

**Wright State University**

**Master of Public Health**

**Culminating Experience**

**Guidelines**

**Revised, August 2009**

## **Master of Public Health - Culminating Experience**

All Master of Public Health candidates are required to complete eight (8) credit hours of culminating experience (CMH 820 and CMH 821). The practice placement (CMH 810) should be completed prior to registration for the culminating experience unless the course director waives that requirement based on special circumstances.

### **I. Course Objectives**

At the conclusion of the course, the student should be able to:

1. Demonstrate detailed knowledge of a Public Health issue.
2. Apply learned knowledge, skills, and abilities to pose a research purpose or question regarding a Public Health issue.
3. Select, prepare, and use appropriate quantitative and/or qualitative methods to answer a public health question.
4. Demonstrate the ability to measure and analyze data and to compare and interpret the results.
5. Demonstrate the ability to discuss and present findings in written and oral formats.

The culminating experience is an applied research project and is comprised of two consecutive four (4) credit hour courses, CMH 820 and CMH 821. Students planning to complete the program in seven quarters and begin the MPH program in the fall quarter will usually take CMH 820 during the fall quarter of the second year of coursework and CMH 821 during the winter quarter of the second year.

### **Culminating Experience is Applied Research**

What is applied research? The student must pose a Public Health question that needs an answer and then endeavor to answer the question through his/her research. The applied research can follow a formal path including the formulation and testing of a hypothesis, collection and analysis of data sets, and design of test and control groups with strictly controlled parameters. The culminating experience research can also be designed to simply ask a question, which is explored via a comprehensive literature search, data collection and analysis i.e. "What are the best practices in the nation for educating practitioners regarding childhood obesity?" The student must propose a methodology that is capable of answering the question. The research must be supported by data. Raw data may be collected via survey or other methodology, or, data may be extracted from existing data sets. Analysis of data must adhere to established quantitative or qualitative standards and be consistent with the proposed research methodology. It is also possible that preparation and submission of a grant application may be considered applied research if it poses a question or identifies and answers a "need", collects and analyzes data and "justifies" the grant to the grantor. The student is encouraged to be creative in proposing an applied research project to his/her Project Guidance Committee.

## **II. Advance Preparation for the Culminating Experience**

***The student should meet with the course director at least 90 days prior to his/her registration for CMH 820 to discuss possible research topics. The student will complete a 1-2 page concept paper and be prepared to discuss a brief description of the proposed project, the objective of the research, the data sources and treatment, and anticipated results. A preliminary time line for the project should accompany the concept paper. Once the concept paper has been accepted, the student will be permitted to register for CMH 820.***

Each student's culminating experience will be supervised by a two or three member Faculty Guidance Committee (Guidance Committee). The chair of the student's Guidance Committee must be a Wright State University faculty member with knowledge and expertise regarding the student's proposed research topic and shall have primary responsibility for guiding the student's research. The second member of the Guidance Committee must be an affiliate of the university who will serve as a consultant reader. The consultant may be a faculty member or another person named by the chair of the Guidance Committee who has special knowledge of the proposed research topic. The role of the consultant will be as a critical reader and content reviewer. The Culminating Experience course director may act as a third consultant/reader in those situations when the other members of the Guidance Committee are not core faculty of the MPH Program. It may also be appropriate to invite a third consultant/reader, when this person brings specific expertise to the applied research project and/or to the Guidance Committee (e.g. community site preceptor, GIS professional, etc.).

The MPH Program Statistical Consultant needs to be contacted early in the process, particularly by those students who will require guidance in the planning and evaluation of quantitative studies. The MPH Program Statistical Consultant may refer the student to the services of the Wright State University Statistical Consulting Center.

## **III. Components of the Culminating Experience**

The Culminating Experience has four components:

1. Part 1: The Proposal (CMH 820)
2. Part 2: Progress Report
3. Part 3: Implementation of the Proposal/ Final Manuscript (CMH 821)
4. Part 4: An Oral Presentation

### **A. Part 1: The Proposal (CMH 820)**

The student must prepare and submit a written research proposal to the Chair of his/her approved Guidance Committee. It is anticipated that the student will be required to meet with the Guidance Committee to explain the objectives and methodology of the proposed research, including the purpose of the research, data sources, data treatment, site location, anticipated results, etc. The committee may require several drafts of the research proposal prior to approval. ***The proposal is much longer in length (20-25***

**pages) than the initial concept paper (1-2 pages). The proposal will be part of the final manuscript.**

The submitted research proposal should include:

- 1) Introduction - A brief overview of the project including a summary of the background leading to the research question or purpose for the research.
- 2) Statement of Purpose or Research Question(s) - Each purpose or question to be examined should be limited to one brief paragraph.
- 3) Review of Literature - Identifies and reviews literature and previous research which defines the scope of the proposed research and directly impacts the purpose or question proposed by the research. This section should include a ***synthesis and discussion*** of the reviewed literature to identify strengths, weaknesses, trends, opportunities, etc., which impinge on the research purpose or methodology. The literature review should provide the basis or rationale for the student's proposed research.
- 4) Methods - Describes the methodology to be utilized for sampling, measurement, data collection and analysis. It should also address the proposed treatment of human or animal subjects if they are included in the experimental design. Assure that the methodology is appropriate for either quantitative (appropriate statistical measures) or qualitative (rigor, truth value, consistency, confirmation or verification, applicability, and neutrality) data being studied.

If the proposed research involves testing of human or animal subjects, or involves an interview, survey, questionnaire or medical record reviews of human subjects, specific approval must be granted by the University Institutional Review Board (IRB) ***prior*** to initiation of the research. Even in the case of exempt research, such as *the collection of data from existing records or samples that are publicly available or if the information is recorded so that subjects cannot be identified directly or through identifiers linked to the subject*, approval of the exempt status must be obtained from the IRB prior to initiation of the research. If the research involves human subjects, a "Petition for Approval of Research Involving Human Subjects" must be prepared for submission to the Wright State University Institutional Review Board (IRB)/ Office of Research and Sponsored Programs (RSP).

The petition must summarize the potential risks/discomforts for the subjects resulting from their participation in the research and indicate the type of risk: physical, psychological, social, or economic.

If the research involves animal subjects, application must be made to the WSU Laboratory Animal Care and Use Committee (LACUC) for approval. Information regarding these requirements may be found at: <http://www.wright.edu/rsp/subjects.html>.

***The petition cannot be submitted to IRB/LACUC until the student's research proposal has been approved by the student's Guidance Committee.***

Samples of the various documents that might be required for the IRB submission are posted on the CMH820/CMH821 course reserves (ask the culminating experience course director for password).

- 5) References - The proposal should provide complete references for all cited work using APA format.
- 6) Appendices - Support materials should be included as appropriately identified appendices.
- 7) Project Timeline - The proposal should provide a complete timeline which identifies significant milestones in the research project and estimated dates of completion for each milestone. For example, the timeline might include an anticipated date for completion of the literature review, the anticipated date of IRB or LUCAC approval, the completion date for data collection, the completion date for data analysis, the anticipated date for submission of the first draft of the manuscript, a reasonable time period for review by both the Guidance Committee chair and the reader, anticipated date for the completed manuscript, anticipated date for the oral presentation, etc. The timeline allows both the student and the Guidance Committee an opportunity to achieve a "meeting of the minds" regarding the requirements and timing of the project.

## **B. Part 2. Progress Report**

***The student may register for CMH 821 only after scheduling and meeting (in person) with the Culminating Experience course director to provide an updated progress report of what has been accomplished in CMH 820.*** After this progress report meeting, the student may begin the process of research as outlined in the "Methods" section of the approved proposal. It is the student's responsibility to maintain sufficient interaction with his/her Guidance Committee to assure a successful and timely conclusion of the project within the agreed upon timeframes as outlined in the project timeline.

## **C. Part 3. Implementation of Proposal/ Final Manuscript (CMH 821)**

The project manuscript should be submitted to the chair of the student's Guidance Committee. It is anticipated that the student will meet several times with the Guidance Committee during the preparation of the manuscript. Several drafts may be required by the committee prior to final approval, as documented by a score of "1" in each of the categories of the Culminating Experience Score Sheet (Attachment 1). Following final approval, the student will submit the manuscript in both electronic and hard copy format. The project manuscript should include the following components:

1. Abstract - An overview of the manuscript. The abstract should be limited to approximately 250 words.
2. Introduction, Purpose Statement, Review of Literature, and Methods - These sections may be carried forward from the original proposal (written during CMH 820) into the manuscript with appropriate modifications. However, occasionally, implementation of the proposal yields unanticipated results and necessitates a re-focus and re-statement of portions of the original proposal.

3. Results and Data Analysis - This section presents the descriptive and/or inferential data included in the research. The quantitative and/or qualitative sampling results and correct statistical analysis are displayed using tables and/or figures.
4. Discussion - This section interprets the results and provides an analysis of the data. It discusses the main findings of the research project and relates the findings to the purpose of the research. It discusses the Public Health implications of the findings and conclusions and makes relevant recommendations. This section also discusses any limitations in the study and makes recommendations regarding the limitations.
5. References - All references included in the manuscript must be properly cited in APA format.
6. Appendices - Support materials such as IRB letters, survey/interview instruments, letters of support, SPSS coding sheets, etc., should be included as appendices to the manuscript.

NOTE: One such appendix must identify the specific **Public Health competencies** achieved by the student during completion of the research project. The student must identify a minimum of sixteen Public Health competencies within a minimum of four different domains.

Source: Competencies Project, Council on Linkages, April, 2001  
<http://trainingfinder.org/competencies/background.htm>  
[http://trainingfinder.org/competencies/list\\_levels.htm](http://trainingfinder.org/competencies/list_levels.htm)

7. Acknowledgements - This is not a required section, but can be included if you choose to acknowledge your guidance committee members, family or any other individuals who significantly supported you in your research efforts.

The Final Manuscript must adhere to appropriate guidelines of the American Psychological Association (APA) as determined by the Guidance Committee. It shall be written in third person, and shall display:

- Title Page
- Table of Contents
- Page numbers, one inch margins, 12-point font, double spaced, white paper, and should be bound.
- Figures and tables shall be numbered and titled and may be in 10 point font if necessary.

#### **D. Part 4. Oral Presentation**

The student will be required to prepare and conduct an oral presentation, which summarizes the rationale, purpose, and main findings of the research project along with the recommendations advanced as a result of the research. The presentation will be made to the student's Guidance Committee and may also be presented to other faculty and/or community groups or professional organizations. The presentation should be of

professional quality with visual aids, supporting documentation, and other presentation aides as necessary.

**Portfolio** - At the conclusion of the presentation, the student must submit a completed portfolio *to the course director*. The portfolio should include hard copy (and electronic where appropriate) of all materials used in the project (copy of the final manuscript with all appendices, IRB approval forms, copies of any raw data or statistical analysis sheets). It should also include the oral presentation aids (PowerPoint, charts, etc.).

#### **IV. Evaluation of the Culminating Experience**

Each student's research will be evaluated and graded by the student's Faculty Project Guidance Committee with final approval by the MPH Program Director. The Culminating Experience will be judged on a pass/unsatisfactory basis.

Upon documentation of successful completion of all parts of The Culminating Experience Score Sheet, the Guidance Committee will complete the Culminating Experience Final Grade Form and submit all documentation to the course director for his/her signature.

#### **V. Obligations**

##### **Obligations of the Student**

It is the student's responsibility to initiate the various components of the culminating experience. The student should meet with the Culminating Experience Course Director and propose the membership of his/her Project Guidance Committee along with the Concept Paper of research. For the duration of the project, the student should maintain appropriate contact with the Project Guidance Committee and factor in reasonable timeframes for review of submitted drafts. Although the Guidance Committee is encouraged to complete reviews as quickly as possible, the student should factor in a 2-week turn around for each draft submitted to the Guidance Committee. In order to receive a grade for CMH 820, each student must schedule a meeting with the course director to report his/her progress before being allowed to register in CMH 821. It is the student's responsibility to submit all components of the culminating experience in a timely fashion. The student is also responsible for completing the requirements for each of the two courses making up the culminating experience in the quarter in which he/she registers for each course. If the requirements are not completed, the student will receive a grade of incomplete and must complete the requirements during the following quarter. Failure to comply will result in a concerned conference to establish the appropriate action.

##### **Obligations of the Culminating Experience Course Director**

The course director shall receive and approve (subject to approval by the MPH Program Director) the student's proposed membership of the Project Guidance Committee. The course director shall assist the Guidance Committee and the student when called upon to do so. The course director will conduct a progress report meeting with each student before registration to CMH 821. At the conclusion of the student's work, the Culminating Experience Score Sheet and Final Grade Form (see Attachment 1) will be

reviewed by the course director, signed where appropriate and filed in the student's MPH Program record. The course director will also enter the grades for CMH 820 and CMH 821 when the appropriate documentation, listed above, is received.

Obligations of the Project Guidance Committee - Chair and Reader(s)

The Guidance Committee shall receive and approve the student's written research proposal and manuscript. During the student's entire research project, the committee will provide interim guidance, and correction if necessary, for each section of the project. The Guidance Committee will be available to the student on a timely basis for discussion and guidance regarding research issues which may arise. At the conclusion of the research, the Guidance Committee will evaluate the research, complete the score sheets, sit for the student's oral presentation, provide a final grade for the student's work, sign the Final Grade Form and deliver these documents to the course director.

## Attachment 1 – MPH CULMINATING EXPERIENCE SCORE SHEET

Student Name: \_\_\_\_\_

Project Title: \_\_\_\_\_

<b>Project Manuscript</b>		
Abstract	Overview of the manuscript. Limit to 250 words.	
Introduction	Overview of the project with an emphasis on rationale and purpose. Limit to 1 page maximum	
Purpose Statement (or Research Questions)	State the purpose(s) of the project. Each purpose or question to be examined should be limited to one brief paragraph.	
Review of Literature	Review of the scope of the literature. Synthesize and discuss reviewed research to identify strength, weaknesses, trends, and opportunities. Provide theoretical and/or conceptual rationale.	
Methods Appropriate to quantitative or qualitative data as applicable	A. Sampling and Subjects/Participants Identifies subjects, sampling, rules for exclusion/inclusion, power analysis (as needed)	
	B. Measurement Identification of independent and dependent variables. All variables defined and operationalized. Valid measurement tools for all variables.	
	C. Data Collection and Analyses Method of data collection and specific statistical analyses.	
	D. IRB or LACUC approval	
Results & Data Analysis	Presents descriptive and inferential data. Includes the use of tables and/or figures. Uses the correct statistical analysis.	
Discussion	Discussion and interpretation of main findings. Public health implications and recommendations. Limitations of the study.	
References	Complete references on all cited works.	
Appendices	Must contain Public Health Competencies and any support materials such as IRB letters, instruments, letters of support, SPSS coding sheets, raw data.	
<b>Oral Presentation</b>		
Presentation	Rationale, purpose, methods, key findings and recommendations. Minimum of 20 minutes with time for questions and answers.	

**Students must receive a “1” in all categories to pass.**

**Scoring: 0 = Does not meet the standard; 1 = Meets or exceeds the standard**

**WRIGHT STATE UNIVERSITY  
MPH CULMINATING EXPERIENCE FINAL GRADE FORM**

**Student Name:** \_\_\_\_\_

**Area of Concentration:** \_\_\_\_\_

**Project Title:** \_\_\_\_\_

**Completion of this form attests that the student has satisfactorily completed each of the parts of the Culminating Experience:**

- Part 1. Proposal**
- Part 2. Progress Report**
- Part 3. Implementation of Proposal/ Project Manuscript**
- Part 4. Oral Presentation**

**Final Grade: Pass** \_\_\_\_\_ **Fail:** \_\_\_\_\_ **(check one)**

*Required Signatures:*

\_\_\_\_\_  
**Guidance Committee Chair** \_\_\_\_\_  
**Date**

\_\_\_\_\_  
**Guidance Consultant / Reader** \_\_\_\_\_  
**Date**

\_\_\_\_\_  
**Guidance Consultant/ Reader 2 (if applicable)** \_\_\_\_\_  
**Date**

\_\_\_\_\_  
**Culminating Experience Course Director** \_\_\_\_\_  
**Date**

**Please return completed Score Sheet/ Final Grade Form to  
MPH Program Coordinator.**