 236 [Summer 1]**	Analytical Clinical Epidemiology	5.0
EPI 253 [Summer 2]	Effectiveness Research w/Longitudinal Health Care Databases	2.5
EPI 288 [Spring - Online]	Introduction to Data Mining and Risk Prediction	2.5
EPI 526 [Fall - Online]	Analysis of Publicly Available Databases for Epidemiologic and Health Services Research	2.5
EPI 527 [Fall - Online]	Design and Conduct of Trials in Preventative Medicine	2.5
EPI 528 [Fall - Online]●	Systematic Review and Meta-Analysis	2.5

●Not offered in 2017-2018

***If summer-only QM students use EPI 236 to fulfill the regression field of study requirement (see p. 49), they may not double count the course as also fulfilling part of the required 5 credits of upper level QM courses.*

RISK AND DECISION SCIENCES

RDS 202 [Spring - Online]***●	Decision Science for Public Health	2.5
RDS 286 [Summer 1]	Decision Analysis in Clinical Research	2.5
RDS 288 [Summer 2]	Methods for Decision Making in Medicine	2.5

****Summer-only QM students may take RDS 202 or RDS 286 to fulfill the Health Services Administration (HSA) core. However, if summer-only QM students take RDS 202 or RDS 286 to fulfill the HSA core, they may not double count the course as also fulfilling part of the required 5 credits of upper level QM courses.*

●Not offered in 2017-2018

HEALTH POLICY AND MANAGEMENT

HPM 276 [Summer 1]	Methods and Applications in Health Services Research	2.5
HPM 299 [Summer 1]	Research with Large Databases	2.5
HPM 512 [Summer 2]	Medical Informatics	2.5
HPM 530 [Summer 1]	Measuring and Analyzing the Outcomes of Health Care	2.5

OTHER

NUT 207 [Summer 1]	Analysis of Country-Level Data	2.5
SBS 250 [Summer 2]	Research on Social and Behavioral Health	2.5

Fall & Spring Online Courses

Academic year (residential) and summer-only QM students may enroll in online courses on a space-available basis – see p. 65 for more information.

SECTION 4: Electives (10 – 15 credits)

Students are free to choose electives at the Harvard Chan School. Academic year QM students also have the additional option of cross-registering for graduate-level courses at other Harvard Graduate Schools, MIT, and Tufts Fletcher School of Law and Diplomacy or Friedman School of Nutrition Science and Policy.

Areas of focus for academic year QM students can include options such as Cancer Prevention, Cardiovascular Epidemiology, Decision Sciences, Infectious Disease, and Nutrition.

<u>MPH-45 Quantitative Methods Degree Requirements</u>	
MPH Program-Wide Public Health Core Requirements	<u>Credits</u>
Public Health Core*	<u>5 – 10</u> 5 – 10 credits
MPH-45 Quantitative Methods – Field of Study Requirements	
Introductory Biostatistics	5.0
Epidemiology	5.0
Regression course (see p. 47 for academic year & p. 49 for summer-only)	5.0
Upper Level QM courses (see p. 47 for academic year & pp. 49-50 for summer-only)	5.0
Practice & Culminating Experience (see pp. 47-48 for AY & p. 49 for SO)	<u>5.0</u> 25 credits
Electives	10 – 15 credits**
Total Requirements	45 credits

***For Academic Year QM Students:**

The School is continuing to transition to an integrated public health core. In fall 2017, some students will take a 5-credit integrated MPH core course, ID 216, Critical Thinking and Action for Public Health Professionals (see p. 15 for more information). Other students will take the individual public health core courses separately (for academic year MPH-QM, 2.5 credits in Environmental Health, 2.5 credits in Health Services Administration, 2.5 credits in Social and Behavioral Sciences, and 2.5 credits in Ethics or completion of the alternative non-credit option – see pp. 9-13). (5 – 10 credits)

***For Summer-Only QM Students:**

Summer-only students will take the individual public health core courses separately (see pp. 9-13 for approved summer options). (10 credits)

**Incoming MPH-45 students will be assessed a flat tuition charge per semester based on degree program and full- or part-time status that will include all registration for that semester. Students may elect to complete additional credits beyond the required 45, but must do so during their enrollment in the MPH degree program and may not use the additional credits to extend their expected graduation date.

CLINICAL EFFECTIVENESS FIELD OF STUDY: MPH-45

The Clinical Effectiveness (CLE) field of study is focused on identifying the most appropriate, ethical, and cost-effective means of providing health care through prevention, early detection, and treatment. With this focus, the field of study is designed to provide the analytical and quantitative training necessary to evaluate the impact of clinical practices. Major areas of professional interest within this field include clinical epidemiology and biostatistics, cost-effectiveness analysis, medical decision analysis, health services research, quality improvement in health care, and measurement of health-related quality of life.

The field of study prepares students for clinical research responsibilities and for leadership roles in evaluating and improving all aspects of health care delivery. Most graduates hold positions in academic medicine. *Limited to clinicians who enroll initially in the summer Program in Clinical Effectiveness.*[‡]

[‡]Please note that the Program in Clinical Effectiveness (PCE) has specific admission requirements and deadlines. Local applicants must have a position in a clinical department in a Boston teaching hospital. Applicants from outside of Boston must be recommended by their affiliated medical school or teaching hospital. Students enrolling in the Program in Clinical Effectiveness must also apply by the MPH degree application deadline (December 1, 2017) in order to be enrolled in the MPH-CLE degree program through the standard admissions process. Contact the Program in Clinical Effectiveness: www.hsph.harvard.edu/clineff, 617-732-5500 x3-2436, ProgClinEffect@partners.org

Curriculum

The curriculum for the Clinical Effectiveness field of study consists of introductory courses in clinical epidemiology and biostatistics, which students take during the summer Program in Clinical Effectiveness; other relevant courses in areas such as epidemiology and biostatistics, health services research, quality improvement, and decision sciences; and required MPH program-wide core courses in public health. Students must also complete an approved practicum and culminating experience project, which usually involves an applied research project, and present it to faculty and other students. Students also have some credits available for elective courses.

CLINICAL EFFECTIVENESS FIELD OF STUDY COMPETENCIES: MPH-45

In the context of clinical and public health research, graduates will be able to:

- Critically evaluate the methods and results of observational and experimental studies relevant to clinical and public health research.
 - Design and conduct valid and efficient studies (e.g., randomized controlled trials, quasi-experimental studies, cohort studies, case-control studies) in areas such as clinical epidemiology, health services research, comparative effectiveness research, and quality improvement.
 - Apply appropriate biostatistical techniques, using software packages (e.g., SAS or STATA) to analyze and interpret data from studies in areas such as clinical epidemiology, health services research, comparative effectiveness research, and quality improvement.
 - Evaluate the effectiveness of clinical and public health interventions by implementing epidemiologic and statistical methods, including crude analyses, stratified analyses, and regression methods.
-

SECTION 1: MPH Program-Wide Public Health Core Requirements (5 – 10 credits)

(i) Biostatistics and Epidemiology

The Biostatistics and Epidemiology cores are included in the Clinical Effectiveness field of study requirements.

Other Public Health Core:

5 – 10 credits**

(ii) Environmental Health Sciences

(iii) Health Services Administration

(iv) Social and Behavioral Sciences

(v) Ethics of Public Health Practice

****For Academic Year CLE Students:**

The School is continuing to transition to an integrated public health core. In fall 2017, some students will take a 5-credit integrated MPH core course, **ID 216, Critical Thinking and Action for Public Health Professionals** (see p. 15 for more information). Other students will take the individual public health core courses separately (see pp. 9-13 for approved options). (5 – 10 credits)

****For Summer-Only CLE Students:**

Summer-only students will take the individual public health core courses separately (see pp. 9-13 for approved summer options). (10 credits)

SECTION 2: MPH-45 Clinical Effectiveness – Field of Study Requirements (12.5 – 22.5 credits)

MPH-45 Clinical Effectiveness students must complete the following field of study-specific requirements:

1. Introductory Biostatistics

BST 206 [Summer 1]	Introductory Statistics for Medical Research	2.5
<i>and</i>		
BST 207 or BST 208 [Summer 2]	Statistics for Medical Research	2.5

Using examples gathered from the clinical literature, these courses address the basic analytical techniques that are commonly used in clinical investigations.

2. Epidemiology

EPI 208 [Summer]	Introduction to Clinical Epidemiology	5.0
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EPI 208 covers the basic epidemiologic design issues that are relevant to clinical investigation including patient selection, outcome measurement, bias, and confounding.

3. Regression (select one of the approved options below)*:

BST 210 [Fall] or [Spring]	Applied Regression Analysis	5.0
<i>or</i>		
BST 213 [Fall]	Applied Regression for Clinical Research	5.0
<i>or</i>		
BST 215 [Sum 2] or [Spr – Online]	Linear and Longitudinal Regression	2.5
<i>or</i>		
EPI 236 [Summer 1]	Analytical Clinical Epidemiology	5.0
<i>or</i>		
Other Approved Alternative		

*Required for academic year CLE students and *recommended* for summer-only CLE students.

4. Upper Level CLE Courses**

Academic year CLE students are required to take 5 additional credits of upper level CLE courses. See list on following pages for description and suggested options.

**Summer-only CLE students are *recommended* to take 5 additional credits of upper level CLE courses.

5. Practice and Culminating Experience

Academic Year CLE Students:

EPI 242 [2 Semesters, Fall/Spring]	Practice and Culminating Experience for Clinical Effectiveness (Academic Year)	2.5
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(1.25 credits per semester for a total of 2.5 credits of EPI 242)

This satisfies the practice and culminating experience that is required for all MPH students. It involves two main components: 1) participating in a weekly seminar course (EPI 242) for two semesters, and 2) working on a project to integrate and apply the skills and competencies learned in coursework to address a clinical or public health problem of interest. Typically, this will involve conducting an applied research project, but it could also pertain to any applied aspect of health care. The practicum project should give students the opportunity to apply the competencies learned in core courses to an actual investigation; this may include aspects of biostatistics, epidemiology, decision sciences, or other quantitative aspects of public health. Students usually identify their own topic for the practicum, but any student who is unsure of an appropriate topic should meet with the leader of this field of study to discuss potential topics.

Students are required to attend two semesters of EPI 242. In addition, each student must do a formal presentation of the results of their practicum project during the EPI 242 seminar (usually during their second semester of the course) or, in special cases, at another seminar that is approved by the leader of this field of

study. Students who cannot attend EPI 242 on a regular basis due to extenuating circumstances must discuss alternative options with the leader of this field of study.

Summer-Only CLE:

Students follow the same requirements as all students in the CLE field of study selecting from Summer Session options. The practice course is the key difference in the program. All summer-only CLE students must take ID 320:

ID 320 [Summer] Practice and Culminating Experience for Clinical Effectiveness 2.5 - 7.5
(Summer-Only)

Summer-only MPH program students develop an off-site practicum at their home institution under the supervision of a local mentor and a member of the faculty at the Harvard Chan School. This practicum may include aspects of biostatistics, epidemiology, decision sciences, or other quantitative aspects of public health. Students should apply the competencies learned in core courses to an actual investigation. Following the first CLE summer coursework, students meet with the leader of this field of study to discuss potential topics for their MPH practicum. Once an appropriate project is identified, the field of study leader identifies a Harvard Chan faculty member to be the supervisor of the practicum. Students ordinarily will write a paper suitable for publication, a grant proposal, or a technical report. This exercise will culminate with a presentation typically in the final summer of the student's program. However, summer-only students can enroll for ID 320 credits and present their MPH practica during any period of the year.

Upper Level CLE Courses:

(5 credits minimum required for academic year CLE students; recommended but not required for summer-only CLE students)

Upper level CLE courses are defined as any courses beyond the introductory level that provide students with analytic and/or quantitative skills for evaluating clinical/public health issues. Some suggested options include the courses listed below. However, this list may not be exhaustive; please contact the CLE field of study leader if you have any questions about whether another course may be counted towards this requirement.

Academic year CLE students may request the option to register for independent study research (EPI 300) as part of their coursework; this may be used to work on the same project as the practicum. A maximum of 5 credits can be taken for EPI 300, and these credits can be spread out among semesters if desired. Of the 5 credits that can be taken for EPI 300, a maximum of 2.5 credits can be counted toward the requirement for upper level CLE courses, and an additional 2.5 credits may be taken as elective credits, if students choose to do so. All credits designated as independent study (EPI 300) are pass/fail only. Students who are interested in registering for EPI 300 must contact the leader of this field of study to obtain approval.

Note: Academic year CLE students may enroll in courses in any term: summer, fall, Winter Session, and spring. Summer-only CLE students may only enroll for on-campus courses in Summer Session and Winter Session. Summer-only CLE students are not permitted to enroll in on-campus courses during the fall or spring semesters. Academic year (residential) and summer-only CLE students may enroll in online courses on a space-available basis (see p. 65).

BIOSTATISTICS

BST 214 [Spring 1] or [Summer 2]	Principles of Clinical Trials	2.5
BST 215 [Sum 2]* or [Spring - Online]*	Linear and Longitudinal Regression	2.5
BST 216 [Spring 1]	Intro. to Quantitative Methods for Monitoring and Evaluation	2.5
BST 223 [Spring]	Applied Survival Analysis	5.0
BST 224 [Summer 2]	Survival Methods in Clinical Research	2.5
BST 225 [Summer 2]	Introduction to Systematic Reviews and Meta-Analysis Methods	2.5
BST 226 [Spring]	Applied Longitudinal Analysis	5.0

**If academic year CLE students use BST 215 to fulfill the regression field of study requirement (see p. 54), they may not double count the course as also fulfilling part of the required 5 credits of upper level CLE courses.*

Upper Level CLE Courses Continued:

EPIDEMIOLOGY

EPI 202 [Fall 2] or [Summer 2]	Epidemiologic Methods 2: Elements of Epidemiologic Research	2.5
EPI 203 [Spring 2]	Study Design in Epidemiologic Research	2.5
EPI 204 [Spring 2]	Analysis of Case-Control, Cohort, & Other Epidemiologic Data	2.5
EPI 210 [Summer 1]	Study Design in Clinical Epidemiology	2.5
EPI 221 [Fall 1]	Pharmacoepidemiology	2.5
EPI 231 [Spring - Online]●	Readings in Global Health	2.5
EPI 233 [Spring]	Research Synthesis and Meta-Analysis	2.5
EPI 235 [Spring 1]	Epi. Methods in Health Services Research	2.5
EPI 236 [Summer 1]**	Analytical Clinical Epidemiology	5.0
EPI 253 [Summer 2]	Effectiveness Research w/Longitudinal Health Care Databases	2.5
EPI 269 [Fall 2]	Epidemiological Research in Obstetrics and Gynecology	2.5
EPI 271 [Winter]	Propensity Score Analysis: Theoretical and Practical Considerations	1.25
EPI 288 [Spring - Online]	Introduction to Data Mining and Risk Prediction	2.5
EPI 289 [Spring 1]	Models for Causal Inference	2.5
EPI 293 [Winter]	Analysis of Genetic Association Studies	2.5
EPI 526 [Fall - Online]	Analysis of Publicly Available Databases for Epidemiologic and Health Services Research	2.5
EPI 527 [Fall - Online]	Design and Conduct of Trials in Preventative Medicine	2.5
EPI 528 [Fall - Online]●	Systematic Review and Meta-Analysis	2.5
ID 537 [Fall]	Obesity Epidemiology	2.5

●Not offered in 2017-2018

***If academic year CLE students use EPI 236 to fulfill the regression field of study requirement (see p. 54), they may not double count the course as also fulfilling the required 5 credits of upper level CLE courses.*

RISK AND DECISION SCIENCES

RDS 202 [Spring - Online]***●	Decision Science for Public Health	2.5
RDS 280 [Fall 2]***	Decision Analysis for Health and Medical Practices	2.5
RDS 282 [Spring 2]	Economic Evaluation of Health Policy and Program Mgmt.	2.5
RDS 284 [Fall]	Decision Theory	5.0
RDS 285 [Spring 1]	Decision Analysis Methods in Public Health and Medicine	2.5
RDS 286 [Summer 1]***	Decision Analysis in Clinical Research	2.5
RDS 288 [Summer 2]	Methods for Decision Making in Medicine	2.5

****CLE students may take RDS 202 or RDS 280 or RDS 286 to fulfill the Health Services Administration (HSA) core. However, if academic year CLE students take RDS 202 or RDS 280 or RDS 286 to fulfill the HSA core, they may not double count the course as also fulfilling part of the required 5 credits of upper level CLE courses.*

●Not offered in 2017-2018

SOCIAL EPIDEMIOLOGY

SBS 263 [Spring]	Multilevel Statistical Methods: Concept and Application	5.0
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OTHER

HPM 299 [Summer 1]	Research with Large Databases	2.5
ID 214 [Spring]	Nutritional Epidemiology	2.5
NUT 207 [Summer 1]	Analysis of Country-Level Data	2.5

Fall & Spring Online Courses

Academic year (residential) and summer-only CLE students may enroll in online courses on a space-available basis – see p. 65 for more information.

SECTION 3: Electives (12.5 – 22.5 credits)

Students are free to choose electives from the previous list of upper level CLE courses or from other elective courses at the Harvard Chan School. Academic year CLE students also have the additional option of cross-registering for graduate-level courses at other Harvard Graduate Schools, MIT, and Tufts Fletcher School of Law and Diplomacy or Friedman School of Nutrition Science and Policy.

<u>MPH-45 Clinical Effectiveness Degree Requirements</u>	
MPH Program-Wide Public Health Core Requirements	<u>Credits</u>
Public Health Core*	<u>5 – 10</u> 5 – 10 credits
MPH-45 Clinical Effectiveness – Academic Year (AY) Field of Study Requirements	
Introductory Biostatistics	5.0
Epidemiology	5.0
Regression course (see p. 54)	2.5 – 5.0
Upper Level CLE courses (see pp. 55-56)	5.0
Practice & Culminating Experience	<u>2.5</u>
	AY CLE: 20 – 22.5 credits
MPH-45 Clinical Effectiveness – Summer-Only (SO) Field of Study Requirements	
Introductory Biostatistics	5.0
Epidemiology	5.0
Practice & Culminating Experience	<u>2.5 – 7.5</u>
	SO CLE: 12.5 – 17.5 credits
Electives**	AY CLE: 12.5 – 20 credits SO CLE: 17.5 – 22.5 credits
Total Requirements	45 credits

***For Academic Year CLE Students:**

The School is continuing to transition to an integrated public health core. In fall 2017, some students will take a 5-credit integrated MPH core course, ID 216, Critical Thinking and Action for Public Health Professionals (see p. 15 for more information). Other students will take the individual public health core courses separately (for academic year MPH-CLE, 2.5 credits in Environmental Health, 2.5 credits in Health Services Administration, 2.5 credits in Social and Behavioral Sciences, and 2.5 credits in Ethics or completion of the alternative non-credit option – see pp. 9-13). (5 – 10 credits)

***For Summer-Only CLE Students:**

Summer-only students will take the individual public health core courses separately (see pp. 9-13 for approved summer options). (10 credits)

**Incoming MPH-45 students will be assessed a flat tuition charge per semester based on degree program and full- or part-time status that will include all registration for that semester. Students may elect to complete additional credits beyond the required 45, but must do so during their enrollment in the MPH degree program and may not use the additional credits to extend their expected graduation date.

REGISTRATION INFORMATION

ALL STUDENTS

Registration

In order to pre-register or register for classes, students must pay their Harvard Chan School bill in full.^{4*} Students are billed in July for the fall semester and in November for the spring semester. Students whose bills are not paid in a timely fashion will be blocked from pre-registration and registration.

Summer registration is different from fall and spring registration, and degree students interested in taking summer classes must request courses by the appropriate deadline. Degree students will be contacted in spring with an email invitation to participate in the Summer Session.

Fees

A Student Health Insurance Plan (SHIP) fee and a Student Health Fee (SHF) are charged each semester.

Credits

If adjusting your credit load, you should be sure to check with:

- a. [Registrar's Office](#): regarding health insurance. All students are billed for the Student Health Insurance Plan (SHIP) fee and the Student Health Fee (SHF), regardless of their credit loads. Students may waive the SHIP fee under certain circumstances. Students who are registered for 10 credits or less may request to waive the SHF fee. For any questions regarding fee waiver eligibility, please visit <http://hushp.harvard.edu/waive>
- b. [Office of Financial Aid](#): regarding potential financial aid adjustments (such as federal loans) and billing changes
- c. [Office of Education/MPH Program Office](#): regarding requirements

Deadlines

Students are responsible for knowing and meeting all deadlines. The School's [academic calendar](#) is posted on the Registrar's website. All students are expected to regularly read their Harvard email.

Leave of Absence

Students who do not register for any credits in the fall or spring semester MUST apply for a leave of absence or risk being withdrawn from degree candidacy. Students registered for Fall or Fall 1 or Fall 2 are considered registered for fall. Students registered for Winter Session or Spring or Spring 1 or Spring 2 are considered registered for spring. If you are only planning to register for Fall 2 or Spring 2 classes, you must still register for those classes during the first two weeks of the fall or spring term or you risk being withdrawn from degree candidacy.

Summer Registration and Summer-Only MPH

Registration guidelines for students enrolled in the summer-only MPH program are addressed separately. Students who complete their programs within one year and adjust their schedules because they have attended the Summer Session or the Program in Clinical Effectiveness should check with the OED/MPH Office regarding guidelines and with the Registrar's Office regarding financial requirements.

For incoming MPH students and MPH students who began in 2016:

Tuition

Incoming MPH-45 students and MPH-45 students who began in the 2016-2017 academic year are billed a flat tuition amount in the fall and spring. Tuition will not be assessed for any registration in the summer term, and is included in the fall and spring flat rates. Be sure to check your account regularly!

FULL-TIME STUDENTS

Full-time students are charged a flat tuition amount in the fall and spring and must take at least 15 credits per semester. MPH-45 students are required to complete a minimum of 45 credits in a one-year program. Therefore, students are generally advised to register for 22.5 – 25 credits per semester. The initial bills for each term (in July for the fall and November for the spring) will be based on the full-time MPH-45 tuition rate for the year. In order to pre-register, students must pay for this tuition amount and any previous balance (if applicable).

PART-TIME STUDENTS

Part-time students in the MPH-45 program typically complete the degree over two-three years (maximum of three years) and have flexibility in scheduling courses. Part-time students are charged a flat tuition amount in the fall and spring and are eligible to take up to 14.75 credits per semester. The initial bills for each term (in July for the fall and November for the spring) will be based on the part-time MPH-45 tuition rate for the year. In order to register, students must pay for this tuition amount and any previous balance (if applicable). Tuition charges will be assessed after pre-registration.

^{4*}For any questions about student billing, please visit the [Student Billing website](#) or contact the [Registrar's Office](#).
MPH-45 Curriculum Guide August 2017

REGISTRATION INFORMATION

For MPH students who began in 2015 and prior:

Tuition

Students who began the MPH in the 2015-2016 academic year and prior are billed for the number of credits they take each term. Bills will be adjusted if a student changes their course load during add/drop. Be sure to check your account regularly!

FULL-TIME STUDENTS

Full-time students are charged on a per credit basis and must take at least 15 credits per semester. MPH-45 students matriculating in 2015 are required to complete a minimum of 45 credits in a one-year program. Therefore, students are generally advised to register for 22.5 – 25 credits per semester. The initial bills for each term (in July for the fall and November for the spring) will be based on a flat number of credits and will then be adjusted throughout the term based on the student's registration. In order to pre-register, students must pay for this initial flat amount and any previous balance (if applicable).

PART-TIME STUDENTS

Part-time students in the MPH-45 program typically complete the degree over two-three years (maximum of three years) and have flexibility in scheduling courses. Part-time students are charged tuition on a per-credit basis and are eligible to take up to 14.75 credits per semester. However, the initial bills for each term (in July for the fall and November for the spring) will be fees only. In order to register, students must pay these fees and any previous balance (if applicable). Tuition charges will be assessed after pre-registration.

INTERNATIONAL STUDENTS

International students who are on a student visa may not be part-time. However, special rules may apply in the very last semester of a student's degree program. Please check with the Harvard International Office (HIO) and with the Registrar's Office for these guidelines.

GENERAL POLICY ON WINTER SESSION

All MPH students must follow MPH Winter Session guidelines. Departmental guidelines cannot be substituted. General information on Winter Session can be found at:

www.hsph.harvard.edu/registrar/winter-session

- A. In general, full-time MPH students are expected to participate in Winter Session activities, whether for-credit or non-credit, on-campus or off-campus, in accordance with their individual needs and interests. Because the nature of these experiences is broad, the following are some of the activities that would be appropriate:
- Courses on campus – These may be credit or non-credit courses at the Harvard Chan School or at other Harvard Graduate Schools or MIT
 - Online courses (non-credit)
 - Domestic or international field study (for-credit or non-credit)
 - Independent study (for-credit or non-credit)
 - Independent work/research/field study (including practicum related activities)
 - Research work (Note: Human Subjects Committee approval may be needed; verify with advisor)
 - Site visits relevant to career opportunities
 - Volunteer work in the community
- B. Every full-time MPH student is required to submit an electronic form describing the nature of the student's Winter Session activities.
- C. Any Winter Session courses taken for credit will be added to the student's spring credit totals.
- D. Part-time students (those who complete the program in more than one year) are not required to participate in Winter Session activities.
- E. Summer-only MPH students will be allowed to register for Winter Session courses.
- F. Students who will be traveling abroad should register their trip with the Harvard Travel Registry. Registration is required for all students traveling on trips funded or arranged by Harvard University, for students traveling as part of their required practicum, and strongly recommended for everyone. To register your travel itinerary, visit www.traveltools.harvard.edu

INSTITUTIONAL REVIEW BOARD (IRB) INFORMATION

The Office of Human Research Administration (OHRA) at Harvard Longwood Medical Area (LMA) is a comprehensive administrative office designed to review, approve, assist, and oversee all human research projects conducted by researchers at the Harvard Medical School, Harvard School of Dental Medicine, and Harvard T.H. Chan School of Public Health: www.hsph.harvard.edu/ohra

- To request consultation and/or IRB submission assistance (ideally pre-submission), students may reach out to OHRA's Quality Improvement Program (QIP) in one of two ways:
 - Submit a Request for QIP Service:
https://harvard.az1.qualtrics.com/jfe/form/SV_9Hx4AQ5p974GvMF

or

 - Contact a Member of QIP Directly:
<https://www.hsph.harvard.edu/ohra/contacts-locations/staff-contact-information>
- As another resource for questions, particularly post-submission, students may reach out to the department-assigned IRB Review Specialists affiliated with their field of study:
<https://www.hsph.harvard.edu/ohra/department-assignments>
- Student submission instructions to the Harvard LMA IRB can be found:
<https://www.hsph.harvard.edu/ohra/submitting-a-protocol/initial-submissions>



INTERDISCIPLINARY CONCENTRATIONS

The Harvard T.H. Chan School of Public Health offers a variety of interdisciplinary or interdepartmental concentrations. These concentrations are designed to deepen students' experience in academic or professional areas aligned with their career goals. Some concentrations are restricted to students in certain programs and/or MPH fields of study. **Note:** These interdisciplinary concentrations do not replace or substitute for the MPH program and the field of study to which you were admitted. Students wishing to pursue an interdisciplinary concentration should review the requirements of the MPH program and of their designated field of study to determine if the requirements of the interdisciplinary concentration fit the requirements of their MPH program. MPH students may find that they can fulfill some, but not all, of the requirements of an interdisciplinary concentration. Planning an appropriate schedule is the responsibility of each student with guidance from the student's academic advisor, the interdisciplinary concentration coordinator, and the Office of Education/MPH Program Office.

Students who fulfill an interdisciplinary concentration receive a letter stating that they have completed the requirements for the interdisciplinary concentration. The interdisciplinary concentration does not appear on the student's diploma or transcript. Overall, students should plan their schedules to gain strong skills and focus on developing strengths in their areas of interest.

Interdisciplinary Concentration in Epidemiology of Infectious Disease

This interdisciplinary concentration has a well-established multidisciplinary approach, with a transdepartmental foundation for education and research that includes the Departments of Biostatistics, Epidemiology, Global Health and Population, Health Policy and Management, and Immunology and Infectious Diseases. These departments participate in the interdisciplinary concentration in the epidemiology of infectious disease, which focuses on population studies incorporating both epidemiologic and laboratory methods of addressing global infectious disease. This concentration is intended to provide training for those students who desire careers in research and teaching in infectious disease. As the concentration is a non-degree program, prospective students must apply to a program in one of the participating departments or fields of study in school-wide programs such as the MPH program, which will issue the degree. Upon matriculation, students may elect to participate in this concentration. Students are responsible for fulfilling the requirements of the academic program within the home department or field of study within a school-wide program in addition to the requirements of the concentration. Students who complete the required 15 credits receive a signed letter of completion.

To learn more, visit www.hsph.harvard.edu/idepi

Interdisciplinary Concentration in Humanitarian Studies, Ethics, and Human Rights

Humanitarian emergencies, natural and man-made, have cataclysmic public health implications for communities and especially for the most vulnerable populations. The increasing complexity of humanitarian crises has raised the stakes for providing in-depth and effective training for those who participate in relief and development efforts. This concentration provides an organized program of study that focuses on the normative underpinnings and practice of humanitarian response. The curriculum covers a broad range of areas including human rights, international humanitarian law, civilian protection, disaster response, coordinated aid, crisis dynamics, sector-based assistance, health and human security of internally displaced people, geopolitical context, monitoring and evaluation, strategic planning, situation analysis, and ethics and standards. Upon completion, students are prepared to assume research, leadership, and managerial roles within the humanitarian and human rights community.

To learn more, visit www.hsph.harvard.edu/husehr



INTERDISCIPLINARY CONCENTRATIONS

Interdisciplinary Concentration in Nutrition and Global Health

The Nutrition and Global Health concentration is designed to build upon a strong base of ongoing research, teaching, collaborative work, and training in nutrition and global health at the Harvard Chan School. The concentration has four participating departments—Nutrition, Global Health and Population, Epidemiology, and Social and Behavioral Sciences—together with the involvement of the François-Xavier Bagnoud Center for Health and Human Rights and the Harvard Humanitarian Initiative. It takes an interdisciplinary approach to teaching and conducting research about nutrition; its effect on human and economic development; nutrition in humanitarian crisis situations; and the dynamic interplay among epidemiologic, nutritional, and demographic transitions around the globe. The concentration is dedicated to research that stresses integrative problem solving and evaluation approaches to global health challenges, with a focus on lower- and middle-income countries.

To learn more, visit www.hsph.harvard.edu/nutrition-and-global-health

Interdisciplinary Concentration in Public Health Leadership / Public Health Leadership Lab

This interdisciplinary concentration was developed to improve the leadership skills of students in order to meet the public health challenges facing society in the 21st century. The concentration is geared toward students who desire careers in leading and implementing transformative public health initiatives. The curriculum focuses on theories, models, and skills that will enable students to enter or reenter the public health profession and assume positions of responsibility with confidence and authority. Students explore areas of leadership development through coursework, experiential workshops, hands-on experience, and reflection. As the concentration does not offer a degree, prospective students must apply to a degree program offered by the Harvard T.H. Chan School of Public Health. Students must fulfill the requirements of their degree program and the requirements of the concentration, which include the core courses and workshops in public health leadership.

To learn more, visit <http://hsph.me/PHL>



INTERDISCIPLINARY CONCENTRATIONS

Interdisciplinary Concentration in Maternal and Child Health/Children, Youth, and Families

The goal of this concentration is to improve the health of children and their families through educating leaders in maternal and child health/children, youth, and families (MCH/CYF). This interdepartmental concentration is geared toward students who desire careers in public health programs for children and their families, and those interested in research and/or teaching in this area. The curriculum focuses on the health problems of the target population, programmatic and policy responses, appropriate research techniques, and specific leadership skills in courses in the four participating departments: Social and Behavioral Sciences, Global Health and Population, Nutrition, and Epidemiology. The MCH/CYF concentration consists of four areas of study: human development and disparities in health, child rights and global health, physical growth and nutrition, and characterization of the health problems of children and their families. As the concentration does not offer a degree, prospective students must apply to a department-based degree program or a field of study in a school-wide program such as the MPH program and must complete the requirements for both the academic program and the concentration. The number of required credits for the concentration ranges from 7.5 to 10, depending on the student's degree program.

To learn more, visit www.hsph.harvard.edu/mch-cyf-concentration

Interdisciplinary Concentration in Women, Gender, and Health

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 (WGH) requires the study of the health of women and girls — and men and boys — throughout the life course; gender, gender equality, and biology must be understood as important and interacting determinants of well-being and disease. Areas of study also include gender and gender inequality in relation to individuals' treatment by and participation in health and medical care systems; the physical, economic, and social conditions in which individuals live; and their ability to promote the health of their families, their communities, and themselves. Inherent in these studies is the protection of human rights as fundamental to health and the recognition of diversity and inequality among women — and men — in relation to race/ethnicity, nationality, class, sexuality, and age. As the concentration does not offer a degree, prospective students must apply to a degree program in one of the participating departments or fields of study in school-wide programs such as the MPH program. Students must fulfill the requirements of the home department or field of study within a school-wide program, which issues the degree, and the requirements of the concentration, which include core courses in women, gender, and health; gender analysis; and women's health.

To learn more, visit www.hsph.harvard.edu/wgh

Departmental Concentration in Health Communication

The Health Communication Concentration (HCC) is a concentration housed within the Department of Social and Behavioral Sciences. HCC welcomes MPH students from other fields of study. HCC prepares students who are interested in health communication to apply rigorous, theory-based research and methods to health and risk communication and to apply and evaluate health communication technologies.

Through coursework and practical experience, HCC provides a rich mix of conceptual, analytical, and applied competencies to understand the role of mass media institutions in public health, to be a critical consumer of health communication literature, and to obtain skills in using communication to promote public health policy and practice.

To learn more, visit www.hsph.harvard.edu/health-communication

ONLINE COURSES

Academic year (residential) and summer-only MPH students may enroll in online courses on a space-available basis. The 2.5-credit online courses listed below are part of the MPH in Epidemiology (MPH-EPI) online/on-campus program. Priority enrollment goes to MPH-EPI students, then to summer-only students, and then to academic year (residential) students.

- **Academic year (residential) students** are limited to a maximum of **3.75 online credits in any semester** and a maximum of **10 online credits overall** out of the required 45 credits for the MPH degree.
- **Summer-only students** are limited to a maximum of **5 online credits in any semester** and a maximum of **10 online credits overall** out of the required 45 credits for the MPH degree.

Fall Online Courses

BST 213(2) [Fall - Online]*	Applied Regression for Clinical Research	5.0
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*The online option of BST 213 is ONLY available to summer-only students. (Academic year (residential) students should enroll in the on-campus section of BST 213.)

EPI 526 [Fall - Online]	Analysis of Publicly Available Databases for Epidemiologic and Health Services Research	2.5
EPI 527 [Fall - Online]	Design and Conduct of Trials in Preventative Medicine	2.5
EPI 528 [Fall - Online]●	Systematic Review and Meta-Analysis	2.5

Spring Online Courses

BST 215 [Spring - Online]	Linear and Longitudinal Regression	2.5
EPI 231 [Spring - Online]●	Readings in Global Health	2.5
EPI 288 [Spring - Online]	Introduction to Data Mining and Risk Prediction	2.5
HPM 506 [Spring - Online]	Practical Scientific Methods for Improving Health & Health Care	2.5
RDS 202 [Spring - Online]**●	Decision Science for Public Health	2.5

●Not offered in 2017-2018

***CLE and QM students may take RDS 202 to fulfill the Health Services Administration (HSA) core. However, if CLE and QM students take RDS 202 to fulfill the HSA core, they may not double count the course as also fulfilling part of the required 5 credits of upper level CLE or QM courses.*

CROSS-REGISTRATION

Harvard Chan students may petition, pending available space, to cross-register for elective courses. The **Harvard University Cross-Registration Consortium** includes the Harvard Faculties, Massachusetts Institute of Technology (MIT), and Tufts University's Fletcher School of Law and Diplomacy and Friedman School of Nutrition Science and Policy. To learn more about cross-registration, visit www.hsph.harvard.edu/registrar/cross-registration

A sampling of elective courses taken by previous Harvard Chan students are listed below.

Harvard Business School

HBS XR-HBS 1286 [Fall]	Strategy and Technology
HBS XR-HBS 1505 [Fall]	Leading Social Enterprise
HBS XR-HBS 1666 [Spring]	Entrepreneurship in Healthcare IT and Services
HBS XR-HBS 1816 [Spring]	Managing, Organizing & Motivating for Value
HBS XR-HBS 1908 [Fall] or [Spring]	Business at the Base of the Pyramid
HBS XR-HBS 2060 [Fall]	Managing Human Capital
HBS XR-HBS 2134 [Spring]	Digital Innovation and Transformation
HBS XR-HBS 2180 [Spring]	Innovating in Health Care
HBS XR-HBS 2195 [Fall]	Transforming Health Care Delivery Systems
HBS XR-HBS 6107 [Spring]	Field Course: Commercializing Science; Technology Strategy and Business Models for Science-Based Enterprises

Harvard Graduate School of Arts and Sciences

FAS APCOMP 209A [Fall]	Data Science 1: Introduction to Data Science
FAS APCOMP 209B [Spring]	Data Science 2: Advanced Topics in Data Science
FAS BCMP 230 [Fall]	Principles and Practice of Drug Development
FAS GOV 2001 [Spring]	Advanced Quantitative Research Methodology

Harvard Graduate School of Design

GSD SES 5330 [Fall]	Healthy Places
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Harvard Graduate School of Education

HGSE EDU A111P [Fall 1]	Public Narrative: Self, Us, Now
HGSE EDU A111Q [Fall 2]	Public Narrative: Loss, Difference, Power, and Change
HGSE EDU S030 [Spring]	Intermediate Statistics: Applied Regression and Data Analysis
HGSE EDU S052 [Spring]	Applied Data Analysis

Harvard Law School

HLS XR-LAW 2195 [Winter/Spring]	Negotiation Workshop
HLS XR-LAW 2497 [Fall]	Public Health Law and Policy
HLS XR-LAW 2589 [Spring]	Behavioral Economics, Law and Public Policy

CROSS-REGISTRATION

Harvard Kennedy School

HKS API 141 [Fall]	Finance
HKS API 206 [Spring]	Fundamentals of Program and Policy Evaluation
HKS API 302 [Fall]	Analytic Frameworks for Policy
HKS API 303 [Fall]	Game Theory and Strategic Decisions
HKS API 304 [Fall]	Behavioral Economics and Public Policy
HKS DPI 120 [Fall]	The U.S. Congress and Law Making
HKS DPI 515 [Fall]	Disability Law and Policy
HKS DPI 662 [Fall]	Digital Government: Technology, Policy, and Public Service Innovation
HKS DPI 810M [Fall 1/2] or [Spr 1/2]	Introduction to Writing for Policy and Politics
HKS DPI 811M [Fall 2] or [Spring 2]	Advanced Intensive Writing for Policy and Politics
HKS DPI 820M [Fall 1 or 2] or [Spr 2]	Policy Memo Writing for Decision Makers
HKS DPI 821M [Spring 1]	Long-Form Policy Writing for Decision Makers
HKS DPI 825M [Fall 2]	Policy Presentations for Decision Makers
HKS MLD 102M [Fall 1]	Getting Things Done: Management in a Development Context
HKS MLD 110 [Fall]	Strategic Management for Public Purposes
HKS MLD 201 [Fall] or [Spring]	Exercising Leadership: The Politics of Change
HKS MLD 222M [Fall 1]	Negotiation Analysis
HKS MLD 223M [Fall 2]	Negotiating Across Differences
HKS MLD 304A/B [Fall]	Science of Behavior Change
HKS MLD 342 [Winter]	Persuasion: The Science and Art of Effective Influence
HKS MLD 377 [Fall]	Organizing: People, Power, Change
HKS MLD 410 [Spring]	State and Local Financial Policy
HKS MLD 601 [Fall]	Operations Management
HKS MLD 602 [Spring]	Performance Leadership: Producing Results in Public & Nonprofit Agencies
HKS MLD 829M [Fall 2]	Fundamentals of Entrepreneurial Finance
HKS SUP 572 [Fall]	The Economics of Health Care Policy
HKS SUP 578M [Spring]	U.S. Healthcare Industry and Regulatory Policy

MIT*

MIT 14.003 [Spring]	Microeconomic Theory and Public Policy
MIT 15.363 [Spring]	Strategic Decision Making in the Life Sciences
MIT 15.810 [Fall]	Marketing Management
MIT 15.915 [Spring]	Laboratory for Sustainable Business

*The Registrar's Office at the Harvard Chan School strongly discourages May graduates from cross-registering into a course at MIT during the spring semester because MIT does not submit their grades until after the Harvard Chan School Commencement deadline.

Key:

FAS – Faculty of Arts & Sciences
GSD – Graduate School of Design
HBS – Harvard Business School
HGSE – Harvard Graduate School of Education
HKS – Harvard Kennedy School
HLS – Harvard Law School
MIT – Massachusetts Institute of Technology

Academic Calendar 2017 – 2018

Summer: July 5 – August 18
Summer 1: July 5 – July 28
Summer 2: July 31 – August 18

Fall: August 28 – December 15
Fall 1: August 28 – October 20
Fall 2: October 23 – December 15

Winter Session: January 2 – January 19

Spring: January 22 – May 11
Spring 1: January 22 – March 9
Spring 2: March 19 – May 11

Harvard Chan School Convocation: May 23, 2018
Harvard University Commencement: May 24, 2018

Please check the academic calendar for a complete listing, including School holidays, add/drop/change and pass/fail deadlines:
www.hsph.harvard.edu/registrar/academic-calendar

Students are expected to observe all deadlines.