

MPH Capstone Project Handbook

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Institute for Health & Equity
Master of Public Health Program
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* The Capstone Project is an evolving course.

MPH Program Contact Information

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Purpose

The Capstone Project, or integrative learning experience (ILE), is an essential aspect of the MPH curriculum. The Council on Education for Public Health (CEPH) requires that, "MPH students complete an integrative learning experience that demonstrates synthesis of foundational and concentration competencies appropriate to the student's educational and professional goals."

The integrative learning experience represents a culminating experience that requires a student to synthesize and integrate knowledge acquired in coursework and other learning experiences and to apply theory and principles in a situation that approximates some aspect of professional practice. The student produces a high quality written product that is, ideally, developed and delivered in a manner that is useful to external stakeholders, such as non-profit or governmental organizations. It will be used as one means by which faculty assess whether the student has mastered the body of public health knowledge and can demonstrate proficiency in the public health competencies appropriate to the student's educational and professional goals.

Objectives

Specific learning objectives include:

- Apply appropriate public health theory, skills, and knowledge to a public health or community health issue.
- Complete a high quality written paper on a significant public health or community health issue or topic.
- Demonstrate proficiency in the selected public health competencies.
- Demonstrate written and oral communication skills.

Prerequisites

Students should have completed all MPH coursework, including the Field Placement, before enrolling in the Capstone Project. However, due to the uniqueness of the Capstone Project and opportunities that may arise, exceptions may be made. Students must submit the Early Capstone Project Request Form to the Program Director in these instances.

Students are required to maintain CITI (Collaborative IRB Training Initiative) certification in the Protection of Human Research Subjects throughout the Capstone Project. The course may be accessed at <http://www.citiprogram.org/>. Upon completion, a copy of the certificate should be submitted to the Program Coordinator.

Master's Paper

An original Master's Paper on a significant public health or community health issue or topic will be the primary component of the Capstone Project. All papers are required to contain a comprehensive literature review. The Master's Paper can take many forms and may include:

- **Program Development.** Students work to develop a program in areas such as health promotion or a community intervention.
- **Program Evaluation.** Students conduct an evaluation of a public or community health program to determine effectiveness and outcomes.
- **Community Assessment.** Students conduct various aspects of a community health assessment.
- **Community Health Planning.** Students develop various aspects of a community health plan.

- **Public Health Policy.** Students research and develop a public policy analysis or an advocacy statement related to a significant public or community health issue.
- **Applied Research.** Students conduct research on a public or community health topic of interest.

Roles and Responsibilities

The Capstone Project is a collaborative effort between the student and the student's Faculty Advisor, who acts as the primary reader of the Master's Paper. A Second Reader will also review and provide feedback during development of the Capstone Project. The Second Reader may be another faculty member or an individual from the public health practice community with expertise in the topic area. Typically, this will be the preceptor or representative from the organization working with the student.

Students participating in the Capstone Project will be responsible for the following:

- Develop and submit a proposal for the Capstone Project to the Faculty Advisor, Second Reader and Program Coordinator for review and approval.
- Maintain CITI (Collaborative Institutional Training Initiative) certification throughout enrollment in the Capstone Project course.
- Obtain MCW IRB approval if deemed appropriate by the IRB.
- Submit drafts of the Master's Paper to the Faculty Advisor and Second Reader for review and comment. Also copy the MPH Program, mph@mcw.edu.
- Submit a final draft of the Master's Paper to the Faculty Advisor within the course guidelines and timeframes. Also copy the MPH Program, mph@mcw.edu.
- Develop and submit a PowerPoint presentation on the findings, outputs, outcomes, and recommendations of the written paper. Also copy the MPH Program, mph@mcw.edu.

The **Faculty Advisor** will be responsible for the following:

- Provide guidance to the student, as needed, in the development of the Capstone Project.
- Review and approve the Capstone Project proposal.
- Act as the Principal Investigator for the student's application to the MCW IRB if deemed appropriate by the IRB.
- Review drafts of the Master's Paper and provide guidance, resources, and constructive feedback.
- Evaluate the Master's Paper and submitted presentation, assess competency achievement, and assign the final grade for the Capstone Project course.

The **Second Reader** will be responsible for the following:

- Review drafts of the written paper and provide guidance, resources, and constructive feedback.

The **Program Coordinator** will be responsible for the following:

- Fulfill administrative aspects of the Capstone Project such as tracking and maintaining Capstone Project forms, monitoring student progress, updating program materials and website, and maintaining data.
- Act as resource for students, Faculty Advisors, and Second Readers.

Products

Proposal

The Capstone Project proposal should be submitted to the Faculty Advisor and Program Coordinator at least six weeks before enrolling in the Capstone Project course. The student may not enroll in the course until the proposal has been approved by the Faculty Advisor, IRB Analyst, and Program Coordinator. The Capstone Project proposal form and further instructions can be found in Appendix B.

Master's Paper

The Master's Paper is the key aspect of the Capstone Project and represents the high quality written product required for the MPH program. The paper should include the following:

- **Title Page** - Include name, title of project, Faculty Advisor's name, and project's time frame.
- **Abstract** - Provide an overview of the paper. The abstract should not exceed 300 words.
- **Introduction** - A brief overview of the paper including a summary of the background leading to the research question or purpose of the paper.
- **Purpose Statement** or Research Question(s) - If more than one purpose or question is applicable, limit the description to one brief paragraph each.
- **Literature Review** - Identify and review literature and previous research applicable to the paper topic. This section should include a synthesis and discussion of the reviewed literature to identify strengths, weaknesses, trends, opportunities, etc. The review should provide the basis for the paper.
- **Methods** - Describe the methodology utilized in the development of the paper. This might include the design, setting, participants, intervention, and main outcome measures of the Capstone Project, or it might provide details regarding sampling, measurement, data collection, and analysis of research.
- **Results** - Present the results of the Capstone Project. Explain the product of the effort put forth.
- **Discussion** - Discuss, in detail, the results. Place the results in the context of the existing base of knowledge on the topic, and discuss limitations.
- **Conclusion** - Provide discrete conclusions supported by evidence. Express any further study or effort implied by the conclusions, and give equal attention to positive and negative conclusions.
- **References** - Properly and consistently cite references in a reputable format of the student's choice. The MPH program recommends using APA format.
- **Appendices** - Support materials may include IRB letters, survey/interview instruments, letters of support, data analysis coding sheets, or others.

The student is required to submit sections of the Master's Paper to the Faculty Advisor, Second Reader, and Program Coordinator as outlined on the Capstone Project Timeline of Responsibilities unless otherwise specified and agreed upon in the Capstone Project Proposal.

PowerPoint or Poster Presentation

A PowerPoint or poster presentation summarizing the findings, outputs, outcomes, and recommendations determined in the Master's Paper should be submitted to the Faculty Advisor, Second Reader and Program Coordinator at least one week prior to the end of the semester. Students are responsible for

making arrangements to present their project to interested stakeholders when working with an organization.

Evaluation

Student performance will be based on the Faculty Advisor's evaluation of the student's written paper and presentation with input from the Second Reader. The final grade is determined by the student's Faculty Advisor, and the student will be assigned a grade of Excellent, Good, Satisfactory or Unsatisfactory. A student whose performance is evaluated as Unsatisfactory will be required to repeat the course. A breakdown of the grading is as follows:

- Capstone Project Proposal - 10%
- Master's Paper - 80%
- PowerPoint Presentation - 10%

Relationship to Other Courses

This course will provide the application and integration of public health theory, knowledge and skills acquired in the academic coursework. The Field Placement and the Capstone Project are two distinct MPH curriculum requirements. However, the two experiences can be linked and students are strongly encouraged to further explore and build upon work done during the Field Placement.

Appendix B – Capstone Project Proposal

A. Contact Information

Student Name _____ Phone _____

MCW Email _____ Alternate Email _____

Faculty Advisor _____ Phone _____

Email _____

Second Reader _____ Phone _____

Email _____

B. Information Needed if Coordinating with a Site

Site Name _____ Website _____

Address _____ Contact Person _____

_____ Email _____

_____ Phone _____

Does this site have its own IRB? No Yes, please identify _____

Will the site require an IRB to review this project prior to initiation of any activities? No Yes

C. Project Description and Logistics

Date CITI training completed _____

Will you receive any funding via a research grant to complete this project? No Yes

Will you be working with any private health information? No Yes

Will you be interacting with possible participants (i.e. surveys, questionnaires, focus groups)? No Yes

Are you planning on publishing or submitting this project as a poster abstract or journal article? No Yes

Project Dates _____

Project Title _____

D. Narrative description of your Capstone Project should include:

1. Rationale

Concise statement of the purpose and question(s) you are trying to address.

2. Project Design

a. Narrative of the project procedure in the sequence in which the project segments will be performed.

b. Description of data/information that will be gathered. Indicate if you will be working with private health information and/or interacting with possible participants.

c. Explanation of each method or approach to be utilized.

3. Materials

Explanation of any instruments or materials you intend to utilize.

4. Data Analysis or Evaluation

a. Intended analytic technique, or

b. Evaluation plan.

5. Anticipated Outcomes

a. Knowledge or product that can be expected as a result of your project.

b. Potential significance of the results, including public health relevance.

c. Dissemination plan.

6. References

Include any references utilized.

7. Course Requirements

a. Timeline, including identification of when deliverables will be submitted.

b. Competencies (at least five foundational and 1 concentration-specific) that will be enhanced during the Capstone Project.

E. Responsibilities

Student responsibilities in carrying out the project:

1. Develop and submit a proposal for the Capstone Project to the faculty advisor and program coordinator for review and approval.
2. Maintain CITI (Collaborative Institutional Training Initiative) certification throughout enrollment in the Capstone Project course.
3. Obtain MCW IRB approval if deemed appropriate by the MPH Program.
4. Submit drafts of the Master's Paper to the faculty advisor and a secondary reader for review and comment.
5. Submit a final draft of the Master's Paper to the faculty advisor within the course guidelines and timeframes.
6. Develop and submit a PowerPoint presentation on the purpose, methods, results, discussion, and conclusions of the Master's Paper.

Faculty advisor responsibilities in guiding the student:

1. Provide guidance to the student, as needed, in the development of the Capstone Project.
2. Review and approve the Capstone Project proposal.
3. Act as the Principle Investigator for the student's application to the MCW IRB if deemed appropriate by the MPH Program.
4. Review drafts of the Master's Paper and provide guidance, resources, and constructive feedback.
5. Evaluate the Master's Paper and submitted presentation, and assign the final grade for the Capstone Project course.

F. Agreement & Approval

The persons whose names are listed below have participated in the development of this Capstone Project Proposal. They have agreed to the responsibilities listed under their roles in Part E of this document, and they indicated their approval of this proposal. The student indicated his/her approval and agreement by submitting his/her proposal. The Faculty Advisor provided his/her approval and agreement through an email to the Program Coordinator. If any changes need to be made to this document, each individual has agreed to make those changes known to all other persons whose names appear below.

(This section to be completed by the Program Coordinator and IRB Consultant.)

Student:

Date submitted proposal:

Faculty Advisor:

Date approved proposal:

IRB Consultant: _____ Date: _____

Does not require MCW IRB Review

Requires MCW IRB Review: Exempt Expedited Full

Comments:

Program Coordinator: _____ Date: _____

Appendix C - Faculty Advisor Evaluation of Student's Capstone Project

Please complete this evaluation and discuss with the student. Submit to the MPH Program at mph@mcw.edu before the end of the semester.

Faculty Advisor Name _____

Student Name _____

Capstone Project Title _____

Part I. Achievement of Competencies

Please assess the extent to which the identified competencies were achieved.

C=Competent

SC=Somewhat Competent

NC=Not Competent

Competencies (as identified in the proposal)	C/SC/NC	Evidence of Competency Attainment

Part II. Student Performance

Please review and assess the following components of the Capstone Project.

Rating Scale				
1=Excellent	2=Good	3=Satisfactory	4=Unsatisfactory	N/A (if didn't observe or not relevant)
	Rating	Comments		
a. Completion of Capstone Project Proposal.				
b. Submission of preliminary draft of Master's Paper.				
c. Completion of final Master's Paper, which incorporated recommendations from the Faculty Advisor and Second Reader.				
d. Submission of a PowerPoint or poster presentation.				
e. Overall grade for Capstone Project: Excellent, Good, Satisfactory, or Unsatisfactory				

Appendix D - MPH Program Graduating Student Final Competency Self Assessment

Instructions

You should submit this assessment to the MPH Program at mph@mcw.edu before the end of your final semester in the MPH program.

Evaluate your competency in the categories based on your experiences throughout the MPH program.

LEVEL OF COMPETENCY

Assess yourself for each of the competencies using one of the following descriptors:

Aware (basic knowledge) = ability to comprehend but limited ability to perform the skill

Basic knowledge = to recall and memorize¹

Comprehension = to translate from one form to another¹

Knowledgeable (some practical experience) = ability to apply and analyze the skill

Knowledge = the condition of knowing something with familiarity gained through experience or association²

Application = to apply or use information in a new situation¹

Analysis = to examine a concept and break it down into its parts¹

Expert (substantial practical experience) = ability to synthesize, evaluate, or teach the skill

Expert = extraordinary proficiency; connotes knowledge as well as technical skill²

Synthesis = to put information together in a unique or novel way to solve a problem¹

Evaluation = to make quantitative or qualitative judgments using standards of appraisal¹

COURSES & ACTIVITIES

Identify the courses – and, if applicable, specific activities within those courses – that enhanced your competency in this area.

EVIDENCE

List the documents you could provide that demonstrate your competency in this area.

To reference instructors' determinations of the competencies their courses enhance, see the Competency Matrix in Appendix E of the MPH Student Handbook. The handbook can be accessed online at <http://www.mcw.edu/mpsprogram/CulminatingExperiences/FieldPlacement/Forms.htm>

References:

1. Arreola, RA. Preparing Learning Objectives: A Teaching Resource provided by the Office of the Vice Chancellor for Planning and Academic Support. University of Tennessee, Memphis. Retrieved on September 3, 2008, from http://www.utmem.edu/grad/MISCELLANEOUS/Learning_ Objectives.pdf
2. Merriam-Webster Online Dictionary. Retrieved on September 11, 2008, from <http://www.merriam-webster.com/>

Name: FOUNDATIONAL COMPETENCIES	LEVEL OF COMPETENCY aware knowledgeable expert	COURSES & ACTIVITIES that helped achieve competency	EVIDENCE documents that demonstrate competency
Evidence-based Approaches to Public Health			
1. Apply epidemiological methods to the breadth of settings and situations in public health practice			
2. Select quantitative and qualitative data collection methods appropriate for a given public health context			
3. Analyze quantitative and qualitative data using biostatistics, informatics, computer-based programming and software, as appropriate			
4. Interpret results of data analysis for public health research, policy or practice			
Public Health & Health Care Systems			
5. Compare the organization, structure and function of health care, public health and regulatory systems across national and international settings			
6. Discuss the means by which structural bias, social inequities and racism undermine health and create challenges to achieving health equity at organizational, community and societal levels			
Planning & Management to Promote Health			
7. Assess population needs, assets and capacities that affect communities' health			

FOUNDATIONAL COMPETENCIES	LEVEL OF COMPETENCY aware knowledgeable expert	COURSES & ACTIVITIES that helped achieve competency	EVIDENCE documents that demonstrate competency
Planning & Management to Promote Health			
8. Apply awareness of cultural values and practices to the design or implementation of public health policies or programs			
9. Design a population-based policy, program, project or intervention			
10. Explain basic principles and tools of budget and resource management			
11. Select methods to evaluate public health programs			
Policy in Public Health			
12. Discuss multiple dimensions of the policy-making process, including the roles of ethics and evidence			
13. Propose strategies to identify stakeholders and build coalitions and partnerships for influencing public health outcomes			
14. Advocate for political, social or economic policies and programs that will improve health in diverse populations			
15. Evaluate policies for their impact on public health and health equity			
Leadership			
16. Apply principles of leadership, governance and management, which include creating a vision, empowering others, fostering collaboration and guiding decision making			

CORE COMPETENCIES	LEVEL OF COMPETENCY aware knowledgeable expert	COURSES & ACTIVITIES that helped achieve competency	EVIDENCE documents that demonstrate competency
Leadership			
17. Apply negotiation and mediation skills to address organizational or community challenges			
Communication			
18. Select communication strategies for different audiences and sectors			
19. Communicate audience-appropriate public health content, both in writing and through oral presentation			
20. Describe the importance of cultural competence in communicating public health content			
Interprofessional Practice			
21. Perform effectively on interprofessional teams			
Systems Thinking			
22. Apply systems thinking tools to a public health issue			

CONCENTRATION COMPETENCIES	LEVEL OF COMPETENCY aware knowledgeable expert	COURSES & ACTIVITIES that helped achieve competency	EVIDENCE documents that demonstrate competency
1. Apply basic theories and models from behavioral science disciplines that are used in public health practice			
2. Demonstrate strategic planning and program planning in the contextual setting for when it is appropriate to use each process			
3. Design a logic model as a component of program planning that addresses short, medium, and long term outcomes			
4. Conduct outcome and impact analysis using evaluation design and data			
5. Apply methods for evaluating efficiency, cost benefit, and cost effectiveness analyses			