Course Syllabus: FPH 8990 Master’s Project (Winter 2018)

Wayne State University School of Medicine
Graduate Program in Public Health

Master’s Project Orientation
Date/Time: Wednesday, January 17, 2018 3:00 – 4:30 pm
Place: 3939 Woodward Ave, 2nd floor conference room

Course Instructors: Dawn Misra, MHS, PhD
Deborah Ellis, PhD
Victoria Neale, PhD, MPH

Course instructors - contact information:
Dawn Misra, MHS, PhD: dmisra@med.wayne.edu
Telephone: 313-577-8199; Office hours by appointment

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Victoria Neale, PhD, MPH: vneale@med.wayne.edu
Telephone: 313-577-7680; Office hours by appointment

Course Description
The Master’s Project is the MPH Program’s culminating experience, in which students apply the
knowledge and skills gained from classroom and field experiences to a scholarly project of their
own design and execution. The final products are a written paper and an oral presentation.

Course Objectives
The objective of the Master’s Project course is for the student to demonstrate MPH Program
competencies. Master’s Projects may take a variety of directions, depending on student interest
and career objectives. The required written report and oral presentation will reflect the
culmination, integration and application of the student’s public health knowledge.

Method of Instruction
A Project Orientation session is held at the beginning of each semester. Students are required to
attend the Orientation at least one time. At the Orientation, course faculty will review all aspects
of the MPH project, including guidelines, important dates and deadlines. FPH 8990 operates
similarly to an independent directed study; after a Project idea is formulated, students must
recruit a Project Advisor and fill out the Project Proposal form.
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Required and Recommended Reading Materials
1) Required Reading (posted on the MPH Program website, under FPH 8990 course materials):

2) Recommended Text:

Timeline
Following approval of the Project Proposal, most students finish the Project in 1-2 semesters. As the FPH 8990 course is similar to an independent study, the timeline for completion depends on the complexity of the Project along with student motivation. See also:
   - Appendix A for Master’s Project Checklist and Timeline.
   - Appendix F for Important Dates and deadlines by semester

Types of Acceptable Master’s Project
The acceptable types of scholarly Projects are quite broad, and can range from secondary analysis of existing data, to the collection and analysis of new data, or to the development and evaluation of an intervention or curriculum, to a grant proposal/study plan. Every Project must include a statement or purpose, must involve a literature review, and must have public health relevance.

Examples of Project Types include but are not limited to the following:
   - **Secondary analysis of existing data**: These projects involve the use of publicly-available data, such as NHANES, BRFSS, SEER, state vital record data, etc., as well as data sets belonging to faculty members or other researchers. Research questions that cannot be addressed using original data collection techniques (due to time or financial constraints) can often be addressed by analysis of previously collected data.
   - **Qualitative analysis**: Qualitative approaches are used to study phenomena or experiences and are based on the interpretation of words and text, as opposed to numerical data in quantitative analysis. Qualitative data are collected by means of interviews, focus groups, or observational studies.
   - **Survey research**: Survey or questionnaire studies encompass measurement procedures that are based on questions posed to respondents. Survey research includes questionnaires administered by paper, in-person interview, telephone, or web-based data collection strategies.
   - **Needs assessment**: A needs assessment is a process used to determine priorities, make organizational improvements, or allocate resources. It involves determining the needs, or gaps, between where the organization envisions itself in the future and its current state. This assessment is followed with a plan of action to address the needs (or closing the gaps) to
bring the organization closer to its desired future state.
A wide variety of data sources are may be used for a needs assessment.

- **Program evaluation**: Evaluation includes a heterogeneous assortment of methods for systematically assessing and improving programs. These techniques can include program surveillance, participant observation, key informant interviews, and/or focus groups to examine program outcomes and impacts. Paper format should include an Introduction, Program Objectives, Methods, Significance, and Next Steps.

- **Experiment**: Experiments have 3 essential components: 1) a hypothesis; 2) an intervention or modification of something; and 3) a comparison of outcomes with and without the intervention or modification.

- **Case study**: In the public health context, a case study is a form of ethnography or participant-observation research. A mixed method approach, including qualitative and quantitative strategies, is used to develop a comprehensive description of a program. Qualitatively, the researcher may talk with and observe people in the organization or program in order to describe how the program functions, including its mission and objectives, and job and role descriptions. Program challenges and limitations are important to describe as well. Quantitative summaries of the program’s efforts and outputs are also provided.

- **Policy Analysis**: Policy analysis is methodologically diverse using both qualitative and quantitative methods, including case studies, survey research, statistical analysis, and model building, among others. One common methodology is to define the problem and evaluation criteria, identify alternatives, evaluate, and recommend the best policy agenda.

- **Literature Review**: Summary of existing research studies on the issue/topic. Be selective, and identify inclusion/exclusion criteria for determining what studies will be included in the literature review. Organize with subheadings to show trends in the literature, and identify main points. Evaluate your sources, consider their strengths and weaknesses, compare and contrast the results of studies and discuss the strength of the evidence, based on the study design. Paraphrase in your own words to explain authors’ ideas. Give references to all sources, but start and paragraphs with your own ideas. Identify gaps in the literature.

- **Grant Proposal or Study Plan**: A study plan should include: a) Background: Literature review that identifies what is known, what is unknown; b) Significance: how the proposed study will contribute to public health knowledge, or fill a gap; c) Preliminary studies or work to date; d) Detailed description of study methods; e) Timeline, plan of work and key personnel; e) Budget and potential funding sources.

**Notes on Acceptable Projects**:
- The Project plan may grow out of Practicum, but it must be distinct from the Practicum.
- If a project is identified from the student’s current employment, it is permissible to develop a Master’s Project distinct from work duties. Specifically, the Project **must be conducted outside of normal work responsibilities**.
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III. Approval Process for MPH Master’s Project

Project Advisor(s)
All MPH Master’s Projects must have a Project Advisor. Students are responsible for developing their own Project and identifying a Project Advisor, and should consult with their Academic Advisor and the Master’s Project course directors as needed to identify a suitable Project and Project Advisor. The Academic Advisor, practicum site representatives, MPH faculty, or someone from another appropriate research setting may serve as the Project Advisor. Project proposals must be approved by the student’s Academic Advisor.

- External Project Advisors
  - If the Project Advisor is not MPH faculty, then a “Letter of Understanding” is recommended. See:
  - Appendix B for guidance on the Letter of Understanding.

Master’s Project Proposal
The Project Proposal requires signatures of the Project Advisor, the Academic Advisor, the External Project Advisor (if any), and a FPH 8990 course instructor. The Project may begin after all signatures are obtained, plus Institutional Review Board (IRB) approval (if relevant).

- IRB approval is required for all Projects that involve “human subjects research”. Consult with your project advisor and use Human Participant Research Determination Tool to determine if IRB approval is required. See http://research.wayne.edu/irb/forms-requirements-categories.php#HPR. (on WSU IRB forms webpage)
  - IRB approval requires submission of multiple forms distinct from the Project Proposal (see IRB website: http://irb.wayne.edu/)
  - Every student conducting Human Subjects research must have submit approval document from the IRB
  - Indicate IRB approval # on Proposal or submit Human Participant Research Tool if IRB approval not required

Compliance with MPH Program Competencies
The Master’s Project is a culminating experience of the MPH Program and therefore its objectives must be consistent with meeting the Program’s core public health competencies. As part of the Project Proposal, students indicate how and to what extent completion of their Project will demonstrate competency in the core areas of public health practice.

Project Approval Process
After the Master’s Project Proposal is signed by both the Project and Academic Advisors, it will be reviewed by a FPH 8990 Course Director, who may require additional changes. No data collection may occur prior to Project approval.

Format and Preparation of the Master’s Project.
- See Appendix C for detailed on the format of the Project cover page, along with other requirements and expectations for the format and organization of the Project paper.
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Evaluation and Grading:
The grade for the MPH Research Project will be assigned based on the following:

1) A Formative Evaluation is provided by the Project Advisor who provides a grade based on the following considerations: development of study purpose; literature review; project design; data analysis; writing skills, and student assumption of responsibility and working independently, with appropriate guidance (see Formative Evaluation Form on MPH Program website).

2) A Summative Evaluation is provided by an Independent Reader (IR), who is appointed by the Project Course Director. The IR will read and provide a grade based on the following considerations: title; abstract; introduction and literature review; materials and methods; results; discussion; references.

3) Oral Presentation: Students are required to present their MPH Project findings during the Student Research Days, scheduled each semester (see Appendix E for Presentation Dates). The Oral Presentation grading form is on the MPH Program website. Presentations are graded as Pass/ Need to Repeat.
   • Students are allotted a set time limit for their oral presentation with slides, and follow-up questions. The talk should include: the background which suggested a need for the Project; the study objectives, and study questions; a summary of methods; a presentation of results; and a discussion that includes conclusions and a statement of public health relevance.

➢ A minimum of a B grade (83%-86%) is required for successful completion of the MPH Master’s Project. Project grades will follow the grading schedule used in the Wayne State University Graduate School and are as follows:
   94-100% = A
   90-93% = A-
   87-89% = B+
   **83-86% = B**
   80-82% = B-

Compliance with MPH Program Competencies
The Master’s Project is a culminating experience of the MPH Program and therefore its objectives must be consistent with meeting the Program’s core public health competencies. As part of the Project Proposal, students indicate how and to what extent completion of their Project will demonstrate competency in the core areas of public health practice. Following completion of all MPH Program requirements, students are asked to provide a final reflection of how they achieved MPH Program core and concentration-specific competencies based on the entirety of their MPH experience, including, courses, Practicum and field experiences, plus the Project.
### Table 1. Method of assessment of specific learning objectives

<table>
<thead>
<tr>
<th>Learning objectives</th>
<th>Methods of assessment</th>
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<tbody>
<tr>
<td>1. Formulate a study question, or statement of purpose</td>
<td>• Course directors’ review and feedback on the Project proposal and final paper</td>
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<td></td>
<td>• Research advisor formative (process) evaluation</td>
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<tr>
<td></td>
<td>• Independent reader summative (outcome) evaluation</td>
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<td>2. Conduct a literature review and synthesis</td>
<td>• Course directors’ review and feedback on the Project proposal and paper</td>
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<td></td>
<td>• Research advisor formative (process) evaluation</td>
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<tr>
<td></td>
<td>• Independent reader summative (outcome) evaluation</td>
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<tr>
<td>3. Detail methods for conducting a project</td>
<td>• Course directors’ review and feedback on the Project proposal and paper</td>
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<tr>
<td></td>
<td>• Research advisor formative (process) evaluation</td>
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<tr>
<td></td>
<td>• Independent reader summative (outcome) evaluation</td>
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<tr>
<td>4. Summarize or analyze data or findings</td>
<td>• Course directors’ review and feedback on the Project paper</td>
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<td></td>
<td>• Research advisor formative (process) evaluation</td>
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<tr>
<td></td>
<td>• Independent reader summative (outcome) evaluation</td>
</tr>
<tr>
<td>5. Interpret findings; make recommendations</td>
<td>• Course directors’ review and feedback on the Project paper</td>
</tr>
<tr>
<td></td>
<td>• Research advisor formative (process) evaluation</td>
</tr>
<tr>
<td></td>
<td>• Independent reader summative (outcome) evaluation</td>
</tr>
<tr>
<td>6. Develop a scholarly paper</td>
<td>• Course directors’ review and feedback on the Project paper</td>
</tr>
<tr>
<td></td>
<td>• Research advisor formative (process) evaluation</td>
</tr>
<tr>
<td></td>
<td>• Independent reader summative (outcome) evaluation</td>
</tr>
<tr>
<td>7. Give an oral presentation of the project work and study findings</td>
<td>• Course directors’ review</td>
</tr>
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</table>

See also:
- **Appendix D** for the Competencies and Learning Objectives from the Association of Schools of Public Health (ASPH) that apply to FPH 8990.
- **Appendix E** for MPH Program Competency by the FPH 8990 Learning Objectives

**Originality of Work**: Academic work submitted by students is assumed to be their own creation. Students are expected to understand the meaning and types of plagiarism. Plagiarism is defined as:
- “Failure to use appropriate referencing when using the words or ideas of other persons”
- “Altering the language, paraphrasing, omitting, rearranging, or forming new combinations of words (patchwork plagiarism) in an attempt to make the thoughts of another appear as your own.”

For more information, review the educational module: “Learn what plagiarism is and how to avoid it” at: [http://www.lib.wayne.edu/services/instruction/research/mod6/](http://www.lib.wayne.edu/services/instruction/research/mod6/)

**Academic Dishonesty** -- All forms of academic misbehavior are prohibited at Wayne State University, as outlined in the MPH Student Handbook and the WSU Student Code of Conduct ([http://www.doso.wayne.edu/student-conduct-services.html](http://www.doso.wayne.edu/student-conduct-services.html)). Students who commit or assist in committing dishonest acts (cheating, fabrication, plagiarism, etc.) are subject to downgrading (failing grade on the test, paper, or other course-related activity, or for the entire course) and/or additional sanctions as described in the Student Code of Conduct.
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- Fabrication: Intentional and unauthorized falsification of any information or citation. Examples include: (a) citation of information not taken from the source indicated; (b) listing sources in a bibliography not used in a research paper.
- Plagiarism: To take and use another’s words or ideas as one’s own. Examples include: (a) failure to use appropriate referencing when using the words or ideas of other persons; (b) altering the language, paraphrasing, omitting, rearranging, or forming new combinations of words in an attempt to make the thoughts of another appear as your own.
- Other forms of academic misbehavior include, but are not limited to: (a) unauthorized use of resources, (b) violating course rules as defined in the course syllabus or other written information provided to the student; (d) selling, buying or stealing all or part of manuscript content (e) changing or altering a grade on a test or other academic grade records.

Course Drops and Withdrawals: In the first two weeks of the (full) term, students can drop this class and receive 100% tuition and course fee cancellation. After the end of the second week there is no tuition or fee cancellation. Students who wish to withdraw from the class can initiate a withdrawal request on Pipeline. You will receive a transcript notation of WP (passing), WF (failing), or WN (no graded work) at the time of withdrawal. No withdrawals can be initiated after the end of the tenth week. Students enrolled in the 10th week and beyond will receive a grade. Because withdrawing from courses may have negative academic and financial consequences, students considering course withdrawal should make sure they fully understand all the consequences before taking this step. More information on this can be found at: http://reg.wayne.edu/pdf-policies/students.pdf

Student Services:
- The Writing Center is located on the second floor of the Undergraduate Library and provides individual tutoring consultations free of charge. Visit http://clasweb.clas.wayne.edu/writing to obtain information on tutors, appointments, and the type of help they can provide.
Appendix A
FPH 8990 Master’s Project Checklist and Sample Timeline
Prerequisites Prior to Registering for FPH 8990

_____ Complete all MPH core classes: FPH 7010, 7015, 7100, 7210, 7240, 7250, 7320, 7230, and 7440
_____ Identify Project advisor and topic in consultation with FPH 8990 Course Director and Academic Advisor, as well as other MPH faculty, as appropriate.
_____ Permission to register for FPH 8990, provided by one of the course Directors to MPH Office

Register for FPH 8990 (three credits total)

Example: First Semester Activities:

_____ Meet with Project Advisor to discuss Project
_____ Conduct preliminary literature review
_____ Write and revise Project Proposal in consultation with Project Advisor
_____ Submit Project Proposal to Academic Advisor for approval
_____ The Academic Advisor signs and forwards the proposal to the Course Director
_____ The Course Director reviews and notifies student that the Project can begin. Project Proposal includes:
   a) verification of completion of online CITI training
   b) Attach IRB waiver or approval, as appropriate

Project when the Project Proposal is approved by FPH 8990 Master’s Project Course Director

Example: Second Semester Activities:

_____ Collect, collate and analyze data, or other relevant activities
_____ Write and revise paper with guidance from Project Advisor
_____ When approved by Project Advisor, send electronic copy Project Course Director by by course deadline.

_____ Apply for WSU graduation: deadline is the fourth Friday of each semester

_____ Schedule with MPH Office the oral presentation on Student Presentation Day. If paper needs major revisions, the Course Director(s) may ask that the presentation be postponed.

_____ Obtain electronic title page signatures from Project Advisor and Course Director, and submit the signed page with approved paper to the Course Director on, or directly following presentation day.

_____ Provide the MPH Program Public Health Competencies Form to Project Advisor and Project Course Director for electronic signatures by end of semester.
Appendix B (page 1 of 2)

Information for a “Letter of Understanding” (Sample content as needed)

When the Project Advisor is not a member of the MPH faculty, a “Letter of Understanding” is the mechanism for communicating about the Project, and for assuring the Project Advisor is informed about roles, responsibilities and issues related to data ownership and publication. The Letter of Understanding will be specific to each MPH Project, and is recommended as a vehicle for communication between students and external Advisors. The following elements are suggested for inclusion, as relevant:

- Statement of agreement by the Project Advisor to supervise the MPH Master’s Project.

- Statement of understanding that the MPH Project cannot proceed without ethics approval of the WSU Institutional Review Board, when the Project involves human participants.

- Statement that the Project Advisor will communicate with the Course Director about problems or delays affecting the Project.

- Statement about data ownership related to data and other materials (e.g. media, curricula, handbooks) created during the course of the MPH Master’s Project.

- Statement about authorship and author responsibilities for any manuscripts submitted for publication.

- In some cases, the Project Advisor will be asked to work with the MPH student and the Academic Advisor to develop a learning contract regarding the objectives of the MPH Project.

- The letter of understanding will contain the contact information of the Project Advisor, the Course Director and the student. The External Project Advisor and the student will sign the letter. The student must deliver a signed copy of the letter of understanding to the Course Director.

**Note:** The next page provides an example of a “Letter of Understanding”. Depending on the particular circumstances, other items may be appropriate to include in the “Letter of Understanding”.

Appendix B (page 2 of 2)

Letter of Understanding Example

This letter is an agreement between the Wayne State University Master of Public Health Student {student name} and {Agency}, as represented by {Agency representative}.

Purpose
This document serves to clarify data ownership, data usage/dissemination, authorship of final report of the Wayne State University Master of Public Health Project conducted by {student name}. The data for this study are provided by {agency} to {student} for the purpose of analysis and reporting for her/his Wayne State University Masters Project (course FPH 8990). The tentative project title is: {title}, and is subject to change.

Ownership
The owner of the study data is {agency}
The owner of the study’s statistical analysis is {student name}
The owner of the final report is {student name}.

Usage/Dissemination
The study report and findings may be disseminated via:
- Wayne State University student oral presentation.
- Wayne State University FPH 8990 course final report.
- {Agency} office reports and community publications.
- Professional conference presentations.

In the case of the submission of scholarly articles for publication in peer-reviewed journals, {student} will provide {Agency representative} the opportunity to review and approve the manuscript prior to submission. A period of 30 days to review/approve any such articles is suggested.

Authorship
{Student} will be first author on any journal articles or conference presentations that stem from this study.

Signatures
I, {Student}, agree to adhere to this agreement.

_________________________________________  ________________________________
Signature                                      Date

I, ________________________________, on behalf of {Agency}, agree to adhere to this agreement.

_________________________________________  ________________________________
Signature                                      Date
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Appendix C  (page 1 of 3)

{Example of Master’s Project Title page. Note that an electronic copy of the paper and the signed title page should be provided. Paper copies are not accepted}

TYPE YOUR PROJECT TITLE HERE
(CENTERED, ALL IN CAPS, SINGLE-SPACED IF MORE THAN ONE LINE)

by

TYPE YOUR NAME HERE (CENTERED ALL IN CAPS)

Submitted to the Department of
Family Medicine and Public Health Sciences
Wayne State University,
Detroit, Michigan

MPH Project
In partial fulfillment of the requirements
For the degree of
MASTER of PUBLIC HEALTH
TYPE IN YEAR HERE

Approved by:
Project Advisor: Type Project Advisor Name Here Access Id: Date:
FPH 8990 Course Director: Type Course Director Name Here Access Id: Date:
Appendix C  (page 2 of 3)

Guidelines for Written Final Report of Master’s Project

Papers are submitted electronically; paper copies are not accepted. All written Project reports must contain a title page with an abstract, and should follow the Introduction, Methods, Results And Discussion (IMRAD) format as appropriate. Other formats can be negotiated for Projects, such as literature reviews or policy analyses. See Learning Objectives section and further detailed below in the section “Organization of the Written Project Report”.

Order of Project Paper (see below for additional detail):
1. Title page (see example on p. 12 with e-signature area)
2. Abstract and key words
3. Introduction
4. Methods
5. Results
6. Discussion
7. Acknowledgements
8. References (see below)
9. Figures and Tables with legends

- All text should be double-spaced and left justified.
- Recommended font sizes 11 or 12 in Arial, Helvetica, or Century Gothic fonts.
- The following margins are recommended 1 inch for all margins (top, bottom, left and right).
- Indent to show new paragraphs.
- Quotations \( \leq 4 \) lines should be double-spaced; quotations exceeding 4 lines should be single-spaced.
- Illustrations and tables should be placed on separate pages with appropriate legends and footnotes as needed. Captions/legends for tables and figures should be single-spaced. Figures and tables should follow references.

Pagination:
- Preliminary pages: Title page and abstract are not numbered.
- Text: Use Arabic numbers beginning with "1" on the first page of the text and continuing throughout the manuscript, including the appendices, reference material. The page numbers should be in the lower right corner.

References:
- The references should be cited and listed according to AMA or APA style.
  - APA style can be found at: http://owl.english.purdue.edu/owl/resource/560/01
Length:
- Final reports should be 10-15 pages of text in length (double spaced). The following allocation of pages per section is recommended:
  - Abstract: Place on its own page (do not exceed 250 words) plus 3-4 key words not in the title.
  - Introduction: 2 – 3 pages
  - Methods: 3 – 4 pages
  - Results: 3 – 4 pages
  - Discussion: 2 – 4 pages
  - Tables & Figures: no more than 5 in total

Paper Outline Format
Most Master’s Project reports should be organized using the IMRAD format: Introduction, Methods, Results and Discussion. Students are advised to use the following expanded IMRAD outline to plan their study, to write their study prospectus and to write their final report. The relative emphasis on each of the study components will vary depending on the specific study. These guidelines also form the basis for the Evaluation by an Independent Reader.

Resource: Bordage G. Considerations on preparing a paper for publication. Teaching & Learning in Medicine, 1989; 1, 47-52. This paper is on the MPH Program website (see Student Resources/Course Information: http://www.familymedicine.med.wayne.edu/mph/course-info.php
  - Bordage provides detailed suggestions for each of the paper components, including the title, abstract, introduction, methods, discussion, references and other considerations.
Appendix D. Association of Schools of Public Health (ASPH) Competencies and Learning Objectives that Apply to FPH 8990

<table>
<thead>
<tr>
<th>Biostatistics</th>
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</thead>
<tbody>
<tr>
<td>A5. Apply descriptive techniques commonly used to summarize public health data</td>
</tr>
<tr>
<td>A6. Apply common statistical methods for inference</td>
</tr>
<tr>
<td>A7. Apply descriptive and inferential methodologies according to the type of study design for answering a particular research question</td>
</tr>
<tr>
<td>A8. Apply basic informatics techniques with vital statistics and public health records in the description of public health characteristics and in public health research and evaluation</td>
</tr>
<tr>
<td>A9. Interpret results of statistical analyses found in public health studies</td>
</tr>
<tr>
<td>A10. Develop written and oral presentations based on statistical analyses for both public health professionals and educated lay audiences</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Epidemiology</th>
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</thead>
<tbody>
<tr>
<td>C1. Identify key sources of data for epidemiologic purposes</td>
</tr>
<tr>
<td>C3. Describe a public health problem in terms of magnitude, person, time and place</td>
</tr>
<tr>
<td>C4. Explain the importance of epidemiology for informing scientific, ethical, economic and political discussion of health issues</td>
</tr>
<tr>
<td>C5. Comprehend basic ethical and legal principles pertaining to the collection, maintenance, use and dissemination of epidemiologic data</td>
</tr>
<tr>
<td>C6. Apply the basic terminology and definitions of epidemiology</td>
</tr>
<tr>
<td>C8. Communicate epidemiologic information to lay and professional audiences</td>
</tr>
<tr>
<td>C9. Draw appropriate inferences from epidemiologic data</td>
</tr>
<tr>
<td>C10. Evaluate the strengths and limitations of epidemiologic reports</td>
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<table>
<thead>
<tr>
<th>Social &amp; Behavioral Sciences</th>
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<tbody>
<tr>
<td>E2. Identify the causes of social and behavioral factors that affect health of individuals and populations</td>
</tr>
<tr>
<td>E4. Identify critical stakeholders for the planning, implementation and evaluation of public health programs, policies and interventions</td>
</tr>
<tr>
<td>E6. Describe the role of social and community factors in both the onset and solution of public health problems</td>
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<thead>
<tr>
<th>Communication and Informatics</th>
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<tbody>
<tr>
<td>F7. Demonstrate effective written and oral skills for communicating with different audiences in the context of professional public health activities</td>
</tr>
<tr>
<td>F8. Use information technology to access, evaluate, and interpret public health data</td>
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</table>

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<thead>
<tr>
<th>Professionalism</th>
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<tbody>
<tr>
<td>J3. Apply evidence-based principles and the scientific knowledge base to critical evaluation and decision-making in public health</td>
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</table>
# Appendix E. MPH Program Competency by the FPH 8990 Learning Objectives

<table>
<thead>
<tr>
<th>Learning Objectives</th>
<th>A5</th>
<th>A6</th>
<th>A7</th>
<th>A8</th>
<th>A9</th>
<th>A10</th>
<th>C1</th>
<th>C3</th>
<th>C4</th>
<th>C5</th>
<th>C6</th>
<th>C8</th>
<th>C9</th>
<th>C10</th>
<th>E2</th>
<th>E4</th>
<th>E6</th>
<th>E7</th>
<th>E8</th>
<th>F7</th>
<th>F8</th>
<th>J3</th>
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<tbody>
<tr>
<td>1. Formulate a research question, hypothesis or statement of purpose</td>
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<td>2. Conduct a literature review and synthesis</td>
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<td>3. Detail methods for conducting a research study</td>
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<td>4. Summarize or analyze data or findings</td>
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<td>5. Interpret findings</td>
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<td>6. Develop a scholarly research paper</td>
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<td>7. Give an oral presentation of the project work and study findings</td>
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Appendix F

FPH 8990 Master’s Project
Important Dates Fall 2017 – Winter 2019

Fall 2017
- FPH 8990 Orientation: **Wednesday, September 13** from 3:00-5:00 pm
- Master’s Project Presentation Day: **Wednesday, September 20**, from 3:00-5:00 pm
- Register for graduation: no later than **Friday, September 29**
- Final paper (approved by Project Advisor) to Course Director: **Friday, November 10**
- Master’s Project Presentation Day: **Wednesday November 29**
  and *if needed* **Wednesday December 6** from 3:00-5:00 pm

Winter 2018
- FPH 8990 Orientation: **Wednesday, January 17** from 3:00 -5:00 pm
- Master’s Project Presentation Day (if needed): **Wednesday, January 24** from 3:00 -5:00
- Register for Summer graduation: no later than **Friday, February 9**
- Final paper (approved by Project Advisor) to Course Director: **Friday, March 23**
- Master’s Project Presentation Day: **Wednesday, April 25** from 3:00-5:00 pm

Spring/Summer 2018
- FPH 8990 Orientation: **Wednesday, May 9** from 3:00-5:00 pm
- Master’s Project Presentation Day (if needed): **Wednesday May 23** from 3:00-5:00 pm
- Register for Summer graduation: no later than **Friday, June 8**
- Final paper (approved by Research Advisor) to Course Director: **Friday, July 20**
- Master’s Project Presentation Day: **Wednesday, August 15** from 3:00-5:00 pm

Fall 2018
- FPH 8990 Orientation: **Wednesday, September 12** from 3:00-5:00 pm
- Master’s Project Presentation Day (if needed): **Wednesday, September 26**, from 3:00-5:00 pm
- Register for graduation: no later than **Friday, September 28**
- Final paper (approved by Project Advisor) to Course Director: **Friday, November 9**
- Master’s Project Presentation Day: **Wednesday November 28**
  and *if needed* **Wednesday December 5** from 3:00-5:00 pm

Winter 2019
- FPH 8990 Orientation: **Wednesday, January 16** from 3:00 -5:00 pm
- Master’s Project Presentation Day: **Wednesday, January 23** from 3:00 -5:00 pm
- Register for graduation: no later than **Friday, February 8**
- Final paper (approved by Project Advisor) to Course Director: **Friday, March 29**
- Master’s Project Presentation Day: **Wednesday, April 24** from 3:00-5:00 pm