D7. MPH Integrative Learning Experience

MPH students complete an integrative learning experience (ILE) that demonstrates synthesis of foundational and concentration competencies. Students in consultation with faculty select foundational and concentration-specific competencies appropriate to the student's educational and professional goals; demonstrating synthesis and integration requires more than one foundational and one concentration competency.

Professional certification exams (e.g., CPH, CHES/MCHES, REHS, RHIA) may serve as an element of the ILE, but are not in and of themselves sufficient to satisfy this criterion.

The school identifies assessment methods that ensure that at least one faculty member reviews each student's performance in the ILE and ensures that the experience addresses the selected foundational and concentration-specific competencies. Faculty assessment may be supplemented with assessments from other qualified individuals (e.g., preceptors).

1) List, in the format of Template D7-1, the integrative learning experience for each MPH concentration, generalist degree or combined degree option that includes the MPH. The template also requires the school to explain, for each experience, how it ensures that the experience demonstrates synthesis of competencies.

All MPH students complete a culminating experience (CE) that aligns with their career goals and program/concentration. Students may work in groups on the research or development of the project. While there are differences in types of projects accepted in each program, all students produce a high-quality, individually written product that demonstrates synthesis of competencies.

MPH Integrative Learning Experience for Biostatistics and Epidemiology (including JD/MPH, LLM/MPH ⁷⁴ and PA/MPH in select programs)		
Integrative learning experience	How competencies are synthesized	
When students enroll in <i>PUBH 6015 Culminating Experience</i> , they develop a quantitative research project.	All CE projects synthesize at least three competencies, pre-identified by the CE instructor and listed on the course syllabus. The student develops the project under the guidance of the CE advisor, who ensures that all competencies are met. The final paper is evaluated by the CE advisor based on a rubric.	
MPH Integrative Learning Experience for Comm Promotion, Maternal and Child Health and Pub		
(including JD/MPH, LLM/MPH and PA/MPH in s		
	How compatentian are symphosized	
Integrative learning experience	How competencies are synthesized	

Template D7-1

⁷⁴ There have been no LLM/MPH students in the MPH in Biostatistics and MPH in Epidemiology in the last three years.

Option #2: Development and pilot testing of an intervention program or components of a program		
Option #3: Development and implementation of community advocacy programs		
Option #4: Evaluation of programs or policies		
Option #5: Development and evaluation of case studies ⁷⁵		
MPH Integrative Learning Experience for Physical Activity in Public Health and Public Health Nutrition (including JD/MPH and LLM/MPH)		
Integrative learning experience	How competencies are synthesized	
 When students enroll in PUBH 6015 Culminating Experience, they may choose one of the below integrative learning experience options. Option #1: Data analysis (primary or secondary) Option #2: Systematic review of the literature 	All CE projects synthesize a minimum of three competencies, pre-identified by the CE advisor based on the type of project the student chooses. The final paper is evaluated by the CE faculty advisor, and the oral presentation is evaluated by at least three faculty.	
Option #3: Paper on policy issue Option #4: Paper on public health practice issue		
MPH@GW Integrative Learning Experience for Public Health Generalist, Global Health, Health Informatics and Analytics, Climate and Health, and Women, Youth and Child Health (including MSN/MPH in Public Health Generalist only)		
Integrative learning experience	How competencies are synthesized	
When students enroll in <i>PUBH 6060</i> and <i>PUBH 6061 MPH@GW Culminating Experience</i> , they may choose one of the below integrative learning experience options. Option #1: Critical analysis project	All CE projects synthesize a minimum of two foundational knowledge competencies, pre- identified by the CE instructor. A pre-identified MPH@GW, Generalist program-specific competency is also listed on the syllabus. Students select additional program-specific	
Option #2: Program plan	competencies based on their unique project and if they are in one of the MPH@GW	
Option #3: Research project	concentrations. The student develops the project under the guidance of the CE advisor, who ensures that all competencies are met. The final paper is evaluated by the faculty advisor based on a rubric.	

⁷⁵ This is a rarely chosen project type. In the case study option, students conduct an in-depth analysis of a real-life complex issue. It may or may not be done in conjunction with a community organization.

MPH Integrative Learning Experience for Global Environmental Health and Environmental Health Science and Policy (including JD/MPH, LLM/MPH and PA/MPH)		
Integrative learning experience	How competencies are synthesized	
When students enroll in <i>PUBH 6137</i> and <i>PUBH 6138</i> Environmental and Occupational Culminating Experience, students develop a systematic review on an important environmental or occupational health issue. Students must choose a topic appropriate to their program and relevant to one of the other core areas of public health (i.e., epidemiology, social and behavioral sciences, health policy and management). Additionally, students must demonstrate quantitative and/or qualitative analytic capability and communicate their work to varied audiences.	All CE projects synthesize a minimum of three competencies that are pre-identified by the CE instructor. The student may identify additional competencies based on their specific project. The student develops the project under the guidance of the CE advisor who ensures that all competencies are met.	
MPH Integrative Learning Experience for Health Policy (including JD/MPH, LLM/MPH and PA/MPH)		
Integrative learning experience	How competencies are synthesized	
 When students enroll in PUBH 6350 Health Policy Capstone, they may choose one of the below integrative learning experience options. Option #1: Quantitative data analysis summarized in a policy brief that presents the methods, results and policy implications of the analysis Option #2: Policy options analysis for a client (real or assumed) Option #3: Design of a descriptive policy analysis (e.g., program evaluation, cost effectiveness analysis, etc.) for an agreed upon stakeholder 	All CE projects synthesize a minimum of three competencies pre-identified by the CE instructor. The student develops the project under the guidance of the CE advisor, who ensures that all competencies are met. The final paper is evaluated by the faculty advisor based on a rubric.	
MPH Integrative Learning Experience for Global Health Epidemiology and Disease Control, Global Health Design, Monitoring and Evaluation, Global Health Policy, and Humanitarian Health		
Integrative learning experience	How competencies are synthesized	
When students enroll in <i>PUBH 6418</i> and <i>PUBH 6419 Global Health Culminating Experience</i> , they must develop a project that addresses a topic appropriate to their program, demonstrate analytic capability, applying quantitative, qualitative, evaluation and/or policy methods to the topic selected and be student-led under the guidance of a faculty CE advisor. Generally, students choose one of the below integrative learning experience options:	Students self-identify competencies that will be synthesized in their proposal during PUBH 6418. The CE advisor reviews and approves the proposal, including the competencies. The final project is evaluated by the CE advisor using a rubric.	

Option #1: Quantitative or qualitative data analysis		
Option #2: Systematic literature review		
Option #3: Scoping or other review		
Option #4: Case-based analysis of a program or policy		
Option #5: Development of a program plan or training curriculum		
Option #6: Evaluation of an existing program		
Option #7: Development of a monitoring and/or evaluation plan		
MPH Integrative Learning Experience for MD/MPH		
Integrative learning experience	How competencies are synthesized	
When students participate in <i>Population Health</i> <i>Summit #4</i> , they select real-world population health issues that directly intersect with their chosen medical specialty. Students develop an Action Plan (with an evaluation plan and metrics) to address the issue, produce a personal and professional wellness and resilience plan and give a 10-minute presentation of the Action Plan.	All CE projects synthesize four competencies, pre-identified by the MD/MPH program director. Summit instructors provide guidance on the Action Plan requirements and the MD/MPH program director guide students during the process. The final paper is evaluated by the MD/MPH program director using a rubric.	

2) Briefly summarize the process, expectations and assessment for each integrative learning experience.

All students earning an MPH at GWSPH complete a CE that requires synthesizing and integrating knowledge acquired in coursework and other learning experiences, and applying theory and principles in a situation that approximates some aspect of professional practice. It is through the culminating experience that faculty members evaluate students' mastery of program competencies.

All CEs address a topic appropriate to the student's program and are student-led with the guidance of a faculty advisor. Example projects include qualitative or quantitative research, systematic literature review, policy analysis, program or intervention evaluation, software application and health training module. Students are encouraged to think creatively when designing their project but also consider feasibility. Students write a high-quality, scientific paper and present an oral PowerPoint presentation regarding their CE. Students are assessed on these two deliverables as well as their work drafting these items.

Except for MD/MPH students, all MPH students enroll in 2 credits' worth of CE course(s) at GWSPH. Students enroll in this CE coursework toward the end of their program. Each CE course also lists required and recommended courses that should be completed prior to enrollment. Often these are foundational courses that provide expertise a student will need to complete the CE. MD/MPH students complete a public health focused CE in their medical school curriculum. Details on this process are provided separately.

Course	MPH Concentration
PUBH 6015 Culminating Experience	Biostatistics
	Community-Oriented Primary Care
	Epidemiology
	Health Promotion
	Maternal and Child Health
	Physical Activity in Public Health
	Public Health Communication and Marketing
	Public Health Nutrition
	PA/MPH, Community-Oriented Primary Care
	PA/MPH, Epidemiology
	PA/MPH, Maternal and Child Health
PUBH 6060 MPH@GW Culminating Experience 1	MPH@GW, Public Health Generalist
PUBH 6061 MPH@GW Culminating Experience 2	MPH@GW, Global Health
	MPH@GW, Health Informatics and Analytics
	MPH@GW, Climate and Health
	MPH@GW, Women, Youth and Child Health
	MSN/MPH, MPH@GW, Public Health Generalist
PUBH 6137 EOH Culminating Experience 1	Global Environmental Health
PUBH 6138 EOH Culminating Experience 2	Environmental Health Science and Policy
	PA/MPH, Global Environmental Health
	PA/MPH, Environmental Health Science and
	Policy
PUBH 6350 Health Policy Capstone	Health Policy
	PA/MPH, Health Policy
PUBH 6418 GH Culminating Experience 1	Global Health Epidemiology and Disease
PUBH 6419 GH Culminating Experience 2	Control
	Global Health Design, Monitoring and
	Evaluation
	Global Health Policy
	Humanitarian Health
IDIS 8334 Intersession IV (Population Health	MD/MPH
Summit #4)	

PUBH 6015 Biostatistics and Epidemiology Culminating Experience

In this single course, students work with their CE instructor to develop a public health quantitative data analysis project. This course is highly personalized, and students mostly work independently and one-on-one with their faculty advisor, practicum site preceptor, practicum director and SAS Coach, as needed. During the semester, students produce a concept paper outlining the topic and method. The concept paper is expanded into a proposal that provides greater details and the first drafts of the background and methods sections of the final manuscript. At the end of the course, students submit an 18- to 20-page research paper consistent with *New England Journal of Medicine* organizational guidelines and provide a 15-minute PowerPoint presentation in a public forum.

PUBH 6015 Community-Oriented Primary Care, Health Promotion, Maternal and Child Health and Public Health Communication and Marketing Culminating Experience

In this single course, students work with their CE advisor to develop a major written paper such as a thesis or applied research project, which presents the results of a needs assessment, development and pilot testing of an intervention program or components of a program, development and implementation of a community advocacy program, evaluation of a program or policy, or development and evaluation of a case study. Students work closely with their CE advisor to develop a concept paper, proposal/IRB application, final report and oral presentation. The final report is expected to be 25-50 double-spaced pages and follow the outline of a published research paper.

<u>PUBH 6015 Public Health Nutrition and Physical Activity in Public Health Culminating Experience</u> In this single course, students work with their CE advisor to develop a public health project based on four options: data analysis, systematic review, nutrition policy or nutrition practice. Students work closely with their CE advisor to develop a proposal, IRB application (if applicable), final paper and oral presentation on a project related to their field of study. The final report is expected to be 15-25 double-spaced pages and conform to the guidelines presented in the syllabus.

PUBH 6060 and PUBH 6061 MPH@GW Culminating Experience

In this two-course sequence, the first course is designed to guide students in developing a CE proposal. Example topics and methods are discussed in class and through the three work products (idea paragraph, concept paper and full proposal), students refine their project plans. Topics identified must be related to the students' concentrations. Students successfully complete this course when they earn credit and have an instructor and faculty advisor-approved final proposal.

In the second course, students work independently under the guidance of their faculty advisor to complete their CE. To successfully pass the class and earn credit, students submit a 25-page paper and prepare a 12-minute oral presentation with PowerPoint. Students present their projects in a live virtual session, open to the public.

PUBH 6137 and PUBH 6138 Environmental and Occupational Health Culminating Experience

In this two-course sequence, students develop a systematic review on an environmental or occupational health issue related to their program. During the first course, faculty guide students in how to choose an appropriate topic and conduct a systematic review. Students successfully complete this course when they earn credit and have an advisor-approved final paper.

In the second course, students create message maps and practice communicating their systematic review results to a variety of audiences including Congress, the media, a community town hall and a scientific conference. To successfully pass the class and earn credit, students participate in these mock scenarios and produce an abstract and poster, all of which are evaluated by the CE advisor.

PUBH 6350 Health Policy Capstone

The identification of a potential health policy topic and target stakeholder is submitted to the instructor prior to the start of the second session of the course. During the course, students provide oral presentations updating the instructor and peers regarding their project progress. Additional assignments include a literature review and research plan, a paper identifying criteria for assessing policy options and a "pitch" to encourage media hype on the topic. A final 10-minute oral presentation with PowerPoint and a 10- to 15-page written paper are submitted as deliverables. CE advisors use a rubric to assess these deliverables.

PUBH 6418 and PUBH 6419 Global Health Culminating Experience

In this two-course sequence, the first course is designed to guide students in developing a CE proposal. Example topics and methods are discussed in class, and peer and faculty advisor feedback guides students in refining their project plans. Topics identified must be related to global health, specifically the students' programs. As part of the written proposal, students must identify and provide evidence of mastery of competencies related to the project. Students

successfully complete this course when they earn credit and thus have approval to implement their CE project.

In the second course, students work independently under the guidance of their faculty advisor to complete their CE. To successfully pass the class and earn credit, students submit a 25- to 35-page paper and prepare a 15-minute oral presentation with PowerPoint. Students present their projects in a public forum.

MD/MPH

As part of the medical school curriculum, MD/MPH students complete the Population Health Summit #4, a longitudinal integrative educational experience that serves as a culmination and synthesis of MD students' clinical public health learning. The Summit focuses on addressing patients' social determinants of health and physician burnout. Students select real-world population health issues that directly intersect with their growing identity as practitioners in their chosen medical specialty. Working under the supervision of faculty leaders and/or experts, students research a critical population health problem and develop a Clinical Public Health Action Plan to address the problem either individually or in small groups, develop and evaluate a personal and professional wellness and resilience plan, and give a 10-minute presentation of the Action Plan to clinical department chairs, GW faculty experts and other medical students. For the CE, MD/MPH students integrate their public health education into an updated Action Plan. Based on preliminary self-study feedback, the MD/MPH CE was altered to ensure that students were submitting individual work products, effective 2024. The final Action Plan is assessed by the MD/MPH program director using a rubric. Each student already submits an individual personal and professional wellness and resilience plan and is required to individually present during the final presentation. For students who complete their Action Plans as a group (prior to the change), students self-evaluate their role, which contributes to the program director's individual assessment.

3) Provide documentation, including syllabi and/or handbooks, that communicates integrative learning experience policies and procedures to students.

See ERF > Criterion D > Criterion D7 > D7.3: MPH ILE_policies.

4) Provide documentation, including rubrics or guidelines, that explains the methods through which faculty and/or other qualified individuals assess the integrative learning experience with regard to students' demonstration of the selected competencies.

See ERF > Criterion D > Criterion D7 > D7.4: MPH ILE_assessment.

5) Include completed, graded samples of deliverables associated with each integrative learning experience option from different concentrations, if applicable. The school must provide at least 10% of the number produced in the last three years or five examples, whichever is greater.

There are no sample CEs from the below programs because there are no students who completed CEs in the last three years.

- MPH@GW, Climate and Health
- MPH@GW, Women, Youth and Child Health
- MPH@GW, Global Health
- MSN/MPH
- LLM/MPH
- JD/MPH

See ERF > Criterion D > Criterion D7 > D7.5: MPH ILE_samples.

6) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.

<u>Strengths</u>

- Each department has specific requirements for their students' CE projects. These requirements are clearly defined, and students have the guidance of a CE advisor to help them navigate the process.
- Students complete a wide array of CE projects that showcase the depth and breadth of public health research, practice and policy analysis, while supporting the specific areas in which they may be concentrating.

Challenges

- Most students complete an end-of-CE evaluation, which assesses their overall satisfaction with the CE process and advising/mentoring. However, depending on the program, this evaluation may not be specific to the CE advisor, so the feedback may not be attributable to a single person.
- For students whose advisor is also their instructor, this advisor is responsible for guiding students on a myriad of topics, some of which they may not be an expert in. In such cases, the advisor recommends that the student speak to another faculty member or external expert for additional mentoring.
- As our programs continue to grow, the MPH@GW in particular, there will be a greater demand on faculty to provide mentorship and expertise to students during their CE project. Additional faculty may be needed.
- The identification and assessment of competencies was ingrained in the fabric of CE projects, though not always clearly documented in syllabi and rubrics. During the self-study review process, areas of improvement were identified, and programs were tasked with updating CE documentation to make competency identification and assessment clearer.

<u>Future Plans</u>

• Departments currently using the PUBH 6015 single course (Biostatistics, Epidemiology and Prevention and Community Health) are considering either creating a two-course sequence (like Global Health) or creating a class with a unique course number specific to their students (like Health Policy and Management).