

# **2024-2025**MPH Curriculum Guide

# CLINICAL EFFECTIVENESS 45-Credit Program (Academic Year / Summer Focused)

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# **TABLE OF CONTENTS**

MPH-45 LEADERSHIP AND ADMINISTRATION	1
HARVARD CHAN ESSENTIAL RESOURCES FOR STUDENTS	2
CLINICAL EFFECTIVENESS POLICIES AND PROCESSES	3
MASTER OF PUBLIC HEALTH: PROGRAM OVERVIEW	6
CLINICAL EFFECTIVENESS FIELD OF STUDY OVERVIEW	7
CLINICAL EFFECTIVENESS DEGREE REQUIREMENTS	9
MPH-45 CLINICAL EFFECTIVENESS – ACADEMIC YEAR CURRICULUM	10
MPH-45 CLINICAL EFFECTIVENESS – SUMMER-FOCUSED CURRICULUM	19
ONLINE ELECTIVE COURSES	26

While every effort has been made to ensure that the information contained in this guide is accurate at the time of publication (August 2, 2024), the Harvard T.H. Chan School of Public Health reserves the right to make changes, at any time, regarding the curriculum, degree requirements, course offerings, policies, or any other information contained herein. This DRAFT version of the MPH-45 Curriculum Guide only pertains to students in the Clinical Effectiveness field of study matriculating in summer or fall 2024.

# MPH-45 LEADERSHIP AND ADMINISTRATION

The Master of Public Health program is a school-wide degree program governed by the *MPH Steering Committee* and supported by the *Office of Educational Programs* and the academic department(s) related to each of the fields of study.

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#### HARVARD CHAN ESSENTIAL RESOURCES FOR STUDENTS

#### MPH PROGRAM OFFICE – OFFICE OF EDUCATIONAL PROGRAMS (MPH-OEP)

hsph.me/mph-program-team ◆ mph@hsph.harvard.edu ◆ 617-432-0090 677 Huntington Avenue, Kresge G-29 Boston, MA 02115

- Signature for General Petitions and other forms
  Emily Davies, Kresge G-29, or mph@hsph.harvard.edu
- MPH Public Health Core: Ying-Ju Lai, ylai@hsph.harvard.edu
- ID 100 Waivers: ID100@hsph.harvard.edu
- Field of Study Waiver and Substitution Requests: MPH-OEP Office mph@hsph.harvard.edu, Field of Study Leader, and Academic Administrator(s)

#### **REGISTRAR'S OFFICE**

hsph.me/registrar ◆ Kresge G-4 Suite ◆ registrar@hsph.harvard.edu ◆ 617-432-1032

- Academic Calendar: hsph.me/events
- Harvard Course Catalog: https://courses.harvard.edu
- Student Handbook: hsph.me/student-handbook
- Student Knowledge Center: hsph.me/knowledge-center (information about course enrollment, cross-registration, etc.)

#### OFFICE OF CAREER & PROFESSIONAL DEVELOPMENT

hsph.me/careers ◆ Kresge G-4 Suite ◆ careers@hsph.harvard.edu

#### OFFICE OF DIVERSITY & INCLUSION

hsph.me/diversity ♦ Kresge G-4 Suite ♦ odi@hsph.harvard.edu

#### OFFICE OF FINANCIAL AID

hsph.me/fin-aid-office ♦ Kresge G-4 Suite ♦ financialaid@hsph.harvard.edu

#### OFFICE OF REGULATORY AFFAIRS & RESEARCH COMPLIANCE

Visit hsph.me/HLC\_IRB for Institutional Review Board (IRB) guidance

#### OFFICE FOR STUDENT AFFAIRS

hsph.me/student-affairs ♦ Kresge G-4 Suite ♦ studentaffairs@hsph.harvard.edu

- Housing Resources: hsph.me/housing
- Student Support Services: hsph.me/support-services

#### OFFICE OF DEVELOPMENT ALUMNI RELATIONS

hsph.me/alumni-relations ♦ 90 Smith Street, Fourth Floor ♦ alumni@hsph.harvard.edu

#### CLINICAL EFFECTIVENESS POLICIES AND PROCESSES

#### **ACADEMIC DEADLINES & HARVARD EMAIL**

Students are responsible for knowing and meeting all deadlines and regularly reading their Harvard email. The School's academic calendar is posted on the *Registrar's Office website*.

#### TRANSFER CREDITS, WAIVERS, & SUBSTITUTIONS

The Harvard Chan School does not accept transfer credits from other academic institutions. However, students who have taken equivalent courses at another institution may petition to waive or substitute a requirement. (MPH 101 – 105 cannot be waived.) If a waiver or substitution is approved, students must still fulfill the 45-credit minimum requirement to graduate. Visit the MPH-OEP Office's website for more information. Students who have previously earned credits through the summer non-degree Program in Clinical Effectiveness (PCE) will have those credits automatically transferred to their degree program after matriculation. To transfer other non-degree credits earned at Harvard Chan, students must submit a Non-Degree Credit Transfer Form. Students may petition to transfer a maximum of 20 non-degree Harvard Chan credits towards their degree program. These credits must have been completed within five years of matriculating in the degree program. To understand the financial implications of transferring non-degree credits into the degree program, visit the Non-Degree Transfer Credits page on the Student Billing website.

#### FIELD OF STUDY & PROGRAM CHANGES

For questions about changing your field of study, changing your program from academic year CLE to summer-focused CLE, or vice versa, contact the MPH-OEP Office (mph@hsph.harvard.edu). It is important to be aware of your program option (academic year or summer-focused) because there are differences in their field of study requirements, the practicum, and course enrollment eligibility. If you have not selected the correct option for your needs, please contact the MPH-OEP Office as soon as possible. Students may make a change early in the program but cannot switch back and forth. Students interested in making a change in program will also want to consult both the Registrar's Office (registrar@hsph.harvard.edu) and the Office of Financial Aid (financialaid@hsph.harvard.edu) to discuss any financial implications.

#### IMPORTANT ENROLLMENT POLICY FOR INTERNATIONAL STUDENTS

Academic year (residential) international students who are on a student visa must enroll in a minimum of 15 credits per fall and spring semester, including a minimum of 11.25 credits of in-person courses per semester. Students can determine their in-person course credits by looking at "instruction mode" in the course listings in *the Harvard Course Catalog*.

Summer-focused international students who are on a student visa must maintain full-time enrollment during Summer Session, and 75% of the total credits must be earned through in-person courses. Full-time enrollment is defined by:

- 7.5 credits over Summer 1 and Summer 2; OR
- 5 credits in either Summer 1 or Summer 2.

#### STUDENT STATUS (FULL-, PART-, & HALF-TIME)

For definitions of full-, part-, and half-time status for academic year (residential) and summer-focused students, see the *Harvard Chan School Student Handbook*. Adjusting your student status may affect your student health insurance, billing, graduation date, student loans, grants, scholarships, and/or student visa (if applicable). Therefore, students considering changing their student status may want to contact:

- 1. MPH-OEP Office mph@hsph.harvard.edu
- 2. Registrar's Office registrar@hsph.harvard.edu
- 3. Office of Financial Aid financialaid@hsph.harvard.edu
- 4. Harvard International Office (Elizabeth Capuano) elizabeth\_capuano@harvard.edu

#### HARVARD CHAN SEMESTER-BASED SYSTEM

The Harvard Chan School uses a semester-based system. For more information, see *hsph.me/navigating-your-field-of-study*.

#### ENROLLING IN ONLY ONE SESSION AND/OR ONE CLASS IN A SEMESTER

Academic year (residential) students taking only Fall 2 or Spring 2 courses must still enroll in those courses by the Fall 1 or Spring 1 add/drop deadlines, respectively, or otherwise risk being withdrawn from degree candidacy. If a student enrolls in only one course in a semester, the course must be in-person. WinterSession credits count toward the Spring Semester total credit count.

Summer-focused students are expected to be enrolled in both Summer 1 and Summer 2. Students who are unable to satisfy this requirement should discuss their academic plans with the MPH Program.

#### LEAVE OF ABSENCE

Students who are unable to enroll in ANY credits in a specific semester must apply for a leave of absence or risk being withdrawn from degree candidacy. If planning to take a leave, students should contact the MPH-OEP Office. The student will need to complete a Leave of Absence Petition.

#### **BILLING & ENROLLMENT**

For questions about tuition or student billing, visit the *Student Billing website* or contact the Registrar's Office. To discuss your student status and implications for credit load minimums and maximums, contact the Registrar's Office (*registrar@hsph.harvard.edu*).

#### Academic Year Full-Time Students

Full-time, MPH-45 students are required to complete a minimum of 45 credits in one year. Therefore, students are generally advised to register for approximately 22.5–25 credits per semester.

#### Academic Year Part-Time Students

Part-time, MPH-45 students are required to complete the degree over two years. Part-time students should prioritize required courses during their first year, except for EPI 946F and EPI 946S. See P. 14 for more details on EPI 946.

• International students who are on a student visa may not be part-time. if you have questions regarding your student visa, please speak with the Harvard International Office (HIO) (elizabeth\_capuano@harvard.edu) and with the Registrar's Office.

#### **Summer-Focused Students**

Summer-focused students in the MPH-45 program typically complete the degree in 2-3 summers (maximum of three summers). Summer-focused students who take online courses and/or Winter Session courses may be able to reduce their time to degree to two summers, but this is not guaranteed and does not result in a reduction in tuition. Students must submit a General Petition and Academic Plan to request an earlier graduation date.

#### MASTER OF PUBLIC HEALTH: PROGRAM OVERVIEW

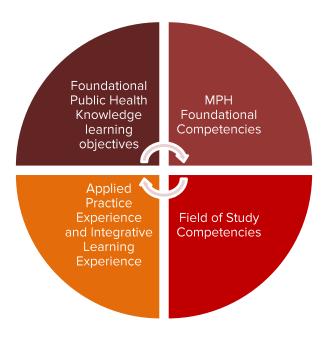
The MPH degree is the most widely recognized professional credential for leadership in public health. The MPH curriculum emphasizes active, student-directed learning, problem solving, and the acquisition of skills essential to the practice of public health. The program is organized around the Foundational Public Health Knowledge learning objectives, the MPH Foundational Competencies, the MPH Concentration Competencies, the Applied Practice Experience, and the Integrative Learning Experience laid out by the Council on Education for Public Health (CEPH). Students pursue a career-oriented field of study. Each field of study has defined five distinct competencies that enhance the 12 Foundational Public Health Knowledge learning objectives and the 22 MPH Foundational Competencies.

#### HARVARD CHAN'S COMPETENCY AND APPLICATION-BASED MPH CURRICULUM

The MPH public health core curriculum is developed in accordance with the Council on Education for Public Health's 12 Foundational Public Health Knowledge learning objectives and 22 MPH Foundational Competencies required of all students receiving an MPH degree at accredited institutions. To learn more, visit <a href="https://heph.me/mph-competencies.">https://heph.me/mph-competencies</a>.

The Foundational Public Health Knowledge learning objectives and the MPH Foundational Competencies are primarily met through the Harvard Chan MPH public health core curriculum, the Applied Practice Experience, and the Integrative Learning Experience.

#### The Harvard Chan MPH Degree



#### CLINICAL EFFECTIVENESS FIELD OF STUDY OVERVIEW

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, decisions, and interventions. 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. Along with the broad perspective on general aspects of public health that the program offers, this training provides a basis for identifying the health policy implications and public health benefits of clinical investigations. 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 Program in Clinical Effectiveness.

#### **CURRICULUM**

The curriculum for the Clinical Effectiveness field of study consists of the required MPH public health core curriculum; introductory courses in clinical epidemiology and biostatistics, which students take during the Program in Clinical Effectiveness; advanced coursework in relevant areas, such as epidemiology and biostatistics, health services research, quality improvement, and decision sciences; and elective courses. Students must also complete an approved Applied Practice Experience and an Integrative Learning Experience.

#### FIELD OF STUDY COMPETENCIES

- 1. Critically evaluate and apply principles of epidemiologic methods, including exposure and outcome measures, measures of association, bias and confounding, and study design options.
- 2. Demonstrate the ability to critically evaluate and apply appropriate biostatistical techniques for data arising from evaluation of public health problems (e.g., including basic probability theory and common distributions, effect measure estimation, continuous and categorical data analysis, parametric and non-parametric hypothesis tests, confidence intervals and p-values, correlation and basic regression techniques, and power/sample size calculations).
- 3. Conduct and interpret results from regression analyses used to examine the effectiveness of clinical decisions and interventions.
- 4. Formulate a clinical research question and develop a proposal for a study to address this question.
- 5. Summarize and critically evaluate the methods and results of studies designed to examine the effectiveness of clinical decisions and interventions.

#### **NAVIGATING YOUR FIELD OF STUDY**

This guide provides detailed information for the Clinical Effectiveness field of study, including the policies and processes for all CLE students, as well as those only applicable to academic year or summer-focused CLE students. This guide also includes an overview of the field of study **competencies** and the field of study **curriculum** that is designed to help students achieve those competencies.

*Supplements* to the MPH Curriculum Guide provides additional details on **required**, **recommended**, and/or **suggested elective courses** for some fields of study.

#### **ADVISING**

Your assigned academic advisor can be found in *my.harvard*. Students are encouraged to carefully review the field of study requirements and consult with their faculty advisor to choose elective courses best suited to their needs. Students, with advisor oversight, can identify graduate-level elective courses across the University, and at MIT and Tufts, that meet their career goals and allow them to take full advantage of being at Harvard. Academic advisors review proposed cross-registered courses to ensure they align with the public health career goals of students. (Please note that summer-focused CLE students are not permitted to cross-register.)

Additionally, the MPH-OEP Office is a good resource for questions regarding the MPH public health core curriculum and graduation. Faculty advisors, field of study leaders, departmental faculty with specific areas of expertise, and academic administrators can all serve as advisors in unofficial capacities too. For more resources on planning your program, visit <code>hsph.me/navigating-your-field-of-study</code>.

#### INTERDISCIPLINARY CONCENTRATIONS

To learn more, visit *hsph.me/interdisciplinary-concentrations* (only open to academic year students).

#### TRACKING YOUR DEGREE PROGRESS

The MPH-OEP Office offers *degree audit sheets* for the Clinical Effectiveness field of study.

#### **GRADUATION**

Completion of the MPH public health core curriculum and field of study requirements for the MPH degree is monitored by the MPH-OEP Office. It is the student's responsibility to proactively reach out to the MPH-OEP Office, field of study leader, and/or academic administrator(s) if any concerns arise.

#### CLINICAL EFFECTIVENESS DEGREE REQUIREMENTS

#### DEGREE REQUIREMENTS FOR ALL CLE STUDENTS

- 45 credits minimum
  - Minimum of 32.5 ordinal credits
  - No more than 12.5 pass/fail credits (some required courses and all independent studies are P/F only)
- Successful completion of all courses required by your field of study
- Applied Practice Experience
- Integrative Learning Experience
- Cumulative grade point average of at least 2.7

#### PROGRAM POLICIES FOR ACADEMIC-YEAR CLE STUDENTS

- Can take a maximum of 27.5 credits per fall and spring semesters
- Can take a maximum of **15 credits** across the full summer term, with no more than 7.5 credits in either Summer 1 or Summer 2. The cap does not apply to full-term summer courses.
- Limited to a maximum of 3.75 credits of online elective courses (see p. 26) in any semester with a maximum of 10 credits of online elective courses overall
  - Some of the required MPH core courses (ID 100 and MPH 101 MPH 105) are online only or have an online option. Those do NOT count towards the online elective credit limits outlined above.
- All full-time MPH students are expected to participate in a Winter Session activity
  that furthers their educational goals and is approved by the MPH-OEP Office. Any
  credits taken during Winter Session count towards your spring semester credit
  totals. To learn more, visit hsph.me/mph-winter-session

#### PROGRAM POLICIES FOR SUMMER-FOCUSED CLE STUDENTS

- Required to take on-campus courses and enroll in 10 15 credits across the full summer term, with no more than 7.5 credits in either Summer 1 or Summer 2. The cap does not apply to full-term summer courses.
  - Students who are unable to satisfy the minimum 10-credit requirement should discuss their academic plans with the MPH Program. If a student is unable to enroll in any on-campus courses during the summer term, they must submit a *Leave of Absence Petition*.
- Limited to a maximum of 5 credits of online elective courses (see p.26) in any semester with a maximum of 10 credits from of online elective courses overall
  - Summer-focused students will take all MPH public health core courses (ID 100 and MPH 101 – MPH 105) online. Those do NOT count towards the online elective credit limits outlined above.
- Can take up to 5 credits of Winter Session coursework per term (hsph.me/mph-winter-session)

#### MPH-45 CLINICAL EFFECTIVENESS – ACADEMIC YEAR CURRICULUM



#### MPH PUBLIC HEALTH CORE CURRICULUM

The MPH public health core curriculum is comprised of:

- Biostatistics and Epidemiology Core course(s);
- ID 100: Foundations for Public Health, a school-wide, pre-matriculation course that provides foundational public health knowledge;
- MPH 101–MPH 105, five courses that cover other foundational public health competencies.

Full-time MPH-45 students are expected to complete the MPH public health core curriculum by the end of the fall semester. Part-time MPH students are strongly encouraged to complete the MPH public health core curriculum in their first year to ensure early grounding in the foundational principles of public health. No waivers or substitutions will be allowed for MPH 101–MPH 105.

BIOSTAT	BIOSTATISTICS AND EPIDEMIOLOGY CORE					
Course Number	Title	Semester	Credits			
BST 206	Introductory Statistics for Medical Research	Summer 1	2.5			
BST 207	Statistics for Medical Research II	Summer 2	2.5			
EPI 208	Introduction to Clinical Epidemiology	Summer	5.0			

MPH PUBLIC HEALTH CORE							
Course Number	Title	Semester	Credits	Course Format/Notes			
ID 100 is required of all Harvard Chan students. While students will complete the coursework via Canvas online in summer, each student will still need to formally enroll in the course via my.harvard during the fall enrollment period.							
ID 100	Foundations for Public Health	Summer into Fall 1	1.0 (Pass/Fail Only)	Asynchronous, self-paced, and online. Takes approx. 10–12 hours total and must be completed by 11:59PM ET on Sunday, August 25, 2024.  Must be completed in first year of program.			
MPH 101	Qualitative Methods for Public Health: A Brief Introduction	Summer or Fall 2	0.25 (Pass/Fail Only)	Asynchronous, online, with set deadlines for each module. Takes approx. 8–10 hours total.  Must be completed in first year of program. Students completing PCE in their first summer should take MPH 101 in Fall 2.			

Academic year CLE students have some flexibility when choosing which terms to complete MPH 102 – MPH 104. See additional offerings on p. 12.

MPH 102, MPH 103, and MPH 104 each have three sections in the Fall Semester.

#### Section 1 & Section 2

ADLI DUDI IO LICALTI I CODE

- Full-time students are required to enroll in Section 1 or 2 (four weeks) as well as the accompanying lab section.
- While Section 1 and 2 are only four weeks long, students should still comply with the drop/add/course change deadlines for Fall 1 and Fall 2.

#### Section 3

• Part-time students have the option to enroll in Section 3 (eight weeks), which does not have a required lab.

MPH 105 has one section, is four weeks long, and is offered in Fall 2 only.

MPH 102 Heal	lth Systems	Fall 1	1.25	Section 1 & Section 2 Sep. 3 – Sep. 25 four weeks, in-person on Mondays and Wednesdays; must be taken with the required lab section.
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				Section 3 Sep. 3 – Oct. 23 Eight weeks; asynchronous, online, with set deadlines for each module.
MPH 103	Leadership and Communication	Fall 2	1.25	Section 1 & Section 2 Nov. 25 – Dec. 18 four weeks, in-person on Mondays and Wednesdays; must be taken with the required lab section.  Section 3 Oct. 28 – Dec. 18 Eight weeks; asynchronous, online, with set deadlines for each module.
MPH 104	Social, Behavioral, and Structural Determinants of Health	Fall 1	1.25	Section 1 & Section 2 Sep. 30 – Oct. 23 in-person; four weeks, must be taken with the required lab section.  Section 3 Sep. 3 – Oct. 23 Eight weeks; asynchronous, online, with set deadlines for each module.
MPH 105	Public Health Policy and Politics	Fall 2	1.25	Oct. 28 – Nov. 20 Four weeks; online, live lectures on Zoom, on Mondays and Wednesdays.

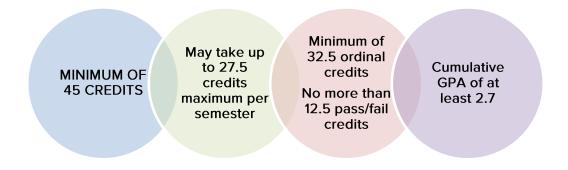
#### ADDITIONAL OFFERINGS – MPH PUBLIC HEALTH CORE

Academic-year CLE students may also take MPH 101, MPH 102, MPH 103, MPH 104 in Summer or Winter Session. In Summer and Winter, the courses are available in online format only.

Course Number	Title	Additional Semester(s) Offered	Credits
MPH 101	Qualitative Methods for Public Health: A Brief Introduction	Summer	0.25
MPH 102	Health Systems	Summer Winter Session	1.25
MPH 103	Leadership and Communication	Summer Winter Session	1.25
MPH 104	Social, Behavioral, and Structural Determinants of Health	Summer Winter Session	1.25

ACADEMIC YEAR CLINICAL EFFECTIVENESS FIELD OF STUDY REQUIREMENTS					
Course Number	Title	Semester	Credits		
Regression (2.5–5 credits) Choose one of the approved courses below.					
BST 210	Applied Regression Analysis	Fall or Spring	5.0		
BST 213	Applied Regression for Clinical Research	Fall	5.0		
BST 215	Linear and Longitudinal Regression	Summer 2 or Spring (ONLINE)	2.5		
EPI 236	Analytical Clinical Epidemiology	5.0			
Upper-level C		urses beyond the introductory level t for evaluating clinical/public health is			
Varies	Take 5 credits from the list of a (hsph.me/CLE-upper-level).	pproved courses	5.0		
Students mus		earning Experience (5 credits) immediately by EPI 946S. Part-time s EPI 946 in Fall and Spring of their se			
EPI 946F	Applied Practice Experience	Fall	2.5		
EPI 946S	and Integrative Learning Experience for CLE (Academic Year)	Spring	2.5		
ELECTIVES (13.75 – 16.25 credits)  To view a sample list of cross-registration electives, visit hsph.me/mph-cross-reg					
TOTAL 45 CREDITS					

# **Important Program Reminders**



#### APPLIED PRACTICE EXPERIENCE AND INTEGRATIVE LEARNING EXPERIENCE

Each field of study in the MPH program requires 1) an **Applied Practice Experience (APE)** ("Practicum"), and 2) an **Integrative Learning Experience (ILE)**, which are components of a practice course or seminar course for each field of study. All MPH students at accredited schools of public health in the U.S. must complete these two degree requirements.

EPI 946 satisfies the Applied Practice Experience and the Integrative Learning Experience for academic-year Clinical Effectiveness students. Students are required to register for and attend two semesters of EPI 946, beginning with EPI 946F (fall semester), followed immediately by EPI 946S (spring semester.) Each semester is 2.5 credits, for 5 credits total. EPI 946 is an on-campus course that meets on Friday mornings, 8:00-9:30 am, and there is a mandatory attendance requirement; remote attendance is not allowed. During one of the two semesters, students will give a formal presentation about their practicum project; during the other, they will write critiques of two other students' presentations. Part-time students (completing the degree in 2 years) should take EPI 946 in Fall and Spring of their second year; full-time students (completing the degree in 1 year) must take it in Fall and Spring of their first year.

#### **Applied Practice Experience**

Detailed information about the Applied Practice Experience is posted on the MPH in Clinical Effectiveness – Practicum site.

The APE is an opportunity to apply MPH competencies to a real-world public health problem or issue that is salient to a health care or public health organization and to produce work that is of value to the organization.

For Clinical Effectiveness students, the Applied Practice Experience, referred to as the practicum, typically will involve conducting an applied research project that is quantitative and analytic (i.e., not purely descriptive.) The project may include aspects of biostatistics, epidemiology, decision sciences, or other quantitative aspects of public health. Students are required to submit two Applied Practice Experience products from their practicum work during EPI 946, demonstrating a total of five competencies (three foundational and two field of study-specific competencies).

Students may develop their projects using data from their home institutions, from mentors/collaborators at other institutions, from publicly available databases, or from other sources. In some cases, students may collect their own data (e.g., by developing and administering a survey), although primary data collection is not a requirement.

During their first semester of EPI 946, students will submit a Learning Agreement, a brief outline of the proposed project. Full-time students should identify their practicum topic by early October at the latest. Part-time students who are completing the degree in two academic years should identify their topic by the end of their first year at the latest. Students usually identify their own topics, but anyone who is unsure of an appropriate

topic should meet with the CLE field of study leader early in their program. The CLE field of study leader must approve the practicum topic and the Learning Agreement.

#### Integrative Learning Experience

The Integrative Learning Experience (ILE) is a culminating experience that requires students to integrate and synthesize specific MPH foundational and field of study competencies that are gained in coursework and other parts of the MPH program. To meet the ILE requirement, students typically write a paper in the form of a manuscript suitable for publication in a peer-reviewed journal, which integrates knowledge gained from the project with other key competencies learned during the program.

#### For More Details

Prior CLE practice sites and recent project abstracts: *hsph.me/mph-prior-practice* MPH in Clinical Effectiveness – Practicum website: *hsph.me/CLE-practicum* 

# SAMPLE SCHEDULE FOR MPH-45 IN CLINICAL EFFECTIVENESS (ACADEMIC YEAR)

# Full-Time Schedule

Full-time students may take a maximum of 27.5 credits per fall and spring semester.

SUMMER (Program in Clinical Effectiveness) Students who have previously completed PCE will have those credits automatically transferred to their degree program.					
BST 206	Introductory Statistics for Medical Research	2.5cr			
BST 207	Statistics for Medical Research II	2.5cr			
EPI 208 Introduction to Clinical Epidemiology 5.0cr					
Varies	2 PCE electives	5.0cr			
Total Credits	15	credits			

FALL (13.75 ı	required credits)		WINTER	SPRING	(7.5 required credits)		
ID 100	Foundations for Public Health (Pre-matriculation coursework begins online in summer)	1.0cr		EPI 946S	Applied Practice Experience and Integrative Learning Experience for CLE (AY)	2.5cr	
MPH 101	Qualitative Methods for Public Health	0.25cr		Varies	Upper-level CLE course	5cr	-
MPH 102	Health Systems	1.25cr		Electives	5	7.5cr	dits
MPH 103	Leadership and Communication	1.25cr	-				45 credits
MPH 104	Social, Behavioral, and Structural Determinants of Health	1.25cr					PROGRAM = .
MPH 105	Public Health Policy and Politics	1.25cr					
Varies	Regression Requirement	5.0cr	1				) OF
EPI 946F	Applied Practice Experience and Integrative Learning Experience for CLE (AY)	2.5cr					END
Electives		1.25cr					
	Work on Practicu	ım (identi	fy topic b	y early O	october 2024)		
TOTAL CREDITS		15 credits				15 credits	

# Part-Time Schedule

Part-time students may take a maximum of 14.75 credits per fall and spring semester.

# Year One

SUMME	SUMMER (Program in Clinical				
Effectiv	eness)				
Student	s who have previously compl	eted			
PCE will	have those credits automatic	cally			
transfer	red to their degree program.				
BST 206	Introductory Statistics for Medical Research	2.5cr			
BST 207	Statistics for Medical Research II	2.5cr			
EPI 208	Introduction to Clinical Epidemiology	5.0cr			
Varies	2 PCE electives	5.0cr			
Total 15 credits					

FALL			Winter			SPRING		
טטוטו	Foundations for Public Health (pre-matriculation coursework begins online in summer)	1.0cr		Social, Behavioral, and Structural Determinants of Health	1.25cr	ivaries	Upper-Level CLE course	2.5cr
IMPH 101	Qualitative Methods for Public Health	0.25cr						
	Public Health Policy and Politics	1.25cr				Varies	Electives	3.75cr
Varies	Regression Requirement	5.0cr						
Total Credits	7.!	5 credits		(Includin		al Credits rSession)		'.5 credits

# Year Two

SUMMER								
MPH 102	Health Systems		1.25					
Total Credits		1.25	credits					

FALL			Winter	SPRING			
MPH 103	Leadership and Communication	1.25cr		EPI 946S	Applied Practice Experience & Integrative Learning Experience for Clinical Effectiveness (AY)	2.5cr	
EPI 946F	Applied Practice Experience & Integrative Learning Experience for Clinical Effectiveness (AY)	2.5cr		Varies	Electives	3.75cr	
Varies	Upper-level CLE courses	2.5cr					
Varies	Electives	1.25cr					
	work on practicum						
Total Credits	7.	5 credits	To (including Wint	ital Credits erSession)	6.	25 credits	

#### MPH-45 CLINICAL EFFECTIVENESS – SUMMER-FOCUSED CURRICULUM



### MPH PUBLIC HEALTH CORE CURRICULUM

The MPH public health core curriculum is comprised of:

- Biostatistics and Epidemiology Core course(s);
- ID 100: Foundations for Public Health, a school-wide, pre-matriculation course that provides foundational public health knowledge;
- MPH 101–MPH 105, five courses that cover other foundational public health competencies.

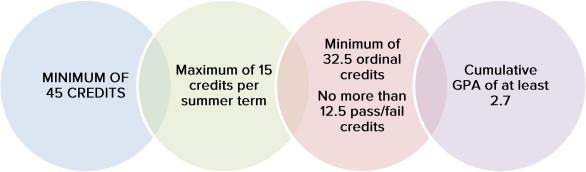
Summer-focused CLE students have some flexibility when choosing which terms to complete MPH 101–MPH 105 (see table on next page). No waivers or substitutions will be allowed for MPH 101–MPH 105.

BIOSTATISTICS AND EPIDEMIOLOGY CORE						
Course Number	Title	Semester	Credits			
BST 206	Introductory Statistics for Medical Research	Summer 1	2.5			
BST 207	Statistics for Medical Research ii	Summer 2	2.5			
EPI 208	Introduction to Clinical Epidemiology	Summer	5.0			

MPH PUBLIC HEALTH CORE							
Course Number	Title	Semester	Credits	Course Format/Notes			
<b>ID 100</b> is required of all Harvard Chan students. While students will complete ID100 via <i>Canvas</i> online in summer, each student will still need to formally enroll in the course via <i>my.harvard</i> during the fall enrollment period.							
ID 100	Foundations for Public Health	Summer into Fall 1	1.0 (Pass/Fail Only)	Asynchronous, self-paced, and online. Takes approx. 10–12 hours total and must be completed by 11:59PM ET on August 25, 2024.  Must be completed in first year of program. Students completing PCE in their first summer should take MPH 101 in Fall 2.			
MPH 101	Qualitative Methods for Public Health: A Brief Introduction	Summer or Fall 2	0.25 (Pass/Fail Only)	Asynchronous, online, with set deadlines for each module. Takes approx. 8–10 hours total.  Must be completed in first year of program.			
MPH 102	Health Systems	Summer or Fall 1 or Winter Session	1.25	Asynchronous, online, with set deadlines for each			
MPH 103	Leadership and Communication	Summer or Fall 2 or Winter Session	1.25	module.  If taking MPH 102, 103, 104 in the fall semester, summer-focused students must enroll in the fully			
MPH 104	Social, Behavioral, and Structural Determinants of Health	Summer or Fall 1 or Winter Session	1.25	online Section 3.			
MPH 105	Public Health Policy and Politics	Fall 2	1.25	Oct. 28 – Nov. 20 Four weeks; online, live lectures on Zoom, on Mondays and Wednesdays			

SUMMER-FOCUSED CLINICAL EFFECTIVENESS FIELD OF STUDY REQUIREMENTS							
Course Number	Title	Credits					
Regression (2.5–5 credits) Choose one of the approved courses below.							
BST 215	Linear and Longitudinal Regression	Summer 2 or Spring (ONLINE)	2.5				
EPI 236	Analytical Clinical Summer 1		5.0				
• •	oursework (5 credits) d (but not required) for summer-fo	cused CLE.					
Varies	Take 5 credits from the list of an (hsph.me/CLE-upper-level).	5.0					
Applied Practice Exp	perience and Integrative Learnin	g Experience (5 credits)					
Applied Practice Experience and Integrative Learning Spring 2.5 EPI 947U Experience for CLE (Summer-Focused) Summer 2.5							
ELECTIVES (13.75–21.25 credits)							
		TO	TAL 45 CREDITS				





#### APPLIED PRACTICE EXPERIENCE AND INTEGRATIVE LEARNING EXPERIENCE

Each field of study in the MPH program requires 1) an **Applied Practice Experience (APE)** ("Practicum"), and 2) an **Integrative Learning Experience (ILE)**, which are components of a practice course or seminar course for each field of study. All MPH students at accredited Schools of Public Health in the U.S. must complete these two degree requirements.

EPI 947 satisfies the Applied Practice Experience and the Integrative Learning Experience for summer-focused Clinical Effectiveness students. Students are required to enroll in two semesters of EPI 947, typically during their final spring (EPI 947S) and summer semesters (EPI 947U). Each semester is 2.5 credits, for 5.0 credits total. The spring course (EPI 947S) is fully online and asynchronous; it includes assignments related to the practicum. The summer course (EPI 947U) is an on-campus seminar during which students will give a formal presentation about their practicum project and complete their ILE.

#### **Applied Practice Experience**

Detailed information about the Applied Practice Experience is posted on the MPH in Clinical Effectiveness – Practicum site.

The APE is an opportunity to apply MPH competencies to a real-world public health problem or issue that is salient to a health care or public health organization and to produce work that is of value to the organization.

For Clinical Effectiveness students, the Applied Practice Experience, referred to as the practicum, typically will involve conducting an applied research project that is quantitative and analytic (i.e., not purely descriptive.) The project may include aspects of biostatistics, epidemiology, decision sciences, or other quantitative aspects of public health. Students are required to submit two Applied Practice Experience products from their practicum work during EPI 947, demonstrating a total of five competencies (three foundational and two field of study-specific competencies).

Summer-focused students usually develop their projects using data from their home institutions, but they may also develop projects using data from other institutions, from publicly available databases, or from other sources. In some cases, students may collect their own data (e.g., by developing and administering a survey), although primary data collection is not a requirement. Summer-focused CLE students should have a local mentor at their home institution and a mentor who is a Harvard faculty member. Students can approach a Harvard faculty member to be their mentor, or they can ask the CLE field of study leader if they need help identifying a faculty member to serve as a mentor.

During their first semester of EPI 947, students will submit a Learning Agreement, a brief outline of the proposed project. Therefore, students need to identify their practicum project and mentor(s) before registering for EPI 947S. Students with any questions about this should meet with the CLE field of study leader early in the program. The CLE field of study leader must approve the practicum topic and the Learning Agreement.

#### Integrative Learning Experience

The Integrative Learning Experience (ILE) is a culminating experience that requires students to integrate and synthesize specific MPH foundational and field of study competencies that are gained in coursework and other parts of the MPH program. To meet the ILE requirement, students typically write a paper in the form of a manuscript suitable for publication in a peer-reviewed journal, which integrates knowledge gained from the project with other key competencies learned during the program.

#### For More Details

Prior CLE practice sites and recent project abstracts: *hsph.me/mph-prior-practice* MPH in Clinical Effectiveness – Practicum website: *hsph.me/CLE-practicum* 

# Sample Schedules for MPH-45 in Clinical Effectiveness (Summer-Focused)

# YEAR ONE

SUMMER (Program in Clinical Effectiveness) Students who have previously completed PCE will have those credits automatically transferred to their degree program.						
BST 206	Introductory Statistics for Medical Research	2.5cr				
BST 207	Statistics for Medical Research II	2.5cr				
EPI 208	Introduction to Clinical Epidemiology	5.0cr				
Varies	2 PCE electives	5.0cr				
Total Credits	15	5 credits				

FALL		Winter	SPRING	
ID100	Foundations for Public Health (pre-matriculation coursework begins online in summer)	1.0cr		
MPH 101	Qualitative Methods for Public Health	0.25cr		
MPH 105	Public Health Policy and Politics	1.25		
Total Credits	2.5	credits		

# YEAR TWO

SUMMER						
MPH 102	Health Systems	1.25cr				
MPH 104	Social, Behavioral, and Structural Determinants of Health	1.25cr				
Varies	Regression Requirement	5.0cr				
Varies	Upper-level CLE course	2.5cr				
Varies	Elective courses	3.75 cr				
Total Credits	13.7	5 credits				

FALL			WINTER	SPRING		
MPH 103	Leadership and Communication	1.25cr		EPI 947S	Applied Practice Experience & Integrative Learning Experience for CLE (Summer Focused)	2.5cr
	Work on Practicum					
Total Credits	1.2	5 credits	lits 2.5 credi		credits	

# YEAR THREE

SUMMER			
EPI 947U	Applied Practice Experience & Integrative Learning Experience for CLE (Summer Focused)	2.5cr	PROGRAM credits
Varies	Upper-level CLE course	2.5cr	ЭР Р 45 с
Varies	Elective Courses	5cr	END (
Total Credits		10 credits	

# **ONLINE ELECTIVE COURSES**

MPH-45 CLE students may enroll in the following online elective courses on a space-available basis. The courses listed below are part of the Harvard Chan School's hybrid MPH in Epidemiology (MPH-EPI) and fully online MPH Generalist (MPH-GEN) programs. Priority enrollment goes to MPH-EPI and MPH-GEN students

See p. 9 for the MPH program's policy on online credits for residential and summerfocused MPH students.

ONLINE ELI	ECTIVE COURSE OPTIONS						
Course Number	Title	Credits	Semester				
Fall							
EPI 526	Analysis of Publicly Available Databases for Epidemiologic and Health Services Research	2.5	Fall				
EPI 527	Design and Conduct of Trials in Preventive Medicine	2.5	Fall				
EPI 528	Systematic Review and Meta-Analysis	2.5	Fall				
EPI 529	Applications of Epidemiology	1.25	Fall				
HPM 559	Introduction to Qualitative Research Methods for Public Health	2.5	Fall				
ID 224	Survey Research Methods for Public Health	2.5	Fall				
ID 290	Emergency Response, Disasters, and Public Health	2.5	Fall 2				
ID 514	Organizational Behavior (Only CLE summer-focused students may petition to enroll. Not available to residential students.)	2.5	Fall 1				
Spring							
BST 215	Linear and Longitudinal Regression	2.5	Spring				
EPI 288	Introduction to Machine Learning and Risk Prediction	2.5	Spring				
EPI 529	Applications of Epidemiology	1.25	Spring				
EPI 530	Introduction to Infectious Disease Modeling	1.25	Spring 2				
HPM 506	Practical Scientific Methods for Improving Health and Health Care	2.5	Spring				
RDS 202	Decision Science for Public Health	2.5	Spring				
ID 273	Innovation and Entrepreneurship in Healthcare	2.5	Spring 1				
ID 218	Financial Transactions and Analysis	2.5	Spring 1				
ID 226	Interventions for Global Health: Concepts and Methods	2.5	Spring				
ID 255	Public Health Leadership: Personal Mastery	1.25	Spring 2				
ID 257	An Introduction to Implementation Science	2.5	Spring 2				
ID 276	Introduction to Nutrition Science	2.5	Spring				
ID 523	Investigating Outbreaks	1.25	Spring 2				