Michigan State University
College of Human Medicine
Division of Public Health

Master of Public Health

Integrative Learning Experience Handbook

Spring 2021
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130 E. 2nd Street, Suite 202
Flint, MI 48502
www.mph.msu.edu

Master of Public Health
College of Human Medicine
MICHIGAN STATE UNIVERSITY

Contents

What is HM 893: Public Health Integrative Learning Experience?

The Integrative Learning Experience (ILE) is designed to allow students to demonstrate their abilities in written form and to synthesize and integrate knowledge acquired from their coursework and competencies developed during the program of study. The ILE is a requirement of the Michigan State University Master of Public Health program, and each student is required to enroll in a 3-credit hour course, HM 893, to complete the ILE requirements. HM 893 is usually completed during the student's last semester and after completion of all foundational courses, all core courses, and the Applied Practicum Experience (APE).

All MPH students have six options (three research study options and three research proposal options) for completion of the ILE; the options are summarized below in the section "Capstone Paper Options".

Students discuss ILE options and ideas with faculty mentors, course faculty, and the CE coordinator throughout their course of study. Once students are ready to begin their ILE, they consult with the CE coordinator to discuss possible ILE topics, options, and expectations. ILE topics may be based on student interests or work they carried out at their APE site. Once a topic and option are selected, an override form for HM 893 is completed by the CE coordinator and student. The form is submitted to the HM 893 course faculty for review and approval. The student is enrolled in the course once their override form is approved.

Capstone Paper Topic Selection

An ILE student is often challenged to select a capstone paper topic and option. The student should conduct preliminary research into subjects that interest them. Scholarly articles can be informative and can provide additional insights such as existing research limitations or suggestions for future research. Similarly, literature references can lead to other publications, references, and topics of interest. It is highly recommended the student start considering capstone paper topics as early as possible during their MPH studies.

The student is encouraged to explore capstone paper topics that reflect their interests with the CE coordinator one to two semesters prior to enrolling in HM 893. The topic of the capstone may be based on a student's professional interests, a topic explored during their APE or selective course, or a new topic of interest.

Institutional Review Board Approval

There are two capstone options that *may* require Institutional Review Board (IRB) approval. Research Study Option 1: Conduct a new study using (primary data analysis) and Research Study Option 2: Conduct a new study (secondary data analysis).

A student interested in pursuing either of these options will need to work with the CE coordinator and the IRB faculty coordinator to determine if an application to MSU's Institutional Review Board is required to prior to enrolling in HM 893. If IRB review is required, then approval and data collection must be completed ***prior*** to enrollment in HM 893. Thus, these options often require advance planning and coordination efforts on behalf of the student. (See the section "Michigan State University Policies on Research Involving Human Subjects" on page 11 of this handbook.) More information about MSU's

Policies on Research Involving Human Subjects can be found at: https://hrpp.msu.edu/help/manual/6-9-A.html.

Capstone Paper Options

The capstone paper is a research paper that focuses on a specific public health topic area and is of sufficient depth and detail to inform the practice community. The paper should be based on a current public health problem or issue that involves an interdisciplinary approach to address a public health problem. There are several options for the capstone paper but the chosen option should be a function of the selective course previously completed by the student as well as aligning with the student's personal and professional interests and goals.

Competency Selection

The six capstone paper options have been designed to allow the student to demonstrate their ability to synthesize the following competencies:

- FC2. Select quantitative and qualitative data collection methods appropriate for a given public health context
- FC8. Apply awareness of cultural values and practices to the design or implementation of public health policies or programs
- FC19. Communicate audience-appropriate public health content, both in writing and through oral presentation
- GC1. Propose a program evaluation, systematic review, or research study to address a public health issue

Research Study Options

Option 1: Conduct a new study (primary data analysis)
Option 2: Conduct a new study (secondary data analysis)
Option 3: Conduct a systematic literature review

Research Proposal Options

Option 1: Proposal of a new public health program, intervention, or policy
Option 2: Proposal to conduct a new study (primary or secondary data)
Option 3: Proposal to evaluate an existing health program, intervention, or policy

MSU MPH Selectives

The MPH program requires one of three offered selective courses which provide a student with additional methods training required for successful completion of the ILE. It is strongly encouraged that the student discuss their capstone interests and ideas with their MPH faculty mentor, their academic advisor, and, when needed, the CE coordinator. This allows a more informed program of study to be developed, including choosing the correct selective to align with their preferred capstone paper option.

The MPH selective courses are as follows:

- HM 807: Practical Application & Critical Thinking Synthesis in Public Health
    - Suggested for Research Study Option 3: Conduct a systematic literature review.
- HM 853: Public Health Program & Intervention Evaluation
    - Suggested for Research Proposal Option 1: Proposal of a new public health program, intervention, or policy and Research Proposal Option 3: Proposal to evaluate an existing health program, or intervention, or policy.
- HM 880: Study Design and Research Methods for Public Health Practice
    - Suggested for Research Study Option 1: Conduct a new study (primary data analysis), Research Study Option 2: Conduct a new study (secondary data analysis), and Research Proposal Option 2: Proposal to conduct a new study; primary or secondary data.

Integrative Learning Experience Course Expectations

The timeline and approach for the ILE are detailed in the HM 893 Course Syllabus. For all ILE options, the student is required to produce a high-quality written product which demonstrates the synthesis of the following competencies:

- FC2. Select quantitative and qualitative data collection methods appropriate for a given public health context
- FC8. Apply awareness of cultural values and practices to the design or implementation of public health policies or programs
- FC19. Communicate audience-appropriate public health content, both in writing and through oral presentation
- GC1. Propose a program evaluation, systematic review, or research study to address a public health issue

During the HM 893 course, the student develops their ILE using templates and rubrics provided for each ILE option At the start of the course, the student is paired with a course faculty member (Faculty #1) to begin work on their ILE product. Each student is required to submit iterative drafts to the assigned course faculty member at weeks three and weeks six of the course. Week six drafts are assessed using the option-specific rubric and each student with a successful week six draft is then paired with an ILE mentor for continued mentoring. A student who does not meet criteria for advancement will be asked to drop the course or be dropped via an administrative drop; these students are then referred to an academic adviser to discuss alternate timing for the ILE course.

A student who has been paired with an ILE mentor will continue editing and improving their paper until their ILE mentor is satisfied with the quality of the ILE written paper. Final ILE written papers are due by week thirteen and are assessed by a second ILE course faculty member (Faculty #2) using the appropriate ILE option-specific rubric. For each option, a minimum of 85% of the rubric elements must be met to earn a passing grade; each student is provided a revision week to make minor revisions, if required.

Roles and Responsibilities

Several resources are available to help a student successfully plan for and complete their ILE. The roles and responsibilities of the student and the various resources available to the student are all summarized in Appendix A: Roles and Responsibilities.

Pre-Capstone Library Guide for MPH Students

The MPH librarian has created a library guide specific to MPH students working toward the completion of their ILE. It is highly recommended that a student access the library guide prior to beginning their Capstone Paper Proposal. This library guide provides resources based on the capstone paper option the student has selected. A student is welcome to reach out to the MPH librarian at any point with questions regarding the library guide.

A student can access the *Pre-Capstone Guide for MPH Students* by following this link: https://libguides.lib.msu.edu/mphce.

Integrative Learning Experience Deliverables

1. Each student will produce a final written paper and abstract as deliverables which demonstrate their ability to synthesize the planned course competencies. The student is required to submit these deliverables to the ePortfolio.

Capstone Paper Templates

Templates and rubrics have been designed for each capstone option. Capstone papers are assessed by ILE course faculty using the option-specific rubric which is designed to assess the student's ability to successfully synthesize these competencies. See Appendix D for templates.

Forms and Rubrics

The student will reference the following forms and rubrics to aid in completion of the ILE.

Appendix C: HM 893 Override form.

- This form is to be used by the student to request enrollment into HM 893. Once completed, the form is submitted to the CE coordinator for review. An override is finalized once the HM 893 course faculty signs the form and returns it to the CE coordinator and the academic advisor for processing. Deadlines for this form are announced each semester by the CE coordinator.

Appendix E: Capstone Paper Rubrics

- These rubrics (6) are used by the HM 893 course faculty during the week six draft assessment and the week thirteen final draft assessment.

Completing HM 893: Public Health Integrative Learning Experience

Prior to Enrollment in the Integrative Learning Experience

Enrollment in HM 893 requires a student to have received a passing grade of at least a 3.0 in each of the foundational, selective, and core courses. Because the completion of the ILE provides evidence of the student's ability to synthesize and integrate knowledge acquired during the degree program, a student ***may not enroll*** in the ILE while taking foundational courses, selectives, core courses, or any electives considered pertinent to the completion of the ILE. It is highly recommended the student complete the APE prior to enrollment in the ILE; however, some students may find it necessary to enroll in both concurrently.

Before enrolling in the Integrative Learning Experience, the student must:

- contact their academic advisor to discuss their intent to enroll in HM 893;
- meet with the available resources (e.g., MPH faculty mentor, Culminating Experience coordinator, HM 893 course faculty, etc.) to discuss potential capstone paper topics and options;
- prepare the override form and submit it to the CE coordinator for review. Forms need final approval from the HM 893 course faculty by the deadline set each semester;
- complete any additional requirements as needed (e.g., IRB application). The student should contact the CE coordinator for assistance, when necessary.

During the Integrative Learning Experience

While enrolled in HM 893, the student must:

- research the approved capstone paper topic;
- attend the required Zoom meetings throughout the course;
- complete and submit the ILE mentor-reviewed sectional draft via the appropriate HM 893 course assignment box;
- complete first and second drafts of the capstone paper and submit them to the ILE mentor and the course faculty via the appropriate HM 893 course assignment boxes;
- submit the reviewed final capstone paper to the HM 893 course assignment box in the course for grading as soon as possible, but no later than the posted due date;
- make all submissions according to the timing as defined in the course syllabus.

Integrative Learning Experience Paper Evaluation Process:

Capstone Paper Evaluation

- At the beginning of the semester, course faculty are assigned to work with a student as they prepare a complete first draft
- The student submits a completed draft at week six; evaluation of the draft capstone paper is done by HM 893 course faculty using the capstone option rubric. Areas for improvement are identified on the rubric

- Students with a successful week 6 draft are then paired with an ILE Mentor who will assist students as they work to address feedback from the week six assessment and finalizing the capstone paper.
- At week thirteen, the student will submit their completed capstone paper for final assessment. Final papers will be assessed by course faculty using the capstone option rubric. A minimum grade of 3.0 (defined as a minimum of 85% of the rubric elements are met) is required for successful completion of the ILE. Any capstone paper not meeting the 3.0 requirement will be discussed by course faculty. ILE mentors may be included in this discussion, if needed. A student with a paper that is deemed to require minimal revisions to achieve the 3.0 threshold will be given one week to make requested revisions. The subsequently submitted capstone paper will be assessed a final time using the corresponding capstone option rubric.

Add to Portfolio
The student will submit the final capstone paper and the completed rubric to their e-portfolio.

Michigan State University Policies on Research Involving Human Subjects

Responsible Conduct of Research and Scholarship

The College of Human Medicine supports responsible conduct of research for all students in the college who perform research. Education and training are provided to assist students. Please reference the *Master of Public Health Student Handbook* for more information.

University Committee on Research Involving Human Subjects (UCRIHS)

The University Committee on Research Involving Human Subjects is an Institutional Review Board (IRB). Federal and University regulations require that all research projects involving human subjects be reviewed and approved by an IRB **before initiation**. All projects must receive UCRIHS approval, even those that do not have direct contact with human subjects (such as secondary data sources). Under the regulations, research is defined as a formal investigation designed to develop or contribute to generalizable knowledge. A human subject of research is an individual (1) from whom an investigator obtains data or (2) about whom the researcher obtains confidential information.

Faculty and the student must submit the proper forms when the research undertaken by the student will include actively gathering data from human subjects as described above and/or use of either current or established data of human subjects gathered at a previous time. Before a student begins any research project, the student must consult with the HM 893 Course faculty for help determining if an IRB review is required and, if needed, contact the CE coordinator for help with the IRB application. For more information about the review process, contact the Human Research and Protection Program office at (517) 355-2180, irb@ora.msu.edu, or go to 4000 Collins Road, Suite 136, Lansing, MI 48910. Information is also available at https://hrpp.msu.edu/.

Integrity and Safety in Research and Creative Activities
This information and more can be found by visiting
https://grad.msu.edu/sites/default/files/content/researchintegrity/guidelines.pdf.

The conduct of research and creative activities by faculty, staff, and students is central to the mission of Michigan State University and is an institutional priority. Faculty, staff, and students work in a rich and competitive environment for the common purpose of learning, creating new knowledge, and disseminating information and ideas for the benefit of their peers and the general public. The stature and reputation of MSU as a research university are based on the commitment of its faculty, staff, and students to excellence in scholarly and creative activities and to the highest standards of professional integrity. As a partner in scholarly endeavors, MSU is committed to creating an environment that promotes ethical conduct and integrity in research and creative activities.

Innovative ideas and advances in research and creative activities have the potential to generate professional and public recognition and, in some instances, commercial interest and financial gain. In rare cases, such benefits may become motivating factors to violate professional ethics. Pressures to publish, to obtain research grants, or to complete academic requirements may also lead to an erosion of professional integrity.

Breaches in professional ethics range from questionable research practices to misconduct. The primary responsibility for adhering to professional standards lies with the individual scholar. It is, however, also the responsibility of advisors and of the disciplinary community at large. Passive acceptance of improper practices lowers inhibitions to violate professional ethics.

Integrity in research and creative activities is based not only on sound disciplinary practice but also on a commitment to basic personal values such as fairness, equity, honesty, and respect. These guidelines are intended to promote high professional standards by everyone - faculty, staff, and students alike.

Integrity in research and creative activities embodies a range of practices that includes the following:

- honesty in proposing, performing, and reporting research
- recognition of prior work
- confidentiality in peer review
- disclosure of potential conflicts of interest
- compliance with institutional and sponsor requirements
- protection of human subjects and humane care of animals in the conduct of research
- collegiality in scholarly interactions and sharing of resources
- adherence to fair and open relationships between senior scholars and their coworker(s)

Appendix A: Roles and Responsibilities

Resource	Role	Prior to ILE	During ILE
Student		• Utilizes provided resources to discuss, identify, and develop potential capstone paper topics. • Works with the Culminating Experience coordinator (in addition to the MPH faculty mentor) to identify competencies to be addressed in the capstone paper. • Once a capstone paper topic and competencies are determined, discusses the capstone paper topic, option, thesis statement, research questions, expected outcomes (option dependent), and selected competencies with the CE coordinator. • Drafts and submits the Capstone Paper Proposal form for iterative review to the CE coordinator *at minimum 30 days prior to the start of the semester of enrollment*. • Submits Capstone Paper Proposal for final approval to the course faculty. • Initiates contact with the ILE mentor as soon as one is assigned. • Discusses the capstone paper topic, option, thesis statement, research questions, expected outcomes (option dependent), and selected competencies with the faculty mentor and refines them as necessary. • Conducts a *preliminary* literature review to substantiate the identified public health concern.	• Regular, ongoing communication with the course faculty and ILE mentor is required for successful completion of the ILE. • Accesses the course in D2L as soon as it opens and reviews course syllabus. • Attends all Zoom meetings. • Completes all assignments according to schedule. • Requests advanced permission from the course faculty if assignments cannot be completed or Zoom meetings cannot be attended according to schedule. • Allows the ILE mentor adequate time to review and comment on all "mentor-reviewed" assignments prior to due dates. • Continues to work on the capstone paper while the ILE mentor and the course faculty evaluate and prepare feedback to submissions. • Implements suggestions from ILE mentor and HM 893 course faculty. •

Resource	Role	Prior to ILE	During ILE
MPH Faculty Mentor	The MPH faculty mentor is an MPH resource assigned to the student at the beginning of the program. The faculty mentor is an MPH program faculty member who has a background in various areas of the public health field. The MPH faculty mentor is intended to help the student develop professionally throughout their studies.	• From the beginning of the program, works with the student to help identify their public health interests and goals and how they relate to the chosen selective course and subsequently the capstone paper option pursued. • Works with the student (in addition to the CE coordinator) to select competencies to be addressed in addition to the required competencies.	• No specific role.
Culminating Experience Coordinator	The CE coordinator is an MPH resource who works with the student throughout their Integrative Learning Experience.	• Acts as a resource to the student (in addition to the MPH faculty mentor) when choosing the appropriate selective course (that determines the capstone paper option). • Works with the student when determining capstone paper topics and options and reviews Capstone Paper Proposal form prior to submission to the course faculty. • Works with the student (in addition to the MPH faculty mentor) to select competencies to be addressed in addition to the required competencies. • When necessary, works with the	• Provides ongoing support to students during the ILE.

Resource	Role	Prior to ILE	During ILE
Integrative Learning Experience Mentor	ILE mentors are MPH faculty who have expertise with the selected capstone paper topics and methodologies.	• Guides the student during weeks 6 through 12 of Capstone course n addressing week 6 rubric feedback and iterating to a final completed paper.	• Participates in regular, ongoing communication with the student. • Provides advice and guidance to the student regarding week 6 rubric feedback. • Reviews capstone paper drafts and provides topical expertise and substantive feedback to the student.

Resource	Role	Prior to ILE	During ILE
HM 893 Course faculty	The HM 893 course faculty is an MPH program faculty member responsible for the curriculum, who has a background in various areas of the public health field as well as the practical experience necessary to effectively guide the student through the multiple aspects of their Integrative Learning Experience.	• Design of paper templates, rubrics, and course offering. • When needed, provides advice and guidance (in addition to the CE coordinator) to the student on selecting paper options. • Reviews and approves the Capstone Course Override form. • Submits approved Capstone Paper Proposal form to CE coordinator via CHM.MPH_Overrides@msu.edu. • Prepares the student for what they should expect during the capstone paper process.	• Participates in regular, ongoing communication with the student. • Monitors student progress through submission of required documents according to the course syllabus. • Maintains periodic communication with ILE mentors, as needed. • Provides timely and substantive feedback throughout the writing process leading up to the week 6 draft. • Meets with students during week 4 to review progress to date and provide feedback • Assesses week 6 draft using capstone option rubric and provides feedback for improving paper. • Assigns ILE mentor and publishes week 6 rubric to student and mentor. • Assesses final paper at week 13 using capstone option rubric. • Attests to competency achievement in ePortfolio. • Informs the student of the final grade; facilitates rewrite opportunity, if needed.

Resource	Role	Prior to ILE	During ILE
Academic Advisor	The academic advisor is assigned to the student at the beginning of the MPH experience. The academic advisor plays a limited role in a student’s ILE but is available to help the student resolve uncertain situations.	• Processes faculty-approved override forms to enroll the student into HM 893. • Discusses any further curriculum planning outside of the Integrative Learning Experience.	• Informs the course faculty of any circumstances that may impede the student for completing assignments on time. • Receives Early Alert Forms for a student who will be required to drop course at week 6. • Reviews the student’s completed curriculum in preparation for the student submitting an application for graduation.

Appendix B: Competencies

MPH Foundational Competencies
(Source: https://storage.googleapis.com/media.ceph.org/wp_assets/2016.Criteria.pdf)
Bolded competencies are required for the capstone paper.

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 healthcare, 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
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
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

MSU Master of Public Health General Concentration Competencies

The MSU MPH General Concentration Competencies that reflect the program mission, vision, and values include the following:

1. **Propose a program evaluation, systematic review, or research study to address a public health issue**
2. Conceptualize a program, service, or policy designed to prevent, reduce and/or mitigate health inequities using a health equity framework
3. Apply the principles of community engagement and associated methodologies to public health practice
4. Apply a systematic approach in the investigation of the relationship between environmental agents and adverse health outcomes with consideration of the social determinants of health and advancing health equity
5. Analyze the ethical assumptions and implications underlying decisions in public health practice

Appendix C: HM 893 Override Request Form

Master of Public Health
College of Human Medicine
MICHIGAN STATE UNIVERSITY

Master of Public Health
Michigan State University
130 W. 2nd Street, Suite 202
Flint, MI 48502

HM 893 Override Request Form

Complete form and obtain HM 893 instructor's signature for enrollment approval.

HM 893 Override Request			
Student Name:			
Advisor Name:		**APID:**	
Planned Semester/Year of Enrollment:			
Capstone Paper Topic - Required:			
Thesis Statement - Required:			
Does your capstone topic/thesis come from or relate to your Applied Practicum Experience? Yes No			

Capstone Paper Option – Required (select only 1):

1) **Research Study Option**
   - Conduct a study which collects and analyzes primary (new) data [requires IRB approval]
   - Analysis of secondary data (previously collected)
   - Conduct a systematic literature review
2) **Research Proposal Option**
   - Proposal of a new public health program, intervention, policy, etc
   - Proposal to conduct a new study
   - Proposal to evaluate an existing public health program, intervention, policy, etc.

Student Signature

I understand that if I do not produce an acceptable capstone draft by week 6 of the enrolled semester, I will not be able to complete the course. Specifically, I will be instructed to drop the course prior to the final drop deadline. If I do not drop the course, the MSU MPH program will submit an administrative drop form to the MSU Registrar's Office on my behalf.

Student Signature: ____________________________ **Date:** ____________________

Instructor Approval

I approve of this student's request to enroll in HM 893 for the semester/year listed above.

Instructor Signature: ____________________________ **Date:** ____________________

Email approved form with HM 893 instructor's signature to: CHM.MPH_Overrides@msu.edu

Office Use Only:

Program Office	Date Completed	Initials
Override/Enrollment Completed		
Student and Instructor Notified		
Override Form Saved in Student File		

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Appendix D: Capstone Paper Templates

Research Study Option: Primary or Secondary Data

(Manuscript Template)

This template has been specifically designed to provide guidance for how to synthesize the following competencies (FC2, FC8, FC19,GC1) and knowledge gained throughout course work into a research proposal or research study focused on solving a public health problem.

[Title]

[Student Name]

HM893

[Date]

Note: You are provided *recommended* page lengths per section to guide your writing efforts. Your entire paper should be a maximum of 30 pages (including Title Page, Abstract, References, and Appendices).

Abstract (150 to 250 words maximum): The abstract should contain the following information:

1. Aim/Purpose/Objective: What was the purpose of this study (i.e., what is the main research question(s))?
2. Data/methods: What type of data did you use? How was the data analyzed (quantitative, qualitative, or mixed methods)?
3. Results: What were the major findings? (i.e., what was the answer to your main research question(s))?
4. Conclusion: What are the implications and/or conclusion of this study?
5. Keywords**:** Three keywords representing the main content of the article. Use keywords that would help other researchers find your study.

Note: The abstract should be on a separate page after the title page and before Section 1.

Section 1. Introduction/Background: The introduction should answer the following questions (1-2 double-spaced pages):

1. What is the problem and/or public health issue?
2. Thoroughly describe the problem.
3. Why is this problem important?
4. Is there statistical evidence from published peer-reviewed literature that this is a problem?
5. What population(s) is affected by this problem/public health issue?
6. What has previous research found regarding this problem? (Provide a *brief* answer here; more in-depth discussion occurs in the subsequent literature review section.)
7. What are the gaps in the literature?
8. How does your study address these gaps?
9. End this section with the specific purpose, research question(s), objectives and/or hypotheses. Make sure there is alignment with the gap in the literature (i.e., how your research question fills the gap in the literature).

Section 2. Literature Review: The literature review is a summary (recap of important information) as well as a synthesis (reorganizing that information to demonstrate how you plan to examine your topic) of the previous published peer-reviewed literature related to your research question and/or public health issue (1-2 double-spaced pages).

Things to consider:

1. How does the article contribute to understanding of your topic (i.e., why it is important)?
2. How are articles related to each other in the context of your topic?
3. What are gaps in the literature (i.e., what are the important unanswered questions)?
4. Are there any debates about your topic and/or intervention methods?
5. What are common themes?
6. How does your research fit with what has already been done?
7. What new things does your research add?

Section 3. Methods: The methods section describes how the study was conducted; it should be detailed enough that it could be replicated with the same data by another researcher. Information that needs to be addressed in the methods section includes (1-3 double-spaced page(s)):

1. Primary Data Collection (If you are carrying out a study and collecting and analyzing this newly collected data.) Describe:
    a) The study site, if applicable.
    b) How was the data was collected (i.e., survey or interview question; include in appendix section)?
    c) Dates of data collection and/or average interview length.
    d) Sample selection (i.e., how did you get participants for the study?)
    e) Ethical considerations (i.e., IRB, informed consent).
    f) Community involvement (i.e., were community members included in certain or all phases of the study?)
    g) Study variables (e.g., dependent variable, independent variable, covariates).
    h) How the data was analyzed (i.e., transcription software, statistical software etc.)
        i. Statistical software (e.g., SAS, STATA, R, Excel, etc.)
        ii. What technique did you use (e.g., ANOVA, Regression analysis, MLM, etc.)?
    i) Operationalize and/or describe variables of interest, if applicable.

2. Secondary Data Collection (If you are carrying out a study using previously collected data.) Describe:
    a) What dataset are you using?
    b) How was the data collected?
    c) What years of the data are you using?
    d) How was the study sample collected?
    e) How big was the sample size?
    f) Describe study variables (e.g., dependent variable, independent variable, covariates).
    g) Ethical considerations (i.e., IRB approval for study/use of data).
    h) How did you analyze the data?
        i. Statistical software (e.g., SAS, STATA, R, Excel etc.)
        ii. What technique did you use (e.g., ANOVA, Regression analysis, MLM etc.)?

<u>Note:</u> Where applicable be sure to explain study-design decisions (e.g., why you conducted interviews; why you used a particular statistical technique, etc.)

Section 4. Results: Present the study findings. Do not interpret the findings here. The Results section should state the findings but it should not interpret them for the reader (1-3 double-spaced pages).

1. Use tables, figures, graphs, and quotes for qualitative work to help convey findings.
2. Each table/figure/chart/graph included needs to have its findings described, in words, in the Results section.
3. Provide a detailed title for each table/figure/graph. Each table/figure/graph should be 'stand alone,' in that the reader should be able to understand each one without reading the Results section.

Note: If possible, include a descriptive table that provides information about the study sample (Table 1 in most manuscripts is a summary of the study population. For example, what percentage of the sample is male/female; racial/ethnic breakdown; provide means and standard deviations for education, age, income (i.e., continuous variables).

Section 5. Discussion: The discussion provides an interpretation of the findings presented in the Results section. Address the following (2-3 double-spaced pages):

Overall Findings

1. Did the data support your research question and/or hypothesis?
2. What do the findings mean within the context of the overall purpose of the paper (interpret findings)?
3. Are the findings consistent with previous research (cite a few studies that support your findings)?
4. Were there any unexpected findings? Are the findings new and/or inconsistent with previous research?
5. How were the results communicated to the public, especially to community members involved in the study?
6. How was or will be the community involved in dissemination of the results?

Section 6. Conclusion: Briefly summarize the paper. Discuss study limitations, implications of the study, and suggestions for future research (1 double-spaced page).

Strengths

1. What were the strengths of this study? For example, was it the first of its kind? Was it a large sample size? Were you able to study variables, populations, or subpopulations that others were not able to? Was your study population unique?

Limitations

1. What were the weaknesses or limitations of this study? Was there missing or incomplete data? Were there biases in the study population? Were you unable to study variables that most/all other studies that were part of the literature on the topic have studied? Was your study population potentially not representative of larger population? Does something limit your ability to generalize the findings you report here to other populations?

Implications

1. Short description (1-3 sentences) of the overall implications of your findings.

References: APA formatting (7th edition format)

APA Examples from 7th edition:

Journal article with a DOI

McCauley, S. M., & Christiansen, M. H. (2019). Language learning as language use: A cross-linguistic model of child language development. *Psychological Review, 126*(1), 1–51. https://doi.org/10.1037/rev0000126

Journal, magazine, or newspaper article without a DOI, from most academic research databases or print version

Anderson, M. (2018). Getting consistent with consequences. *Educational Leadership, 76*(1), 26–33.

Authored book without a DOI, from most academic research databases or print version

Burgess, R. (2019). Rethinking global health: Frameworks of power. Routledge.

Chapter in an edited book without a DOI, from most academic research databases or print version

Weinstock, R., Leong, G. B., & Silva, J. A. (2003). Defining forensic psychiatry: Roles and responsibilities. In R. Rosner (Ed.), Principles and practice of forensic psychiatry (2nd ed., pp. 7–13). CRC Press.

Webpage on a website with a group author

Centers for Disease Control and Prevention. (2018, January 23). People at high risk of developing flu-related complications. https://www.cdc.gov/flu/about/disease/high_risk.htm

World Health Organization. (2018, March). Questions and answers on immunization and vaccine safety. https://www.who.int/features/qa/84/en/

Webpage on a website with no date

National Nurses United. (n.d.). What employers should do to protect nurses from Zika. https://www.nationalnursesunited.org/pages/what-employers-should-do-to-protect-rns-from-zika

Appendix: Include additional tables and/or survey/interview tools, if needed.

Research Study Option: Systematic Review

(Systematic Review Template)

This template has been specifically designed to provide guidance for how to synthesize the following competencies (FC2, FC8, FC19, GC1) and knowledge gained throughout course work into a research proposal or research study focused on solving a public health problem.

[Title (Be sure to include the word 'Systematic Review')]

[Student Name]

HM893

[Date]

Note: You are provided *recommended* page lengths per section to guide your writing efforts. Your entire paper should be a maximum of 30 pages (including Title Page, Abstract, References, and Appendices).

Abstract (150 to 200 words maximum): Provide a structured summary that includes the following information, as applicable: background/objectives; data sources; methods; study eligibility criteria; results; limitations; conclusions; and implications of key findings.

1. **Background/Objectives:** What was the purpose of this systematic review (i.e. what is the main research question)?
2. **Methods:** What was the article inclusion and exclusion criteria? What databases were used?
3. **Results:** What were the major findings? (i.e. what was the answer to your main research question; how many and types or articles are included).
4. **Conclusion:** What are the implications and/or conclusion of this study?
5. **Keywords:** (Three keywords representing the main content of the article. Use keywords that would help other researchers find your study)

Note: The abstract should be on a separate page after the title page and before Section 1.

Example of an abstract for a systematic review (the article is a good example of a systematic review and can be found in the course):

O. Ferdinand, A., Sen, B., Rahurkar, S., Engler, S., & Menachemi, N. (2012). The relationship between built environments and physical activity: a systematic review. *American journal of public health*, *102*(10), e7-e13.

Objectives. We conducted a systematic review of the literature examining the relationship between built environments (e.g., parks, trails, sidewalks) and physical activity (PA) or obesity rates.

Methods. We performed a 2-step inclusion protocol to identify empirical articles examining any form of built environment and any form of PA (or obesity rate) as the outcome. We extracted data from included abstracts for analysis by using a standard code sheet developed for this study.

Results. Of 169 included articles, 89.2% reported beneficial relationships—but virtually all articles utilized simple observational study designs not suited for determining causality. Studies utilizing objective PA measures (e.g., pedometer) were 18% less likely to identify a beneficial relationship. Articles focusing on children in community settings (–14.2%), those examining direct measures of obesity (–6.2%), or those with an academic first author (–3.4%) were less likely to find a beneficial relationship.

Conclusions. Policymakers at federal and local levels should encourage more rigorous scientific research to determine whether altered built environments will result in increased PA and decreased obesity rates.

Section 1. Introduction/Background: The introduction should answer the following questions (1-2 double-spaced pages):

1. What is the problem and/or public health issue?
2. Why is this problem important (i.e., what are the implications for public health policy or research)?
3. Is there statistical evidence that this is a problem?
4. What population(s) is affected by this problem/public health issue?
5. What does previous research, including existing systematic reviews, if applicable, reveal about the public health issue?
6. Are there gaps and/or do these previous studies fail to answer your research question? Why?
7. How does your systematic review address these gaps (i.e., what are you adding new to the discussion; why is your systematic review needed)?
8. End this section with the specific research question that your systematic review will address. Make sure there is alignment with the gap in the literature (i.e., how your research question fills the gap in the literature).

Note: If you have a previously drafted systematic review protocol, then please use it to insert the information in the appropriate areas of the template.

Section 2. Methods: The methods section should address the following questions and should be detailed enough that the systematic review can be replicated by another researcher (2-3 double spaced pages):

1. How will you conduct the systematic review?
2. What databases are you using (name the databases, such as PubMed, Medline Plus, etc.)?
3. What are your key search terms (include, in the appendix, the full search syntax used for each database)?
4. What are the inclusion/exclusion criteria? Provide a rationale for these criteria (in other words, you should be able to justify from published literature the rationale for the criteria).
5. What are the study variables (dependent and independent)? Provide justification for including each variable(s)? In addition, include how you define and operationalize each variable.
6. What is the process for selecting studies (i.e., primary screening for eligibility, secondary screening for specific outcomes and study variables, etc.)?
7. How will you assess the quality of the studies?
8. Describe how risk of bias (in individual published articles, and for the systematic review overall) will be addressed. Bias can be introduced by flawed study designs, inappropriate patient selection, biased treatment group allocation, biased confounders, publication bias, etc.
9. Discuss how data will be extracted. Data extraction should include, where applicable, information about when and where the study was performed; a summary of the methodology; a description the primary outcome measure; sample size of participants; summary demographic data such as age, gender, race/ethnicity; strengths and limitations of included articles; etc. *Note:* this is not an exhaustive list, but data that is extracted from each article should answer and/or be related to your research question.

Inclusion/Exclusion Criteria (things you should consider):

1. Date
2. Geographic location
3. Language
4. Target population (age, children vs. adults, race/ethnicity, SES, health condition, etc.)
5. Peer review
6. Outcomes related to research question
7. Study design
8. Sample size
9. Methodology (qualitative vs. quantitative studies)
10. Sampling method

Section 3. Search Results: Provide a brief summary of the results (1 paragraph) as well as a flow chart. Use the template below for the flow diagram (**required**).

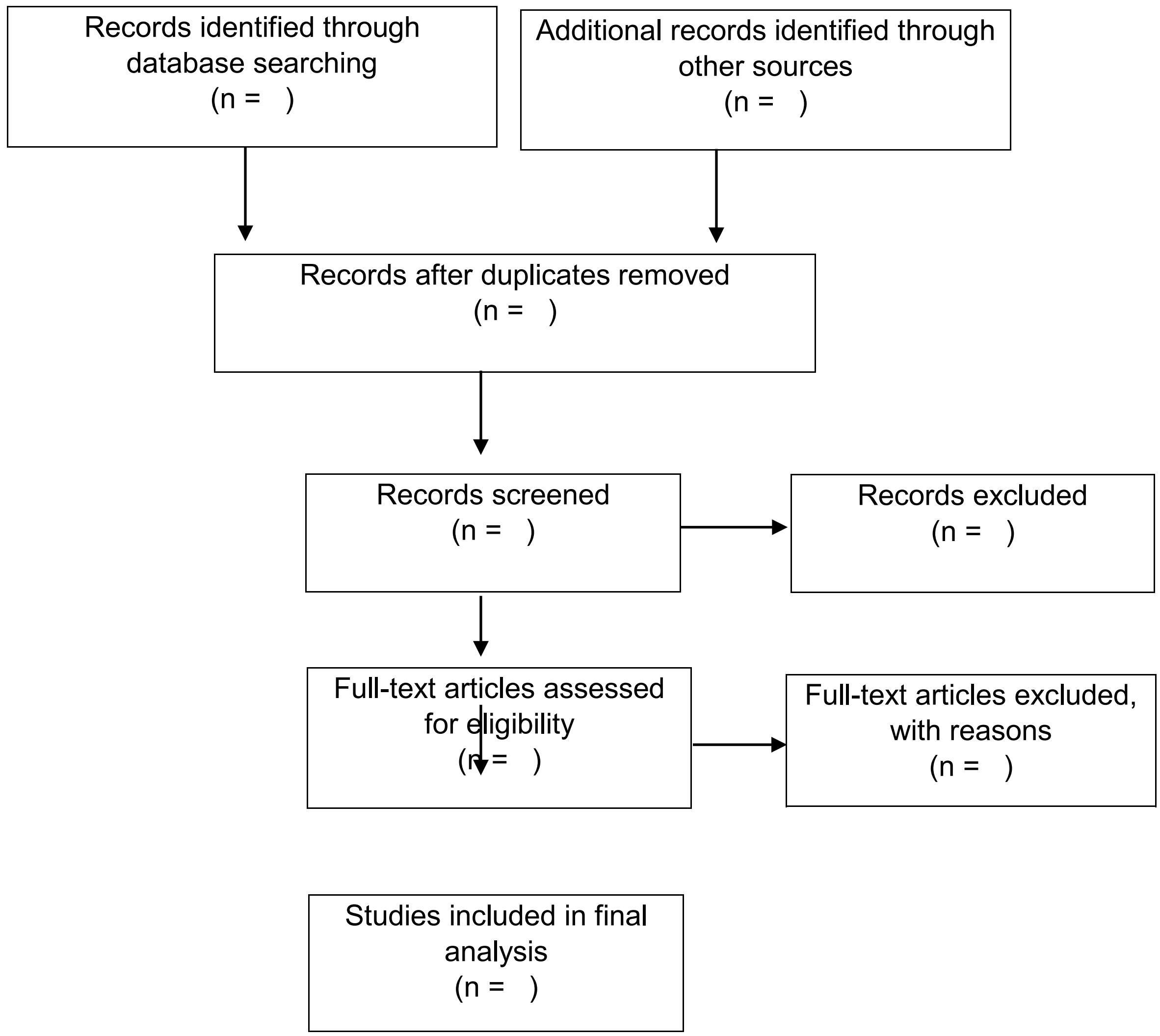

Figure 1: Eligibility criteria for the study of obesity in Hispanic youth published between 2008 and 2019.

<u>**Note:**</u> This is an example of how specific the title for the figures, tables and graphs should be. Be sure to include the name of the topic you are studying, the population, and the study period.

Section 4. Results: Present the study findings. Do not include how you plan to interpret the findings here. Use tables, figures, and graphs as necessary. The Results section states the findings but does not interpret them for the reader. Each table/figure/graph included needs to have its findings described, in words, in the Results section. Provide a detailed title for each table, figure or graph. Include the following information, as applicable (4-5 double-spaced pages):

1. Start by summarizing the number of studies included.
2. For each article include present study characteristics and/or data extracted such as sample size, year(s) of study, outcome results and/or dependent variable(s), location of study, data source, study design, etc. This information can be presented in a descriptive table (example table layout below—you can edit table content as you deem necessary to address your research questions/objectives).
3. At a minimum, a narrative synthesis of studies should be presented (if possible, conduct a meta-analysis of data). A narrative synthesis must address:
    a) Critical assessment of the papers that have been included in your review (i.e., strengths, limitations, link back to your research questions, etc.)
    b) Include an evaluation of the heterogeneity of the data from each of the articles.
    c) Include an evaluation of risk of bias for individual articles.

Table 1: Characteristics of studies of obesity in Hispanic youth published between 2008 and 2019.

Authors	Data Source & Dates of Study	Study Design	Study Location	Sample Size	Dependent Variables	Study Findings[1]	Study Strengths	Study Limitations

[1] The information here will be related to your research question; do the studies provide evidence for your research question? (% of studies) Determine the best way to present whether the studies address your research question.

Section 5. Discussion: The Discussion section provides an interpretation of the findings presented in the Results section. Consider addressing the following (1-2 double-spaced pages):

Overall Findings

1. Did the data support your research question?
2. What do the findings mean within the context of the overall purpose of the paper (interpret findings)?
3. Are the findings consistent with previous research (you may consider citing a few studies that support your findings)?
4. Address risk of bias in the overall systematic review.
5. Were there any unexpected findings? Are the findings new and/or inconsistent with previous research?

Section 6. Conclusion: Briefly summarize the paper. Discuss limitations and implications of the systematic review and suggestions for future research (1 double-spaced page).

Strengths

What were the strengths of this systematic review? Was it the first of its kind? Was it the largest? Were you able to study variables others were not able to? Was your population unique?

Limitations

What were the weaknesses or limitations of this systematic review? Were you able to find quality studies? Are there a limited number of studies that prevent in-depth analysis of the research topic? Were there limitations in the selection criteria?

Implications

Provide a short discussion (1-3 sentences) of the overall implications of your findings.

References: APA formatting (7th edition format)

APA Examples from 7th edition:

Journal article with a DOI

McCauley, S. M., & Christiansen, M. H. (2019). Language learning as language use: A cross-linguistic model of child language development. *Psychological Review, 126*(1), 1–51. https://doi.org/10.1037/rev0000126

Journal, magazine, or newspaper article without a DOI, from most academic research databases or print version

Anderson, M. (2018). Getting consistent with consequences. *Educational Leadership, 76*(1), 26–33.

Authored book without a DOI, from most academic research databases or print version

Burgess, R. (2019). Rethinking global health: Frameworks of power. Routledge.

Chapter in an edited book without a DOI, from most academic research databases or print version

Weinstock, R., Leong, G. B., & Silva, J. A. (2003). Defining forensic psychiatry: Roles and responsibilities. In R. Rosner (Ed.), Principles and practice of forensic psychiatry (2nd ed., pp. 7–13). CRC Press.

Webpage on a website with a group author

Centers for Disease Control and Prevention. (2018, January 23). People at high risk of developing flu-related complications. https://www.cdc.gov/flu/about/disease/high_risk.htm

World Health Organization. (2018, March). Questions and answers on immunization and vaccine safety. https://www.who.int/features/qa/84/en/

Webpage on a website with no date

National Nurses United. (n.d.). What employers should do to protect nurses from Zika. https://www.nationalnursesunited.org/pages/what-employers-should-do-to-protect-rns-from-zika

Appendix: Include additional tables, graphs and figures, if needed. **Required**: full search syntax for each database used.

Program Proposal Option: Proposal to Implement a New Program/Intervention/Policy

(New Program/Intervention/Policy Proposal Template)

This template has been specifically designed to provide guidance for how to synthesize the following competencies (FC2, FC8, FC19, GC1) and knowledge gained throughout course work into a research proposal or research study focused on solving a public health problem.

[Title]

[Student Name]

HM893

[Date]

Note: You are provided *recommended* page lengths per section to guide your writing efforts. Your entire paper should be a maximum of 30 pages (including Title Page, Abstract, References, and Appendices).

Abstract (150 to 250 words maximum): The abstract should contain the following information:

1. What is the problem that the proposed program/intervention/policy will address?
2. What is/are the primary goal(s) and objective(s) of the program/intervention/policy?
3. What are the expected outcomes of this new program/intervention/policy?
4. Who is the intended target population?
5. Where and when will the program/intervention/policy be implemented?
6. What methods will you use to assess whether the program/intervention/policy is successful in meeting its objective(s)?

Note: The abstract should be on a separate page after the title page and before Section 1.

Section 1. Background/Rationale for the Proposed Program/Intervention/Policy: This section should address the following elements (2-3 double-spaced pages):

1. What is the public health problem and/or issue that the program/intervention/policy aims to address?
2. Why is this problem important?
3. What evidence from published literature demonstrates that this problem is an important public health concern? Use statistics from credible sources and peer-reviewed references.
4. What population(s) is affected by this public health problem?
5. Are there previous programs/interventions/policies that address this public health problem? What gaps exist in previous research? What are the strengths and weaknesses of previous programs?
6. How does your program/intervention/policy aim to address these gaps? What is the rationale for your proposed intervention/program/policy?
7. Conclude this section by stating the specific purpose/aim of the proposed program/intervention/policy. Be sure to clarify how your program/intervention/policy will expand on extant literature and aligns with proposed methods that will be used to assess your work.

Section 2. Program/Intervention/Policy Design: This section provides detailed information about the program/intervention/policy you are proposing. This section should include the following elements (3-4 double-spaced pages):

Program or Policy Purpose (Goals and Objectives)

a) What are the goals and objectives of the program/intervention/policy? Goals are broad statements of what you want to achieve with the proposed program/intervention/policy. Objectives are specific steps that establish how the goal will be achieved. Objectives should be specific, measurable, achievable, relevant, and time-based (i.e., SMART).

Example of Goal and SMART Objective

Goal 1: Increase health educator knowledge about obesity among Hispanic youth.

Objective 1.1: Conduct obesity training classes resulting in 80% of health educators completing the course "Obesity in among Hispanic adolescents" by May 31, 2021.

Note: Repeat this format if you have more goals/objectives.

Need

a) What is the need for your program/intervention/policy?
b) How do you expect it to contribute to public health?

Program/Intervention/Policy Context

a) What social, cultural, and political context/environment exists for the public health problem/issue that you propose to address? What contextual/environmental factors may influence or affect the success of your program/intervention/policy?
    i. What is the theoretical basis of your program/intervention/policy? What *evidence* exists that this work will address the identified need?

Target Population

a) What population(s) does the program/intervention/policy target? Be specific.

Duration

a) How long will the program/intervention/policy be implemented?
b) If there are specific sub-activities planned, discuss the timing, frequency, and duration of such activities (e.g., media campaign – is this one message displayed in one location for a specific time amount?).

6. Logic Model -- This is a graphical depiction of the components that will be included in your program/intervention/policy and how they align with anticipated outcomes. **There is an example at the end of this document and template is provided in the course**. A logic model includes the following elements:

1. Inputs: resources that are invested in a program/policy/intervention (e.g., staffing, training resources, equipment, monetary resources, location of program delivery).
2. Activities: events that a program/intervention/policy undertakes to produce desired outcomes (e.g., holding meetings, training providers, creating a communications campaign).
3. Outputs: the direct results of activities that reflect the delivery of a program (e.g., number of staff train, number of media campaigns created).
4. Outcomes (short-term, intermediate, and long-term): the desired results of a program/intervention/policy (e.g., change in knowledge or skills, reduction in health disparity).

Section 3. Action Plan: This section identifies the strategies and activities that will be implemented to accomplish the goals and objectives of the proposed program/intervention/policy (1-3 double-spaced pages). Create a table that includes the following information:

1. The goal, objective, and strategy of each program/intervention/policy activity
2. The individual(s) or group(s) responsible for performing each activity
3. The timeframe for performing each activity

Recreate the table on the next page. **Note:** there should be a separate table for each proposed goal and objective.

Example Action Plan

Goal 1: Reduce deaths and injuries from unintentional falls among older adults.			
Objective 1. Reduce by 25% the death rate for unintentional falls among persons 65 years of age and older.			
Strategies	**Action Steps**	**Responsible Entities**	**Time Frame**
1. Develop a public education campaign to increase awareness of the risk factors for falls among older adults	1. Create a statewide common message about factors that increase the risk of falls and injuries among older adults 2. Develop a communications plan targeting high-risk populations 3. Develop culturally sensitive information on ways to reduce fall risks 4. Incorporate common fall and injury messages across state agencies that provide services for older adults	Governor's Advisory Council on Aging; State Health Care Cost Containment System; State Department of Economic Services, Division of Adults & Aging; tribal Councils; senior centers; academic institutions	1. By 8/31/2007 2. By 12/31/2007 3. By 3/31/2008 4. By 3/31/2008
2. Promote evidence-based healthy living practices that lower the risk of falls (e.g., physical activity, medication management, annual vision assessment)	1. Identify existing best-practice programs 2. Develop guidelines and criteria for best-practice programs that promote healthy living and lower fall risk, targeting high-risk populations 3. Distribute medical forms at pharmacies, senior centers, and community health centers throughout the state 4. Market existing fall prevention programs	Home Safety Council; state agencies; local health departments; Fall Prevention Coalition; senior centers; community health centers; Osteoporosis Prevention Coalition; pharmacies	1. By 9/30/2009 2. By 2/28/2010 3. By 6/30/2010 4. By 12/31/2010

Section 4. Budget: This section provides a detailed breakdown of the budget for the proposed program/intervention/policy (1-2 double-spaced pages). Provide a narrative explanation of the budget (i.e., rationale/reasoning for each budget item) as well as a line by line budget table (this table can be included in the appendix section). Some things to consider when developing a budget include:

1. Describe the funding source. Where will you get the funds to implement the program/intervention/policy?
2. Costs to consider (this is not an exhaustive list):
    a) Salaries for professional and non-professional personnel. What are their roles/responsibilities?
    b) Costs for materials (e.g., education materials, surveys)
    c) Travel costs
    d) Data management costs (e.g., transcription of interviews, data collection tools, analysis software)
    e) Marketing costs
    f) Special equipment costs
    g) Incentive costs
    h) Research setting

<u>**Note:**</u> There are many ways to format the budget table. Be sure to include clear headings. These headings may include salary and wages (personnel); travel; equipment; supplies; incentives; and service (e.g., transcription, statistical consultations). This is not an exhaustive list.

Section 5. Evaluation Focus: This section briefly describes how you plan to evaluate the proposed program/intervention policy (1-page maximum). Do not provide a complete evaluation design. Rather, provide a succinct summary of how you plan to evaluate the program/intervention/policy.

Address the following questions in narrative format and fill out the table below.

1. In what activities will you engage to evaluate the implementation and potential impact(s) of the new program/intervention/policy?
2. How will you know if the program is being delivered as designed (process metrics)?
3. What outcomes do you plan to monitor and assess?
4. How will you eventually know if your program/intervention/policy worked (outcome metrics)?

1. **Suggested Table**

Evaluation Question	Criterion or Indicator	Standards (i.e., what constitutes success?)
1.		
2.		

Tip: Ensure alignment of each question to proposed goals and objectives (i.e., we should see no new proposed outcomes in this section if not previously articulated in the logic model).

Section 6. Conclusion: Briefly summarize the proposed program/intervention/policy and its aims. Discuss anticipated strengths, limitations, and expected outcomes of this work (1 double-spaced page).

Brief summary of proposed program/intervention/policy (be sure to include one or two sentences about the relevance/significance of the program/intervention/policy to public health).

Strengths

1. What are the anticipated strengths of this program/intervention/policy? Does it have a unique design? Is the target population unique? Are you proposing a new program/intervention/policy to address an existing and/or new public health issue?

Limitations

1. What are the anticipated weaknesses or limitations of this program/intervention/policy? Are there biases in the program design? Are there barriers to participation?

Expected Outcomes

1. What are the potential implications of the anticipated results? How do you expect that findings will help to inform public health policy and practice more broadly?

References: APA (7th Edition formatting)

Some APA Examples:

Print Article

Scruton, R. (1996). The eclipse of listening. *The New Criterion, 15*(3), 5–13.

Electronic Article

Baniya, S., & Weech, S. (2019). Data and experience design: Negotiating community-oriented digital research with service-learning. *Purdue Journal of Service-Learning and International Engagement, 6*(1), 11–16. https://doi.org/10.5703/1288284316979

Website (with author's name)

Price, D. (2018, March 23). *Laziness does not exist*. Medium. https://humanparts.medium.com/laziness-does-not-exist-3af27e312d01

Website (from an organization)

American Society for the Prevention of Cruelty to Animals. (2019, November 21). *Justice served: Case closed for over 40 dogfighting victims*. https://www.aspca.org/news/justice-served-case-closed-over-40-dogfighting-victims

Website (with no author name)

Benefits of Quitting. SmokeFree.gov. Retrieved March 1, 2020, from, https://smokefree.gov/quit-smoking/why-you-should-quit/benefits-of-quitting

Appendix: Include additional tables and/or survey/interview tools, if needed.

Example Logic Model:

Inputs	Activities	Outputs	Outcomes		
			Short-Term	***Intermediate***	***Long-Term***

Research Proposal Option: Proposal to Conduct a New Study

(Research Proposal Template)

This template has been specifically designed to provide guidance for how to synthesize the following competencies (FC2, FC8, FC19, GC1) and knowledge gained throughout course work into a research proposal or research study focused on solving a public health problem.

[Title]

[Student Name]

HM893

[Date]

Note: You are provided *recommended* page lengths per section to guide your writing efforts. Your entire paper should be a maximum of 30 pages (including Title Page, Abstract, References, and Appendices).

Abstract (150 to 250 words maximum): The abstract should contain the following information:

1. What is the problem that the proposed research study will address?
2. What is the main objective of the proposed study?
3. What are the expected implications of the study?
4. Who will participate in the study (i.e., target population)?
5. Where and when will the study be conducted?

Note: The abstract should be on a separate page after the title page and before the Introduction/Background section.

Section 1. Background/Rationale for the Proposed Study: The section should address the following (2-3 double-spaced pages):

1. What is the problem and/or public health issue?
2. Why is this problem important?
3. Is there statistical evidence that this is a problem?
4. What population(s) is affected by this problem/public health issue?
5. What has previous research found regarding this problem? Use peer-reviewed references to explain and justify the problem the proposed study will address.
6. Are there previous studies that address this problem? What gaps exist in previous research?
7. How does your study address these gaps? What is the rationale for your study?
8. End this section with the specific purpose/aim of research question(s). Make sure there is alignment with the gap in the literature as well as the proposed research design.

Section 2. Research Question and Hypothesis: Restate your research question and provide specific hypothesis related to what you expect the find in your study.

Section 3. Research Design and Methods: This section describes how you will conduct the study. It should be detailed enough that it could be replicated by another researcher. Explain study design decisions. Address the following information, as applicable (2-3 double-spaced pages):

1. Describe the study site and/or research setting.
2. Sample selection (i.e., how will you get participants for the study)? What selection criteria will you use? Will you provide incentives for participation? What is the minimum sample size you want to reach?
3. Community involvement (i.e., will community members be included in certain or all phases of the study?)
4. Address ethical considerations (i.e., informed consent, confidentiality, IRB, etc.)
5. Operationalize and/or describe study variables (e.g., dependent variable, independent variable, covariates).
6. How will you collect data (i.e., survey or interview questions; include data collection tools in appendix section)? In addition, justify the research methodology based on existing literature.
7. What is the research methodology (i.e., qualitative, quantitative, mixed methods)? Justify the use of this method based on existing literature.
8. Dates of data collection and/or average interview length.
9. Operationalize and/or describe variables of interest, if applicable.
10. Briefly describe how you will analyze the data (i.e., transcription software, statistical software, help from a consultant etc.). What statistical technique will you use to analyze the data (e.g., ANCOVA, logistic regression, ordinary least squares regression, qualitative analysis etc.)?

Note: The study design should align with the purpose of the study/aim, research questions, hypotheses, and/or goals and objectives.

Section 4. Results: This section discusses your plan for presenting the study findings. Do <u>not</u> include how you plan to interpret findings (1-2 double-spaced pages).

How do you plan to present the results from the proposed study?

1. Describe tables/figures/graphs that you will use to help convey findings.
   a) For each table/figure/graph produce a mock table/figure that contains the appropriate column/row/axis labels.
   b) Each table/figure/graph should be 'stand-alone' in that the reader should be able to understand each one without reading the results section.
   c) Provide a detailed title for each table/figure/graph.

<u>Note:</u> You must provide a mock descriptive table that provides information about the study sample (Table 1 in most manuscripts is a summary of the study population). You are not expected to have data for the mock table, but the rows and columns should show what you would include (i.e., what percentage of the sample is male/female; racial/ethnic breakdown; provide means and standard deviations for education, age, income (i.e., continuous variables)).

Tips:

1. Ensure that the results align with the research design and methods section.
2. Double check that proposed statistical methods are aligned with what you are proposing to present in the results section.
3. Double-check that the variables presented in mock tables are identified in the methods section.
4. Double-check that the statistic results align with the research design and methods section (i.e., if your survey doesn't collect race/ethnicity data then it's not possible to present race-specific statistics in your mock tables).

Section 5. Project Activities/Timeframe: This section provides a detailed timeline (i.e., month-by-month or year-by-year) of the specific activities of starting and implementing the study. You can include a list of these activities (bullet points) or put it in table. These activities provide information about how the study goals/objectives will be achieved.

Section 6. Budget (Optional for Proposal for Research Study): This section provides a detailed breakdown of the budget for the proposed study. Provide a narrative explanation of the budget (i.e., rationale/reasoning for budget items) as well as a line-by-line budget table (this table can be included in the appendix section). Note, you must determine, based on the study you are proposing, whether this section is optional. Some things to consider when developing a budget include (1-2 double-spaced pages):

1. Describe the funding source. Where will you get the funds to conduct the study?
2. Salaries for professional and non-professional personnel. What are their roles/responsibilities?
3. What are the costs for conducting interviews or printing surveys?
4. Are they any travel costs?
5. Are there any analytical costs (i.e., transcription of interviews, analyzing data)?
6. Are there any marketing costs?
7. Do you need special equipment?
8. Will you provide incentives for participation?
9. Are there any costs associated with the research setting?

Note: There are many ways to format the budget table. Be sure to include identifiable headings. Major headings to consider are: salary and wages (personnel); travel; equipment; supplies; incentives; service (i.e., transcription, statistical consultations). This is not an exhaustive list.

Section 7. Conclusion: Briefly summarize the proposed study. Discuss strengths, limitations, and expected outcomes of the proposed study (1 double-spaced page).

Brief summary of proposed study (be sure to include 1 or 2 sentences about the relevance/significance of the study).

<u>Strengths</u>

2. What were the strengths of this proposed study? Does it have a unique study design? Is the target population unique? Are you proposing a new study?

<u>Limitations</u>

2. What were the weaknesses or limitations? Are there biases in the study design? Are there barriers to participation? Is your study population not representative of larger population? Does something limit your ability to generalize the proposed study to other populations? Explain whether these limitations are serious to the integrity of the study design.

<u>Expected Outcomes</u>

2. What are the implications of the potential results? How is this study useful for policy makers or the broader community? What are areas of future research?

References: APA (7th edition format)

APA Examples from 7th edition:

Journal article with a DOI

McCauley, S. M., & Christiansen, M. H. (2019). Language learning as language use: A cross-linguistic model of child language development. *Psychological Review, 126*(1), 1–51. https://doi.org/10.1037/rev0000126

Journal, magazine, or newspaper article without a DOI, from most academic research databases or print version

Anderson, M. (2018). Getting consistent with consequences. *Educational Leadership, 76*(1), 26–33.

Authored book without a DOI, from most academic research databases or print version

Burgess, R. (2019). Rethinking global health: Frameworks of power. Routledge.

Chapter in an edited book without a DOI, from most academic research databases or print version

Weinstock, R., Leong, G. B., & Silva, J. A. (2003). Defining forensic psychiatry: Roles and responsibilities. In R. Rosner (Ed.), Principles and practice of forensic psychiatry (2nd ed., pp. 7–13). CRC Press.

Webpage on a website with a group author

Centers for Disease Control and Prevention. (2018, January 23). People at high risk of

developing flu-related complications. https://www.cdc.gov/flu/about/disease/high_risk.htm

World Health Organization. (2018, March). Questions and answers on immunization and vaccine safety. https://www.who.int/features/qa/84/en/

Webpage on a website with no date

National Nurses United. (n.d.). What employers should do to protect nurses from Zika.

https://www.nationalnursesunited.org/pages/what-employers-should-do-to-protect-rns-from-zika

Appendix: Include additional tables and/or survey/interview tools, if needed.

Research Proposal Option: Proposal to Conduct an Evaluation

(Evaluation Template)

This template has been specifically designed to provide guidance for how to synthesize the following competencies (FC2, FC8, FC19, GC1) and knowledge gained throughout course work into a research proposal or research study focused on solving a public health problem.

[Title]

[Student Name]

HM893

[Date]

Note: You are provided *recommended* page lengths per section to guide your writing efforts. Your entire paper should be a maximum of 30 pages (including Title Page, Abstract, References, and Appendices).

Abstract (150 to 250 words maximum): The abstract should contain the following information:

1. What is the public health problem addressed?
2. What is the program/policy you plan to evaluate?
3. Who is the target population?
4. What is/are the main evaluation question(s)?
5. What is the evaluation design?
6. What are the expected implications of the evaluation?
7. What data will be collected and used to conduct the evaluation?
8. Where and when will the evaluation be conducted?

Note: The abstract should be on a separate page after the title page and before Section 1.

Section 1. Background/Rationale for Proposed Evaluation: This section should address the following elements (2-3 double spaced pages):

1. What public health problem and/or issue does the program/policy address?
2. Why is this problem or issue important?
3. What does existing data demonstrate about the magnitude and potential health impacts of this problem or issue?
4. What population(s) is affected by this public health problem/ issue?
5. What has previous *evaluation literature* found regarding this problem? Use peer-reviewed references to summarize the findings from evaluations of similar programs or policies. Address the following elements:
    a. Describe your research methods, inclusion criteria, and studies that you reviewed.
    b. Describe the overall evaluation findings, including the strengths and weaknesses of this work.
6. What are the gaps or limitations in the evaluation literature? How does your proposed evaluation address these issues?

Section 2. Program or Policy Description: This section provides detailed information about the program/policy that you are evaluating. This section should include the following elements (4-8 double spaced pages):

1. **<u>Program or Policy Purpose (Goals and Objectives)</u>**
   a) What are the goals and objectives of the program/policy that you are evaluating? What are the goals/objectives of your evaluation? Goals are broad statements of what you want to achieve with the proposed evaluation. Objectives are specific steps that establish how the goal will be achieved. Objectives should be specific, measurable, achievable, relevant, and time-based (i.e., SMART). *Both goals and objectives should be aligned with the main evaluation question(s).*

   Example of Goal and SMART Objective

   Goal 1: Increase health educator knowledge about obesity among Hispanic youth.

   Objective 1.1: Conduct obesity training classes resulting in 80% of health educators completing the course "Obesity in among Hispanic adolescents" by May 31, 2021.

   Note: Repeat this format if you have more goals/objectives.

2. **<u>Need</u>**
   a) What is the need for your evaluation? How do you expect it to contribute to public health?
3. **<u>Program/Policy Context</u>**
   a) What social, cultural, and political context/environment exists for the public health problem/issue that you propose to evaluate? What contextual/environmental factors may influence or affect your evaluation?
4. **<u>Target Population</u>**
   a) What population does the program/policy target?
5. **<u>Stage of Program or Policy</u>**
   a) How long has the program/policy been in place?
   b) Is it in the planning or implementation stage?
6. **<u>Resources/Inputs</u>**
   a) What resources are available to support your evaluation (e.g., staff, space, technology, money)?
7. **<u>Outputs</u>**
   a) What products/outputs will you produce as a result of the planned evaluation?
8. **<u>Outcomes</u>**
   a) What are the evaluation's intended outcomes (short-term, immediate, and long-term)?
   b) How do these intended outcomes align with the overall program or policy goal(s)?

<u>Logic Model</u> -- This is a graphical depiction of the components that you are evaluating and how they align with anticipated outcomes. **There is an example at end of document and template provided in the course**. A logic model includes the following elements:

a) Inputs
b) Activities
c) Expected Outputs
d) Outcomes (short-term, intermediate, and long-term)

Section 3. Evaluation Focus: This section provides information on how you will design your evaluation. This section should include the following elements (1-2 double spaced pages):

1. Evaluation Question(s)
    b) What specific questions do you intend to answer through your evaluation?

2. Stakeholders

    a) Who are the stakeholders? Who will use the evaluation findings?
    b) What role will stakeholders play in developing this evaluation proposal?
    c) How do you plan to engage these stakeholders when implementing this evaluation proposal (e.g., participating in data collection, interpretation of findings)?

3. Evaluation Design

    a) What is the design for this evaluation (e.g., experimental, pre-post with comparison group, time series, case-study, post-test only)?
    b) Why was this design selected? What are the strengths and limitations of this design?

Section 4. Data Collection: This section provides information on how you will collect/compile data for your evaluation. It should provide information on the methods that you will use to collect data and how these methods, and the data that will be compiled, are related to the evaluation question(s) you are trying to answer. This section should include the following elements (1-2 double spaced pages):

Data Collection Methods

1. Will you collect new data to answer the evaluation questions, or will you use secondary data?
2. How will the data align with relevant program/policy performance measures?
3. What methods will be used to collect or acquire the data?
4. Will you collect data from a sample of participants? If so, how will the sample be selected?
5. How will data collection instruments be identified and tested? If you are using a previously validated instrument, include this detail and cite the corresponding source(s).
6. How will the quality and utility of data be determined?
7. From whom or from what will data be collected? What is the source of the data?
8. How will the data be stored, managed, and protected?
9. Address ethical considerations (e.g., participant informed consent, confidentiality, IRB approval).
10. Evaluation Question Link:
    a) How does each data collection method relate to the evaluation question(s) proposed? Suggested table:

Evaluation Question	Data Collection Method	Source of Data	Timeline for Data Collection
1.			
2.			

Section 5. Data Analysis and Interpretation: In this section, you will provide information on the standards you will use to judge the performance and/or outcomes of the program or policy that you evaluate. You should describe how you will analyze your evaluation findings and interpret and justify your conclusions (1-2 double spaced pages).

Indicators and Standards

1. What are the measurable or observable elements that can tell you about the performance or outcomes of the program or policy that you are evaluating?
2. What constitutes "success" (i.e., by what standards will you compare your evaluation findings)?

   Suggested table:

Evaluation Question	Criterion or Indicator	Standards (i.e., what constitutes success?)
1.		
2.		

Analysis of Data

1. What methods will you use to analyze your data (e.g., descriptive statistics, inferential statistics)?
2. Provide example data table templates, if applicable.

Interpretation of Findings

1. Which stakeholders will you involve in drawing, interpreting, and justifying conclusions from your findings?
2. What are your plans for involving them in this process?

Section 6. Disseminating Findings: This section should include the following elements (1 double-spaced page):

1. What is the target audience(s) for reporting evaluation findings?
2. What is the purpose of communicating with this audience?
3. What is the most appropriate communication type (e.g., report, presentation, audio-visual) for this audience?
4. When will evaluation results be disseminated?

Section 7. Evaluation Project Activities/Timeframe: This section provides a detailed timeline (i.e., month-by-month or year-by-year) of the specific activities involved in starting, implementing, and concluding your evaluation. You can include a list of these activities (bullet points) or summarize them in a table. These activities should provide information about how the evaluation goals/objectives will be achieved (1 double-spaced page).

Timeline: Present your evaluation tasks along a timeline (use a GANTT chart - example provided at the end of the document).

1. Planning and administrative tasks
2. Data collection tasks
3. Data analysis
4. Report writing
5. Information dissemination
6. Any anticipated challenges regarding the feasibility of your timeline?

Section 8: Budget: This section provides a detailed breakdown of the budget for the proposed evaluation. Provide a narrative explanation of the budget (i.e., rationale/reasoning for budget items) as well as a line-by-line budget table (this table can be included in the appendix section). Some things to consider when developing a budget include (1-2 double-spaced pages):

1. Describe the funding source. Where will you get the funds to conduct this evaluation?
2. Salaries for professional and non-professional personnel. What are their roles/responsibilities?
3. What are the costs associated with data collection and analysis (e.g., transcription of interviews, statistical software)?
4. Are there any travel-related costs?
5. Are there any marketing-related costs?
6. Do you need special equipment?
7. Will you provide incentives for participation?
8. Are there any transportation-related costs?

<u>Note:</u> There are many ways to format the budget table. Be sure to include identifiable headings. Major headings to consider are: salary and wages (personnel); travel; equipment; supplies; incentives; service (e.g., transcription, statistical consultations). This is not an exhaustive list.

Section 9. Conclusions: Briefly summarize the primary goal(s) and objectives of the proposed evaluation. Discuss its potential strengths, limitations, and how it is expected to contribute to public health (1 double spaced page).

Brief summary of the proposed evaluation (be sure to include one or two sentences about the relevance/significance of the evaluation).

<u>Strengths</u>

1. What are the anticipated strengths of this proposed evaluation? Is it addressing an important gap or limitation in the literature? Is the target population unique?

<u>Limitations</u>

1. What are the anticipated weaknesses or limitations of this proposed evaluation? Are there biases in the evaluation design? Are there barriers to participation? Is your target population representative of the larger population? Does something limit your ability to generalize findings from the proposed evaluation to other populations? Explain how these limitations may pose threats to the integrity of the evaluation design.

<u>Expected Outcomes</u>

1. What are the implications of the potential evaluation findings? How will this evaluation be useful for policy makers or the broader community? What are potential implications for future research?

References: APA (7^{th} Edition Format)

APA Examples from 7^{th} edition:

Journal article with a DOI

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World Health Organization. (2018, March). Questions and answers on immunization and vaccine safety. https://www.who.int/features/qa/84/en/

Webpage on a website with no date

National Nurses United. (n.d.). What employers should do to protect nurses from Zika.

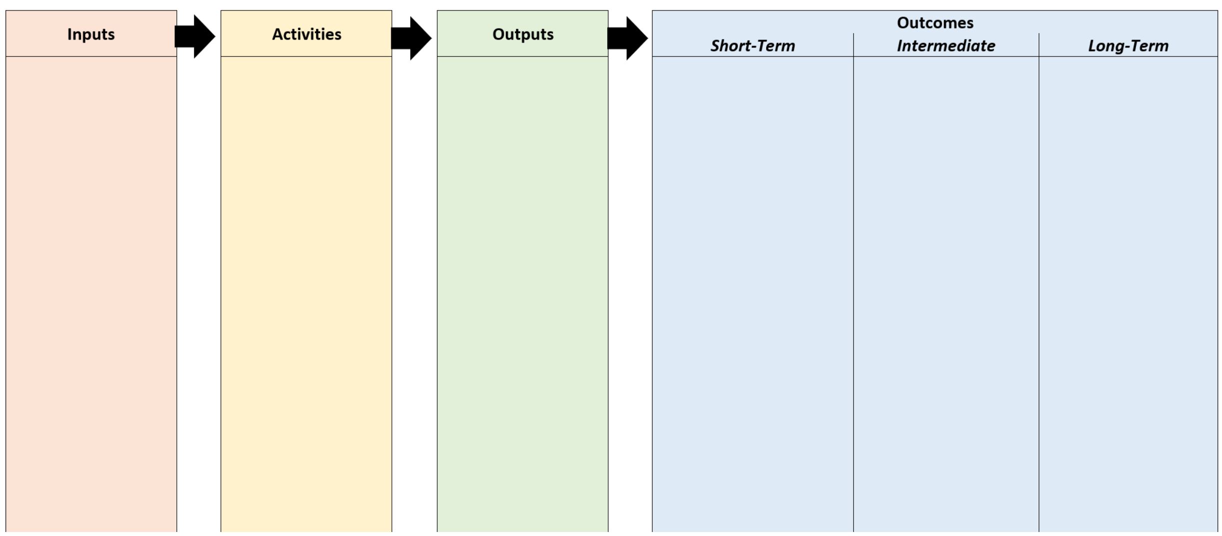
https://www.nationalnursesunited.org/pages/what-employers-should-do-to-protect-rns-from-zika

Appendix: Include additional tables and/or survey/interview tools, if needed.

GANNT Chart Example:

Activity	Phase 1: Planning		Phase 2: Etc.		Phase 3: Etc.		Phase		
	January 2021	February 2021	March 2021	April 2021	Month YYYY	Month YYYY			
1.									
2.									
3.									
4.									
5.									

Example Logic Model:



Appendix E: Integrative Learning Experience Rubrics

<u>MPH Capstone Manuscript Rubric</u>

This rubric has been specifically designed to assess your abilities to synthesize the following competencies (FC2, FC8, FC19, GC1) in a research proposal or research study focused on solving a public health problem.

<u>Manuscript Rubric (100 points)</u>

Outline	Required Elements	Met	Not Met	Feedback (if element is "not met" students are required to address in their revisions)
I. Abstract	1. Describes the purpose of the study (i.e., what is the main research question(s).			
	2. Describes the data used and how it is analyzed.			
	3. Describes the major study findings.			
	4. Describes the implications and/or conclusions of the study.			
	5. Provides three keywords representing the main content of the article.			
	6. 150 to 250 words			
II. Introduction/ Background	1. Thorough description of the public health problem and/or issue.			
	2. Explains why the problem/issue is important.			
	3. Provides data/statistical evidence that reveals the magnitude and potential health impacts of the problem or issue.			
	4. Describes the population(s) affected by the public health problem/issue.			
	5. Brief discussion of the findings from previous research related to the problem/issue.			
	6. Discusses the gaps or limitations in previous studies and discusses how the proposed study addresses these gaps.			
	7. Provides a specific purpose/aim, research question(s), objectives and/or hypotheses that is align with the gap in the literature.			

Outline	Required Elements	Met	Not Met	Feedback (if element is “not met” students are required to address in their revisions)
III. Literature Review	1. Discusses how each article incorporated in the literature review contributes to the understanding of the topic (i.e. why is it important).			
	2. Discusses how are articles related to each other in the context of the topic (i.e. synthesis of articles).			
	3. Discusses gaps in the literature.			
	4. Discusses any debates about the topic, if applicable.			
	5. Discusses common themes.			
	6. Describes how the current research fits with previous studies and describes new contributions to the literature of the current study.			
IV. Methods (Primary data, if applicable)	1. Describes the study site and/or research setting, if applicable.			
	2. Describes how the data was collected.			
	3. Discusses how participants are selected into the study sample (i.e. selection criteria, incentives, sample size etc.)			
	4. Describes if there is community involvement in certain or all phases of the study, if applicable.			
	5. Discusses ethical considerations.			
	6. Operationalizes and/or describes study variables (i.e. dependent variables, independent variables, and covariates), if applicable.			
	7. Discusses how the data will be collected and describes the research methodology.			
	8. Discusses dates of data collection and/or average interview length			
	9. Describes how data will be analyzed and statistical technique used to analyze the data.			

Outline	Required Elements	Met	Not Met	Feedback (if element is "not met" students are required to address in their revisions)
IV. Methods (Secondary data, if applicable)	1. Describes the dataset.			
	2. Describes how the data was collected.			
	3. Provides years of data used.			
	4. Discusses how the study sample was collected and provides sample size of study.			
	5. Operationalizes and/or describes study variables (i.e. dependent variables, independent variables, and covariates).			
	6. Discusses ethical considerations.			
	7. Describes how data will be analyzed and statistical technique used to analyze the data.			
V. Results	1. Uses tables, figures, graphs and quotes for qualitative work to covey findings. (Each table, figure, and graph are 'stand alone in that the reader can understand each one without reading the results text).			
	2. Provides narrative explanation for each table, figure, chart or graph used to convey findings.			
	3. Provides a detailed title for each table, figure or graph.			
VI. Discussion	1. Discusses whether the data supports the research question and/or hypotheses.			
	2. Describes what the findings mean within the context of the overall purpose of the paper (i.e. interprets findings).			
	3. Discusses if findings are consistent with previous research or if there are any unexpected, new or inconsistent findings.			
	4. Discusses how the results are communicated to the public, especially community members involved in the study, if applicable.			

Outline	Required Elements	Met	Not Met	Feedback (if element is “not met” students are required to address in their revisions)
	5. Discusses how the community will be involved in the dissemination of the results, if applicable.			
VII. Conclusion	1. Provides a brief summary of the proposed study and the relevance/significance of the study.			
	2. Discusses the anticipated strengths of the study.			
	3. Discusses the anticipated weaknesses or limitations of the study.			
	4. Discusses the implications of the potential study findings.			
Organization and Mechanics	1. The paper is scholarly, of high quality and professionally prepared (i.e., it has a neat and orderly appearance, and is devoid of grammatical and spelling errors).			
References	1. APA formatting 7th edition (correct in-text citations and reference page)			
	2. At least six scholarly, peer-reviewed sources that are recent and relevant.			
Appendix	1. Include additional tables and/or survey/interview tools, if needed.			
Additional Comments				

<u>MPH Capstone Systematic Review Rubric</u>

This rubric has been specifically designed to assess your abilities to synthesize the following competencies (FC2, FC8, FC19, GC1) in a research proposal or research study focused on solving a public health problem.

<u>Systematic Review Rubric (100 points)</u>

Outline	Required Elements	Met	Not Met	Feedback
I. Abstract	1. Describes the purpose of the systematic review (i.e. what is the main research question(s).			
	2. Describes the databases used and the inclusion and exclusion criteria.			
	3. Describes the major study findings.			
	4. Describes the implications and/or conclusions of the study.			
	5. Provides three keywords representing the main content of the article.			
	6. 150 to 250 words			
II. Introduction/ Background	1. Describes the public health problem and/or issue.			
	2. Explains why the problem/issue is important.			
	3. Provides data/statistical evidence that reveals the magnitude and potential health impacts of the problem or issue.			
	4. Describes the population(s) affected by the public health problem/issue.			
	5. Discusses what previous systematic reviews, if applicable, reveal about the public health issue.			
	6. Discusses the gaps or limitations in previous systematic reviews and discusses how the current systematic review addresses these gaps.			
	7. Provides a specific research question(s), that the systematic review will address (research question aligns with gaps in literature).			

Outline	Required Elements	Met	Not Met	Feedback
IV. Methods	1. Describes how the systematic review is conducted.			
	2. Describes the databases used.			
	3. Discusses key search terms.			
	4. Describes the inclusion/exclusion criteria and provides a rationale for these criteria.			
	5. Operationalizes and/or describes the study variables. Provides a justification for including each variable.			
	6. Describes the process for selecting studies.			
	7. Discusses how the quality of each study is assessed.			
	8. Describes how risk of bias is addressed.			
	9. Discusses how data is extracted.			
V. Search Results	1. Provides a summary of the results in narrative form and uses a flow chart.			
VI. Results	1. Summarizes the number of studies included.			
	2. Provides a table that presents study characteristics and/or data extracted such as sample size, years of study, outcome results, dependent variables, etc.			
	3. Provides a narrative synthesis of the studies included that addresses a critical assessment of the papers included in the review, includes an evaluation of heterogeneity of data form each article and includes an evaluation of risk of bias for individual articles.			
VI. Discussion	1. Discusses whether the data supports the research question.			

Outline	Required Elements	Met	Not Met	Feedback
	2. Describes what the findings mean within the context of the overall purpose of the systematic review (i.e. interprets findings).			
	3. Discusses if findings are consistent with previous research or if there are any unexpected, new or inconsistent findings.			
	4. Discusses risk of bias in the overall systematic review.			
VII. Conclusion	1. Provides a brief summary of the systematic review and the relevance/significance of the systematic review.			
	2. Discusses the strengths of the systematic review.			
	3. Discusses the weaknesses or limitations of the systematic review.			
	4. Discusses the implications of the findings.			
Organization and Mechanics	1. The paper is scholarly, of high quality and professionally prepared (i.e., it has a neat and orderly appearance, and is devoid of grammatical and spelling errors).			
References	1. APA formatting 7th edition (correct in-text citations and reference page)			
	2. At least six scholarly, peer-reviewed sources that are recent and relevant.			
Appendix	1. Includes full search syntax used for key search terms for each database.			
	2. Includes additional tables and/or survey/interview tools, if needed.			
Additional Comments				

MPH Capstone Propose a New Program/Intervention/Policy Rubric

This rubric has been specifically designed to assess your abilities to synthesize the following competencies ((FC2, FC8, FC19, GC1) in a research proposal or research study focused on solving a public health problem.

Research Proposal of a New Program/Intervention/Policy Rubric (100 points)

Outline	Required Elements	Met	Not Met	Feedback
I. Abstract	1. Describes the problem that the proposed program/intervention/policy will address.			
	2. Describes the target population.			
	3. Describes the main objective of the program/intervention/policy.			
	4. Describes when and where the program/intervention/policy will be implemented.			
	5. Describes the expected outcomes of the of the program/intervention/policy.			
	6. Discuss the method(s) used to assess success of the program/intervention/policy.			
	7. 150 to 250 words			
II. Background/ Rationale	1. Describes the public health problem and/or issue that the proposed program/intervention/policy will address.			
	2. Explains why the problem/issue is important.			
	3. Provides data/statistical evidence that reveals the magnitude and potential health impacts of the problem or issue.			
	4. Describes the population(s) affected by the public health problem/issue.			

Outline	Required Elements	Met	Not Met	Feedback
	5. Discusses the findings from previous programs/interventions/policies related to the problem/issue. Uses peer reviewed references to explain and justify the problem the proposed program/intervention/policy will address.			
	6. Discusses the gaps or limitations in previous programs/interventions/policies and discusses how the proposed program/intervention/policy addresses these gaps.			
	7. Provides a specific purpose/aim of the proposed program/intervention/policy that is aligned with the gap in the literature and proposed program/intervention/policy design.			
III. Program, Intervention, or Policy Design	1. Provides SMART goals and objectives of the proposed program/intervention/policy.			
	2. Describes why the proposed program/intervention/policy is needed and how it contributes to public health.			
	3. Describes the social, cultural and political context/environment that exists for the health problem being addressed and discuss how these factors may influence program/intervention/policy success.			
	4. Discusses the theoretical basis of the planned program/intervention/policy.			
	5. Describes the target population of the program/policy.			
	6. Describes how long the program/intervention/policy will be in place.			
	7. Describes the program/intervention/policy intended outcomes (short-term, immediate and long-term) and discusses how intended			

Outline	Required Elements	Met	Not Met	Feedback
	outcomes align with overall program/intervention/policy goals.			
	8. Provides a logic model that depicts how the components evaluated align with anticipated outcomes.			
VI. Action Plan	1. Provides an action plan that discusses the goals, objectives and strategy of each activity, describes activities and changes that will take place, discusses who will perform each activity and provides timeframe for the activity.			
	2. Provides a detailed action plan table for each proposed goals and objectives.			
VII. Budget	1. Provides a budget narrative and line by line budget table that describes the funding source, salaries and roles/responsibilities for professional and on-professional personnel, costs associated with data collection and analysis, travel-related costs, marketing-related costs, special equipment, participant incentives and transportation-related costs, if applicable.			
VIII. Evaluation Focus	1. Provides a narrative and table that describes the activities used to evaluate the implementation and impact of the new program/intervention/policy; process metrics about program/intervention/policy delivery; outcomes to assess and monitor; and outcome metrics about program/intervention/policy success.			
IX. Conclusion	1. Provides a brief summary of the proposed study and the relevance/significance of the program/intervention/policy.			

Outline	Required Elements	Met	Not Met	Feedback
	2. Discusses the anticipated strengths of the proposed program/intervention/policy.			
	3. Discusses the anticipated weaknesses or limitations of the proposed program/intervention/policy.			
	4. Discusses the implications of the potential study findings and how this evaluation is useful for policy makers or the broader community.			
Organization and Mechanics	1. The paper is scholarly, of high quality and professionally prepared (i.e., it has a neat and orderly appearance, and is devoid of grammatical and spelling errors).			
References	1. APA formatting 7th edition (correct in-text citations and reference page)			
	2. At least six scholarly, peer-reviewed sources that are recent and relevant.			
Appendix	1. Include additional tables and/or survey/interview tools, if needed.			
Additional Comments				

MPH Capstone Research Proposal 'New Study' Rubric

This rubric has been specifically designed to assess your abilities to synthesize the following competencies (FC2, FC8, FC19, GC1) in a research proposal or research study focused on solving a public health problem

Research Proposal to Conduct a New Study Rubric (35 rows)

Outline	Required Elements	Met	Not Met	Feedback
I. Abstract	1. Describes the problem the proposed research study will address			
	2. Describes the target population.			
	3. Describes the main objective of the proposed study.			
	4. Describes when and where the study will be conducted.			
	5. Describes the expected implications of the of the study.			
	6. 150 to 250 words			
II. Background/ Rationale	1. Describes the public health problem and/or issue that the proposed study will address.			
	2. Explains why the problem/issue is important to study.			
	3. Provides data/statistical evidence that reveals the magnitude and potential health impacts of the problem or issue.			
	4. Describes the population(s) affected by the public health problem/issue.			
	5. Discusses the findings from previous studies related to the problem/issue using peer reviewed references.			
	6. Discusses the gaps or limitations in previous studies and discusses how the proposed study addresses these gaps.			
	7. Provides a specific purpose/aim or research question(s) that aligns with the gap in the literature and proposed research design.			

Outline	Required Elements	Met	Not Met	Feedback
III. Research questions and hypotheses	1. Provides a specific research question and specific hypothesis related to expected findings from the proposed study.			
IV. Research design and methods	1. Describes the study site and/or research setting.			
	2. Discusses how participants are selected into the study sample (i.e. selection criteria, incentives, sample size etc.).			
	3. Describes if there is community involvement in certain or all phases of the study, if applicable.			
	4. Discusses ethical considerations.			
	5. Operationalizes and/or describes study variables (i.e. dependent variables, independent variables, and covariates)			
	6. Discuss how the data will be collected and describes the research methodology. Provides justification for research methodology based on existing literature.			
	7. Discusses dates of data collection and/or average interview length			
	8. Describes how data will be analyzed and statistical technique used to analyze the data.			
V. Results	1. Describes how the data will be presented in the proposed study (i.e. describe and include tables, figures and graphs that will help convey findings).			
	2. Provides a mock descriptive table that provides information about the study sample (does not have to have actual data, but should show row and column headings for data that will be included in the table)			

Outline	Required Elements	Met	Not Met	Feedback
VI. Project Activities/ Timeframe	1. Provides a detailed timeline (i.e. month by month or year by year) of specific activities of starting and implementing the study (can use bullet points or a table, activities provide information about how the study goals/objectives will be achieved)			
VII. Budget (optional)	1. Provides a budget narrative and line by line budget table that describes the funding source, salaries and roles/responsibilities for professional and on-professional personnel, costs associated with data collection and analysis, travel-related costs, marketing-related costs, special equipment, participant incentives and transportation-related costs, if applicable.			
VIII. Conclusion	1. Provides a brief summary of the proposed study and the relevance/significance of the study.			
	2. Discusses the anticipated strengths of the proposed study.			
	3. Discusses the anticipated weaknesses or limitations of the proposed study.			
	4. Discusses the implications of the potential study findings and how this evaluation is useful for policy makers or the broader community.			
	5. Discusses areas for future research.			
Organization and Mechanics	1. The paper is scholarly, of high quality and professionally prepared (i.e., it has a neat and orderly appearance, and is devoid of grammatical and spelling errors).			
References	1. APA formatting 7th edition (correct in-text citations and reference page)			
	2. At least six scholarly, peer-reviewed sources that are recent and relevant.			

Outline	Required Elements	Met	Not Met	Feedback
Appendix	1. Include additional tables and/or survey/interview tools, if needed.			
Additional Comments				

MPH Capstone Program Evaluation Rubric

This rubric has been specifically designed to assess your abilities to synthesize the following competencies (FC2, FC8, FC19, GC1) in a research proposal or research study focused on solving a public health problem

Program Evaluation Rubric (100 points)

Outline	Required Elements	Met	Not Met	Feedback
Abstract	1. Describes the public health problem being addressed, the program/policy evaluated and the main evaluation questions.			
	2. Describes the target population.			
	3. Describes the evaluation design and the data collected and used for the evaluation.			
	4. Describes when and where the evaluation will be conducted.			
	5. Describes the expected implications of the evaluation.			
	6. 150 to 250 words			
I. Section 1	1. Describes the public health problem and/or issue that the proposed program/policy will address.			
	2. Explains why the problem/issue is important to address.			
	3. Provides data that reveals the magnitude and potential health impacts of the problem or issue.			
	4. Describes the population(s) affected by the public health problem/issue.			
	5. Discusses the findings from previous evaluation literature related to the problem/issue using peer reviewed references.			
	6. Discusses the gaps or limitations in the evaluation literature and discusses how the proposed evaluation addresses the issue.			

Outline	Required Elements	Met	Not Met	Feedback
II. Section 2	1. Provides goals and objectives of the program/policy evaluated **and** the goals and objectives of the proposed evaluation (The goals and objectives of the proposed evaluation should be SMART).			
	2. Describes why the proposed evaluation is needed and how it contributes to public health.			
	3. Describes the target population of the program/policy.			
	4. Describes the social, cultural and political context/environment that exists for the health problem being evaluated and discuss how these factors may influence the proposed evaluation.			
	5. Describes the stage of the program or policy (i.e. how long has the policy/program been in place).			
	6. Describes resources that are available to support the evaluation (i.e. staff, space, technology, money etc.).			
	7. Describes products/outputs produced by the evaluation.			
	8. Discusses the proposed evaluation's intended outcomes (i.e. short-term, immediate and long-term) and describes how these intended outcomes align with the overall program's or policy's goals.			
	9. Provides a logic model that depicts how the components evaluated align with anticipated outcomes.			
III. Section 3	1. Provides specific question(s) that the proposed evaluation will answer.			

Outline	Required Elements	Met	Not Met	Feedback
	2. Describes the stakeholders and their role in the development of the evaluation proposal. Discusses how stakeholders will be engaged with the implementation of the proposed evaluation.			
	3. Describes the proposed evaluation design and explains why this design was selected. Discusses the strengths and limitations of the design.			
IV. Section 4	1. Describes how data will be collected to answer the proposed evaluation's questions and discuss the methods used to collect or acquire the data.			
	2. Discusses how the data will align with the relevant program/policy performance measures.			
	3. Describes the source of the data. If collecting data from participants, discuss how the sample will be selected. Discusses how the proposed evaluation will address ethical considerations.			
	4. Discusses how data collection instruments will be identified and tested.			
	5. Discusses how the quality and utility of the data will be determined and how the data will be stored, managed and protected.			
	6. Describes how each data collection method relates to the evaluation questions proposed.			
V. Section 5	1. Discusses the measurable or observable elements that provides information about the performance or outcomes of the program or policy being evaluated (indicators and standards). Discuss what constitutes success.			
	2. Discusses the methods used to analyze data (i.e. descriptive statistics, inferential statistics) and provide example data templates, if applicable.			

Outline	Required Elements	Met	Not Met	Feedback
	3. Discusses the stakeholders involved in drawing, interpreting and justifying conclusions from the evaluation findings. Describes how stakeholders will be involved in this process.			
VI. Section 6	1. Describes the target audience(s) for reporting evaluation findings and explains the purpose of communicating with this audience.			
	2. Discusses the most appropriate communication type for this audience and provides information about when the evaluation will be disseminated.			
VII. Section 7	1. Provides a timeline of evaluation tasks using a GANTT chart that includes information on planning and administrative tasks, data collection tasks, data analysis, report writing, information dissemination and anticipated challenges regarding the feasibility of timeline.			
VIII. Section 8	1. Provides a budget narrative and line by line budget table that describes the funding source, salaries and roles/responsibilities for professional and non-professional personnel, costs associated with data collection and analysis, travel-related costs, marketing-related costs, special equipment, participant incentives and transportation-related costs, if applicable.			
IX. Section 9	1. Provides a brief summary of the proposed evaluation and the relevance/significance of the evaluation.			
	2. Discusses the anticipated strengths of the proposed evaluation.			
	3. Discusses the anticipated weaknesses or			

Outline	Required Elements	Met	Not Met	Feedback
	limitations of the proposed evaluation.			
	4. Discusses the implications of the potential evaluation findings and how this evaluation is useful for policy makers or the broader community.			
	5. Discusses the potential implications for future research.			
Organization and Mechanics	1. The paper is scholarly, of high quality and professionally prepared (i.e., it has a neat and orderly appearance, and is devoid of grammatical and spelling errors).			
References	1. APA formatting 7th edition (correct in-text citations and reference page),			
	2. At least six scholarly, peer-reviewed sources that are recent and relevant.			
Appendix	1. Include additional tables and/or survey/interview tools, if needed.			
Additional Comments				