

## **Program Assessment Plan**

Program: Master of Public Health (MPH)

Department: Behavioral Sciences & Health Education and Epidemiology & Biostatistics (offering concentrations in Behavioral Health & Health Education;

Biosecurity & Disaster Preparedness; Biostatistics; Epidemiology; Global Health; Maternal & Child Health)

College/School: College for Public Health & Social Justice

Date: June 29, 2018

Primary Assessment Contact: Anne Sebert Kuhlmann, PhD, MPH, Associate Professor & MPH Program Director, anne.sebertkuhlmann@slu.edu, 314-977-4029

| #   | Program Learning Outcomes  | Assessment Mapping  | Assessment Methods  | Use of Assessment Data  |
|-----|--|---|---|---|
|     | <ul> <li>What do the program faculty expect all students to know, or be able to do, as a result of completing this program?</li> <li>Note: These should be measurable, and manageable in number (typically 4-6 are sufficient).</li> </ul> | From what specific courses (or other<br>educational/professional experiences)<br>will artifacts of student learning be<br>analyzed to demonstrate achievement<br>of the outcome? Include courses taught<br>at the Madrid campus and/or online as<br>applicable. | <ul> <li>What specific artifacts of student<br/>learning will be analyzed? How, and by<br/>whom, will they be analyzed?</li> <li>Note: the majority should provide<br/>direct, rather than indirect,<br/>evidence of achievement.</li> <li>Please note if a rubric is used and, if so,<br/>include it as an appendix to this plan.</li> </ul>   | How and when will analyzed data be<br>used by faculty to make changes in<br>pedagogy, curriculum design, and/or<br>assessment work?<br>How and when will the program<br>evaluate the impact of assessment-<br>informed changes made in previous<br>years?   |
| Cat | egory: Evidence-Based Approaches to Pub  | lic Health  |   |   |
| 1   | Apply epidemiological methods to the<br>breadth of settings and situations in<br>public health practice  | <ul> <li>PUBH 5030 Methodological<br/>Approaches to Understanding<br/>Population Health</li> </ul>  | <ul> <li>PUBH 5030: In quizzes 2 and 3<br/>students will identify the<br/>appropriate study design for a<br/>particular research question; on the<br/>mid-term and final exams students<br/>will calculate and interpret the<br/>appropriate measure of effect for a<br/>specific study design.</li> <li>PROCESS (how and by whom the data<br/>will be analyzed) TBD in FL18</li> </ul> | The MPH Steering Committee will<br>review our Program Assessment Report<br>on an annual basis and will recommend<br>changes to the curriculum overall and to<br>specific courses and/or assessments as<br>warranted.<br>The results from our AY17-18 report will<br>be kept in mind as we roll-out our<br>revamped curriculum in FL18. In<br>particular, we will pay attention to the<br>area on the CPH exam with the lowest |

## Note: Each cell in the table below will expand as needed to accommodate your responses.

|   |  |   |  | institutional average score<br>(environmental sciences) as we develop<br>the PUBH 5060 Environmental &<br>Biological Determinants of Health<br>course to assure it covers the<br>competencies adequately. |
|---|--|---|--|---|
| 2 | Select quantitative and qualitative data<br>collection methods appropriate for a<br>given public health context                              | <ul> <li>PUBH 5030 Methodological<br/>Approaches to Understanding<br/>Population Health</li> <li>PUBH 5040 Generating Evidence<br/>from Public Health Data</li> <li>PUBH 5070 Translating Evidence<br/>and Theory for Community Practice</li> </ul> | <ul> <li>PUBH 5030: In Quiz 4 students will demonstrate they can identify the appropriate type of data for a given context; on the mid-term and final exams students will describe the strengths and weaknesses of specific qualitative and quantitative approaches</li> <li>PUBH 5040 Homework exercises early in the course will ask students to describe appropriate sampling procedures and randomized treatment assignments. They will also be asked to read research articles and answer questions regarding the design of published studies.</li> <li>PUBH 5070 Students will conduct a community needs assessment whereby they gather and assess data on community assets and determine areas of improvement. Students will select and identify the most appropriate data to be included in the community needs assessment.</li> </ul> |   |
| 3 | Analyze quantitative and qualitative<br>data using biostatistics, informatics,<br>computer-based programming and<br>software, as appropriate | <ul> <li>PUBH 5040 Generating Evidence<br/>from Public Health Data</li> <li>PUBH 5960 Integrated Capstone</li> </ul>  | <ul> <li>PUBH 5040 Homework sets and the final exam require the student to use SPSS to do statistical tests and fit statistical models as well as practice qualitative coding. The midterm exam requires calculation of appropriate statistics using a calculator and appropriate interpretation of SPSS output.</li> <li>PUBH 5960 TBD</li> </ul>   |   |

| 4   | Interpret results of data analysis for<br>public health research, policy or practice   | <ul> <li>PUBH 5030 Methodological<br/>Approaches to Understanding<br/>Population Health</li> <li>PUBH 5040 Generating Evidence<br/>from Public Health Data</li> <li>PUBH 5070 Translating Evidence<br/>and Theory for Community Practice</li> </ul>                                       | <ul> <li>PUBH 5030 In the article critique presentations students will discuss the distinction between statistically significant and substantially meaningful results for research, policy and practice and to critically evaluate the quality of evidence from a published study. In the final exam students will identify characteristics of analytical studies that support or refute the strength of the evidence.</li> <li>PUBH 5040 The following written interpretations are assessed through homework assignments, group quizzes and exams: confidence intervals, hypothesis tests, linear and logistic regression coefficients, standard errors and residuals</li> <li>PUBH 5070 Literature review (assessment) that identifies and describes Type 1 data. Interpret results of data for the community assessment. Final presented and interpreted as part of the community needs assessment</li> </ul> |
|-----|--|---|--|
| Cat | egory: Public Health & Health Care System  | 5   |  |
| 5   | Compare the organization, structure<br>and function of health care, public<br>health and regulatory systems across<br>national and international settings  | <ul> <li>PUBH 5050 Health Care Across the<br/>Lifecourse: From Policy to Practice</li> <li>PUBH 5960 Integrated Capstone</li> </ul>   | <ul> <li>PUBH 5050 TBD</li> <li>PUBH 5960 TBD</li> </ul>   |
| 6   | Discuss the means by which structural<br>bias, social inequities and racism<br>undermine health and create challenges<br>to achieving health equity at<br>organizational, community and societal<br>levels | <ul> <li>PUBH 5010 Mission and Practice of<br/>Global Public Health</li> <li>PUBH 5030 Methodological<br/>Approaches to Understanding<br/>Population Health</li> <li>PUBH 5060 Environmental and<br/>Biological Determinants of Health;</li> <li>PUBH 5960 Integrated Capstone</li> </ul> | <ul> <li>PUBH 5010 Each student will<br/>provide an example of and<br/>response to structural bias and<br/>racism as exemplified in their<br/>profession. Each student will also<br/>respond to at least one other<br/>student's post.</li> <li>PUBH 5030 In Quiz 2 students will<br/>identify patterns of data that</li> </ul>  |

|      |   |  | describe health inequities; on the    |
|------|---|--|---------------------------------------|
|      |   |  | mid-term exam and final students      |
|      |   |  | will be asked to discuss the          |
|      |   |  | structural and social influences on   |
|      |   |  | observed health inequities.           |
|      |   |  | PUBH 5060 Students will interpret     |
|      |   |  | these factors with short essay        |
|      |   |  | questions on Exam 2. Online           |
|      |   |  | students will also discuss the        |
|      |   |  | concept of environmental justice      |
|      |   |  | during the week 4 online              |
|      |   |  | discussion.                           |
|      |   |  | • PUBH 5960 TBD                       |
| Cate | egory: Planning & Management to Promot                  | e Health   | · · · · · · · · · · · · · · · · · · · |
| Call | con y. Flathing & Mallagement to Promot                 |  |                                       |
| 7    | Assess population needs, assets and                     | PUBH 5070 Translating Evidence                     | PUBH 5070 Literature review and       |
|      | capacities that affect communities'                     | and Theory for Community Practice                  | summary of Type 1 evidence.           |
|      | health  | <ul> <li>PUBH 5960 Integrated Capstone</li> </ul>  | Community assessment that             |
|      |   |  | addresses needs, assets and           |
|      |   |  | capacities                            |
|      |   |  | PUBH 5960 TBD                         |
| 8    | Apply awareness of cultural values and                  | <ul> <li>PUBH 5070 Translating Evidence</li> </ul> | PUBH 5070 Literature review and       |
|      | practices to the design or                              | and Theory for Community Practice                  | summary of types 2 and 3 evidence     |
|      | implementation of public health policies<br>or programs | HCE 5020 Public Health Ethics                      | (intervention). Innovative            |
|      |   | PUBH 5960 Integrated Capstone                      | intervention plan with justification  |
|      | 1 0   |  | for your choice. Description of       |
|      |   |  | cultural values and practices for the |
|      |   |  | population in intervention plan.      |
|      |   |  | • HCE 5020 TBD                        |
|      |   |  | • PUBH 5960 TBD                       |
| 9    | Design a population-based policy,                       | • PUBH 5050 Health Care Across the                 | • PUBH 5050 TBD                       |
| Ĩ    | program, project or intervention                        | Lifecourse: From Policy to Practice                | PUBH 5070 Literature review and       |
|      |   | PUBH 5070 Translating Evidence                     | summary of types 2 and 3 evidence     |
|      |   | and Theory for Community Practice                  | (intervention). Innovative            |
|      |   | PUBH 5960 Integrated Capstone                      | intervention plan with justification  |
|      |   |  | for choice. Timeline. Description of  |
|      |   |  | how cultural competency will be       |
|      |   |  | addressed in the intervention plan.   |
|      |   |  | • PUBH 5960 TBD                       |
|      |   |  |                                       |
| 10   | Explain basic principles and tools of                   | • PUBH 5050 Health Care Across the                 | PUBH 5050 TBD                         |
| 10   | budget and resource management                          | Lifecourse: From Policy to Practice                | • PUBH 5960 TBD                       |
|      | buuget and resource management                          | PUBH 5960 Integrated Capstone                      |                                       |
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| 11   | Select methods to evaluate public health programs  | <ul> <li>PUBH 5070 Translating Evidence<br/>and Theory for Community Practice</li> <li>PUBH 5960 Integrated Capstone</li> </ul>   | <ul> <li>PUBH 5070 Innovative intervention<br/>plan with support for your choice.<br/>Evaluation methods, logic model,<br/>goals and objectives as part of the<br/>evaluation plan.</li> <li>PUBH 5960 TBD</li> </ul>   |
|------|--|---|---|
| Cate | egory: Policy in Public Health   |   |   |
| 12   | Discuss multiple dimensions of the policy-making process, including the roles of ethics and evidence   | <ul> <li>PUBH 5050 Health Care Across the<br/>Lifecourse: From Policy to Practice</li> <li>HCE 5020 Public Health Ethics</li> <li>PUBH 5960 Integrated Capstone</li> </ul>  | <ul> <li>PUBH 5050 TBD</li> <li>HCE 5020 TBD</li> <li>PUBH 5960 TBD</li> </ul>  |
| 13   | Propose strategies to identify<br>stakeholders and build coalitions and<br>partnerships for influencing public<br>health outcomes  | <ul> <li>HCE 5020 Public Health Ethics</li> <li>PUBH 5960 Integrated Capstone</li> </ul>  | <ul> <li>HCE 5020 TBD</li> <li>PUBH 5960 TBD</li> </ul>   |
| 14   | Advocate for political, social or<br>economic policies and programs that<br>will improve health in diverse<br>populations  | <ul> <li>PUBH 5010 Mission and Practice of<br/>Global Public Health</li> <li>PUBH 5050 Health Care Across the<br/>Lifecourse: From Policy to Practice</li> <li>PUBH 5960 Integrated Capstone</li> </ul>           | <ul> <li>PUBH 5010 Students will write an editorial on an issue that demonstrates the perspective of public health and one other profession in the College.</li> <li>PUBH 5050 TBD</li> <li>PUBH 5960 TBD</li> </ul>  |
| 15   | Evaluate policies for their impact on public health and health equity  | <ul> <li>PUBH 5050 Health Care Across the<br/>Lifecourse: From Policy to Practice</li> <li>PUBH5960 Integrated Capstone</li> </ul>  | <ul> <li>PUBH 5050 TBD</li> <li>PUBH 5960 TBD</li> </ul>  |
| Cate | egory: Leadership  |   |   |
| 16   | Apply principles of leadership,<br>governance and management, which<br>include creating a vision, empowering<br>others, fostering collaboration and<br>guiding decision making | <ul> <li>PUBH 5070 Translating Evidence<br/>and Theory for Community Practice</li> <li>PUBH 5050 Health Care Across the<br/>Lifecourse: From Policy to Practice</li> <li>PUBH 5960 Integrated Capstone</li> </ul> | <ul> <li>PUBH 5070 In-class case studies<br/>related to leadership and<br/>management. Students will<br/>complete an assessment of their<br/>leadership skills, discussing their<br/>vision, obstacles they face as future<br/>leaders in public health, strategies<br/>to share ideas, solve problems and<br/>network in a collaborative and<br/>supportive manner.</li> <li>PUBH 5050 TBD</li> <li>PUBH 5960 TBD</li> </ul> |
| 17   | Apply negotiation and mediation skills to address organizational or community  | <ul> <li>PUBH 5050 Health Care Across the<br/>Lifecourse: From Policy to Practice</li> <li>HCE 5020 Public Health Ethics</li> </ul>   | <ul> <li>PUBH 5050 TBD</li> <li>HCE 5020 TBD</li> <li>PUBH 5960 TBD</li> </ul>  |

|     | challenges  | PUBH 5960 Integrated Capstone  |   |  |
|-----|---|--|---|--|
| Cat | Category: Communication   |  |   |  |
| 18  | Select communication strategies for<br>different audiences and sectors                                      | <ul> <li>PUBH5030 Methodological<br/>Approaches to Understanding<br/>Population Health;</li> <li>PUBH 5040 Generating Evidence<br/>from Public Health Data</li> <li>HCE 5020 Health Care Ethics</li> <li>PUBH 5960 Integrated Capstone</li> </ul>                                    | <ul> <li>PUBH 5030 In the article critique presentations students will be asked to discuss the potential for study findings to be applied in practice, and will communicate relevant messages from the study findings for specific audiences (scientific, practice, policy and community).</li> <li>PUBH 5040 Homework assignments and exam questions ask students to interpret the results of a statistical analysis for public health practitioners. Construct tables and graphs that convey the information relevant to the scientific question of interest.</li> <li>HCE 5020 TBD</li> <li>PUBH 5960 TBD</li> </ul>   |  |
| 19  | Communicate audience-appropriate<br>public health content, both in writing<br>and through oral presentation | <ul> <li>PUBH 5040 Generating Evidence<br/>from Public Health Data</li> <li>PUBH 5050 Health Care Across the<br/>Lifecourse: From Policy to Practice</li> <li>PUBH 5070 Translating Evidence<br/>and Theory for Community Practice</li> <li>PUBH 5960 Integrated Capstone</li> </ul> | <ul> <li>PUBH 5040 The assessments<br/>described for MPH FC #4 &amp; #18<br/>assess written communication.<br/>Students will work in groups to<br/>develop a presentation of a data<br/>analysis, and each member of the<br/>group will orally present a part of<br/>the presentation to assess this<br/>competency.</li> <li>PUBH 5050 TBD</li> <li>PUBH 5070 Final oral presentation.<br/>Written summaries and final<br/>project. Students will write brief<br/>short reports (1,200) that can be<br/>submitted to a peer-reviewed<br/>journal (i.e., AJPH). The report will<br/>be structured with an introduction<br/>with separate sections for the<br/>methods, results, discussions and<br/>public health implications.</li> <li>PUBH 5960 TBD</li> </ul> |  |

| 20<br>Cate | Describe the importance of cultural<br>competence in communicating public<br>health content | <ul> <li>PUBH 5070 Translating Evi<br/>and Theory for Community</li> <li>HCE 5020 Public Health Etl</li> <li>PUBH 5960 Integrated Cap</li> </ul>                          | Practicecultural competency will be<br>addressed in the community                               |
|------------|---|---|---|
| 21         | Perform effectively on interprofessional teams  | <ul> <li>PUBH 5010 Mission and Pr<br/>Global Public Health</li> <li>HCE 5020 Public Health Eth</li> <li>PUBH 5910 Internship</li> <li>PUBH 5690 Integrated Cap</li> </ul> | (interprofessional) discussion<br>ics groups to create a photovoice<br>collage that depicts the |
| Cat        | egory: Systems Thinking   |   |   |
| 22         | Apply systems thinking tools to a public health issue                                       | <ul> <li>PUBH 5050 Health Care Ac<br/>Lifecourse: From Policy to</li> <li>PUBH 5960 Integrated Cap</li> </ul>   | Practice • PUBH 5960 TBD  |

## **Additional Questions**

1. On what schedule/cycle will faculty assess each of the above-noted program learning outcomes? (It is <u>not recommended</u> to try to assess every outcome every year.)

The 22 program learning outcomes are grouped into 7 categories by CEPH, our accrediting body. The MPH is a two-year degree program. Therefore, we anticipate assessing the outcomes associated with 2-3 categories per year such that our achievement of all the program learning outcomes is reviewed every 2-3 years.

2. Describe how, and the extent to which, program faculty contributed to the development of this plan.

Both the MPH Steering Committee comprised of faculty members from all concentrations in the degree program and a group of faculty convened by the Associate Dean for Academic & Faculty Affairs were involved in mapping specific courses to appropriate program learning outcomes. Then, groups of faculty members responsible for teaching specific courses identified the artifacts of student learning to be assessed in their courses for the mapped outcomes based on the guidance provided by CEPH. Finally, the draft syllabi for the courses including the artifacts of student learning were reviewed and approved by the MPH Steering Committee.

The PROCESS of assessment (how and by whom the data will be analyzed) will be fleshed out in the MPH Steering Committee during the Fall 2018 semester as we finalize our report to CEPH on the implementation of our revamped curriculum to meet our new accreditation-required program learning outcomes.

3. On what schedule/cycle will faculty review and, if needed, modify this assessment plan?

NOTE that in addition to the above assessments that each focus on specific program learning outcomes, the MPH programs uses several global measures of our outcomes: 1) Certified in Public Health (CPH) exam results for graduating students (the national standardized exam is aligned with the above 22 program learning outcomes dictated by CEPH and provides an external benchmark of program success), 2) Preceptors' Evaluation of Student Interns, and 3) Exit Survey data with students' self-assessment of competency mastery. The first two global measures are DIRECT measures while the third is an INDIRECT measure.

This plan is currently a draft. Changes in our accreditation standards from CEPH are driving the roll-out of a revamped MPH curriculum to meet our new program learning outcomes starting with the FL18 entering cohort. We will finalize our assessment plan over the course of the Fall 2018 as the new courses to be offered in during the 2<sup>nd</sup> year of the MPH curriculum are developed and as we finalize our report for CEPH on the roll-out of our revamped curriculum.

Given the changes in program learning outcomes and revamped curriculum that are occurring with the FL18 entering cohort, the MPH Steering Committee will initially review this assessment plan on an annual basis.

IMPORTANT: Please remember to submit any assessment rubrics (as noted above) along with this report.