

COLORADO SCHOOL OF PUBLIC HEALTH CAPSTONE EXPERIENCE

CAPSTONE EXPERIENCE

The Capstone experience includes a Capstone project or research paper, classwork that builds presentation skills and requires reflection on competencies acquired throughout the MPH program, and oral and poster presentations at the Public Health Forum.

Goal of Capstone Experience

Goal: The goal of the Capstone experience for MPH students is to connect all aspects of the curriculum, including seminars, lectures, course work, independent studies, projects and direct experiences to establish an understanding, appreciation and working knowledge of public health practice and, specifically, how their chosen areas of concentration enhance public health practice in Colorado, the nation and the world.

Rationale: Students may see courses or other structured learning opportunities conducted in the confines of a specific syllabus and a short dedicated time frame as independent sessions and may store away the skill sets acquired during these structured sessions only to use them again under limited circumstances. However, it is the intent of the MPH program that each course and skill set be presented and practiced to complement and enhance others and, consequently, not stand alone. Individual courses are necessary to establish basic knowledge and skills in small enough bites that they can be absorbed and practiced, often in isolation. While the practicum provides an opportunity to observe the broad spectrum of public health knowledge and skills in practice, the Capstone project provides the opportunity for the student to link the theory, philosophy and knowledge from courses with real-life observations from the practicum to develop a program, policy or other concrete product relevant to public health in the student's area of interest and future practice.

Guiding/Core Values

1. The Capstone project (or research paper) should reflect the student's broad knowledge of the public health system and the special role that the selected concentration plays in accomplishing the ideals and objectives of public health practitioners.
2. The Capstone project (or research paper) must relate the acquired skills from the specific MPH concentration to the overall goals of public health practice.
3. The Capstone class, which incorporates presentation skills, should correlate the specific core learning objectives of the MPH degree with the final project or paper and the student's vocational objectives.
4. As the core MPH and concentration-specific courses in the MPH program provide input and guidance for selecting and conducting a successful MPH practicum, the practicum experience will generally provide the idea and issues for the Capstone project. Since students invest 120 hours into the practicum, we should capitalize on this experience and gain efficiency for the faculty and student by using the practicum to launch the Capstone experience.
5. A student may choose to do a Capstone project or paper that does not relate to the practicum if another proposed project better meets relevant interests and career goals.

6. In most cases, students will choose a Capstone project. In order to adequately gauge the success of the project in fulfilling the goals of the Capstone project and ultimately prepare students for careers in public health, the student's faculty advisor (and practice preceptor if applicable) will review and approve the project proposal before enrollment in the Capstone course and will assist Capstone faculty with assessment of the completed project.
7. Some students may choose to complete a research paper rather than a project. Students should declare the desire to engage in a research paper option as early as possible, with approval of the concentration director and assignment of a faculty mentor and /or practice preceptor. This option requires three research paper credits (PUBH 6651), two of which count as general (not concentration) electives and one that replaces one of the two PUBH 6955 credits.
8. While the course is planned to be completed in one semester, the course director(s) can assign an Incomplete grade and allow additional time if needed, up to one academic year. Students should note that additional registration (PUBH 6956 Continuing Studies), with credits not applicable toward graduation, will be required if they are not enrolled for any other credits during the completion semester(s).

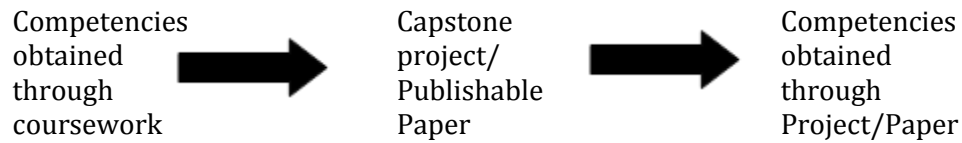
Capstone Experience Objectives:

1. To develop products that can be added to the student's portfolio, documenting her/his reasoning, decision-making, analytical and authorship skills as they relate to linking important public health projects to the MPH learning objectives and competencies. Products may include a Capstone Project or a Research Paper.
2. To provide a collaborative environment for students from all concentrations to review and discuss the core competencies of the MPH curriculum in relationship to their practice related experiences.
3. To provide an independent but guided opportunity for the student to practice and document the role that their specific concentration skills play in public health practice.
4. To develop awareness of personal strengths and competencies as a public health professional.
5. To improve skills related to presenting project results in oral and written formats.

Critical success factors: a student will have achieved the goals of the Capstone experience if they

1. contribute to other students' knowledge, through classroom participation, about their concentration's role in improving public health in the areas public health education, research and community practice.
2. bring to the classroom sessions specific examples, interesting problems and general public health issues for classroom discussion while developing one of these problems/issues for final presentation, documentation and final submission for graduation.
3. deliver oral and poster results of Capstone project at Public Health Forum
4. successfully complete a final paper that 1) summarizes the Capstone experience (rationale, background, methods, results and conclusion) and 2) reflectively describes the progression from competencies gained from coursework and brought to the

Capstone experience, to the increase in and integration of competencies that the MPH graduate will carry into practice.



MPH COMPETENCIES

MPH competencies will vary according to the project and the area of concentration. Students should consult with Concentration Directors in their areas and refer to the Practicum Resource Guide <http://www.ucdenver.edu/academics/colleges/PublicHealth/Academics/degreesandprograms/Documents/Competencies%20for%20all%20MPH%20Graduates.pdf> for MPH-general and concentration-specific competencies.

Completing the Capstone activities will specifically address the following Core Cross-Cutting Competencies:

- CR-CC 1 Define, assess and report on the health status of populations, determinants of health and illness, and factors contributing to health promotion and disease prevention.
- CR-CC 2 Determine uses and limitations of quantitative and qualitative methods in research and public health practice.
- CR-CC 3 Communicate effectively both in writing and orally with policy makers, professionals, and the public.
- CR-CC 4 Identify and address ethical issues that arise in public health practice and research.
- CR-CC 5 Identify, retrieve, appraise, and apply scientific evidence relevant in the practice of public health.
- CR-CC 6 Understand and utilize leadership, team building, negotiation, and conflict resolution skills to collaborate and build partnerships for the purpose of improving the public's health.
- CR-CC 7 Identify organizational decision-making structures, stakeholders, style and processes.
- CR-CC 8 Define a public health problem and specify an analytic approach.
- CR-CC 11 Describe steps and strategies to consider when working collaboratively in a culturally-sensitive manner with diverse groups to promote the health of communities.
- CR-CC 13 Integrate professional ethics, principles of cultural competence, and accountability in all professional conduct.

CAPSTONE COURSE STRUCTURE

Capstone Course Content:

The Capstone course has three major components:

- 1) completion of a Capstone project or research paper
- 2) a set of Capstone activities
- 3) class participation

The Capstone activities include both oral and poster presentations with an abstract at the Public Health Forum, and a report that describes the Master's Project and integrates the project or paper experience with public health competencies.

Course Structure

For most students, the Capstone Course includes 1) completion of an independent Capstone Project in which the student completes the project and demonstrates public health competencies and 2) a set of Capstone activities that include a final presentation and a reflective report of the project. Most commonly, students will take the course for 2 credits and will complete both components. Exceptions include students who have fulfilled the MPH requirement for the first component through a publishable research paper.

Students who opt to write a research paper rather than complete a Capstone Project will receive one (1) credit for the Capstone activities and up to three (3) credits for the Research Paper (PUBH 6651), two (2) of which will count as non-concentration elective credits. Please see Capstone faculty for specific requirements.

Class time will include coaching support to complete Projects, instruction concerning effective presentations, and opportunities to practice presentations and reflect on competencies gained throughout the MPH program. Course expectations include regular class attendance and supportive, constructive feedback to other students' efforts. Attendance and participation will contribute to the course grade.

SELECTING A CAPSTONE PROJECT

While occasionally a student may choose a more structured activity, namely a research paper, it is highly recommended that the student identify a project that has a scope of work that can be completed in one semester (16 weeks and at least 60 hours in addition to the practicum).

The student needs to select a project BEFORE registering for the course. The student, in consultation with faculty advisor (and preceptor if applicable), will define a project and prepare a project summary that describes the question of interest, the methods to be used, the type of product and the anticipated timeline. The Capstone course director will assign a registration number when the student presents a copy of the project summary signed by advisor and preceptor.

In order to optimize the student's public health experience in the MPH program, it is strongly recommended that the project be related to, emanate from or culminate the efforts and work of the practicum experience. Capstone faculty will meet with Practicum students at the Practicum mid-point to facilitate project development.

Projects should be specific to the student's MPH concentration area, but they may take on

many different structures and formats based on the specific experiences. Completed projects should demonstrate acquisition of MPH and concentration-specific competencies, generally including analytic skills. A tangible product is expected at the end of the Capstone experience.

Examples of projects include but are not limited to the following:

Grant Development

A student may choose to develop a grant proposal that would include all elements of a scientific research plan: research question, hypothesis, specific aims, literature review, study design, analysis plan, significance, and limitations. The topic of the grant should be one with public health significance.

Data analysis and report

A student may choose to perform a report of data addressing a public health problem. The analysis might include development of the question and study design, developing the analysis plan and performing the analysis, and/or interpretation of the data analysis.

Capacity building project

A student may develop and/or a capacity building project that assists organization and institutional development in order to **plan, implement, monitor, and evaluate** prevention programs and services. The final product could be a report providing direction for future capacity building, or an evaluation of current capacity building activities.

Epidemiologic Investigation

A student may choose to develop and implement an epidemiologic project. This may include the development of the study design, collection of data, and final analysis. The types of projects may include but are not limited to surveillance reports, outbreak investigations, and identification of risk factors related to disease development or worsening.

Program Planning, Implementation and Evaluation

A program planning Capstone might involve the development of a plan to implement a public health program, the implementation of the plan, or the evaluation of the program. The project could address critical issues such as management, fiscal, ethical and logistical issues, or the evaluation/monitoring of an existing public health program, such as process evaluation, monitoring of outputs and outcomes, impact assessment, and/or cost analysis.

Survey Development and Implementation

The Capstone project may include the creation and/or implementation of a survey in the public health community, and might include the development of the analysis plan, and the analysis and interpretation of the results. The survey would address issues of public health importance.

Community assessment

A student may choose to complete a community assessment to characterize the social, economic, and environmental status of a community. The project might include a description of the local and national data resources, development of tools to collect information from the community, implementing focus groups and key-informant interviews, and analysis and synthesis of data collected.

Health policy statement/advocacy

A Capstone project could involve analysis of the public health implications of a current or proposed health policy or advocacy plan. The project could include perspectives on economics and financing, need and demand, politics/ethics/law, or quality/effectiveness.

GENERAL FACULTY RESPONSIBILITIES

- Faculty Advisors
 - Student's faculty advisor will provide input and approve project/report topic and scope of work, in conjunction with Capstone Faculty as needed.
 - Student will work with Practicum Director and preceptor, if relevant, to document practice institution's expectations and responsibilities
 - Faculty advisor, and preceptor if relevant, has the responsibility to approve the Project Summary. The faculty advisor should ensure that the student is exposed to and understands the fundamentals and foundations of the field of public health. The selection of an adequate project should attempt to fill gaps in the student's education that produces a better understanding of public health goals. Faculty Advisor has responsibility to sign Project Summary
- CSPH Faculty Overall will provide technical support as needed and requested. Faculty advisors and Capstone Faculty will serve as coaches and help students to identify resources to provide technical support. The resources may be CSPH faculty, adjunct faculty, or community practitioners. Technical support might include statistical advice, review of survey designs, assistance with qualitative analysis, or subject-specific knowledge.