Master’s Project Guidelines
[Revised, effective Fall 2011]¹

¹Note: students enrolled prior to Fall 2011 may choose to follow either set of guidelines.
The master’s project (HSCI 897)

Students in the Master of Public Health program (all streams) who are electing to submit a master’s project in partial satisfaction of degree requirements must enroll in HSCI 897, “Master’s Project”. The master’s project is meant to be a culminating experience where students synthesize and integrate the knowledge they have acquired in coursework and other learning experiences throughout the Program. It is expected that in the project students will demonstrate their mastery of a body of knowledge related to their MPH concentration and, of particular importance, demonstrate an ability to apply theory and principles to some aspect of professional practice.

The master’s Project meets the requirements for a “culminating experience” established by our accrediting authority, the Council on Education for Public Health. The culminating experience is defined as:

one that requires a student to synthesize and integrate knowledge acquired in coursework and other learning experiences and to apply theory and principles in a situation that approximates some aspect of professional practice. It must be used as a means by which faculty judge whether the student has mastered the body of knowledge and can demonstrate proficiency in the required competencies (PHP Program Criteria, CEPH, http://www.ceph.org/)

In FHS, the culminating experience consists of the mentored preparation of a scholarly paper (hereafter, the “capstone paper”), and an oral presentation of this paper before the FHS community of faculty, staff, and students. The capstone paper will generally involve a critical investigation of a public health issue or problem based on original analysis. It should approximate what would be required of a public health scientist engaged in professional practice. The written product of this effort is a high quality scholarly paper.

What are the possible forms that the capstone paper can take?

The master’s paper can take many forms including one of the designs below, an expansion of a course project, or an internship or practicum opportunity. The overarching principle for determining suitability of a capstone project is whether it provides students the opportunity to apply the skills and competencies acquired in the MPH program to a problem likely to be encountered in public health practice. The topic and format of the capstone project is flexible and is developed through discussions between the student and supervisor. Some examples of formats or designs for the capstone paper include:

Critical Literature Review
The capstone paper would be a critical, practice-focused analysis of an important public health problem through a survey of current literature on the topic. The project would include
sections that clearly describe the problem, assess the problem and its magnitude, evaluate its causes and determinants, and discuss prevention and intervention strategies.

**Program Plan**
The capstone paper would involve the development of a plan to implement a public health program within a defined population or community. The paper will develop the current state of knowledge about the problem to be addressed, present an implementation methodology, and identify a framework for monitoring and evaluation. The paper would also address issues such as management, fiscal, ethical and logistical issues.

**Program Evaluation**
The capstone paper would involve the evaluation/monitoring of an existing public health program, such as process evaluation, monitoring of outputs and outcomes, impact assessment, and/or cost analysis. Students often undertake such evaluation projects in the context of their practicum placements. *These may be developed into a capstone paper, provided that the student expands their analysis to address broader significance of their work* (i.e., beyond the particular organization or program they evaluated as part of the practicum).

**Policy Analysis**
The capstone paper would involve analysis of the public health implications of a current or proposed policy or law. The paper might include perspectives on economics and financing, need and demand, politics/ethics/law, or quality/effectiveness.

**Research Proposal**
The capstone paper would simulate a grant proposal or research plan. The paper would include a clear statement of the research question, the specific aims of the proposal, review of literature, study design, methods of analysis, implications and significance of the work. The research question must be one that is encountered in professional work, such as the evaluation of a public health intervention.

**Research Report**
The capstone paper could involve the collection, analysis, and/or interpretation of data to address a public health problem. The paper should include sections on the research question, study design, data collection procedures, data analysis, interpretation, and significance of findings.

*Secondary Data Analysis*
Typically the capstone research paper is in the form of a secondary data analysis, using an existing data set. Please note that the appropriate ethics approval may need to be obtained for any paper that uses data gathered from human subjects. Even in cases where the data is de-identified, a determination should be sought from the SFU ethics board.
Primary Data Analysis
Work for the MPH capstone may also involve the primary collection and analysis of data. Data collection for the capstone is usually in the context of an ongoing study, but it is also possible (although not recommended) for MPH students to initiate an original study under the guidance of a faculty member. In the latter case, the student should allow substantial lead time for research planning and ethics approval.

In terms of assessment, the paper will be evaluated on the basis of how well it demonstrates the student’s ability to:

- succinctly define a public health issue or problem;
- discuss the public health problem within the context of public health practice and/or policy in Canada or globally;
- critically review the research literature of relevance to the topic;
- develop a persuasive, evidence-based argument;
- where and when appropriate, describe the methodology employed or proposed (e.g., data sources; data or policy analysis, case method analysis, program evaluation, etc);
- explain findings in a style appropriate for public health practice or scholarly publication;
- analyze and interpret findings and make appropriate conclusions and recommendations for policy/practice.

Relationship of the capstone paper to the practicum project

On return from their practicum students are required to develop and present a poster that reflects their practicum experience. On completion of the poster presentation, the student will get credit (a grade of complete or incomplete) for the practicum. The practicum poster and related written materials that a student may prepare as part of their practicum may not be submitted in satisfaction of the capstone paper requirement. However, a capstone paper may include and refer to data, information, case study, and other relevant practice-based information that the student develops in the context of their practicum.

The capstone project requires a more detailed and extensive analysis than a term paper and is not merely a literature review, needs assessment, or chronology of the work in the practicum.

The paper should represent an effort to synthesize or integrate across multiple public health disciplines. The paper should be written in a scholarly style with correct referencing. The length of the manuscript text (excluding references and tables/figures) should be approximately 25-30 pages,
double-spaced, or 5500-7000 words, excluding references, figures, tables, and appendices.

Selecting the supervisory committee

The capstone paper is considered in the SFU Graduate Studies terminology to be an “extended essay.” Acceptance of the paper in partial satisfaction of degree requirements requires the approval of two faculty: the student’s supervisor and one additional reader. Typically the second reader is another SFU faculty member, but arrangements can be made to have committee members from other universities or from a private research institution. If the latter, a CV must accompany the supervisory committee form to the office of the Dean of Graduate Studies. See the Graduate Program Coordinator or Assistant for help with this form.

The student and supervisor work together to identify an appropriate second reader. The supervisor is responsible for issuing the invitation to the second reader.

The capstone paper is developed with the student’s supervisor. Once a draft of the paper has been accepted by the student’s supervisor as being ready for oral presentation (see “readiness to present” form), the paper is then sent to the second reader for their review. Normally this should occur two weeks before the oral presentation. The second reader reserves their comments and questions for the oral presentation, and should not work with the students on revisions to the paper until after the oral presentation.

Subsequent to the oral presentation, the student, the supervisor, and the second reader will discuss the paper and agree on what, if any, revisions are required to meet the expectations described above. Once these revisions are completed to the satisfaction of the readers, they will sign the cover sheet of the paper, and sign the “Recommendation for Award of Degree” form required by SFU-Graduate Studies. Once the signatures are obtained, the capstone paper is deemed to have been satisfactorily completed.

On the successful completion of the capstone paper, students will receive a grade of “Complete” for HSCI 897. This normally represents the completion of the course work for the Master of Public Health degree, presuming that all other requirements (course units and the practicum) have been met. If this is the case, students will be “Recommended for the Award of Degree” to the Dean of Graduate Studies, and eligible for convocation.

The oral presentation

At FHS we require all MPH candidates to formally present their capstone paper in a public venue. Students work with the Graduate Program Staff and their supervisor to identify an appropriate time/date for the presentation. Invitations to attend capstone presentations will be issued to all FHS faculty and students.

The presentation of the capstone paper will be about 20 minutes in length, and is intended to be presented in a format similar to that found in most professional conferences. In the presentation
the student should clearly state their problem, describe their analysis of that problem (see “forms of the capstone paper” above), present a conclusion, and identify practice-based implications and/or recommendations. An appropriate number of slides (10-15) should accompany the presentation.

The formal presentation will be followed by a question-and-answer period. The supervisor and second reader will be offered the first opportunity to ask questions, followed by an invitation to others in the audience.

Oral presentations will be formally evaluated by the supervisor and the second reader. While the student will not be “passed” or “failed” on the basis of their presentation, the supervisory committee may find that as a result of the presentation and questions that additional development of the capstone paper is required.

Preparation of the capstone paper proposal or outline

The capstone paper is meant to be a mentored experience. Students should expect to work closely with their supervisor as they write the paper. The supervisor will review and make comments on the outline/proposal to help guide the student.

Students should submit a proposal or detailed outline of their paper to their supervisor BEFORE they begin their work. Once finalized, the proposal is signed by the supervisor and the student and added to the student’s file. The proposal should contain the following information:

Title page
- Student’s name
- Name of the supervisor

Background and rationale
- Introduction to the public health problem
- Discussion of the problem in the context of the theory, concepts, and methods of relevant public health disciplines.
- Significance for public health practice/policy

Purpose/argument
- One or, at most, two primary research questions, topics, and/or hypotheses as appropriate
- Argument or central purpose/thesis of the paper

Evidence to be used to develop the paper
- Data sources, as appropriate
- Methods, as appropriate
- Analysis or approach
- Ethical review (if appropriate)
Timeline
- Include proposed dates of drafts/sections of paper as well as projected oral presentation date

Preparing the capstone paper

The capstone paper must be presented in a form that is amenable to examination and review. This means that documentation of the research or inquiry process must be provided in a form that allows others to follow the line of reasoning and to evaluate the credibility of the work.

At minimum, the paper must meet the criteria of content and presentation that are as rigorous as those applied to work done in a professional public health setting. Some projects can be written in a publishable style appropriate to the discipline. Students should consult with their supervisor about writing style early on in the process. However, if the paper is to be submitted to a peer-reviewed scientific journal, the student and supervisory committee may agree that higher standards are appropriate.

Although the format and topics included in a capstone paper will vary according to the form the paper takes (see above), we suggest the following as a minimal outline:

1) Title page and abstract
2) Introduction to the public health problem: i.e. “why is this a public health problem?”
3) Purpose of the paper, clear statement of the topic or problem
4) Critical review of relevant literature
5) Methods as appropriate to the form of the paper
6) Presentation and discussion of results: findings, case studies, thematic analyses, ethnographic materials, etc. (to include tables, figures, and/or exhibits)
7) Discussion of main results, including a statement of limitations as appropriate
8) Implications and recommendations for public health practice and/or policy
9) Critical reflection of the student’s role as a public health practitioner in relation to the problem, and if appropriate, to the agencies addressing the issue or problem.
10) References should be completed in American Psychological Association (APA) or Canadian Journal of Public Health (CJPH) style. **However**, if a student and their committee deem the paper worth of submission for publication, the referencing system used for the journal to which the student intends to submit may be used.

Depending on the nature of the project and intended purpose of the report, an alternative structure and sections of the paper may be warranted (e.g., in the case of a critical essay or commentary). If so, this should be discussed with and agreed to by the supervisor.

In the discussion section students are expected to integrate their findings with relevant literature, discuss the strengths and limitations of methods/approach/analysis and consider the implications of their work for practice.

A student’s critical reflection of their role as a public health practitioner could include answers to the following: What you learned about yourself in the process of doing the work? How did your research/practice influence others? What would you do differently?
Although the capstone paper will no longer be submitted to the SFU library, the paper should be presented and organized in a style that is in accordance with library requirements. Project/thesis templates, are available from the Library web site: http://www.lib.sfu.ca/researchhelp/writing/theses templates/msword_pc.htm. Please note that this template is set up for theses and so not all sections/headings may be relevant to the capstone paper.

**Submission for publication to the FHS website:**

Once a capstone paper is completed it will be published to the FHS website where it will be organized into a searchable database. Students should thus provide a final PDF copy to the Graduate Program Assistant.

Under some circumstances, for example where the capstone project is using data provided by another organization which does not permit publication, the capstone project will not be published to the web.

Regardless of the above, all capstone papers must be provided in a bound, hard-copy, to the Graduate Program Assistant, where it will be maintained in FHS offices.

**Preparing to present and complete:**

You must be registered in the Master’s project or the project completion course in the semester you plan to present and submit your capstone paper. Master’s project students register in HSCI 897 (Master’s Project) or HSCI 895 (Project completion). See the guidelines above regarding presentation of the capstone paper.

Students should plan their schedules so that their supervisor has sufficient time to read and approve a draft paper prior to the oral presentation. The second reader must also be given time to read the paper prior to the presentation. Two weeks is advised.

**Recommendation for the award of degree**

Before the recommendation for award of degree is approved, the Coordinator, Graduate Programs checks course requirements against the student’s record. The recommendation for the award of degree is then approved by the Director, Graduate Programs. Following approval the recommendation for award of the degree is forwarded to the Office of the Dean of Graduate Studies who then seeks degree approval from Senate.

Note that students are also required to complete an exit survey prior to graduation. This survey, which is online, helps us to evaluate and improve our programs.