

MPH in Climate Change and Health
Competencies, Courses, and Assessments

Competency	Course Numbers and Names [^]	Specific Assessment Opportunity
<p>1. Demonstrate an understanding of the climate drivers of human health and the exposure pathways through which impacts occur.</p>	<p>EHS 525: A Public Health Lens to Climate HPS 533: Global Health</p>	<p>In EHS 525, students are assessed: (i) using an individual climate lab assignment that constitutes 25% of the course grade. This assignment requires students to demonstrate an understanding of climate change indicators and become familiar with the processes that drive climate. (ii) A term paper. (iii) graded discussion assignment (iv) An Art assignment: In this assignment, students are required to be creative in using art, poetry, music, etc. to convey what resonates with them about climate change and health. A final exam provides further opportunity to assess students' overall competencies related to climate change and health science, policies, and mitigation strategies. (v) Final exam.</p> <p>In HPS 533, students are assigned to read the McMichael, A.J. (2013). Globalization, climate change, and human health. N Engl J Med; 368:1335-43. They are asked to review a PowerPoint lecture entitled "Climate Change and Global Health".</p>

		<p>After reviewing the lecture and the readings for the week, students are asked to provide brief responses to the following discussion questions.</p> <ul style="list-style-type: none"> (a) What are the direct and indirect pathways through which climate change and the environment influence human health? How will vulnerable populations be particularly impacted? (b) How will public health agencies respond to and address the impact of climate change? <p>Although responses can be found in the PPT lecture and the assigned reading, students are encouraged to consult and cite outside sources to support their responses.</p> <p>In addition to their initial assignment posting of about 500 words (for both questions combined), comment substantively on the postings of at least three of your colleagues within the week.</p> <p>Students are graded on the quality of their postings and responses using a standard grading rubric.</p>
<p>2. Develop adaptation measures to address climate effects on health</p>	<p>EPID/EHS 545: One Health Foundations CPH 502: Climate and Health</p>	<p>In weeks 4-6 of EPID/EHS 545, complete an assignment focusing on an example of a public health crisis at the intersection of humans, animals, and the environment. Students will critique surveillance and</p>

		<p>preventive public health responses and propose an intervention (adaptation measure(s) to lessen the impact of the crises at this intersection. Their proposed intervention must be described clearly, delineated in a logical model, and reflected upon in terms of impact and challenges. Students must submit a complete draft for initial instructor feedback. Based on feedback, students will submit the final essay for a grade and develop a presentation using PowerPoint and the voice recording feature.</p> <p>Additionally, in week 3 of the course of CPH 502, students are assigned to watch a YouTube video on "Climate Change 2022: Impacts, Adaptation & Vulnerability". They are then assessed on the quality of a white paper assignment that requires them to propose adaptation strategies to address climate change. Quiz 3 further assesses students' ability to develop climate change adaptation strategies. Discussion questions for weeks 4 and 5 provide opportunities to assess students' ability to develop and analyze climate change adaptation strategies and policies.</p>
<p>3. Estimate the feasibility of implementation and the impact of solutions to the world's increasing food needs based on alternative methods, indigenous knowledge, and native crops, in the context of cutting-edge technologies.</p>	<p>CPH 532: Food in 2050 and Beyond: Climate Change and Global Health</p>	<p>In CPH 532, students are assessed by completing a scoping exercise. The exercise requires students to (i) identify ten existing under-used, ready-to-use, and pipeline-ready food technologies,</p>

		<p>products, and practices. These innovations must support food security, health, and livelihoods of people and societies living in sub-Saharan Africa, Asia, Small Island Nations, Central and South America, areas which are especially vulnerable to the impacts of climate-related extremes; (ii) conduct prioritization of innovations (5 low-tech grassroots and inclusive, and 5 high-tech) using provided template and guideline; (iii) identify gaps and needs to support upscaling and adoption of innovations within the context of priority geographies.</p> <p>Comprehensive guidance for executing the scoping exercise, information regarding the grading rubric, and expectations will be available in class and on D2L learning management system.</p>
<p>4. Develop the tools to communicate climate effects on health.</p>	<p>CPH 502: Climate and Health EHS 525: A Public Health Lens to Climate Change</p>	<p>In CPH 502, three assignments are used to assess students' competency in communicating the effects of climate change on health. For the first assignment, students will write a white paper describing a challenge to responding to climate change effects on health and how to address it. For the second assignment, students will create a StoryMap using ArcGIS Online, which connects climate change to a health topic of their choice. For the third assignment, students will use a platform of their choice, to record a 10-minute</p>

		<p>oral presentation to their peers on a topic from the course they find intriguing.</p> <p>Additionally, in EHS 525, students are assessed by (i) Requiring them to develop a podcast or video to motivate a selected target audience to change their behaviors and reduce their carbon footprint. The individual-level assignment requires each student to write a one-page summary report of their contribution to the group work, highlighting the key lessons they learned for public health practice related to climate change education. Additional details regarding the grading rubric and expectations will be available in class and on the D2L learning management system. (ii) Quiz and graded discussion posting in week 16.</p>
<p>5. Critique pandemic and climate preparedness plans from local, regional, national, and global perspectives.</p>	<p>EPID/EHS 445-545: One Health Foundations</p>	<p>In EPID/EHS 545, Students are assessed using a One Health Evidence-Based Critique. After reviewing two assigned readings, students write a policy brief to decision-makers that focuses on a One Health topic of their choice. They will need to focus on a topic highlighted in their readings. They are required to imagine that the authors of their readings were testifying before Congress, and they are to present a brief on other research supporting an argument for a One Health approach to mitigate impact at the local, state, national, or global level. The policy brief must include recommendations</p>

		based on evidence from the scientific literature and must include at least 15 references, including the two assigned readings.
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