



# 2023-2024 MPH Curriculum Guide

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

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While every effort has been made to ensure that the information contained in this guide is accurate at the time of publication, 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 version of the MPH-45 Curriculum Guide (published on July 28, 2023) only pertains to students in the Clinical Effectiveness field of study matriculating in summer or fall 2023.

# 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

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/academic-calendar
- 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

https://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 – 106 cannot be waived.) If a waiver or substitution is approved, students must still fulfill the 45-credit minimum requirement in order to graduate. Visit the MPH-OEP Office's website for more information.

Students who have previously earned credits through the non-degree Program in Clinical Effectiveness (PCE) will have those credits automatically transferred to their degree program after matriculation. If students want to transfer other non-degree credits earned at the Harvard Chan School in a separate semester, they 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. 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 either changing your field of study or 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 which program option (academic year or summer-focused) you have selected because there are differences in the program, particularly with regard to fulfilling the field of study requirements and the practicum. 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. One way for students to determine their in-person course credits is to look at "instruction mode" in the course listings in *the Harvard Course Catalog*.

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

For definitions of full-time, part-time, 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. Winter Session credits count toward the Spring Semester total credit count.

Summer-focused students planning to take only in Summer 2 courses must still enroll in those courses by the Summer 1 add/drop deadline or otherwise risk being withdrawn from degree candidacy. Students in their first summer of the degree program are expected to be enrolled for both Summer 1 and Summer 2 sessions.

#### 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*). A course materials fee may apply for some courses. Where applicable, a maximum estimated course materials fee can be found in the *Harvard Course Catalog*. Course materials fees are billed following the add/drop period each term and are not included in tuition. For more information on course materials fees, see *hsph.me/curriculum-center/for-students*.

#### Academic Year Full-Time Students

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 approximately 22.5–25 credits per semester.

#### Academic Year Part-Time Students

Part-time students in the MPH-45 program typically complete the degree over two to three years (maximum of three years). Part-time students should prioritize required courses during their first year.

• 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  $2 \frac{1}{2}$ -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. Note that this does not result in a reduction in tuition.

#### MASTER OF PUBLIC HEALTH: PROGRAM OVERVIEW

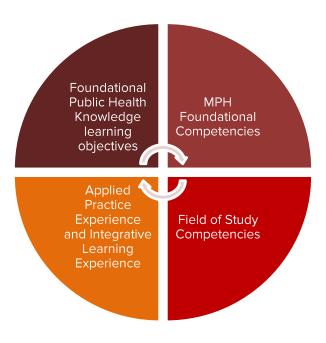
The MPH degree is the most widely recognized professional credential for leadership in public health. The MPH curriculum emphasizes active, student-directed learning, problem solving, and the acquisition of skills essential to the practice of public health. The program is organized around the Foundational 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 hsph.me/mph-competencies.

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

- Critically evaluate and apply principles of epidemiologic methods, including exposure and outcome measures, measures of association, bias and confounding, and study design options.
- 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).
- Conduct and interpret results from regression analyses used to examine the effectiveness of clinical decisions and interventions.
- Formulate a clinical research question and develop a proposal for a study to address this question.
- 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**, 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
  - o Minimum of 32.5 ordinal credits
  - o 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 in fall and spring semesters
- Can take a maximum of 15 credits in summer term
- Limited to a maximum of 3.75 credits of online elective courses (see p.25) in any semester with a maximum of 10 credits of online elective courses overall
  - o The required MPH core courses of ID 100 and MPH 101 MPH 106 (6.25 credits total) do NOT count towards the MPH program's 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

- Can take a maximum of 15 credits in summer term, including credits from EPI 947U
- Limited to a maximum of 5 credits of online elective courses (see p.25) in any semester with a maximum of 10 credits from of online elective courses overall
  - o The required MPH core courses of ID 100 and MPH 101 MPH 106 (6.25 credits total) do NOT count towards the MPH program's online elective credit limits outlined above.
- Can take up to 5 credits of Winter Session coursework per term (hsph.me/mph-winter-session)
- Registering for only practicum credits (EPI 947U) in summer term:
  - O Summer-focused degree students are required to enroll in on-campus courses during the summer term. If a student wants to enroll in EPI 947U and no other on-campus courses, they may do so if the student is in their final semester, and this is the last remaining degree requirement. Students will be required to submit the *Final Summer Practicum Intent Form* to the Registrar's Office before the add/drop deadline for the applicable summer term.
  - o If a student is not able to enroll in on-campus courses during the summer term and does not meet the criteria above, they will be required to submit a *Leave of Absence Petition*.

#### 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 106, six courses that cover other foundational public health competencies.

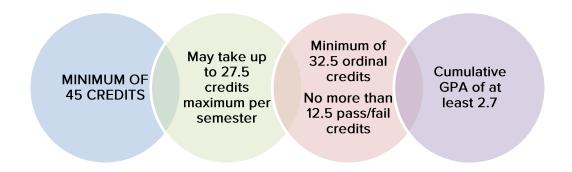
Full-time MPH-45 students are expected to complete the MPH public health core curriculum by the end of the fall semester. Part-time MPH students are strongly encouraged to complete the MPH public health core curriculum in their first year to ensure early grounding in the foundational principles of public health. No waivers or substitutions will be allowed for MPH 101–MPH 106.

| ACADEMIC YEAR CLINICAL EFFECTIVENESS CORE REQUIREMENTS |  |          |         |  |  |  |
|--|--|----------|---------|--|--|--|
| Course<br>Number                                       | Title  | Semester | Credits |  |  |  |
| Biostatistic   | cs and Epidemiology Core (10 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     |  |  |  |

| Course<br>Number   | Title  | Semester                                 | Credits                     | Course Format/Notes   |
|--|--|--|-----------------------------|---|
| MPH Public H   | ealth Core (6.25 credits)  |  |                             |   |
| '  | ired of all Harvard Chan students.<br>student will still need to formally<br>riod. |  | •                           |   |
| ID 100   | Foundations for Public Health  | Summer into<br>Fall 1                    | 1.0<br>(Pass/Fail<br>Only)  | Asynchronous, self-paced online course. Takes approx. 10–12 hours total and must be completed by Sunday, August 20, 2023.   |
|  | r CLE students have some flexibil courses; see options below.                      | ity when choosing                        | which terms                 | s to complete the MPH 101–  |
|  | emic year CLE students must enro<br>MPH 104 since those sections inv               |  |                             |   |
| MPH 101  Qualitative Methods for Public Health: A Brief Introduction |  | Summer<br>or<br>Fall 2                   | 0.25<br>(Pass/Fail<br>Only) | Asynchronous online course 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                        | Fall: Hybrid course format consisting of asynchronous online content and required inperson sessions. A fully  |
| MPH 103  | Leadership and<br>Communication  | Summer or Fall 2 or Winter Session       | 1.25                        | online and asynchronous section (Section 3) is available to part-time, MPH-45 students.  Summer & Winter:   |
| MPH 104  | Social, Behavioral, and<br>Structural Determinants of<br>Health                    | Summer or Fall 1 or Winter Session       | 1.25                        | Online and asynchronous course format with set deadlines for each module  |
| MPH 105  | Public Health Policy and Politics  | Fall 2                                   | 1.25                        | Synchronous online course that meets weekly.  |
| MPH 106A/B   | Intersectoral Perspectives in<br>Public Health                                     | Fall + Spring 1<br>or<br>Spring + Fall 1 | 0                           | Asynchronous, self-paced online course with two parts. MPH 106A is full-term and offered in Fall and Spring, followed by MPH 106B in the subsequent Spring 1 or Fall 1. |

| Course Number   | Title  | Title Semester   |                          |  |  |  |  |  |
|---|--|--|--------------------------|--|--|--|--|--|
| Regression (2.5–5   | credits)   |  |                          |  |  |  |  |  |
| Choose <u>one</u> 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   | Summer 1   | 5.0                      |  |  |  |  |  |
| Upper-Level CLE Coursework (5 credits)  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. |  |  |                          |  |  |  |  |  |
| Upper-level CLE co  | ourses are defined as any courses b  |  |                          |  |  |  |  |  |
| Upper-level CLE co  | ourses are defined as any courses b  | uating clinical/public hea   |                          |  |  |  |  |  |
| Upper-level CLE co<br>students with analy<br>Varies  Applied Practice E<br>Two semesters rec  | ourses are defined as any courses b<br>tic and/or quantitative skills for eval<br>Take <b>5</b> credits from the list of ap  | uating clinical/public hea<br>oproved courses<br>g Experience (2.5 credi<br>udents (completing the d | ts)                      |  |  |  |  |  |
| Upper-level CLE co<br>students with analy<br>Varies  Applied Practice E<br>Two semesters rec  | Take 5 credits from the list of an (hsph.me/CLE-upper-level).  Experience and Integrative Learninguired (Fall and Spring of their second Applied Practice Experience   | uating clinical/public hea<br>oproved courses<br>g Experience (2.5 credi<br>udents (completing the d | ts)                      |  |  |  |  |  |
| Upper-level CLE co<br>students with analy<br>Varies  Applied Practice E<br>Two semesters red<br>should take EPI 94  | ourses are defined as any courses by tic and/or quantitative skills for evaluation Take 5 credits from the list of any (hsph.me/CLE-upper-level).  Experience and Integrative Learning quired (Fall and Spring). Part-time students for their second in Fall and Spring of their second in Fall and Spring in Fall an | uating clinical/public head proved courses  g Experience (2.5 creding the dayear.                    | ts) legree in 2-3 years) |  |  |  |  |  |

# **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 that is required for academic-year Clinical Effectiveness students. Students are required to register for and attend <u>two</u> semesters of EPI 946. During one of the two semesters, they 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 2-3 years) should take this 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 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. Part-time students who are completing the degree in two or more academic years should identify their topic by the end of their first year. 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, a grant proposal, or a technical report, 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

| SUMMER (Program in Clinical Effectiveness) Students who have previously completed PCE will have those credits automatically transferred to their degree program. |  |  |  |  |  |  |
|--|--|--|--|--|--|--|
| BST 206  | 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<br>Credits   | 15 credits   |  |  |  |  |  |

| FALL             |  |            | WINTER           | SPRING      |  |            |                    |
|------------------|--|------------|------------------|-------------|--|------------|--------------------|
|                  | Foundations for Public   |            |                  | MPH<br>106B | Intersectoral Perspectives in<br>Public Health                                     | Ocr        |                    |
| ID100            | Health (pre-matriculation coursework begins online in summer)                      | 1.0cr      |                  | EPI 946S    | Applied Practice Experience<br>and Integrative Learning<br>Experience for CLE (AY) | 1.25cr     |                    |
| MPH 101          | Qualitative Methods for  | 0.25cr     |                  | Varies      | Upper-level CLE course   | 2.5cr      |                    |
|                  | Public Health  | 0.2001     |                  | Varies      | Electives  | 8.75cr     |                    |
| MPH 102          | Health Systems   | 1.25cr     |                  |             |  |            | dits               |
| MPH 103          | Leadership and<br>Communication  | 1.25cr     |                  |             |  |            | 45 credit <b>s</b> |
| MPH 104          | Social, Behavioral, and<br>Structural Determinants of<br>Health                    | 1.25cr     |                  |             |  |            | PROGRAM = 4        |
| MPH 105          | Public Health Policy and<br>Politics   | 1.25cr     |                  |             |  |            | - PRO              |
| MPH 106A         | Intersectoral Perspectives<br>on Public Health                                     | Ocr        |                  |             |  |            | END OF             |
| Varies           | Regression Requirement   | 5.0cr      |                  |             |  |            | ш                  |
| EPI 946F         | Applied Practice Experience<br>and Integrative Learning<br>Experience for CLE (AY) | 1.25cr     |                  |             |  |            |                    |
| Varies           | Upper-level CLE course   | 2.5        |                  |             |  |            |                    |
|                  | Work on Pra  | cticum (id | entify topic     | by early (  | October 2023)  |            |                    |
| Total<br>Credits | 15 credits   |            | Total<br>Credits |             |  | 15 credits |                    |

# Part-Time Schedule

# Year One

| SUMMER (Program in Clinical Effectiveness) Students who have previously completed PCE will have those credits automatically transferred to their degree program. |   |           |  |  |  |  |
|--|---|-----------|--|--|--|--|
| BST<br>206   | Introductory Statistics for<br>Medical Research | 2.5cr     |  |  |  |  |
| BST<br>207   | Statistics for Medical 2.5cr                    |           |  |  |  |  |
| EPI 208 Introduction to Clinical Epidemiology 5.0cr  |   |           |  |  |  |  |
| Varies 2 PCE electives 5.0cr   |   |           |  |  |  |  |
| Total<br>Credits   | 1.  | 5 credits |  |  |  |  |

| FALL             |   |         | Winter           |   |        | SPRING           | ò                         |              |
|------------------|---|---------|------------------|---|--------|------------------|---------------------------|--------------|
|                  | Foundations for Public<br>Health (pre-<br>matriculation<br>coursework begins<br>online in summer) | 1.0cr   | MPH<br>104       | Social,<br>Behavioral, and<br>Structural<br>Determinants of<br>Health |        | Varies           | Electives                 | 3.75cr       |
| MPH<br>101       | Qualitative Methods for<br>Public Health  | 0.25cr  |                  |   |        |                  |                           |              |
|                  | Public Health Policy<br>and Politics  | 1.25cr  |                  |   |        | Varies           | Upper-Level CLE<br>course | 2.5cr        |
| 1// 2/1/20       | Regression<br>Requirement   | 5.0cr   |                  |   |        |                  |                           |              |
| Total<br>Credits | 7.5   | credits | Total<br>Credits | 1.25 (  | redits | Total<br>Credits |                           | 6.25 credits |

# Year Two

| SUMMER           |                |     |           |  |  |  |  |  |
|------------------|----------------|-----|-----------|--|--|--|--|--|
| MPH<br>102       | Health Systems |     | 1.25      |  |  |  |  |  |
| Total<br>Credits |                | 1.2 | 5 credits |  |  |  |  |  |

| FALL             | FALL   |         |  | SPRING           |   |         |
|------------------|--|---------|--|------------------|---|---------|
| MPH 103          | Leadership and<br>Communication  | 1.25cr  |  | EPI 946S         | Applied Practice Experience &<br>Integrative Learning Experience<br>for Clinical Effectiveness (AY) | 1.25cr  |
| MPH<br>106A      | Intersectoral Perspectives<br>in Public Health   | Ocr     |  | MPH 106B         | Intersectoral Perspectives in<br>Public Health  | Ocr     |
| EPI 946F         | Applied Practice<br>Experience & Integrative<br>Learning Experience for<br>Clinical Effectiveness (AY) | 1.25cr  |  | Varies           | Electives   | 3.75cr  |
| Varies           | Upper-level CLE courses  | 2.5cr   |  |                  | ,   | l       |
| Varies           | Electives  | 2.5cr   |  |                  |   |         |
|                  | work on practicum  |         |  |                  |   |         |
| Total<br>Credits | 7.5  | credits |  | Total<br>Credits | 7.5   | 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 106, six courses that cover other foundational public health competencies.

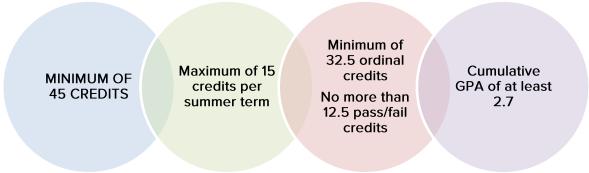
Summer-focused CLE students have some flexibility when choosing which terms to complete MPH 101–MPH 105 (see table on next page). No waivers or substitutions will be allowed for MPH 101–MPH 106.

| SUMMER-FOCUSED CLINICAL EFFECTIVENESS CORE REQUIREMENTS |  |          |         |  |  |  |
|---|--|----------|---------|--|--|--|
| Course<br>Number  | Title  | Semester | Credits |  |  |  |
| Biostatistic  | cs and Epidemiology Core (10 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     |  |  |  |

| Course<br>Number  | Title  | Semester                           | Credits                     | Course Format/Notes  |  |  |  |  |
|---|--|------------------------------------|-----------------------------|--|--|--|--|--|
| MPH Public  | Health Core (6.25 credits)                                     |                                    | L                           |  |  |  |  |  |
| ID 100 is required of all Harvard Chan students. While students will complete ID100 via Canvas 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<br>into Fall 1              | 1.0<br>(Pass/Fail<br>Only)  | Asynchronous, self-paced, online course. Takes approx. 10–12 hours total and must be completed by Sunday, August 20, 2023.   |  |  |  |  |
| MPH 101   | Qualitative Methods for Public<br>Health: A Brief Introduction | Summer<br>or<br>Fall 2             | 0.25<br>(Pass/Fail<br>Only) | Asynchronous online course 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  |  |  |  |  |
| MPH 103   | Leadership and Communication                                   | Summer or Fall 2 or Winter Session | 1.25                        | for each module.  If taking MPH 102, 103, 104 in the fall semester, summer-students must   |  |  |  |  |
| MPH 104   | Social, Behavioral, and<br>Structural Determinants of Health   | Summer or Fall 1 or Winter Session | 1.25                        | enroll in the fully online<br>Section 3.   |  |  |  |  |
| MPH 105   | Public Health Policy and Politics                              | Fall 2                             | 1.25                        | Synchronous online course that meets weekly  |  |  |  |  |
| MPH<br>106A/B   | Intersectoral Perspectives in Public<br>Health                 | Fall +<br>Spring 1<br>(Year 2)     | 0                           | Asynchronous, self-paced, online course with two parts. MPH 106A is full- term and offered in Fall and Spring, followed by MPH 106B in the subsequent Spring 1 or Fall 1. Part A must be completed prior to the 1st semester of EPI 947. |  |  |  |  |

| SUMMER-FOCUSED CLINICAL EFFECTIVENESS FIELD OF STUDY REQUIREMENTS   |   |                             |            |  |  |  |
|---|---|-----------------------------|------------|--|--|--|
| Course Number   | Title   | Semester                    | Credits    |  |  |  |
| Regression (2.5–5 credits) Choose <u>one</u> of the approved courses below.                                     |   |                             |            |  |  |  |
| BST 215   | Linear and Longitudinal<br>Regression                                       | Summer 2 or Spring (ONLINE) | 2.5        |  |  |  |
| EPI 236   | Analytical Clinical Epidemiology  | Summer 1                    | 5.0        |  |  |  |
| Upper-Level CLE Co  | oursework (5 credits)<br>d (but not required) for summer-foo                | cused CLE.                  |            |  |  |  |
| Varies  | Take 5 credits from the list of approved courses (hsph.me/CLE-upper-level). |                             | 5.0        |  |  |  |
| Applied Practice Exp  | perience and Integrative Learnin  | g Experience (5 credits)    |            |  |  |  |
| Applied Practice Experience and Integrative Learning EPI 947U Experience for CLE (Summer-Focused) Spring Summer |   | Spring<br>Summer            | 2.5<br>2.5 |  |  |  |
| ELECTIVES (13.75–21.25 credits)   |   |                             |            |  |  |  |
|   | TOTAL 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 that is required for summer-focused Clinical Effectiveness students. Students are required to enroll in <a href="two">two</a> semesters of EPI 947, typically during their last spring (EPI 947S) and summer semesters (EPI 947U). The spring course (EPI 947S) is fully asynchronous and only includes assignments related to the practicum. In summer (EPI 947U), students will give a formal presentation of their practicum projects 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 CLE students develop a practicum at their home institution under the supervision of a local mentor and a member of the faculty at Harvard. 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.

By the end of their second summer, prior to beginning their practicum, students will submit a Learning Agreement, a brief outline of the proposed project. Students who are trying to complete their degree in less than three summers will need to do this earlier and should meet with the CLE field of study leader early in the program to discuss this. 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, a grant proposal, or a technical report, 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)<br>Students who have previously completed PCE<br>will have those credits automatically transferred<br>to their degree program. |   |       |  |  |  |
|---|---|-------|--|--|--|
| BST<br>206  | Introductory Statistics for Medical<br>Research | 2.5cr |  |  |  |
| BST<br>207  | Statistics for Medical Research II              | 2.5cr |  |  |  |
| EPI 208   | Introduction to Clinical<br>Epidemiology        | 5.0cr |  |  |  |
| Varies  | 2 PCE electives                                 | 5.0cr |  |  |  |
| Total 15 credit   |   |       |  |  |  |

| FALL             |   |        | Winter           |   |           | SPRING |
|------------------|---|--------|------------------|---|-----------|--------|
|                  | Foundations for Public Health (pre-<br>matriculation coursework begins<br>online in summer) | 1.0cr  | MPH 104          | Social, Behavioral, and<br>Structural Determinants<br>of Health | 1.25cr    |        |
| MPH 101          | Qualitative Methods for Public<br>Health  | 0.25cr |                  |   |           |        |
| MPH 105          | Public Health Policy and Politics   | 1.25   |                  |   |           |        |
| Total<br>Credits | 2.5 credits   |        | Total<br>Credits | 1.2   | 5 credits |        |

# YEAR TWO

| SUMMER           |                          |               |  |  |  |  |
|------------------|--------------------------|---------------|--|--|--|--|
| MPH 102          | Health Systems           | 1.25cr        |  |  |  |  |
| Varies           | Regression Requirement   | 2.5 – 5.0cr   |  |  |  |  |
| Varies           | 2 Upper-level CLE course | 5cr           |  |  |  |  |
| Varies           | Elective courses         | 3.75 – 6.25cr |  |  |  |  |
| Total<br>Credits |                          | 15 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   |  |
| MPH 106A          | Intersectoral Perspectives in<br>Public Health | Ocr       |        |          | Intersectoral Perspectives in<br>Public Health   | Ocr     |  |
| Work on Practicum |  |           |        |          |  |         |  |
| Total<br>Credits  | 1.2  | 5 credits |        |          | 2.5 (  | credits |  |

# YEAR THREE

| SUMMER           |   |             |                        |
|------------------|---|-------------|------------------------|
| EPI 947U         | Applied Practice<br>Experience & Integrative<br>Learning Experience for<br>CLE (Summer Focused) | 2.5cr       | = PROGRAM<br>5 credits |
| Varies           | Elective Courses  | 5cr         | ) OF<br>= 4!           |
| Total<br>Credits |   | 7.5 credits | ENE                    |

## **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 ELECTIVE COURSE OPTIONS |   |         |          |  |  |  |  |
|--------------------------------|---|---------|----------|--|--|--|--|
| Course<br>Number               | Title   | Credits | Semester |  |  |  |  |
| Fall Options                   | Fall Options  |         |          |  |  |  |  |
| 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 255                         | Public Health Leadership: Personal Mastery  | 1.25    | Fall 2   |  |  |  |  |
| ID 276                         | Introduction to Nutrition Science   | 2.5     | Fall     |  |  |  |  |
| ID 514                         | Organizational Behavior (Only CLE summer-focused students may petition to enroll. Not available to residential students.) | 2.5     | Fall 1   |  |  |  |  |
| Spring Options                 |   |         |          |  |  |  |  |
| BST 215                        | Linear and Longitudinal Regression  | 2.5     | Spring   |  |  |  |  |
| EPI 529                        | Applications of Epidemiology  | 1.25    | Spring   |  |  |  |  |
| HPM 506                        | Practical Scientific Methods for Improving Health and<br>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 |  |  |  |  |