Wright State University

Master of Public Health

Culminating Experience Guidelines

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Master of Public Health - Culminating Experience

All Master of Public Health (MPH) candidates are required to complete six (6) credit hours of culminating experience (CMH 8210: CE I and CMH 8220: CE II). The practice placement (CMH 8110) should be started prior to registering for the culminating experience.

I. Culminating Experience Objectives

At the conclusion of the culminating experience, 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 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.

Students should plan to start working on their culminating experience when they are at least two semesters from completing their MPH program of study. The culminating experience is an applied research project that is completed during courses CMH 8210 and CMH 8220 taken consecutively at three (3) credit hours each.

If a student does not meet the requirements of CMH 8210 (see Section III, Part 1 & 2) or CMH 8220 (see Section III, Part 3 & 4) in the term registered, s/he must enroll for one (1) credit hour under CMH 8230 for each subsequent term until the requirements are met.

The Culminating Experience is Applied Research

Applied research involves the investigation of a research question that is based on a synthesis of current peer-reviewed literature. Answering the research question includes analysis of data using appropriate quantitative or qualitative methods and provides adequate interpretation of results. Applied research involves formulation and testing of a hypothesis, collection and analysis of data, study design of test and control groups with strictly controlled parameters, and well-defined variables. The student must propose a methodology that is capable of answering the research question. Data for the research may come from secondary sources or be collected by the student using a survey or other discipline-based methodology. Analysis of data must adhere to established quantitative or qualitative research methods. Students are responsible for the data analysis for their research.

In summary, the student must pose a practical public health question based on a review of current literature and then endeavor to answer the question by using appropriate research methods. In some cases the research question will emerge from the students practice placement experience. In all cases, the student will formulate the research question in collaboration with their guidance committee. The student is encouraged to be creative when exploring a culminating experience project with his/her guidance committee. The culminating experience should be related to the student's concentration track (i.e. Health Promotion and Education,

Public Health Management, Emergency Preparedness, or Global Health). All MPH faculty are willing to discuss specific options, strategies, and expectations with students.

The most common culminating experience project options are presented below. Other project options can be suggested and developed by students. However, the culminating experience topic and research strategy must be approved by the guidance committee before the project is started.

Epidemiologic Research - This option addresses a population-based condition or disease. This option requires that students analyze epidemiological data to answer a current epidemiological question. Students may use a publicly available dataset, gather data from medical charts, or obtain written permission to use a dataset that is not publicly available through other sources. Given the CE's tight schedule, it is recommended that students use secondary sources but s/he may collect primary data if their guidance committee approves.

Environmental Health Research - This option encompasses research of environmental factors that are harmful to human health including air quality, food safety, water treatment, and waste management. Research in this discipline may include assessment and control of communicable diseases or toxic and chemical exposures. Such research may also investigate the interface between occupational exposures by utilizing methods from risk assessment, ergonomics and toxicology. Latest scientific approaches such as geospatial technology can be used to explore possible links between built environment and emerging global environmental health concerns.

Program Planning, Implementation and/or Evaluation - This option provides students with an opportunity to take a principal role in planning a health program in collaboration with a community agency or program. This option focuses on processes used in planning and/or implementation of a health program based on a synthesis of peer reviewed literature and the requirements of the partner agency. This option also provides students with the opportunity to take a principal role in evaluating a community health project, service, or program for an agency**.**

Community Assessment - This option provides students with the opportunity to take a principal role in planning and implementing a community assessment in collaboration with a community agency or organization. Community assessment projects usually focus on a specific community health concern or population. Information from several data sources are combined to provide a broad perspective of the community health concern or population and to ascertain potential factors that can be leveraged to address the concern or aid the target population.

Evidence-Based Practice Review - The evidence-based practice review will provide an in-depth analysis of a problem or issue relying on published literature, and if appropriate, include other sources of evidence such as gray literature and key informant interviews, among others. This option can explore a question using a comprehensive literature search, data collection, analysis, and synthesis from a variety of evidence sources. The student must propose a methodology that is capable of answering the question and synthesizing the current evidence. Lessons learned and/or recommendations are often the end result of evidence-based practice reviews.

Team-Based Applied Research - Public health practice requires that people work on a project in teams. Teamwork requires that individuals develop interpersonal and collaboration skills not used in individual projects. Students can choose to enhance their team building skills by conducting a team-based applied research. Most applied research options can be conducted

as a team-based project. Teams may either self-organize or a faculty member may organize a team to work on a project. Teams can be between two (2) and four (4) members. All team members must commit to completing the project.

II. Advance Preparation for the Culminating Experience

The student should meet with the CE director at least 60 days prior to his/her registration for CMH 8210 to discuss possible research topics. The student will complete a one (1) to two (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 by the CE director and the guidance committee, the student will be permitted to register for CMH 8210.

Each student's culminating experience will be supervised by a two- or three-member faculty 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 will serve as a consultant and 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 second member will be as a critical reader and content reviewer. The CE 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, or to have a co-chair, when this person brings specific expertise to the applied research project and/or to the guidance committee (e.g. community site preceptor, geographic information system [GIS] professional, etc.). Guidance committees are constructed so that students have appropriate support for their specific planned data analysis. This negates the need for outside statistical consulting. However, **students who wish to incur and pay consulting costs on their own** may seek the WSU Statistical Consulting Center services.

Competency Lists and the Culminating Experience Process

Students should study the Tier I Core Public Health Competencies and WSU MPH Concentration Competencies (Attachment A) as they plan their culminating experience project. These competencies represent valuable professional knowledge, skills, and abilities that are integral to public health professionals. Choosing specific competencies to achieve as part of the CE process is recommended to strategically prepare for one's planned public health career.

III. Components of the Culminating Experience

The culminating experience has four components:

- Part 1: Preliminary Manuscript - CMH 8210 (CE I)
- Part 2: CMH 8210 (CE I) Checklist
- Part 3: Final Manuscript - CMH 8220 (CE II)
- Part 4: Poster Presentation

Part 1: Preliminary Manuscript - CMH 8210 (CE I)

This is the first half of the final culminating experience manuscript. Length of the preliminary manuscript will depend on the topic and typically ranges from 15 to 30 pages in length.

The student must prepare and submit a written preliminary manuscript to the chair of his/her approved guidance committee during CMH 8210. The student will be required to meet with the guidance committee to plan the project timeline, review due dates, and outline 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 preliminary manuscript prior to approval.

Pilot for CMH 8210 has helpful information for writing manuscripts and has the CE I Checklist. All checklists are also found on the WSU MPH website under Student Resources.

Project Timeline - The proposal should provide a complete timeline that identifies significant milestones for the research project and estimated dates of completion for each. For example, the timeline might include an anticipated date for completion of the literature review, the anticipated date of Institutional Review Board (IRB) or Laboratory Animal Care and Use Committee (LACUC) submission and 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 and anticipated date for the poster presentation. 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.

The submitted preliminary manuscript must follow American Psychological Association (APA) formatting and style guidelines with the following sections:

1) Title Page (include the names of your committee members and his/her role)
2) Acknowledgements Page (optional; placeholder until final manuscript completed)
3) Table of Contents (placeholder until final manuscript completed)
4) Abstract (placeholder until final manuscript completed)
5) Introduction - A brief overview of the project including a summary of the background leading to the research question or purpose for the research (1-3 pages).
6) Statement of Purpose or Research Question(s) - Each purpose or question to be examined should be limited to one brief paragraph.
7) 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.
8) Methods - Describes the methodology 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. The methodology must be appropriate for either quantitative (appropriate statistical measures) or qualitative (rigor, truth value, consistency, confirmation or verification, applicability, and neutrality) data analysis. Institutional Review Board approval, confirmation of exempt status of the project, or non-human subjects content should be described.
9) References - The proposal should provide complete references for all cited work using APA format.
10) Appendices - Support materials should be included as appropriately identified appendices.

Institutional Review Board (IRB) - Prior to the start of a project, proper approvals for ethical use of data must be obtained. All students are required to complete the CITI Program course on research ethics and protection of human subjects https://www.citiprogram.org/. Specific instructions are available in Pilot.

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 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*, confirmation of the exempt status or non-human subjects nature of the project must be obtained from the IRB prior to initiation of the research.

The IRB 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 are found at: http://www.wright.edu/rsp/subjects.html.

Samples of the various documents that might be required for the IRB submission are posted in Pilot for CMH 8210.

Part 2. CMH 8210 (CE I) Checklist

The student may register for CMH 8220 only after providing the CE director with a completed and signed CE I Checklist found in Pilot (email is acceptable).

After the signed checklist is received, the student may begin analysis outlined in the Methods section of the preliminary manuscript. 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. Contact CE Director if you have questions.

Part 3. Final Manuscript - CMH 8220 (CE II)

The final manuscript should be submitted to the chair of the student's guidance committee. It is expected that the student will meet several times with the guidance committee during the preparation of the manuscript and complete the recommended revisions.

The final manuscript includes the preliminary manuscript with added results, discussion, conclusions or recommendations, and any needed updates to the literature review. Several revised drafts may be required by the committee prior to final approval. The approval of the manuscript by the guidance committee will be documented by a score of "1" in each of the categories of the Culminating Experience Score Sheet (Attachment B). Upon guidance committee approval, the student will submit the final manuscript electronically to the CE director for final approval and to the MPH program coordinator for binding and archiving.

The manuscript must adhere to appropriate guidelines of the American Psychological Association (APA). Students should consult the 'Writing guidance' resources on the WSU MPH homepage under Student Resources (http://www.med.wright.edu/mph#sresources). The links include a MPH APA formatting guide, the Purdue Online Writing Lab (OWL), and the APA

mini manual 6th edition. It is usually written in third person. **The manuscript will be in 12 point font, double spaced with no extra spacing between paragraphs, have page numbers, and one inch margins.** Figures and tables must be numbered and titled and may be in 10 point font if necessary. Figure titles appear below figures and table titles appear above tables.

The manuscript should include the following components (use the CE II Checklist in CMH 8220 Pilot as a resource):

1. Title Page (include the names of your committee members and his/her role)
2. Acknowledgement(s) - 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.
3. Table of Contents
4. Abstract - An overview of the manuscript. The abstract should be no more than 250 words and includes 5-7 keywords not part of the title.
5. Introduction, Purpose Statement, Review of Literature, and Methods - These sections are carried forward from the preliminary manuscript written during CMH 8210 into the final 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 preliminary manuscript.
6. Results - 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.
7. 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 and literature review. 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.
8. References - All references cited in the manuscript must be properly referenced in APA format. If reference is not cited, in the body of the text, it should not be included in the Reference list.
9. Appendices - Support materials such as IRB letters, survey/interview instruments, letters of support, etc., should be included as appendices to the manuscript. The public health competencies checklist will be added to the final manuscript at the time of publication (see Section IV).

Final manuscripts with all requested revisions are due 14 days after the student's poster presentation.

Part 4. Poster Presentation

The student must have their complete manuscript approved by the guidance committee and upload it to the Pilot DropBox for CMH 8220 before receiving the poster template and instructions from the CE Director.

The student is required to prepare an academic poster and present his/her research during a poster session. Students should be prepared to summarize the rationale, purpose, and main findings of the research project and answer questions in the same way one would at a professional conference.

Students should be open to the possibility that minor revisions to their final manuscript may be required based on questions and clarifications identified during his/her presentation.

Poster sessions will be scheduled on the Friday following the last day of each term.

IV. Evaluation of the Culminating Experience

Each student's research is evaluated and graded by the student's faculty guidance committee with final approval by the CE director. The culminating experience is graded on a pass/fail basis.

The student must identify the specific public health competencies achieved by the student during completion of the research project. The student will have a final meeting with the guidance committee to examine the public health and concentration competencies checklists to identify which were applied during the culminating experience. A copy of this checklist should be signed by the student and the guidance committee chair to become part of the final publication.

A checklist of the Tier 1 Core Public Health Competencies (rev. 2014) and concentration specific competencies used by the WSU MPH program is provided in Attachment A and is available on the WSU MPH homepage under Student Resources.

Upon documentation of successful completion of all parts of the CE II Checklist the guidance committee will complete and sign the culminating experience final grade form and submit it to the CE director with the signed competency checklists.

Final Deliverables - ***The following must be*** **provided** ***to the CE director for final grade of the culminating experience.***

The documents are compiled by the MPH program coordinator and should include:

1. A single electronic copy of the final manuscript with all appendices
2. IRB approval/exemption/non-human subjects project documentation and the student's CITI Program certificate.
3. A completed culminating experience score sheet and culminating experience final grade form signed by the guidance committee.
4. A completed checklist of public health and concentration competencies used by the student during the research project. The checklist must bear the signatures of the student and the CE Chair to certify the student's knowledge and ability to apply the competencies.
5. A completed and signed copy of the CORE Scholar permission form by the student. (Optional: Necessary for the CE and poster to be published on the WSU CORE Scholar site: http://corescholar.libraries.wright.edu/mph_comm/)

V. Obligations

Obligations of the Student

It is the student's responsibility to initiate and follow up on the various components of the culminating experience. The student should meet with the CE 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.

"Appropriate contact" is to be defined by mutual agreement between the student and his/her faculty guidance committee. Although the guidance committee is encouraged to complete reviews as quickly as possible, the student should factor approximately 7-10 calendar days turn around for each draft submitted to the guidance committee. In order to receive a passing grade for CMH 8210 and given permission to register for CMH 8220, each student must submit to the CE Director a completed and signed CE I Checklist found in CMH 8210 Pilot or on the MPH website (see Section III, Part 2).

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 CMH 8210 and CMH 8220 (as outlined in Section III of this document) in the term in which he/she registers for the credit hours. If the requirements are not completed, the student must meet with the CE director to create a plan detailing the requirements to complete the project during the following term. The student will be required to register for CMH 8230 (one credit hour) in each subsequent term until the CE requirements are met. Failure to comply may result in a concern conference to establish the appropriate action.

Obligations of the Culminating Experience Director

The CE director shall receive and approve (subject to approval by the MPH program director) the student's proposed project guidance committee. The CE director shall assist the guidance committee and the student when called upon to do so. The CE director will require and review a CE I Checklist from each student before giving permission to register for CMH 8220. At the conclusion of the student's work, the culminating experience score sheet and final grade form (see Attachment B) will be reviewed by the CE director, signed where appropriate, and filed in the student's MPH program record. The CE director will also enter the grades for CMH 8210, CMH 8220, and CMH 8230 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 preliminary and final 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. The guidance committee will also keep the CE director apprised of progress and concerns during the CE process to aid in facilitation. At the conclusion of the research, the guidance committee will evaluate the research, complete the score sheet, provide a final grade for the student's work, signing the final grade form and the competencies checklists, and deliver these documents to the CE director.

Attachment A

Checklists for Competencies Applied in CE

Student Name: _____

Area of Concentration: _____

Project Title: _____

Tier 1 Core Public Health Competencies Checklist

Domain #1: Analytic/Assessment Skills	Used
Describes factors affecting the health of a community (e.g., equity, income, education, environment)	
Identifies quantitative and qualitative data and information (e.g., vital statistics, electronic health records, transportation patterns, unemployment rates, community input, health equity impact assessments) that can be used for assessing the health of a community	
Applies ethical principles in accessing, collecting, analyzing, using, maintaining, and disseminating data and information	
Uses information technology in accessing, collecting, analyzing, using, maintaining, and disseminating data and information	
Selects valid and reliable data	
Selects comparable data (e.g., data being age-adjusted to the same year, data variables across datasets having similar definitions)	
Identifies gaps in data	
Collects valid and reliable quantitative and qualitative data	
Describes public health applications of quantitative and qualitative data	
Uses quantitative and qualitative data	
Describes assets and resources that can be used for improving the health of a community (e.g., Boys & Girls Clubs, public libraries, hospitals, faith-based organizations, academic institutions, federal grants, fellowship programs)	
Contributes to assessments of community health status and factors influencing health in a community (e.g., quality, availability, accessibility, and use of health services; access to affordable housing)	
Explains how community health assessments use information about health status, factors influencing health, and assets and resources	
Describes how evidence (e.g., data, findings reported in peer-reviewed literature) is used in decision making	
Domain #2: Policy Development/Program Planning Skills	
Contributes to state/Tribal/community health improvement planning (e.g., providing data to supplement community health assessments, communicating observations from work in the field)	
Contributes to development of program goals and objectives	
Describes organizational strategic plan (e.g., includes measurable objectives and targets; relationship to community health improvement plan, workforce development plan, quality improvement plan, and other plans)	
Contributes to implementation of organizational strategic plan	
Identifies current trends (e.g., health, fiscal, social, political, environmental) affecting the health of a community	
Gathers information that can inform options for policies, programs, and services (e.g., secondhand smoking policies, data use policies, HR policies, immunization programs, food safety programs	
Describes implications of policies, programs, and services	
Implements policies programs, and services	
Explains the importance of evaluations for improving policies, programs, and services	
Gathers information for evaluating policies, programs, and services (e.g., outputs, outcomes, processes, procedures, return on investment)	
Applies strategies for continuous quality improvement	
Describes how public health informatics is used in developing, implementing, evaluating, and improving policies, programs, and services (e.g., integrated data systems, electronic reporting, knowledge management systems, geographic information systems)	
Domain #3: Communication Skills	
Identifies the literacy of populations served (e.g., ability to obtain, interpret, and use health and other information; social media literacy)	
Communicates in writing and orally with linguistic and cultural proficiency (e.g., using age-appropriate materials, incorporating images)	
Solicits input from individuals and organizations (e.g., chambers of commerce, religious organizations, schools, social service organizations, hospitals, government, community-based organizations, various populations served) for improving the health of a community	

Tier 1 Core Public Health Competencies Checklist (Cont'd)

Domain #3: Communication Skills (Cont'd)	Used
Suggests approaches for disseminating public health data and information (e.g., social media, newspapers, newsletters, journals, town hall meetings, libraries, neighborhood gatherings)	
Conveys data and information to professionals and the public using a variety of approaches (e.g., reports, presentations, email, letters)	
Communicates information to influence behavior and improve health (e.g., uses social marketing methods, considers behavioral theories such as the Health Belief Model or Stages of Change Model)	
Facilitates communication among individuals, groups, and organizations	
Describes the roles of governmental public health, health care, and other partners in improving the health of a community	
Domain #4: Cultural Competency Skills	
Describes the concept of diversity as it applies to individuals and populations (e.g., language, culture, values, socioeconomic status, geography, education, race, gender, age, ethnicity, sexual orientation, profession, religious affiliation, mental and physical abilities, historical experiences)	
Describes the diversity of individuals and populations in a community	
Describes the ways diversity may influence policies, programs, services, and the health of a community	
Recognizes the contribution of diverse perspectives in developing, implementing, and evaluating policies, programs, and services that affect the health of a community	
Addresses the diversity of individuals and populations when implementing policies, programs, and services that affect the health of a community	
Describes the effects of policies, programs, and services on different populations in a community	
Describes the value of a diverse public health workforce	
Domain #5: Community Dimensions of Practice Skills	
Describes the programs and services provided by governmental and non-governmental organizations to improve the health of a community	
Recognizes relationships that are affecting health in a community (e.g., relationships among health departments, hospitals, community health centers, primary care providers, schools, community-based organizations, and other types of organizations)	
Suggests relationships that may be needed to improve health in a community	
Supports relationships that improve health in a community	
Collaborates with community partners to improve health in a community (e.g., participates in committees, shares data and information, connects people to resources)	
Engages community members (e.g., focus groups, talking circles, formal meetings, key informant interviews) to improve health in a community	
Provides input for developing, implementing, evaluating, and improving policies, programs, and services	
Uses assets and resources (e.g., Boys & Girls Clubs, public libraries, hospitals, faith-based organizations, academic institutions, federal grants, fellowship programs) to improve health in a community	
Informs the public about policies, programs, and resources that improve health in a community	
Describes the importance of community-based participatory research	
Domain #6:Public Health Sciences Skills	
Describes the scientific foundation of the field of public health	
Identifies prominent events in the history of public health (e.g., smallpox eradication, development of vaccinations, infectious disease control, safe drinking water, emphasis on hygiene and hand washing, access to health care for people with disabilities)	
Describes how public health sciences (e.g., biostatistics, epidemiology, environmental health sciences, health services administration, social and behavioral sciences, and public health informatics) are used in the delivery of the 10 Essential Public Health Services	
Retrieves evidence (e.g., research findings, case reports, community surveys) from print and electronic sources (e.g., PubMed, Journal of Public Health Management and Practice, Morbidity and Mortality Weekly Report, The World Health Report) to support decision making	
Recognizes limitations of evidence (e.g., validity, reliability, sample size, bias, generalizability)	
Describes evidence used in developing, implementing, evaluating, and improving policies, programs, and services	
Describes the laws, regulations, policies, and procedures for the ethical conduct of research (e.g., patient confidentiality, protection of human subjects, Americans with Disabilities Act)	
Contributes to the public health evidence base (e.g., participating in Public Health Practice-Based Research Networks, community-based participatory research, and academic health departments; authoring articles; making data available to researchers)	
Suggests partnerships that may increase use of evidence in public health practice (e.g., between practice and academic organizations, with health sciences libraries)	

Tier 1 Core Public Health Competencies Checklist (Cont'd)

Domain #7: Financial Planning and Management Skills	Used
Describes the structures, functions, and authorizations of governmental public health programs and organizations	
Describes government agencies with authority to impact the health of a community	
Adheres to organizational policies and procedures	
Describes public health funding mechanisms (e.g., categorical grants, fees, third-party reimbursement, tobacco taxes)	
Contributes to development of program budgets	
Provides information for proposals for funding (e.g., foundations, government agencies, corporations)	
Provides information for development of contracts and other agreements for programs and services	
Describes financial analysis methods used in making decisions about policies, programs, and services (e.g., cost-effectiveness, cost-benefit, cost-utility analysis, return on investment)	
Operates programs within budget	
Describes how teams help achieve program and organizational goals (e.g., the value of different disciplines, sectors, skills, experiences, and perspectives; scope of work and timeline)	
Motivates colleagues for the purpose of achieving program and organizational goals (e.g., participating in teams, encouraging sharing of ideas, respecting different points of view)	
Uses evaluation results to improve program and organizational performance	
Describes program performance standards and measures	
Uses performance management systems for program and organizational improvement (e.g., achieving performance objectives and targets, increasing efficiency, refining processes, meeting Healthy People objectives, sustaining accreditation)	
Domain #8: Leadership and Systems Thinking Skills	
Incorporates ethical standards of practice (e.g., Public Health Code of Ethics) into all interactions with individuals, organizations, and communities	
Describes public health as part of a larger inter-related system of organizations that influence the health of populations at local, national, and global levels	
Describes the ways public health, health care, and other organizations can work together or individually to impact the health of a community	
Contributes to development of a vision for a healthy community (e.g., emphasis on prevention, health equity for all, excellence and innovation)	
Identifies internal and external facilitators and barriers that may affect the delivery of the 10 Essential Public Health Services (e.g., using root cause analysis and other quality improvement methods and tools, problem solving)	
Describes needs for professional development (e.g., training, mentoring, peer advising, coaching)	
Participates in professional development opportunities	
Describes the impact of changes (e.g., social, political, economic, scientific) on organizational practices	
Describes ways to improve individual and program performance	

Concentration Specific Competencies Checklist

Mark only those pertaining to student's concentration

Emergency Preparedness:	Used
Demonstrate the understanding of model leadership in emergency conditions	
Communicate and manage information related to an emergency	
Demonstrate the mastery of the use of principles of crisis and risk management	
Use research and/or evaluation science methodologies and instruments to collect, analyze and interpret quantitative and qualitative data	
Employ ethical principles in the practice of public health emergency preparedness	
Demonstrate an understanding of the protection of worker health and safety	

Global Health:	Used
Identify strategies that strengthen community capabilities for overcoming barriers to health and well-being	
Exhibit interpersonal skills that demonstrate willingness to collaborate, trust building abilities, and respect for other perspectives	
Identify and respond with integrity and professionalism to ethical issues in diverse economic, political, and cultural contexts	
Apply the health equity and social justice framework for the analysis of strategies to address health disparities across different populations	
Conduct evaluation and research related to global health	
Enhance socio-cultural and political awareness	
Apply systems thinking to analyze a diverse range of complex and interrelated factors shaping health at local, national, and international levels	

Health Promotion and Education:		Used
Area 1: Assess Needs, Assets and Capacity for Health Education		
1.1	Identify stakeholders to participate in the assessment process	
1.2	Engage stakeholders to participate in the assessment process	
1.3	Analyze factors that foster or hinder the learning process	
1.4	Identify factors that foster or hinder skill building	
1.5	Analyze factors that foster or hinder skill building	
1.6	Synthesize assessment findings	
Area 2: Plan Health Education Programs		
2.1	Use assessment results to inform the planning process	
2.2	Select planning model(s) for health education	
2.3	Develop goal statements	
2.4	Formulate specific, measurable, attainable, realistic, and time-sensitive objectives	
2.5	Assess efficacy of various strategies to ensure consistency with objectives	
2.6	Select a variety of strategies and interventions to achieve stated objectives	
2.7	Organize health education into a logical sequence	
2.8	Develop a timeline for the delivery of health education	
Area 3: Implement Health Education		
3.1	Identify training needs	
3.2	Develop training objectives	
3.3	Create training using best practices	
3.4	Evaluate training	
3.5	Use evaluation findings to plan future training	
Area 4: Conduct Evaluation and Research Related to Health Education		
4.1	Create purpose statement	
4.2	Develop evaluation/research questions	
4.3	Assess the merits and limitations of qualitative and quantitative data collection for research	
4.4	Critique existing data collection instruments for research	
4.5	Create logic model to guide the evaluation process	
4.6	Develop data analysis plan for research	
4.7	Write new items to be used in data collection for research	

Concentration Specific Competencies Checklist (Cont'd)

Health Promotion and Education (Cont'd):		Used
4.8	Evaluate feasibility of implementing recommendations from evaluation	
4.9	Disseminate research findings through professional conference presentations	
Area 5: Manage Health Education Programs		
5.1	Identify fiscal and other resources	
5.2	Prepare requests/proposals to obtain fiscal resources	
5.3	Develop budgets to support health education efforts	
5.4	Manage program budgets	
5.5	Prepare budget reports	
5.6	Demonstrate ethical behavior in managing fiscal resources	
5.7	Use communication strategies to obtain program support	
5.8	Facilitate cooperation among stakeholders responsible for health education	
5.9	Prepare reports to obtain and/or maintain program support	
5.10	Synthesize data for purposes of reporting	
5.11	Promote collaboration among stakeholders	
5.12	Employ conflict resolution strategies	
5.13	Develop strategies to enhance staff and volunteers' career development	
5.14	Implement strategies to enhance staff and volunteers' career development	
5.15	Identify potential partner(s)	
5.16	Assess capacity of potential partner(s) to meet program goals	
5.17	Elicit feedback from partner(s)	
5.18	Evaluate feasibility of continuing partnership	
Area 6: Serve as a health education resource person		
6.1	Analyze requests for training	
6.2	Prioritize requests for training	
6.3	Assess needs for training	
6.4	Identify existing resources that meet training needs	
6.5	Use learning theory to develop or adapt training programs	
6.6	Develop training plan	
6.7	Implement training sessions and programs	
6.8	Use a variety of resources and strategies	
6.9	Evaluate impact of training programs	
6.10	Provide expert assistance	
6.11	Evaluate the effectiveness of the expert assistance provided	
Area 7: Communicate and advocate for health and health education		
7.1	Lead advocacy initiatives	
7.2	Evaluate advocacy efforts	
7.3	Use evaluation and research findings in policy analysis	
7.4	Use evidence-based research to develop policies to promote health	

Public Health Management	Used
Have a knowledge of strategy and management principles related to public health and health care settings	
Be capable of applying communication and group dynamic strategies to individual and group interaction	
Know effective communication strategies used by health service organizations	
Have an understanding of organizational theory and how it can be utilized to enhance organizational effectiveness	
Have a knowledge of leadership principles	
Know change management principles	
Have a knowledge of successful program implementation principles	
Have a knowledge of strategies used for monitoring, evaluating, and continuously improving program performance	
Be capable of applying decision-making processes	
Have a knowledge of systems thinking principles	
Have an awareness of strategies for working with stakeholders to determine common and key values to achieve organizational and community goals	

Concentration Specific Competencies Checklist (Cont'd)

Public Health Management (Cont'd)	Used
Have a knowledge of human resource principles to enhance organizational management, motivate personnel and resolve conflict	
Know strategies for promoting teamwork for enhanced efficiency	
Have an understanding of effective mentoring methods	
Be able to assess and resolve internal and external organizational conflicts	
Be able to use negotiation techniques	
Be able to determine how public health challenges can be addressed by applying strategic principles and management-based solutions	
A knowledge of the finance and accounting skills needed for operational management, performance assessment, and forecasting	
The ability to develop a departmental budget	
An understanding of marketing principles and strategies	
A knowledge of ethical principles relative to data collection, usage, and reporting results	
An awareness of ethical standards related to management	
A knowledge of ethical standards for program development	
Detailed knowledge of public health laws and regulations	
The ability to write grants to secure external funding	

Signatures:

MPH Student _____ Date _____

CE Chair _____ Date _____

Attachment B

CULMINATING EXPERIENCE SCORE SHEET/ FINAL GRADE FORM

Student Name: _____

Project Title: _____

Project Manuscript		
Abstract	Overview of the manuscript. Limit to 250 words.	
Acknowledgement(s) - Optional	Acknowledge your guidance committee members, family or any other individuals who significantly supported you in your research efforts (Optional)	
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 strengths, 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 Analysis Method of data collection and specific statistical analyses.	
	D. IRB or LACUC approval (if required)	
Results	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 in APA format on all cited works.	
Appendices	Must contain competencies checklists and any support materials such as IRB letters, instruments, letters of support, raw data.	
Poster Presentation		
Prepare Poster and Present	Rationale, purpose, methods, key findings and recommendations. Minimum of 5 minutes with time for questions and answers.	

***Students must receive a "1" in all categories to pass; "N/A"* can be used for "optional" or "if required" categories.**
Scoring: 0 = Does not meet the standard; 1 = Meets or exceeds the standard

Attachment B

CULMINATING EXPERIENCE SCORE SHEET/ 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. Preliminary Manuscript (CMH 8210)
Part 2. CMH 8210 (CE I) Checklist
Part 3. Final Manuscript (CMH 8220)
Part 4. Poster Presentation

Final Grade: Pass _____ Fail: _____ (check one)

Required Signatures:

_____ _____
Guidance Committee Chair **Date**

_____ _____
Guidance Committee Co-Chair (if applicable) **Date**

_____ _____
Guidance Consultant / Reader **Date**

_____ _____
Guidance Consultant/ Reader 2 (if applicable) **Date**

_____ _____
Director, Culminating Experience **Date**

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