

D4. MPH and DrPH Concentration Competencies

The school defines at least five distinct competencies for each concentration or generalist degree at each degree level. These competencies articulate the unique set of knowledge and skills that justifies awarding a degree in the designated concentration (or generalist degree) and differentiates the degree offering from other concentrations offered by the unit, if applicable.

The list of competencies may expand on or enhance foundational competencies, but, in all cases, including generalist degrees, the competency statements must clearly articulate the additional depth provided beyond the foundational competencies listed in Criteria D2 and D3.

The school documents at least one specific, required assessment activity (e.g., component of existing course, paper, presentation, test) for each defined competency, during which faculty or other qualified individuals validate the student's ability to perform the competency.

If the school intends to prepare students for a specific credential (e.g., CHES/MCHES) that has defined competencies, the school documents coverage and assessment of those competencies throughout the curriculum.

- 1) Provide a matrix, in the format of Template D4-1, that lists at least five competencies in addition to those defined in Criterion D2 or D3 for each MPH or DrPH concentration or generalist degree, including combined degree options and indicates at least one assessment activity for each of the listed competencies. Typically, the school will present a separate matrix for each concentration.*

There are several instances in which one or more courses are required in different programs. Each program and/or department is responsible for developing D4 competencies in line with their MPH program's mission. As a result, competency language may differ between programs. For example, the Department of Global Health took a department-level approach whereby all programs requiring PUBH 6400 Global Health Frameworks use the same competency and same assignment to show assessment. The Department of Prevention and Community Health allowed each MPH program to develop their own D4 competencies and link them to assignments. As a result, even though almost all programs require PUBH 6500 Planning and Implementing Health Promotion Programs, each program has different D4 competencies connected to the course (or in the case of Community-Oriented Primary Care, no D4 competencies linked).

Template D4-1

Assessment of Competencies for MPH, Biostatistics		
Competency	Course	Describe specific assessment opportunity
<p>Design, Plan and Conduct Studies: Apply basic principles of biostatistics to contribute to the design, planning, and conduct of public health and biomedical studies.</p>	<p>PUBH 6869 Principles of Biostatistical Consulting</p> <p>PUBH 6866 Principles of Clinical Trials</p>	<p>PUBH 6869–In the Study Planning Assignment: Sample Size (Part 2), students develop testable study hypotheses and conduct a literature review to decide on certain statistics such as the standard deviation that may be needed for calculations. Students write two reports where they discuss their hypotheses, literature review findings and proposed statistical calculations (e.g., effect size and population parameter for the control group), all of which are required when designing, planning and conducting a study. See ERF.</p> <p>PUBH 6866–In small groups, students develop a concept proposal describing a clinical trial. They apply basic principles of biostatistics, such as randomization, blinding, control groups, endpoints, design configuration, inclusion/exclusion criteria, sample size calculation, and data analysis issues. In the final class, groups present their proposal. Students are individually assessed during the presentation as every member must present and answer questions during the Q&A session. See ERF.</p>
<p>Manage Data: Manage databases from public health and biomedical studies using statistical software, e.g., SAS.</p>	<p>PUBH 6853 Use of SAS for Data Management and Analysis</p>	<p>PUBH 6853–There are seven homework assignments that build on students’ abilities to manage databases in SAS. For example, in Homework #4, students create a new SAS dataset by importing data from an excel file and reading raw data in a text file. See ERF.</p>
<p>Analyze Data and Interpret Results: Analyze data by applying methodological concepts and interpret the results from public health and biomedical studies.</p>	<p>PUBH 6864 Applied Survival Analysis for Public Health Research</p>	<p>PUBH 6864–On part 2 of the final exam, students manage a database, perform other programming tasks, analyze data using statistical software and write methods and results sections appropriate for a technical report, where they clearly and thoroughly explain the methods and interpret the results. See ERF.</p>

<p>Communicate Results: Communicate results from statistical analysis in layman’s terms as a member of a multidisciplinary research team on public health or biomedical studies.</p>	<p>PUBH 6869 Principles of Biostatistical Consulting</p> <p>PUBH 6866 Principles of Clinical Trials</p>	<p>PUBH 6869–Sessions 1 and 2 cover general communication skills for biostatistics consultations through lecture material, online videos, and practice during class sessions. Session 4 focuses specifically on how to communicate in writing a sample size justification. In the Sample Size Justification, students write two reports that would be similar to what might be included in grant applications. While the justification will be partly technical, the overall descriptions provided by the students are meant to be understandable in fairly nontechnical (layman’s) language. See ERF.</p> <p>PUBH 6866–At the start of the course, students are surveyed and placed on multidisciplinary teams based on program and experience. In the Concept Proposal assignment, these groups collaborate and communicate regarding the appropriate statistical theories and study designs. Groups present their proposal in a group presentation. Students are individually assessed in the presentation as each is required to present. The presentation is expected to be given using nontechnical language (p. 4).</p>
<p>Apply Ethical Principles: Identify and apply basic ethical principles pertaining to data confidentiality and interpretation of statistical results derived from public health and biomedical data.</p>	<p>PUBH 6869 Principles of Biostatistical Consulting</p>	<p>PUBH 6869–Following in- and out-of-class didactics on ethical issues in biostatistics consulting, students complete an Online Quiz, where students must recognize ethical problem(s) in a consulting scenario and discuss approaches to solve these issues. See ERF.</p>

Assessment of Competencies for MPH in Community Oriented Primary Care		
Competency	Course	Describe specific assessment opportunity
<p>Develop characterizations of communities and identify their health needs using the principles of COPC.</p>	<p>PUBH 6510 Community-Oriented Primary Care Principles and Practice</p>	<p>PUBH 6510–In the workgroup assignment and final paper, groups of students develop characterizations for an identified community. Groups are provided with questions they must answer in their characterization. Additionally, groups conduct a stakeholder interview and summarize their findings related to the community’s health needs. Students are individually assessed through a team evaluation process and during class time when groups are given time to work on their papers. The instructor engages with each group to assess student participation and understanding. See ERF.</p>

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<p>Build a community asset map using qualitative and quantitative information about community needs and assets.</p>	<p>PUBH 6510 Community-Oriented Primary Care Principles and Practice</p>	<p>PUBH 6510–In the Asset Mapping Assignment, students build a community asset map using a mixture of qualitative and quantitative data. This asset map is built upon the previous group work of defining and characterizing the community and meeting with community stakeholders (pp. 4-5; see ERF).</p>
<p>Develop the ability to build partnerships and manage community health organizations by engaging stakeholders to implement community-based programs.</p>	<p>PUBH 6513 Community Health Management</p>	<p>PUBH 6513–As part of the Group Final Project, groups conduct interviews with community health stakeholders involved in implementing the TakeMeHome intervention to learn how community health organizations develop partnerships to implement the program. Following the interviews, groups of students write a paper, integrating their learnings from class and findings from interviews to discuss how leaders and managers build partnerships and manage their organizations while implementing community-based programs. Students are individually assessed during class time when groups are given time to work on their papers. The instructor engages with each group to assess student participation and understanding. See ERF.</p>
<p>Develop an evaluation plan for a community-based intervention or COPC program.</p>	<p>PUBH 6510 Community-Oriented Primary Care Principles and Practice</p>	<p>PUBH 6510–In the Workgroup Assignment and Final Paper, students work in a small group to develop an evaluation plan for their planned community intervention. They write a paper, tying in the aims/objectives of the intervention. Students are individually assessed by the instructor through a team evaluation process and through in-class engagement with the instructor. See ERF.</p>
<p>Apply COPC processes and principles to address health disparities.</p>	<p>PUBH 6513 Community Health Management</p>	<p>PUBH 6513–As part of the Group Final Project, students apply the principles of COPC processes and principles to develop an interview guide for a key stakeholder associated with community HIV testing access and the TakeMeHome intervention. Groups interview the stakeholder, create a codebook and analyze the transcript. The instructor individually assesses students during the creation of the interview guide, codebook and transcript analysis as groups are given class time to work. See ERF.</p>
<p>Provide health policy recommendations aimed at reducing health inequities in the US health care system.</p>	<p>PUBH 6512 Community-Oriented Primary Care Policy and Issues</p>	<p>PUBH 6512–In the Brief Review and Critique, students reflect on the US health care system and propose a health policy recommendation to reduce health inequities (p. 3; see ERF).</p>

Assessment of Competencies for MPH, Environmental Health Science and Policy		
Competency	Course	Describe specific assessment opportunity
Identify the adverse human health effects of chemical, biological, and physical hazards.	PUBH 6123 Toxicology: Applications for Public Health Policy	PUBH 6123—Students complete a series of quiz and exam questions related to this competency. See ERF.
Conduct and interpret data analyses of environmental or occupational exposures or health outcomes.	PUBH 6131 Quantitative Methods in Environmental and Occupational Health PUBH 6853 Use of SAS for Data Management and Analysis ⁶⁸	PUBH 6131—In the Presentation and Paper, students apply computational and statistical concepts to carry out a series of data analyses and interpret the results. Students write a paper and deliver an oral presentation describing their methodologies and results which assess environmental/occupational exposures (p. 2). PUBH 6853—There are seven homework assignments that build on students' abilities to conduct and interpret data analyses using SAS. See ERF.
Assess environmental or occupational exposures to evaluate the severity of a chemical, physical, or biological hazard and potential for prevention and control strategies to reduce exposure.	PUBH 6126 Assessment and Control of Environmental Hazards	PUBH 6126—In the Literature Presentation, students synthesize and critique peer-reviewed articles that assess environmental or occupational exposures and identify the potential for prevention and control strategies to reduce exposures. Students use the human health risk paradigm/framework in their assessment (p. 2).
Evaluate observational studies that examine the relationship between environmental or occupational exposures and health, including biases and study limitations.	PUBH 6121 Environmental and Occupational Epidemiology	PUBH 6121—Students evaluate two peer-reviewed publications, both individually and within a group. Students write a critique of the article using a provided framework that assesses the competency. See ERF.

⁶⁸ PA/MPH students take PUBH 6853. All other students take PUBH 6131.

Demonstrate knowledge of processes through which science-based policies are developed to address environmental or occupational health issues.	PUBH 6122 Protecting Public Health and the Environment: Policies, Politics and Programs	PUBH 6122–In the Agency Petition assignment, students write a science-based petition to a federal agency requesting a change in policy that affects an environmental or occupational health issue. In the Public Comments assignment, students write a public comment on a proposed rule (i.e., federal regulation) related to an environmental or occupational health issue. To complete these tasks, students must demonstrate knowledge of the processes through which science-based policies are developed (p. 3).
Synthesize information to assess and manage environmental or occupational risks and engage in public health risk communication.	PUBH 6124 Risk Management and Communication	PUBH 6124–In the Final paper and presentation, students work in groups to prepare a problem-based environmental or occupational health case study. Acting as a federal, state, or local government public health official, students write a final paper where they synthesize information to assess and manage their chosen risk. In a 30-minute presentation (with PowerPoint), students communicate public health risk information as their chosen public health official. Students are individually assessed through self-reflection exercise, during the presentation Q&A, and the Session 5 proposal. See ERF.

Assessment of Competencies for MPH, Epidemiology		
Competency	Course	Describe specific assessment opportunity
Identify and assess patterns of diseases to postulate hypotheses and to identify strategies to evaluate the impact of health problems.	PUBH 6252 Epidemiologic Methods 2: Advanced Epidemiologic Methods	PUBH 6252–In the Quantitative Methods Assignment, students identify appropriate measures, measures of association and disease patterns. They assess patterns of disease and interpret data analyses to identify strategies to address health issues. See ERF.
Plan and design an epidemiologic study to include observational or experimental design.	PUBH 6247 Design of Health Studies	PUBH 6247–In the Research Proposal, students plan and design an observational study. Students write a background on the topic, develop study aims, identify a study population and provide an overview of the study design and sample size. They define measures of key variables, provide an analysis timeline and develop shell tables based on proposed analyses. See ERF.
Evaluate epidemiologic studies and identify limitations and sources of bias.	PUBH 6252 Epidemiologic Methods 2: Advanced Epidemiologic Methods	PUBH 6252–In the Threats to Validity Assignment, students identify and assess various sources and types of bias. See ERF.

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Conduct and interpret data analyses from epidemiological studies to address research questions.	PUBH 6260 Applied Epidemiologic Data Analysis	PUBH 6260–In Homework #1, students conduct data analysis using SAS and answer a series of questions. They then write a written report that includes methods, results and conclusion sections where students interpret the analyses. See ERF.
Manage datasets from epidemiological studies using statistical software.	PUBH 6260 Applied Epidemiologic Data Analysis	PUBH 6260–In Homework #1, students manage a dataset in SAS to conduct data analyses. See ERF.
Synthesize data and literature to communicate findings.	PUBH 6252 Epidemiologic Methods 2: Advanced Epidemiologic Methods PUBH 6260 Applied Epidemiologic Data Analysis	PUBH 6252–In the Synthesis Module Assignment, students write a paper reviewing two peer-reviewed publications. Students synthesize information from the literature to answer a series of questions. See ERF. PUBH 6260–In Homework #1, students write a written report that includes methods, results and conclusion sections where students synthesize data and literature to communicate their findings. See ERF.

Assessment of Competencies for MPH, Global Environmental Health		
Competency	Course	Describe specific assessment opportunity
Evaluate observational studies that examine the relationship between environmental or occupational exposures and health, including biases and study limitations.	PUBH 6121 Environmental and Occupational Epidemiology	PUBH 6121–Students evaluate two peer-reviewed publications, both individually and within a group. Students write a critique of the article using a provided framework that assesses the competency. See ERF.

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<p>Conduct and interpret data analyses of environmental or occupational exposures or health outcomes.</p>	<p>PUBH 6131 Quantitative Methods in Environmental and Occupational Health</p> <p>PUBH 6853 Use of SAS for Data Management and Analysis</p>	<p>PUBH 6131–In the Presentation and Paper, students apply computational and statistical concepts to carry out a series of data analyses and interpret the results. Students write a paper and deliver an oral presentation describing their methodologies and results which assess environmental/occupational exposures.</p> <p>PUBH 6853–There are seven homework assignments that build on students’ abilities to conduct and interpret data analyses using SAS. See ERF.</p>
<p>Assess environmental or occupational exposures to evaluate the severity of a chemical, physical, or biological hazard and potential for prevention and control strategies to reduce exposure.</p>	<p>PUBH 6126 Assessment and Control of Environmental Hazards</p>	<p>PUBH 6126–In the Literature Presentation, students synthesize, critique and present peer reviewed articles that assess environmental or occupational exposures and identify the potential for prevention and control strategies to reduce exposures. Students present this information in a PowerPoint presentation (p. 2).</p>
<p>Apply multidisciplinary perspectives to identify, analyze, and address global health challenges.</p>	<p>PUBH 6435 Global Health Program Development and Implementation</p>	<p>PUBH 6435–Over the course of term, groups of students work to develop a global health intervention. The course is co-taught by a multidisciplinary team, and students are expected to apply these perspectives to their project design and implementation plans. Students are individually assessed through a peer evaluation process (p. 3).</p>
<p>Synthesize scientific evidence to inform global environmental health interventions and reduce and prevent environmental health related disease and injury.</p>	<p>PUBH 6128 Global Environmental and Occupational Health</p>	<p>PUBH 6128–Groups of students work together to identify a global environmental health challenge and present a topic defense which includes an evidence-based summary of the background and scope of the issue, and an articulation of the proposed intervention’s primary aims. Then, individually, students write a paper detailing the methods of their proposed intervention. Students must synthesize information to write about appropriate methods (pp. 3-4).</p>
<p>Utilize frameworks for the design of culturally acceptable and contextually feasible global health interventions.</p>	<p>PUBH 6435 Global Health Program Development and Implementation</p>	<p>PUBH 6435–In the final exam, students utilize frameworks for the design of culturally acceptable and contextually feasible global health interventions. Students then peer-review designs and answer a series of questions regarding the proposal, which assess this competency. See ERF.</p>

Assessment of Competencies for MPH, Global Health Epidemiology and Disease Control		
Competency	Course	Describe specific assessment opportunity
Conduct and interpret data analyses from epidemiological studies to address research questions.	PUBH 6853 Use of SAS for Data Management and Analysis PUBH 6252 Epidemiologic Methods 2: Advanced Epidemiologic Methods	PUBH 6853—Students conduct and interpret data analysis from epidemiological studies on homework and the final exam. See ERF. PUBH 6252—Students conduct and interpret data analysis from epidemiological studies on several assignments. See ERF.
Plan and design epidemiologic studies including observational and experimental designs.	PUBH 6247 Epidemiologic Methods 1: Design of Health Studies	PUBH 6247—In the Research Proposal, students plan and design an observational study. In Section 1, students write a background on the topic, develop study aims, identify a study population, and provide an overview of the study design and sample size. In Section 2, students define measures of key variables, provide an analysis timeline and develop shell tables based on proposed analyses. See ERF.
Interpret and critique research and best practices to inform the development of evidence-based solutions for global health challenges.	PUBH 6047 Systematic Reviews to Synthesize Evidence in Public Health Practice	PUBH 6047—In the Case Studies and Related Class Discussions, students examine meta-analyses and related decision-making as related to three current controversies in global health. For each case study, students critically assess the papers for discussion in class. For two of the case studies, students submit a “PRISMA Checklist” to assess research quality. In class, students interpret and critique the research and best practices before writing a short reflection essay on the case (p. 3).
Analyze multilevel determinants in global health problems that form the basis for disease control strategies and interventions.	PUBH 6486 Global Health Programs and Approaches to the Control of Infectious Diseases	PUBH 6486—In the Final Exam, students write an essay where they analyze multilevel determinants in global health problems and develop evidence-based solutions. See ERF.
Apply multidisciplinary perspectives to identify, analyze, and address global health challenges.	PUBH 6400 Global Health Frameworks	PUBH 6400—This course is taught by a multidisciplinary team of instructors, and attendees of the class are also interdisciplinary, coming from several different programs and degree levels. Consequently, students learn a multidisciplinary approach to global health challenges and are expected to apply these learnings in a reflection piece. See ERF.

Analyze the ethical issues of global health programs, policies and research.	PUBH 6416 Ethical and Cultural Issues in Global Health Research and Programs Or PUBH 6423 Ethics in Public Health Practice and Policy	PUBH 6416–In the Cultural Autobiography assignment, students choose a global health topic of interest and explore the various ethical and cultural issues that contribute to the global health program/policy/research while reflecting on how their own lived and learned experiences affect their examination or perspective on such issues. See ERF. or PUBH 6423–In the Case Study Write-Up and Analysis, students analyze ethical issues in a global health policy/program/research by focusing on a public health case study of their choice. They develop a public health case study presenting a moral dilemma and are expected to conduct a detailed moral analysis of the case study and moral dilemma using ethical theories and principles. See ERF.
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Assessment of Competencies for MPH, Global Health Policy		
Competency	Course	Describe specific assessment opportunity
Identify and analyze evidence to design cultural and equity-specific global health policies in the appropriate context for the national, regional, and/or global health system or institutions.	PUBH 6417 Cross-Cultural Approaches for Global Health Practice	PUBH 6417–In the Case Study of Program/Policy Assessment of Cultural Approaches, groups of students assess the extent to which cross-cultural considerations were included in the policy, plan, strategy or evaluation. Groups present their assessment and recommendations for improvements to the policy or program in a PowerPoint presentation and in a final written report. Through the presentation in which all students contribute and a peer assessment, students are individually assessed. See ERF.
Explain the governance, organization and policy-making of the current global health system architecture.	PUBH 6441 Global Health Organizations and Regulations	PUBH 6441–In the Global Health Organizations Assessment and Presentation, groups of two students will review the history, aims, governance, organizational structures and current strategies of a pre-identified global health organization, framework or treaty. Students will present their findings to the class. Both members of the group are expected to present and complete a peer evaluation. The instructor assesses students individually during their presentation, the following Q&A and through the peer evaluation (p. 2).
Interpret and analyze health policies for health diplomacy.	PUBH 6450 Global Health Diplomacy	PUBH 6450–Assignment #2 is a position paper and a live mock of a negotiation at a multilateral organization (World Health Assembly). Students will be assigned a country and need to write a two-page memo and represent the country during the live session, where they will apply their diplomacy skills in interpreting and analyzing the policy. See ERF.

<p>Evaluate the impact of the economic dimensions (cost, benefits, effectiveness, and financing) of global health policies, particularly in low- and middle-income countries.</p>	<p>PUBH 6466 Health Financing in Low- and Middle- Income Countries Or PUBH 6440 Global Health Economics Or PUBH 6399 Topics in Health Policy (Cost-Benefit Analysis in Health care)⁶⁹</p>	<p>PUBH 6466–Final exam has questions that address this competency. See ERF. Or PUBH 6440–In the policy blog, students describe a specific challenge related to global health in a low- and middle-income country and suggest policy improvements using an economic rationale. See ERF. Or PUBH 6399–In the final project, students write a cost-benefit analysis/cost-effectiveness analysis. Students in the Global Health Policy program choose a global health policy in a low- or middle-income country.</p>
<p>Interpret and critique research and best practices to inform the development of evidence-based solutions for global health challenges.</p>	<p>PUBH 6047 Systematic Reviews to Synthesize Evidence in Public Health Practice</p>	<p>PUBH 6047–In the Case Studies and Related Class Discussions, students examine meta-analyses and related decision-making as related to three current controversies in global public health. For each case study, students critically assess the papers for discussion in class. For two of the case studies, students submit a “PRISMA Checklist” to assess research quality. In class, students interpret and critique the research and best practices before writing a short reflection essay on the case.</p>
<p>Apply relevant quantitative tools to inform different audiences and public health topics.</p>	<p>PUBH 6412 Global Health Quantitative Research Methods</p>	<p>PUBH 6412–In the Breastfeeding Assignment, students seek to understand the relationships between duration of breastfeeding, maternal age, wealth and experience with antenatal care visits. Students perform different statistical methods/tools using STATA. Students write a short paper answering a series of questions and interpret their results, which are appropriately tabled as per the format of a journal. The resulting paper has two main audiences: students who wish to become analysts and future general public health practitioners/policy makers/stakeholders, who will use the material for evaluating the quality of statistical evidence. See ERF.</p>

⁶⁹ This topics course is offered rarely and very few Global Health Policy students take it. It is being removed from the list of selectives in this program in 2024–2025.

Apply multidisciplinary perspectives to identify, analyze, and address global health challenges.	PUBH 6400 Global Health Frameworks	PUBH 6400—This course is taught by a multidisciplinary team of instructors, and attendees of the class are also interdisciplinary coming from several different programs and degree levels. Consequently, students learn a multidisciplinary approach to global health challenges and are expected to apply these learnings in a reflection piece. See ERF.
Analyze the ethical issues of global health programs, policies and research.	PUBH 6416 Ethical and Cultural Issues in Global Health Research and Programs Or PUBH 6423 Ethics in Public Health Practice and Policy	PUBH 6416—In the Cultural Autobiography assignment, students choose a global health topic of interest and explore the various ethical and cultural issues that contribute to the global health program/policy/research while reflecting on how their own lived and learned experiences affect their examination or perspective on such issues. See ERF. Or PUBH 6423—In the Case Study Write-Up and Analysis, students analyze ethical issues in a global health policy/program/research by focusing on a public health case study of their choice. They develop a public health case study presenting a moral dilemma and are expected to conduct a detailed moral analysis of the case study and moral dilemma using ethical theories and principles. See ERF.

Assessment of Competencies for MPH, Global Health Program Design, Monitoring and Evaluation		
Competency	Course	Describe specific assessment opportunity
Utilize frameworks for the design of culturally acceptable and contextually feasible global health interventions.	PUBH 6435 Global Health Program Development and Implementation	PUBH 6435—In the final exam, students utilize frameworks for the design of culturally acceptable and contextually feasible global health interventions. Students then peer-review designs and answer a series of questions regarding the proposal, which assesses this competency. This is an individual assignment which allows faculty to individually assess students on this competency. See ERF.
Conduct evaluation research with a particular focus on vulnerable groups or low- and middle-income contexts.	PUBH 6501 Program Evaluation	PUBH 6501—In the Evaluation plan, students select a real-world program affecting a vulnerable group or low- and middle-income context. Students develop an evaluation plan choosing either a process evaluation description and data collection or a performance measurement description and data collection (p. 3).

<p>Apply relevant quantitative tools to inform different audiences and public health topics.</p>	<p>PUBH 6412 Global Health Quantitative Research</p>	<p>PUBH 6412–In the Breastfeeding Assignment, students seek to understand the relationships between duration of breastfeeding, maternal age, wealth and experience with antenatal care visits. Students perform different statistical methods/tools using STATA. Students write a short paper answering a series of questions and interpret their results, which are appropriately tabled as per the format of a journal. The resulting paper has two main audiences: students who wish to become analysts and future general public health practitioners/policy makers/stakeholders who will use the material for evaluating the quality of statistical evidence. See ERF.</p>
<p>Interpret and critique research and best practices to inform the development of evidence-based solutions for global health challenges.</p>	<p>PUBH 6047 Systematic Reviews to Synthesize Evidence in Public Health Practice</p>	<p>PUBH 6047–In the Case Studies and Related Class Discussions, students examine meta-analyses and related decision-making as related to three current controversies in global public health. For each case study, students critically assess the papers for discussion in class. For two of the case studies, students submit a “PRISMA Checklist” to assess research quality. In class, students interpret and critique the research and best practices before writing a short reflection essay on the case (p. 4).</p>
<p>Apply multidisciplinary perspectives to identify, analyze, and address global health challenges.</p>	<p>PUBH 6400 Global Health Frameworks</p>	<p>PUBH 6400–This course is taught by a multidisciplinary team of instructors and attendees of the class are also interdisciplinary coming from several different programs and degree levels. Consequently, students learn a multidisciplinary approach to global health challenges and are expected to apply these learnings in a reflection piece. See ERF.</p>
<p>Analyze the ethical issues of global health programs, policies and research.</p>	<p>PUBH 6416 Ethical and Cultural Issues in Global Health Research and Programs Or PUBH 6423 Ethics in Public Health Practice and Policy</p>	<p>PUBH 6416–In the Cultural Autobiography assignment, students choose a global health topic of interest and explore the various ethical and cultural issues that contribute to the global health program/policy/research while reflecting on how their own lived and learned experiences affect their examination or perspective on such issues. See ERF. Or PUBH 6423–In the Case Study Write-Up and Analysis, students analyze ethical issues in a global health policy/program/research by focusing on a public health case study of their choice. They develop a public health case study presenting a moral dilemma and are expected to conduct a detailed moral analysis of the case study and moral dilemma using ethical theories and principles. See ERF.</p>

Assessment of Competencies for MPH, Health Policy		
Competency	Course	Describe specific assessment opportunity
Identify and analyze health policy options to address public health and health systems problems, including their impact on equity.	PUBH 6315 Introduction to Health Policy Analysis	PUBH 6315–In the second Policy Analysis paper, acting as a policy advisor, students write a memo that describes a current health policy issue. Example health policies include access to health services for trans people and maternal mortality and morbidity in a state without Medicaid expansion. Students analyze policy options, documenting the equity/disparity issues. Afterwards, students recommend one or more policy actions, justifying their decision. See ERF.
Interpret and apply laws to health policy situations, considering relevant facts, equity, and the legal rights and responsibilities of stakeholders.	PUBH 6330 Health Services and Law Or PUBH 6335 Public Health and Law	PUBH 6330–The purpose of the final exam is to determine whether, while focusing on certain major issues in health services law, students can not only identify relevant principles, laws, cases, etc., but also think and reason critically, present analyses persuasively, and state conclusions concisely. See ERF. Or PUBH 6335–The purpose of the two exams is for students to identify and analyze how various legal principles impact major issues in public health. Students will interpret and apply laws to health policy situations, considering relevant facts, equity, and the legal rights and responsibilities of stakeholders. See ERF.
Apply microeconomic concepts and tools to analyze health policy questions.	PUBH 6340 Health Economics and Finance	PUBH 6340–The exams include both theoretical and relevant policy questions that assess students’ ability to apply microeconomic theory and tools to health policy issues. See ERF.
Find, assess, and apply data (including statistics) and other evidence to do policy analysis and research.	PUBH 6310 Statistical Analysis in Health Policy PUBH 6315 Introduction to Health Policy Analysis	PUBH 6310–The take-home exam evaluates students’ data management skills, their ability to perform the correct univariate, bivariate and multivariate statistical tests, and how well they interpret the findings of the statistical results they conduct. See ERF. PUBH 6315–In the First Partial Analysis, students are presented with a hypothetical scenario and must write a problem statement, background and landscape on a particular health policy topic. This requires finding data and other evidence to support the policy analysis. See ERF.

<p>Write and speak on health policy topics clearly and persuasively in different contexts for and on behalf of a variety of stakeholders.</p>	<p>PUBH 6315 Introduction to Health Policy Analysis</p>	<p>PUBH 6315—In a series of policy analyses, students act as a key stakeholder and prepare a memo to a variety of policy stakeholders. In each written memo, students clearly describe the challenge and then persuasively argue for appropriate action by that stakeholder. In the Oral Testimony Assignment, students translate research findings for policymakers. In pairs, students are assigned a research study and then prepare testimony to summarize/highlight/translate the findings and policy relevance for a congressional committee. Students must each present part of the testimony and their presentations are assessed individually. See ERF.</p>
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<p>Assessment of Competencies for MPH, Health Promotion</p>		
<p>Competency</p>	<p>Course</p>	<p>Describe specific assessment opportunity</p>
<p>Assess the socioecological, psychosocial and behavioral health needs of communities and populations.</p>	<p>PUBH 6500 Planning and Implementing Health Promotion Programs</p>	<p>PUBH 6500—In Assignment 2, groups of students will develop a needs assessment for their target population and health problem. Teams focus on the causes of psychosocial and behavioral factors that affect the health of their community. Students propose solutions to address identified needs. Each member of a group is expected to contribute to the paper. Students complete peer evaluations to provide feedback on the work of fellow learners (pp. 18-19)</p>
<p>Develop and plan health promotion strategies and programs that are theory-based, evidence-informed, and culturally appropriate.</p>	<p>PUBH 6503 Introduction to Public Health Communication and Marketing</p>	<p>PUBH 6503—In Assignments #1-3, students work in groups to develop a strategic health promotion communication plan that is grounded in an ecological framework. In Assignment #1, groups review the literature to identify a target population and evidence supporting the need for a campaign. In Assignment #2, groups flesh out their objectives and core messages. They draft some culturally appropriate materials for pretesting with the target population. In Assignment #3, groups describe the strategies for achieving the health promotion objectives. All group members are expected to participate in the presentation and answer questions. Students also complete a peer evaluation. See ERF.</p>

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<p>Implement, administer, and manage health promotion programs.</p>	<p>PUBH 6500 Planning and Implementing Health Promotion Programs</p>	<p>PUBH 6500–In Assignment 4, groups of students write a paper containing four parts including an implementation plan and management plan for a health promotion program. Students must discuss the timeline of implementation, budget and justification, evaluation plan including measures, instruments and data collection plans, and a narrative on how financial, human and other resources for the program will be managed to ensure quality. Each member of a group is expected to contribute to the paper. Students complete peer evaluations to provide feedback on the work of fellow learners (pp. 20-23).</p>
<p>Evaluate health promotion programs.</p>	<p>PUBH 6501 Evaluation of Health Promotion and Disease Prevention Programs</p>	<p>PUBH 6501–In the Evaluation Plan, students prepare an evaluation plan based on a real-world program of their choice related to their MPH program. In the Midterm Exam, students answer a series of multiple-choice questions regarding program evaluation. They then write two essays, evaluating different health promotion programs. See ERF.</p>
<p>Use qualitative and quantitative research to inform the design of health promotion strategies and programs.</p>	<p>PUBH 6504 Social and Behavioral Science Research Methods (Quant) PUBH 6530 Qualitative Methods in Health Promotion (Qual)</p>	<p>PUBH 6504–In Assignment 1, students perform data entry, cleaning and management tasks on a provided dataset. They conduct a preliminary analysis on this dataset to characterize the community and assess the health-related needs of the population and evaluate the impact of health promotion interventions. See ERF.</p> <p>PUBH 6530–In the Qualitative Research Project and Paper, students conduct qualitative methods to identify knowledge, attitudes, beliefs, social dynamics and other elements of a specific group or situation. Students may complete this project individually or in a group. If completed as a group, students must have defined roles and methods should be more complex, with all students participating in data collection and analysis. The instructor assesses students individually based on their defined roles (p. 3).</p>

Assessment of Competencies for MPH, Humanitarian Health		
Competency	Course	Describe specific assessment opportunity
Interpret and critique research and best practices to inform the development of evidence-based solutions for global health challenges.	PUBH 6468 Preparation and Response to Epidemics, Pandemics, Mass Health Emergencies and Disasters	PUBH 6468–In the Research Response Papers, students develop evidence-based solutions that address major global health challenges. For example, Topic #1 asks students to assess the evidence and practices, and critique them regarding responses to pandemics (COVID-19 and others), balance pros and cons, and formulate the best approaches or future recommendations. Students will have to identify and assess the evidence behind and implications of improving in water quality or air quality during this pandemic and data on vaccine effectiveness, development, or introduction and testing and acceptance of tele-health or tele-medicine into health care system, or strengths or shortcoming in communications strategies and approaches during the pandemic both at health care and social settings and at the national or international levels etc. (which include different disciplines of social or health care or economic etc.). Then they need to balance the level and nature of evidence against each other and formulate a wide range of potential practices and solutions/recommendations for a wide variety of stakeholders from different disciplines (pp. 4-5; see ERF).
Explain and analyze major problems and challenges in humanitarian and disaster settings and strategies to address them.	PUBH 6468 Preparation and Response to Epidemics, Pandemics, Mass Health Emergencies and Disasters	PUBH 6468–In the Research Response Papers, students interpret and critique research and practices to explain and analyze major challenges and describe communication strategies and ways to address disasters, epidemics, pandemics, and mass health emergencies in different populations, geographic locations, and across political contexts. For example, in Topic #1, students explore the challenges of pandemics/epidemics and mass health emergencies, evaluate the evidence or its lack of behind the practices or current recommendations, assess pros and cons for different challenges, including but not limited to already implemented communication strategies, within a broader issue of pandemic, across national or international landscapes and potential ways to address them (pp. 4-5; see ERF).

<p>Describe the institutional landscape and the governance in the aid system, and the interrelationship of foreign policy and health outcomes in humanitarian settings.</p>	<p>PUBH 6467 Ethics and Accountability in Humanitarian Assistance</p> <p>PUBH 6480 Public Health in Humanitarian Settings</p>	<p>PUBH 6467–In the Ethics and Accountability Short Response paper, students write a 6- to 8-page paper on a topic related to the humanitarian aid landscape. See ERF. Additionally, students complete weekly PowerPoint slides based on the readings for the week. Sessions 13 and 14 focus on the interrelationship between policy and humanitarian aid (pp. 18-19).</p> <p>PUBH 6480–In the Research Paper and Midterm and Final Exams, students address the governance and institutional landscape of the aid system (p. 5; see ERF).</p>
<p>Communicate public health and medical evidence on humanitarian and health emergency topics to a variety of audiences such as technical experts, lay population, policymakers, or other relevant stakeholders.</p>	<p>PUBH 6468 Preparation and Response to Epidemics, Pandemics, Mass Health Emergencies and Disasters</p>	<p>PUBH 6468–In the Research Response Papers, students address major global health challenges including developing communication strategies to a variety of audiences. Students write these papers with language geared toward technical experts or academic audiences. For example, Topic No. 1 specifically requires students to go outside the health care domain and dive into social and political issues that a) have different levels of evidence and related communication for average persons, and b) require evaluating data from nonscientific, grey, and lay literature, and media outlets such as newspapers, social media outlets, documentaries, blogs, political websites, and other social forums commonly used by and designed for average lay persons (pp. 4-5; see ERF).</p>

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<p>Describe and address current main communicable, non-communicable, and other pathologies across the populations, geographic locations, and social and political contexts in the humanitarian and disaster settings.</p>	<p>PUBH 6462 Nutrition and Food in Large Humanitarian Emergencies</p> <p>PUBH 6480 Public Health in Humanitarian Settings</p> <p>PUBH 6468 Preparation and Response to Epidemics, Pandemics, Mass Health Emergencies, and Disasters</p>	<p>PUBH 6462–In the final paper, students use the prompt to write a research paper (p. 4).</p> <p>PUBH 6480–In the final research paper, students explore main communicable and non-communicable diseases and pathologies (p. 5).</p> <p>PUBH 6468–In the Research Response Papers and Group presentations, students address a number of major problems in disaster and mass health emergencies (p. 4).</p>
<p>Apply relevant quantitative tools to inform different audiences and public health topics.</p>	<p>PUBH 6412 Global Health Quantitative Research Methods</p>	<p>PUBH 6412–In the Breastfeeding Assignment, students seek to understand the relationships between duration of breastfeeding, maternal age, wealth and experience with antenatal care visits. Students perform different statistical methods/tools using STATA. Students write a short paper answering a series of questions and interpret their results, which are appropriately tabled as per the format of a journal. The resulting paper has two main audiences: students who wish to become analysts and future general public health practitioners/policy makers/stakeholders, who will use the material for evaluating the quality of statistical evidence. See ERF.</p>
<p>Apply multidisciplinary perspectives to identify, analyze, and address global health challenges.</p>	<p>PUBH 6400 Global Health Frameworks</p>	<p>PUBH 6400–This course is taught by a multidisciplinary team of instructors, and attendees of the class are also interdisciplinary coming from several different programs and degree levels. Consequently, students learn a multidisciplinary approach to global health challenges and are expected to apply these learnings in a reflection piece. See ERF.</p>

Analyze the ethical issues of global health programs, policies and research.	<p>PUBH 6416 Ethical and Cultural Issues in Global Health Research and Programs</p> <p>PUBH 6467 Ethics and Accountability in Humanitarian Assistance</p>	<p>PUBH 6416–In the Cultural Autobiography assignment, students choose a global health topic of interest and explore the various ethical and cultural issues that contribute to the global health program/policy/research while reflecting on how their own lived and learned experiences affect their examination or perspective on such issues. See ERF.</p> <p>PUBH 6467–In the Short Research Paper, weekly assignments and the exam, students explore and evaluate ethical challenges. See ERF.</p>
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Assessment of Competencies for MPH, Maternal and Child Health		
Competency	Course	Describe specific assessment opportunity
Assess the individual, community, organizational and societal needs of women, adolescents, or children.	PUBH 6551 Maternal and Child Health 2	PUBH 6551–The Class Project for this course is a semester-long project focused on quantitatively assessing the individual, community, organizational and societal needs of women, adolescents, and children through the conduct of research. The entire class will work as one group with several subgroups to conceptualize the project including research questions, survey design, data collection and data analysis. Students are responsible for turning in their own, individual paper based on the results of their analyses (p. 5).
Develop policies or programs based on behavioral theory frameworks to improve health outcomes of women, adolescents or children.	PUBH 6500 Planning and Implementing Health Promotion Programs	PUBH 6500–In Assignment #3, teams will design a health promotion program that is based on best practices, theoretically grounded and appropriate for the target population. There is specifically a section where students detail the selected behavioral theory and it’s operationalized in the design. Each member of a group is expected to contribute to the paper. Students complete peer evaluations to provide feedback on the work of fellow learners (pp. 19-20).
Administer and implement policies or programs to improve health outcomes of an at-risk community.	PUBH 6500 Planning and Implementing Health Promotion Programs	PUBH 6500–In Assignment #4, teams of students build on their health promotion program design to develop an implementation and evaluation plan. Groups discuss how the program will be managed and administered. Each member of a group is expected to contribute to the paper. Students complete peer evaluations to provide feedback on the work of fellow learners (pp. 20-23).

Conduct evaluation and research related to the health and well-being of women, adolescents, or children.	PUBH 6551 Maternal and Child Health 2	PUBH 6551—Students complete 5 SPSS lab assignments throughout the semester. The labs will apply the materials learned in class, with a focus on analyzing a “real world” dataset—the Girl Rising dataset. The SPSS lab assignments are critical to understanding how to conduct evaluation and research using quantitative data. Each lab will focus on specific research topics including identifying research questions and variables, recoding variables, descriptive/bivariate/multivariate analysis, and interpreting the results of the analysis. See ERF.
Translate evidence and advocate for health and well-being of women, adolescents, or children.	PUBH 6551 Maternal and Child Health 2	PUBH 6551—In the Assignment on Writing Effective Public Comments: How to Bring Your Voice to the Federal Regulatory Process, students learn about the process of regulation implementation by federal agencies. They participate in a workshop that examines the structure of public comments and how to write effectively, translating evidence to advocate for the health and well-being of women, adolescents or children. Students write a public comment to a currently posted regulation (p. 4).
Incorporate a life course perspective to the health and well-being of women, adolescents, or children.	PUBH 6550 Maternal and Child Health 1	PUBH 6550—In the Final Paper, students choose an MCH topic and describe how a life course perspective is incorporated into how public health conceptualizes this MCH topic. See ERF.

Assessment of Competencies for MPH, Public Health Communications and Marketing		
Competency	Course	Describe specific assessment opportunity
Apply an ecological framework to assess and promote population health.	PUBH 6503 Introduction to Public Health Communication and Marketing	PUBH 6503—In Assignments #1-3, students work in groups to develop a strategic health promotion communication plan that is grounded in an ecological framework. In Assignment #1, groups review the literature to identify a target population and evidence supporting the need for a campaign. In Assignment #2, groups flesh out their objectives and core messages. They draft some culturally appropriate materials for pretesting with the target population. In Assignment #3, groups describe the strategies for achieving the health promotion objectives. All group members are expected to participate in the presentation and answer questions. Students also complete a peer evaluation. See ERF.

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<p>Utilize marketing research to develop and improve public health programs.</p>	<p>PUBH 6571 Social Marketing: Theory and Practice</p>	<p>PUBH 6571–In part 3 of the Campaign Proposal, groups of students describe the primary marketing research that they will use to develop their social marketing campaign. While this is a group project, individuals are assessed through the written portion, the presentation pitch and peer evaluations. See ERF.</p>
<p>Develop and administer communication programs to promote individual- and population-level behavior change.</p>	<p>PUBH 6503 Introduction to Public Health Communication and Marketing</p>	<p>PUBH 6503–In Assignments #1-3, students work in groups to develop a strategic health promotion communication plan that is grounded in an ecological framework. In Assignment #1, groups review the literature to identify a target population and evidence supporting the need for a campaign. In Assignment #2, groups flesh out their objectives and core messages. They draft some culturally appropriate materials for pretesting with the target population. In Assignment #3, groups describe the strategies, tactics and a timeline for their communication program for achieving the health promotion objectives. The term administer is being used in the implementation context. In other words, students are expected to learn how to research and develop their campaign (Assignments #1 and #2) and implement it (Assignment #3). Assignment #3 specifically states, “The tactics are the ‘meat’ of your campaign. These are the activities that you are proposing to create and implement, the set of materials you propose to develop and distribute (such as a tool kit or information kit), the partnerships you propose to arrange, the publicity events you create, etc. They will be the vehicles for your health communication messages.” All group members are expected to participate in the presentation and answer questions. Students also complete a peer evaluation. See ERF.</p>
<p>Develop and administer marketing programs to promote individual- and population-level behavior change and improve the health capacity of communities.</p>	<p>PUBH 6571 Social Marketing: Theory and Practice</p>	<p>PUBH 6571–In part 2 of the Campaign Proposal, groups of students identify their target audience based on their research. In part 5, they use a behavior change theory to examine barriers, benefits, and motivations for individuals and populations to change their behavior. The social marketing campaign must take these into consideration. While this is a group project, individuals are assessed through the written portion, the presentation pitch and peer evaluations. See ERF.</p>
<p>Develop and administer communication programs to promote the adoption of policies that enhance health.</p>	<p>PUBH 6503 Introduction to Public Health Communication and Marketing</p>	<p>PUBH 6503–In the Message Map activity, students create key messages as part of a communication plan with the goal of promoting a policy to address a public health challenge. See ERF.</p>

Evaluate effectiveness of public health communication and marketing initiatives.	PUBH 6504 Social and Behavioral Science Research Methods	PUBH 6504–In Assignments 3-5, students conduct analysis on a provided dataset. The analyses are on health promotion campaigns with communication/marketing components. Students write a report summarizing their findings. See ERF.
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Assessment of Competencies for MPH, Public Health Nutrition		
Competency	Course	Describe specific assessment opportunity
Use appropriate nutrition assessment methods at the individual, community, or population levels.	PUBH 6611 Nutrition Assessment	PUBH 6611–In the Body Composition and Anthropometrics Assessment Portfolio, students conduct anthropometry and body composition assessments. These tests are appropriate nutrition assessment methods for the individual level as they relate to anthropometry. At the end of the lab period, students submit a lab worksheet with data from their assessments (p. 4).
Design, implement and evaluate food and nutrition programs and policies and their effects on population health outcomes. ⁷⁰	PUBH 6620 Designing Healthy Communities	PUBH 6620–In the Case Study assignments, students examine the social determinants of health, the food, built, and age-friendly environments of selected wards in Washington, DC, and design SMART Goals to address the needs of those communities using the Policy, Systems, and Environment framework. Students design a series of PSE recommendations along with an evaluation plan. As part of the final project (which includes the case studies), students complete a peer evaluation which assists the instructor in being able to individually assess students. See ERF.
Employ systems thinking to identify and address factors impacting the accessibility, availability, adequacy, and safety of the food supply.	PUBH 6612 Food Systems in Public Health	PUBH 6612–In the Challenge Assignment, students apply a systems thinking approach to a unique aspect of the food system. In a paper, students describe the perspectives of various stakeholders on the given topic, indicate interrelationships between stakeholders and identify opportunities to remove barriers and have stakeholders work more collaboratively to improve health outcomes (p. 3).
Apply a policy, systems and environment approach to creating healthy food environments at the population level.	PUBH 6620 Designing Healthy Communities	PUBH 6620–In the midterm exam, students answer questions that address this competency (p. 5; see ERF).

⁷⁰ Based on feedback from the preliminary self-study, “implement” is being removed from this competency for the 2024-2025 academic year.

<p>Utilize appropriate research methods to address public health nutrition issues and support food and nutrition-related policy development.</p>	<p>PUBH 6613 US Food Policy and Politics Or PUBH 6482 International Food and Nutrition Policy</p>	<p>PUBH 6613–In the Final Paper, students conduct a literature review on a public health nutrition problem of their choice and write a paper evaluating/proposing a policy or regulatory approach to address the issue. In addition to the paper, students give a 10-minute PowerPoint presentation on their findings (p. 3).</p> <p>PUBH 6482–In the Final Paper (Parts A and B), students investigate major nutrition and food challenges in a particular country. Students systematically identify programs and policies to address these challenges in a paper (pp. 3-4,17).</p>
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Assessment of Competencies for MPH, Physical Activity in Public Health		
Competency	Course	Describe specific assessment opportunity
<p>Describe the role of physical activity in the health and function of the general population.</p>	<p>EXNS 6208 Physical Activity in Public Health</p>	<p>EXNS 6208–In Assignment 4–Infographic, groups of students design an infographic that promotes daily physical activity in the setting of their choice. As part of this infographic, students describe how physical activity promotes health and function of the population. To assess individual participation and contribution on the assignment, students complete a peer evaluation form.</p>
<p>Explain various physiological and psychosocial mechanisms that mediate the relation between physical inactivity and chronic disease morbidity and mortality.</p>	<p>EXNS 6208 Physical Activity in Public Health</p>	<p>EXNS 6208–Students answer questions related to this competency on the midterm exam. See ERF for midterm exam.</p>
<p>Design physical activity interventions that are consistent with current social and behavioral theories.</p>	<p>EXNS 6208 Physical Activity in Public Health</p>	<p>EXNS 6208–In the Case Report (Homework 3), students are given a scenario (in this case cancer patients currently receiving treatment for breast cancer) and design a physical activity plan for this target population, taking into account social and behavioral theories. See ERF for Case Report.</p>
<p>Perform physical activity assessments using state-of-the-art technology.</p>	<p>EXNS 6208 Physical Activity in Public Health</p>	<p>EXNS 6208–In Assignment 1–PAL calculation, students collect personal data and calculate their P.A.L. using metabolic equivalents of task (METs) derived from the Compendium of Physical Activities. As part of the class discussion grade, students practice using accelerometers, step-counters, ActivPAL, and questionnaires to assess physical activity during lectures.</p>

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<p>Apply statistical and epidemiological methods to develop and test hypotheses pertaining to physical activity and health and disease outcomes at the population level.</p>	<p>EXNS 6204 Biostatistical Methods and Research Design</p>	<p>EXNS 6204–In Homework 4, students develop and test hypotheses using various statistical tests and the NHANES dataset. Students apply statistical and epidemiological methods to answer a series of questions related to their statistical calculations. See ERF.</p>
<p>Design and evaluate interventions for improving physical activity at the community and population levels.</p>	<p>PUBH 6620 Designing Healthy Communities</p>	<p>PUBH 6620–In the Case Study assignments, students examine the social determinants of health, the food, built, and age-friendly environments of selected Wards in Washington, DC, and design SMART Goals to address the needs of those communities using the Policy, Systems, and Environment framework. Students design a series of PSE recommendations along with an evaluation plan. As part of the final project (which includes case studies), students complete a peer evaluation, which helps the instructor individually assess students.</p>
<p>Integrate the science and practice of exercise science and public health in promoting an active lifestyle at the community and population levels.</p>	<p>EXNS 6208 Physical Activity in Public Health</p>	<p>EXNS 6208–In the Final Project–Active Design Project, groups of students redesign a public space (e.g., airport, library, fast-food restaurant) to maximize physical activity and minimize sedentary behavior for the community and population that use this public space. This activity requires the integration of the science and practice of exercise science and public health to effectively redesign the public space. Groups present their ideas in a PowerPoint presentation. The instructor assesses students individually when the students present, answer questions during the Q&A and through a peer evaluation form, which contains questions on group participation and contributions to the project (p. 3).</p>

Assessment of Competencies for MPH@GW, Public Health Generalist		
Competency	Course	Describe specific assessment opportunity
Develop a programmatic implementation and evaluation plan for a health promotion intervention.	PUBH 6500 Planning and Implementing Health Promotion Programs	PUBH 6500–In Assignment #4, teams develop an implementation and evaluation plan which includes a timeline, budget, evaluation questions, evaluation design (e.g., sampling, instruments, data collection techniques), and dissemination and management plans. Each member of a group is expected to contribute to the paper. Students complete peer evaluations to provide feedback on the work of fellow learners (pp. 19-21).
Assess the functions, capacities, management and governance of governmental, international and non-state organizations that comprise health systems.	PUBH 6442 Comparative Global Health Systems	PUBH 6442–In the Group Presentation, teams choose a topic in which they can assess the functions, capacities and management of governmental, international and non-state organizations within 2 to 3 countries. All students must contribute to the presentation. Individuals are assessed by the instructor through a combination of the presentation, Q&A following the presentation and peer evaluation feedback (pp. 3-4).
Apply appropriate theories toward the development, implementation, and evaluation of public health interventions to address health risks at the individual, interpersonal, community, and/or population levels and mitigate population health impact.	PUBH 6500 Planning and Implementing Health Promotion Programs	PUBH 6500–In Assignment #3, teams will design a health promotion program that is based on best practices, theoretically grounded and appropriate for the target population. There is specifically a section where students detail the selected behavioral theory and it's operationalized in the design. In Assignment #4, students build on the design to develop an implementation and evaluation plan. Each member of a group is expected to contribute to the paper. Students complete peer evaluations to provide feedback on the work of fellow learners (pp. 17-21).
Apply commonly employed data management techniques using appropriate software tools.	PUBH 6052 Practical Data Management and Analysis for Public Health	PUBH 6052–In Graded Assignment 1, students apply commonly employed data management techniques in SPSS. See ERF.
Describe how health systems performance is affected by various approaches to health care organization, health law, health workforce development and health care financing.	PUBH 6442 Comparative Global Health Systems	PUBH 6442–In the Group Presentation, teams choose a topic in which they can assess how the health system performance is affected by various approaches to health system organization of the six building blocks of a health system. All students must contribute to the presentation. Individuals are assessed by the instructor through a combination of the presentation, Q&A following the presentation and peer evaluation feedback (pp. 3-4).

Develop communication campaigns and strategies to disseminate health promotion information through media channels.	PUBH 6503 Introduction to Public Health Communication and Marketing	PUBH 6503–In the Group Campaign Design and Evaluation Planning Project, teams of students develop a health communication campaign strategy, tactic or program materials (Assignment #2). Students write a communication strategy statement, develop 3 key messages for the primary target audience and develop a prototype of two health communication materials. See ERF for detailed instructions (p. 6).
Investigate a public health issue through evidence-based methods, including a review of scientific literature.	PUBH 6500 Planning and Implementing Health Promotion Programs	PUBH 6500–In Assignment #2, teams will conduct a needs assessment to inform the planning of the health promotion program. The needs assessment will occur through a scientific literature review, where teams will investigate the target population, epidemiological issue, educational and ecological underlying factors, and research evidence-based programs addressing their health topic. The needs assessment will serve as the foundation for the program design and implementation plan (pp. 16-18). Each member of a group is expected to contribute to the paper. Students complete peer evaluations to provide feedback on the work of fellow learners. See ERF.

Assessment of Competencies for MPH@GW, Climate and Health		
Competency	Course	Describe specific assessment opportunity
Evaluate observational studies that examine the relationship between environmental or occupational exposures and health, including biases and study limitations.	PUBH 6136 Environmental and Occupational Epidemiology PUBH 6135 Researching Climate Change and Human Health	PUBH 6136–In the Final Assignment, students individually prepare an epidemiologic critique of one environmental epidemiologic study. They must evaluate the study for the relationship between exposures and human health. This is part of a larger group project. Members of the group project are assessed individually during the presentation and through a peer evaluation process. See ERF. PUBH 6135–In the Final group project, students work in small groups over the course of the term to evaluate existing epidemiologic research that investigates an environmental or occupational health problem related to climate change and its effects on human health, including summarizing scientific literature, methods, and results, and evaluating biases. Students write a memo and conduct an oral presentation. Students are individually assessed during the presentation, the after-presentation Q&A and through a peer evaluation process (p. 3).

Assess environmental and/or occupational exposures that are linked with climate change and evaluate health hazards associated with them.	PUBH 6140 Global Climate Change and Air Pollution	PUBH 6140–In Paper 1, students interact with the CDC Environmental Public Health Tracking Network Tool to visualize climate-relevant health exposures and evaluate the health hazards associated with those risks in a specific country. Students write a paper answering a series of questions, assessing the exposures (p. 3; see ERF).
Examine scientific approaches for studying the effects of climate change on human health.	PUBH 6135 Researching Climate Change and Human Health	PUBH 6135–In the midterm exam, students answer a series of questions related to this competency. See ERF.
Communicate the effects of climate change and sustainability actions on public health to varied audiences using evidence-based effective strategies.	PUBH 6133 Social Dimensions in Climate Change and Health	PUBH 6133–In the Paper Assignments, students work in pairs to develop a proposal for a video on the effects of climate change and sustainability action on public health to nontechnical audiences, using evidence-based effective strategies. Once approved, the students produce a documentary video in the Final Video project based on their proposal. Students are individually assessed through a peer evaluation process (p. 4).
Recommend strategies to prevent or control environmental or occupational exposures that are linked with climate change.	PUBH 6140 Global Climate Change and Air Pollution	PUBH 6140–In the Presentation 1 and Paper 1, groups of two students interact with the CDC Environmental Public Health Tracking Network Tool to visualize climate-relevant health exposures and evaluate the health hazards associated with those risks in a specific country. Students write a paper and give a ten-minute PowerPoint presentation answering a series of questions, including recommending strategies for mitigating health hazards (p. 3; see ERF).

Assessment of Competencies for MPH@GW, Global Health		
Competency	Course	Describe specific assessment opportunity
Interpret and critique research and best practices to inform the development of evidence-based solutions for global health challenges.	PUBH 6486 Global Health Programs and Approaches to the Control of Infectious Diseases	PUBH 6486–The final exam is an essay exam on several topics that have been covered including disease control strategies and interventions, which will require students to analyze global health problems and develop evidence-based solutions. See ERF.
Analyze multilevel determinants in global health problems that form the basis for disease control strategies and interventions.	PUBH 6486 Global Health Programs and Approaches to the Control of Infectious Diseases	PUBH 6486–The final exam is an essay exam where students will need to analyze multilevel determinants in global health problems to address disease control strategies and interventions. See ERF.

Develop strategies to meet the health needs of children globally.	PUBH 6563 Global Child Health	PUBH 6563—During the midterm and final exam, students answer a series of short answer questions that address this competency. See ERF.
Recommend strategies to prevent and control environmental and occupational exposures that are linked with climate change.	PUBH 6128 Global Environmental and Occupational Health	PUBH 6128—In the Intervention Project, students work in groups and individually to develop strategies for controlling/preventing an environmental or occupational exposure. The project is structured in three parts and ultimately results in two presentations and one paper. Individuals are assessed during the Q&A sessions of each group presentation and in the individual writing sections of the paper (p. 3).
Apply multidisciplinary perspectives to identify, analyze, and address global health challenges.	PUBH 6400 Global Health Frameworks	PUBH 6400—This course is taught by a multidisciplinary team of instructors, and attendees of the class are also interdisciplinary, coming from several different programs and degree levels. Consequently, students learn a multidisciplinary approach to global health challenges and are expected to apply these learnings in a reflection piece. See ERF.

Assessment of Competencies for MPH@GW, Health Informatics and Analytics		
Competency	Course	Describe specific assessment opportunity
Use appropriate health information technology (IT), informatics and data terms.	PUBH 6704 Health Information Technology, Informatics and Decision Making	PUBH 6704—Students take an exam that addresses this competency. See ERF.
Demonstrate [the use of] strategies that apply data and health IT structures, policies and processes. ⁷¹	PUBH 6705 Health Law and Health IT	PUBH 6705—In Individual Assignment 4, students write a paper on privacy and disclosure. Taking on the role of a hospital compliance officer, students are tasked with creating privacy and security policies and procedures for their hypothetical hospital. Then, students apply their policies and procedures in five health care scenarios, demonstrating knowledge of data and health IT structures, policies and processes. See ERF.
Consult with stakeholders to identify health IT solutions and present results.	PUBH 6703 Healthcare Delivery and Health IT	PUBH 6703—In Assignment #3, students interview a health care executive tasked with delivering care to a specific population. Students write a paper and present their findings from the interview by describing and analyzing how technology is used to address key health challenges affecting the specific population. See ERF.

⁷¹ Bracketed language included to improve clarification and intention of the competency.

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<p>Apply concepts of health informatics to areas of population health.</p>	<p>PUBH 6706 Population and Community Health Analytics</p>	<p>PUBH 6706–In the Final paper, students write a memo to a key decision-maker who influences community/population health. Using data driven evidence, students describe the problem and apply concepts of health informatics when proposing how to address the issue. See ERF.</p>
<p>Solve health care issues through the optimization of health IT, related data, and business processes.</p>	<p>PUBH 6705 Health Law and Health IT</p>	<p>PUBH 6705–In the Final Group Assignment, teams of students are assigned real-life health care issues. They must work together to address legal, ethical and IT concerns. Students conduct a peer and self-assessment, which helps instructors individually assess students. See ERF.</p>
<p>Assess the implications of health information technology and related data and processes.</p>	<p>PUBH 6704 Health Information Technology, Informatics and Decision Making</p>	<p>PUBH 6704–In the Group Final: Use Case Change Management Presentation, teams of students identify a health care issue that has impacted individual and population health in a local community. Taking on the role of health care system managers, students develop a multiyear strategy to implement delivery system changes with the necessary data flow and health IT infrastructure. In their 20-minute presentation and paper, students discuss the impact the technical change will have from a health informatics perspective and how it will affect distinct groups and stakeholders within the health care organization. See ERF.</p>

Assessment of Competencies for MPH@GW, Women, Youth and Child Health		
Competency	Course	Describe specific assessment opportunity
Assess the individual, community, organizational and societal needs of women, youth, or children.	PUBH 6550 Maternal and Child Health 1	PUBH 6550–In the Final Paper, students choose a MCH topic, describe the individual, community, organizational and societal needs, and strengths of these populations, and provide their insights about the gaps in programs, policies and leadership in tackling these challenges. See ERF.
Apply social and behavior change models and strategies that have been shown to be successful in improving the health and well-being of women, youth, or children.	PUBH 6563 Global Child Health PUBH 6451 Monitoring/Evaluation of Sexual/Reproductive Health Programs in Low- and Middle-Income Countries	PUBH 6563–In the GLearning activity, Social and Behavior Change for Nutrition, students complete an online module from the Global Health eLearning Center on Social and Behavior Change (SBC) interventions related to malnutrition. At the end of the course, students apply their knowledge of evidence-based SBCs in a final exam. See ERF. PUBH 6451–In the Individual Paper (Assignment 2), students describe social and behavior change models and strategies that have shown to be successful in improving the health of women (including youth). Students choose a strategy and an intervention that has a strong theoretical basis and/or has been proven to work in other settings. The paper must include a review of literature on the effectiveness of relevant program strategies and policies to support the rationale for the intervention chosen. The description should be written from the perspective of the organization that would implement the intervention and describe the team doing the implementation. The intervention should be in line with US government policies on development assistance for sexual and reproductive health programs and should reflect current global policy frameworks in sexual and reproductive health (p. 4).

<p>Develop a behavioral change model-based strategy or intervention logic model to improve the health of women, youth or children.</p>	<p>PUBH 6451 Monitoring/Evaluation of Sexual/Reproductive Health Programs in Low- and Middle-Income Countries</p>	<p>PUBH 6451–In Individual Paper (Assignment 3) students develop an intervention and include a visual explanation of the intervention's logic in the form of a logic model. A logic model should demonstrate the relationships between activities, outputs, outcomes and impact and be accompanied by a maximum of one paragraph text description of the strategy and intervention as needed. Students describe an appropriate social and behavior change model and strategy to improve the situation of women (and youth). Using the template provided in the course, students will be asked to submit a completed logframe for the intervention to be implemented they described earlier. The logframe should include clear objectives, measurable indicators including outputs, outcomes and impacts, means of verification, and any relevant assumptions about the project's success. This should be the bases for evaluating the proposed activities. Students are expected to use standard sexual and reproductive health indicators as appropriate in their logframes (p. 5).</p>
<p>Develop an evaluation plan for a behavioral change model-based strategy or intervention to meet the health needs of women, youth or children.</p>	<p>PUBH 6451 Monitoring/Evaluation of Sexual/Reproductive Health Programs in Low- and Middle-Income Countries</p>	<p>PUBH 6451–In the Project Proposal Paper (Assignment 4), students follow a template modeled on the key elements of a USAID RFA. One of the elements is a measurement and evaluation plan. Students develop a logframe with outputs, outcomes, and impact, description of measurement activities designed to evaluate, research and track progress on proposed indicators and capabilities needed to conduct measurement activities effectively (p. 5).</p>
<p>Apply a life course perspective to the health and well-being of women, youth, or children.</p>	<p>PUBH 6550 Maternal and Child Health 1</p>	<p>PUBH 6550–In the Final Paper, students choose a MCH topic and incorporate a life course perspective to the healthy development of MCH populations. See ERF.</p>

Assessment of Competencies for DrPH, Public Health Generalist		
Competency	Course	Describe specific assessment opportunity
Apply implementation science approaches to improve uptake of evidence for decision-making.	PUBH 8708 Applied Public Health Methods	PUBH 8708–In the Final Project, groups of students apply implementation science approaches to address priority health challenges in a grant proposal. Teams propose topics and implementation-science oriented research questions before designing an approach. Students pitch their proposal to public health practitioners using a PowerPoint presentation and write a paper. Students are individually assessed during the oral presentation as all group members are expected to present and answer questions during the Q&A. See ERF.
Integrate leadership frameworks into practices, programs, and/or policies to address public health challenges.	PUBH 8706 Leadership Principles and Practice 1	PUBH 8706–For the Personal Leadership Model and Leadership Framework paper, students write about their personal leadership model and apply it to key leadership frameworks/theories/concepts. Students describe how they integrated or plan to integrate their leadership framework into at least one example of a public health program, policy or practice. Additionally, students write a Strategic Plan to support their Personal Leadership Framework where they develop an 8-year strategy to support their leadership framework (p. 4).
Understand how to apply a health equity lens in all aspects of public health practice, including assessments, programs, policies, and/or services.	PUBH 8720 Social Change and Collective Impact	PUBH 8720–In Homework #1 Journal Article Analysis, students discuss the role of politics, ideology and activism in public health research and practice. Students choose one of four supplied articles and write a paper answering a series of questions related to health inequities (see page 4 of syllabus). In Homework #2 Identifying Levers for Change, students identify specific policies and practices that are driving inequities as measured in health, wealth and social well-being (see page 5 of syllabus). In the Small Group Project Public Health 3.0, students write a paper and present a proposed development of a collective impact initiative to address a place-based and/or race-based inequity. Students will be individually assessed during the presentation and through a peer evaluation process (p. 4).

<p>Develop workforce strategies that consider human motivation, adult learning principles, organizational factors, and available resources.</p>	<p>PUBH 8716 Pedagogical Methods and Practice for Public Health Leaders and Practitioners</p>	<p>PUBH 8716–In the Executive Coaching Plan, students develop a coaching plan as a workforce development strategy for the person in a case study. A comprehensive template is provided and includes an assessment of the root cause, scope of the problem, coaching goal(s), type of coaching (external vs. internal), coach, other stakeholders, check-in plans, desired outcomes, outcome measurement, etc. (p. 5). In the Critical Analysis of CEPH Competencies & Pedagogical Recommendations, students critique CEPH's DrPH competencies from a public health practitioner-leader perspective and propose 3-5 new or improved competencies needed to train the next generation of public health workforce (p. 4).</p>
<p>Apply the core elements of a policy analysis to issues in health policy (health services and public health policy).</p>	<p>PUBH 8722 Public Health Policy Analysis</p>	<p>PUBH 8722–In the Final Assignment, students write a detailed policy analysis memo for a key decision-maker about a health problem that requires that a policy or programmatic solution be designed. Students will then conduct an oral presentation during the last week. The final policy analysis assignment will include all the components of a polished analysis of a health policy topic chosen by the student and approved by the instructor. The analysis will reflect a more in-depth and thorough comparative assessment than was required in the two-page policy analysis assignment. At a minimum, students must assess proposed policy options on the effectiveness, cost, and equity of the distinct options. See ERF.</p>

- 2) *For degrees that allow students to tailor competencies at an individual level in consultation with an advisor, the school must present evidence, including policies and sample documents, that demonstrate that each student and advisor create a matrix in the format of Template D4-1 for the plan of study. Include a description of policies in the self-study document and at least five sample matrices in the electronic resource file.*

See ERF > Criterion D > Criterion D4 > D4.2: Temp D4-1_samples.

- 3) *Provide supporting documentation for each assessment activity listed in Template D4-1. Documentation should include the following, as relevant, for each listed assessment:*

- *assignment instructions or guidelines as provided to students*
- *writing prompts provided to students*
- *sample exam question(s)*

See ERF > Criterion D > Criterion D4 > D4.3: Temp D4-1_syllabi.

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

Strengths

- GWSPH is proud to be able to provide students with a broad array of distinctive opportunities to specialize (via offered concentrations) within the MPH. This is especially important in the context of our location in Washington, DC, where specialization is highly valued for entry-level positions for MPH graduates.
- In every case, GWSPH concentrations are bolstered by faculty members who are thought leaders in specific areas: scholars, practitioners and policy experts who can provide students with up-to-date knowledge and competencies gained through firsthand knowledge of the field.
- GWSPH advisors and faculty are well-versed in the requirements of these concentrations and prepared to provide students with needed guidance and advice; the MPH Advisory Committee provides a solid mechanism for coordination and collaboration.
- The GWSPH Office of Student Affairs held multiple workshops sessions in 2022 to assist faculty in reviewing their program-specific competencies. The workshops were well-received, and subsequent review of program-specific competencies shows increased use of Bloom's taxonomy verbs and the use of competency language in assessment instructions.

Challenges

- Not surprisingly, some courses meet competencies in more than one program, necessitating considerable review to ensure the assessments are appropriate for each course and program.
- It is a challenge to have a multitude of residential programs (15 total) that are managed by different departments. This requires coordination through the MPH Advisory Committee.

Future Plans

- As with the MPH foundational knowledge competencies, the new Director of Academic Planning and Accreditation plans to implement processes to review program-specific competencies and linked didactics and assessments more regularly and consistently.