

**CUNY GRADUATE SCHOOL OF PUBLIC HEALTH  
AND HEALTH POLICY**

**The Public Health Culminating Experience**

**2015-2016**

**HANDBOOK**

**for the**

**Capstone Project**

**[www.sph.cuny.edu](http://www.sph.cuny.edu)**

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## Part I: The Culminating Experience

### Introduction

This handbook was developed for CUNY SPH students who are completing one of the following degree programs:

Specialization	Degree
Community-based Public Health & Health Equity	MPH
Community Health Education	MPH
Environmental & Occupational Health Sciences	MPH
Environmental & Occupational Health Sciences	MS
Epidemiology and Biostatistics	MPH
General Public Health	MPH
Health Care Policy & Administration	MPH
Health Policy & Management	MPH
Public Health Geographic Information Sciences	MPH
Public Health Nutrition	MPH

Although the capstone courses have different names and numbers, they share the same requirements for three major deliverables: (1) the writing assignment, (2) the presentation, and (3) the reflection. This handbook describe in depth each of these three major assignments and their various components. Guidelines, resources, and other helpful information are also presented. Capstone faculty must approve of the deliverables so students are advised to regularly consult capstone faculty.

<p><u>Brooklyn College</u></p>	<p><b>HNSC 7950X: Capstone Project</b> This course consists of a structured seminar aimed at allowing students to apply experiences gained during their graduate program and synthesize that knowledge and experience in the form of a major writing project. It is expected that students use a combination of synthesized evidence, theoretical models, and empirical research to answer a public health research question or practice problem using interdisciplinary perspectives.</p> <p><b>HNSC 7999X: Thesis Research</b> Research for master's thesis supervised by a faculty member. Credit is not earned until the thesis is accepted. Students register for this course only once.</p> <p><b>HNSC 7935X: Research Seminar II (taken with HNSC 7999X)</b> Examination of quantitative and qualitative techniques appropriate for research in the health sciences. Class discussions of each student's efforts in developing a master's thesis.</p>
<p><u>Hunter College</u></p>	<p><b>PH 73800: Capstone Project</b> This course consists of a structured seminar aimed at allowing students to apply experiences gained during their graduate program and synthesize that knowledge and experience in the form of a major writing project. It is expected that students use a combination of synthesized evidence, theoretical models, and empirical research to answer a public health research question or practice problem using interdisciplinary perspectives.</p>

<u>Lehman College</u>	<p><b>PHE 790: Capstone Project (for CBPHHE students)</b>  This course consists of a structured seminar aimed at allowing students to apply experiences gained during their graduate program and synthesize that knowledge and experience in the form of a major writing project. It is expected that students use a combination of synthesized evidence, theoretical models, and empirical research to answer a public health research question or practice problem using interdisciplinary perspectives.</p> <p><b>PHE 791: Workshop in GISc Research for Public Health (for GISc students)</b>  An advanced examination of mapping and of new computer-aided technologies in the natural and social sciences, including research design and methodology and designing and conducting an independent GIS public health research project, conforming to generally acceptable professional geographical practices and techniques, under the supervision of faculty.</p>
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*Core Competencies*

Through the three major assignments of the capstone course, students demonstrate they have achieved the core public health competencies developed by the CUNY School of Public Health.

By the time you graduate, you are expected to be able to:

1. Apply the public health core functions of assessment, policy development and assurance.
2. Apply theories, concepts, models and methods to the design of public health research, policy and practice
3. Adhere to ethical and social justice principles and standards
4. Interpret and analyze public health literature and apply evidence-based research
5. Apply basic statistical and informatics techniques
6. Communicate public health information through oral, written, digital and visual presentation
7. Explain how social, behavioral, biomedical and environmental determinants affect population health
8. Design and evaluate interventions to prevent or control public health problems
9. Collect, analyze and interpret public health data
10. Engage and collaborate with diverse groups
11. Describe the legal foundations of the U.S. public health system and its interrelationships with other systems including health care, education and environmental protection
12. Apply a framework for the planning, implementation and evaluation of public health programs, policies and interventions
13. Explain the context of public and private health-care systems in which health care and public health policy are made and healthcare is delivered

*Evaluation and Grading*

Capstone faculty from the student’s specialization has primary responsibility for guiding the student through the Capstone Project while the Faculty Mentor has primary responsibility for guiding the student through Master’s Thesis.

The Capstone faculty member from the student’s specialization assigns a grade to the written work, the portfolio, and other applicable assignments such as Blackboard posts or attendance. The presentation is assigned an average grade based on all faculty member evaluations. The Capstone faculty member from the student’s specialization assigns the final grade for the course, as well. The minimum passing grade for the capstone course is “B.”

Capstone Project	Master’s Thesis	Presentation	Portfolio
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	Hunter, Lehman, and Brooklyn	Brooklyn & Hunter	Hunter, Brooklyn & Lehman	Hunter and Brooklyn <sup>1</sup>
1 <sup>st</sup> reader	Capstone faculty member in student's specialization	Faculty mentor	All capstone faculty members	Capstone faculty member in student's specialization
2 <sup>nd</sup> reader	Non-capstone faculty member in any specialization	Capstone faculty member in student's specialization		

	Grade Weight by Campus		
	Brooklyn	Hunter	Lehman
<b>Assignment</b>			
Major writing assignment	70%	75%	60%
Oral or poster presentation of the major writing project	15%	15%	40%
Portfolio (required in order to earn a grade for the course)	5%	5%	
Participation	5%	5%	
Blackboard Posts	5%		
<i>Total</i>	100%	100%	100%

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<sup>1</sup> Lehman College requires a Fieldwork reflection piece in place of a portfolio, which is graded as part of the Supervised Fieldwork course.

## Part II: Writing Assignment

Students complete either a Capstone Project or a Master's Thesis. Both are described below:

### ***Master's Thesis***

A master's thesis refers to a paper that reports on original research, with the general expectation that the finished product is of publishable quality, meets professional standards, and is useful to some external audience (e.g. journal readers, practitioners, advocates, other researchers).

At Hunter, capstone students with a GPA  $\geq 3.8$  may opt to write a master's thesis in lieu of a capstone paper, with formal approval of the academic faculty advisor and a mentor. At Brooklyn College, any capstone student may elect to write a master's thesis as their capstone paper. Students are advised to make this decision one year before they expect to graduate.

Eligible students who choose the thesis must submit a detailed proposal to the capstone faculty member by the end of the semester preceding the semester in which the student expects to enroll in the capstone course (that is, one semester in advance). The proposal should be 2 to 4 single-spaced pages, it should outline and describe the project, and include the names of the master's thesis mentor and one or more additional reviewers. If the thesis falls in the category of research report, the plan must include background and significance, hypothesis, data and methods. The capstone faculty member reviews the plan, assesses whether the proposal is expected to be of publishable quality, and approves/disapproves it.

### Format

Students writing a master's thesis must follow the guidelines for the particular journal to which they expect to submit the manuscript. Every journal has an online Information for Authors section that describes in detail requirements for style of the main text, length of the manuscript, references and artwork. The suggested length of the thesis option at Brooklyn is 40 to 60 double-spaced pages.

### Publication

Students are strongly encouraged to submit their master's thesis for publication. Advisors can be co-authors on the paper, but generally, the student is expected to be the first author. Student and advisor should discuss and agree on the publication plan, co-authorship possibility, and order of co-authors before submission of the master's thesis proposal, and should ensure that the final authorship follows IJCME guidelines. No matter the type of major written work the student chooses to do, a summary of the work will be presented in a lecture format or as poster. Part III of this handbook provides the specifics on the two means of communicating their work to others.

### ***Capstone Project***

There are two types of capstone projects students may choose: a practice project/essay that is based on work conducted during the fieldwork experience, and a research project/essay that is based on original research and data analysis. MPH students in the Maternal, Child, Reproductive, and Sexual Health (MCRSH) concentration are required to conduct their fieldwork and write their capstone paper on a topic in MCRSH that is relevant to their area of specialization.

**Practice Project/Essay:** Students conducting a practice project identify a problem to be studied, systematically review the literature associated with the problem, plan, implement, and evaluate a program or intervention to ameliorate the problem, discuss the results or outcomes of the project, and present conclusions and recommendations based on the project.

**Research Project Report:** Students conducting a research project identify a problem to be studied, systematically review the literature associated with the problem, collect primary or secondary data (see below) about the problem (quantitative and/or qualitative), analyze the data in order to either answer research questions or support or refute a pre-selected hypothesis, discuss the results, present conclusions, and make appropriate recommendations based on the study, which might include the need for further research. GISc students and MS-EOHS students must select this option.

- *Primary data* collection and analysis for capstone is usually in the context of an ongoing study, but it is also possible for highly-motivated students to initiate an original study. In the latter case, the student must allow substantial lead time for research planning and Institutional Review Board (IRB) approval
- *Secondary data* analysis is research typically using an existing data set, or exploiting published data. The appropriate IRB approval may need to be obtained for any project that uses data gathered from human subjects. Even in cases where the data is de-identified, a *determination* must be sought from the IRB office

**With the permission of capstone faculty, students may also select to write one of the following:**

- **Policy analysis**—Students conducting a policy analysis would analyze the public health implications of a current or proposed policy. The project could include perspectives on economics and financing, need and demand, politics/ethics/law, or quality/effectiveness.
- **Evaluation of an existing program** – Students evaluating an existing program will provide a description of the program, explain the purpose of the evaluation, describe the methods and procedures used to evaluate the program, identify the logistics of carrying out the evaluation, and present the results of the evaluation.
- **Written plan for a program** – Students creating a plan for a new program will conduct a needs assessment, create a program mission, goals, and objectives, develop an intervention, describe how the program will be implemented, and explain how the program would be evaluated.
- **Grant proposal** – Students writing a grant proposal for a public health initiative will identify the problem for which the grant would be used, explain the significance, list the hypotheses/questions to be answered, review the literature associated with the problem, create goals and objectives, methods, create a timeline and budget, and explain how the intervention would be evaluated.
- **Manual** – Students creating a manual for a public health initiative will demonstrate the need for the manual, create goals and objectives for the manual, create a table of contents, develop the content for the manual, describe how the manual will be used, and explain how the manual would be evaluated.
- **Systematic review of the literature** – Students conducting a systematic review will define a study question, create a strategy to identify appropriate literature, read and review the literature, extract the appropriate information from the literature, summarize the findings, present conclusions, and make recommendations based on the systematic review. Students selecting this option must follow standard guidelines for conducting a review, such as STROBE or PRISMA. For more information on this option, refer to the [AJPH Author Instructions](#).

**Format and Structure of the Capstone Paper**

The paper will take the form of a peer-reviewed journal article, such as articles that appear in the Research and Practice section of the *American Journal of Public Health (AJPH)*. The main text of the capstone paper will be 3000 to 5000 words in length, excluding abstract, table of contents, references, tables, and figures. There will be a title page, structured abstract and table of contents, followed by the main text, references and then tables and figures (one to a page). If there is an appendix, it is placed at the end. Grammar, quality of writing, illustrations and overall presentation are considered when the paper is being evaluated. The paper follows the outline below.

1. Structured abstract (180 words)
2. Table of contents
3. Introduction & literature review/problem statement/background (750 - 1250)
4. Agency background, purpose and project rationale (450-750)
5. Methods/Project description/process (750-1250)
6. Results/Project outcomes (450)
7. Discussion, limitations, recommendations (450-750)
8. Conclusions (150)
9. References
10. Tables, graphs, figures, etc.
11. Appendices

**Title page:** Include title of the document, student’s name, CUNYFirst number, email address, name of capstone advisor, date of submission, abstract word count, and text word count. Do not use a large format font or other decorations on the title page as they may interfere with entering comments in track changes.

**Structured abstract:** Summary of key points. The abstract should briefly describe: 1) the background and focus of the paper; 2) the methods utilized; 3) a summary of the results; 4) conclusions. Instructions for developing a structure abstract. Instructions for developing a structured abstract are available from the National Library of Medicine via [this link](#).

**Table of Contents:** Insert electronically. Instructions for creating an electronic table of contents can be found via [this link](#).

**Introduction:** Background including significance of public health issue. This section relates to the background of the paper, including a statement of the problem, and the specific aims of the study. The [literature review](#) section should contain scientific evidence from a variety of text and electronic sources including limitations of the research findings; relevant and appropriate information sources; and interpreted scientific information. Even if it is innovative, the paper should be presented so that it is related to an existing body of knowledge or work on the subject with review of the literature, and identification of the gap to be addressed by this paper. [Statement of question you will address](#), which should integrate an understanding of the health status of the population; determinants of health and illness; factors contributing to health promotion; influencers of the use of health services; and/or policy and apply that understanding to the issue of interest. Variables relevant to public health are selected and defined. The research question should be clearly, concisely, and coherently stated at the end of the introduction.

**Methods & materials:** For research papers, a clear description of the methods or methodological model and theory (where applicable) that another public health professional might be able to use to replicate the findings. Any previously published procedures should be referenced in the reference section.

For practice papers, present the design of the project: Describe the project procedure in the sequence in which the project segments will be performed. Provide a [Gantt chart](#). Describe each method or approach to be utilized, the population participating in the project, the project site. Provide information about the relevant institutional resources available to help complete your project. Provide a [logic model](#). At a minimum, a practice project will require IRB determination, which should be mentioned in the Methods section.

IRB: Research projects will likely require IRB clearance. If your project is based on some aspect of your fieldwork experience, you should have IRB clearance already. In that case, you do not need additional clearance. However, if your capstone paper is not related to your fieldwork, IRB clearance is required for capstone. In either case, attach a copy of any IRB application and/or IRB determination letter with your portfolio (discussed in Part IV).

**Results:** Present the collected data and analysis. Alternatively, utilize the relevant methodological model (and theory where applicable) to present and describe the finding of the assessment, or the plan for the service program, education campaign, or program evaluation.

**Discussion/Future directions/Policy recommendation:** Provide conclusions drawn from the data and analysis. The discussion should reflect the project findings, including unexpected results, and relate these to existing knowledge on the topic. Any difficulties encountered or recommendations for further study should also be included. If the student has completed an assessment, education or program plan, or evaluation project, he/she should highlight and summarize the significant issues. Limitations of the research or project should be addressed in this section. A brief presentation of next steps/future directions is appropriate and encouraged. The core competencies of public health practice should be addressed.

**Conclusions and recommendations:** Conclusions should be based on evidence and relevance to the core competencies of public health practice. The relevance of findings to public health practice and any limitations of the study/project should be discussed. Recommendations for program improvement, policy changes, and future study should be made as appropriate.

**References:** Every statement of fact in the text should be referenced and cited in the bibliography. Pertinent journal articles and reference texts should be cited. Unless otherwise instructed, use the *AJPH* style for all capstone papers, which is the same style used by the *Journal of the American Medical Association (JAMA)*. Refer to the *AMA Manual of Style, 10<sup>th</sup> edition*.

**Tables/Figures:** Insert tables, illustrations or charts at the end of the text (after references). Do not insert them in the body of the text. (Inserting and attempting to place these items in Word is time-consuming and can cause formatting problems. Most journals require these items to be sent separately from the text. Typesetters at the journal integrate these items for publication.)

- Place tables after the references in the main text (insert a page break). Then insert tables, charts, illustrations one to a page separated by page breaks.
- Each table or figure should have a clear title and short description if relevant. Please ensure that sufficient information is provided so that the tables/figures can be understood standalone. Students using photographs or large files are advised to make the file small enough to be transmitted by email. Please ensure that any figures copied from other sources are fully referenced and redrawn as necessary. This can usually be done by re-formatting using the compress function. If this fails, make a special arrangement with the capstone faculty member.

**Appendices:** Supplemental material should be added to the main document set off by page breaks. Examples of appendix materials are questionnaires, data collection instruments or checklists, or data too lengthy to be published with the paper. This material must not make the paper too lengthy to email. The manuscript is ready to be submitted for review when you have completed the following checklist.

Yes	No	Objective
		The structured abstract provides a summary of the paper
		The background, rationale, and purpose for the project are clearly stated
		The methods are clearly described and appropriate for the purpose of the project
		The results are presented clearly, using tables and figures if appropriate
		The discussion relates the findings to the existing literature, identifies strengths and limitations, and describes any implications for public health

**Submitting the manuscript for review**

- Submit the manuscript as a single file to facilitate distribution and storage. Consider 4 or 5 megabytes as the maximum file size for email transmission and distribution. If the file is too large and cannot be emailed using the college email system, it is the student’s responsibility to make the document email friendly (see below).
- The paper should be emailed to the student’s capstone faculty member. That faculty member is responsible for forwarding the paper to the second reviewer.
- The subject line in your transmitting emails should be “Capstone Paper - *Lastname Firstname\_ Paper title\_Date.*”
- The revised paper should be transmitted with a subject line “Capstone Paper revised - *Lastname Firstname\_Paper title\_date*”
- The response to reviewers should be transmitted with a subject line “Response to reviewers - *Lastname Firstname Paper Title\_date.*”

**Grading the manuscript**

The penultimate draft of the written assignment is reviewed by the capstone faculty and a second reader. Reviewers complete an evaluation rubric that uses this scale to evaluate the points listed below; the complete rubric can be found in the appendix. Keep these points in mind when writing the paper.

<b>Evaluation</b>	<b>Score</b>	<b>Description</b>
Excellent	4.0	All relevant concepts correctly applied
Good	3.5	Most relevant concepts correctly applied
Fair	3.0	Some concepts are correctly applied
Failing	2.5-0.5	Incorrect application of most relevant concepts
	0	Missing

1. Structured abstract: summary of key points
2. Effectively enables reader to anticipate the paper
3. Readily identifiable, clear, concise, and coherent
4. Significance, originality, and background
5. Review of literature, analysis, assessment
6. Results, discussion, consideration of limitations/weaknesses/strengths
7. Evidence of critical thinking, and recommendations
8. Items presented support thesis
9. Clear, accurately summarizes paper
Demonstrates a clear understanding of the 5 public health disciplines:
10. Epidemiology
11. Biostatistics
12. Social and Behavioral Science
13. Public Health Administration
14. Environmental Health
15. Correct referencing style; at least 12 peer-reviewed articles
16. Effective use of headings and subheadings
17. Basic mastery of written English: grammar, syntax, word usage, spelling, etc.
18. Tables, graphs, maps, diagrams, photographs used

#### Final submission of manuscript

The penultimate draft of the paper that has been evaluated by two reviewers is returned to the student. Guided by suggestions and comments made by the reviewers, the student makes final revisions to the paper and composes a response letter. The letter and final draft of the paper are submitted together to the capstone faculty member, who grades it after reading it one last time.

### Response letter

The response letter clearly states the changes made in the manuscript in response to the concerns expressed by the two reviewers. A justification must be provide if the student disagrees with any of the reviewers' suggestions. The appendix contains a template for a response letter. *Please use this style when composing your own response.*

### **Part III: Presentation**

In addition to producing a major written report, all capstone students present an overview of their capstone project to fellow classmates, preceptors, academic advisors, capstone faculty members, mentors and other interested parties. This presentation occurs during the last weeks of the capstone semester. During the spring term, the

presentations coincide with the school's annual research day. Students choose to present a summary of their work in either a lecture or in a poster format.

#### Oral Presentation

Presentations must not exceed 10 minutes--with an additional 2 to 3 minutes of time for questions. The format for the oral presentation must include the following:

1. Title
2. Overview/Outline
3. Introduction/background
4. Project Methods
5. Results/Findings
6. Discussion
7. Conclusion
8. Acknowledgments

**Organization** is key when giving a successful 10-minute talk. Time is extremely limited so you need to know exactly what you want to convey and what information is necessary to convey it. The talk should have no more than **10-12 slides** - that means only about a minute to talk about each slide. And don't load more information onto one slide just to have fewer slides.

**Start with a clearly defined problem** and progress through the talk in a logical manner. State a question/ problem ("I was interested in the following question..."). How did you go about answering it? ("This is the strategy I used to answer the question...") What did you find? ("These are my results...") What do the findings mean? ("This is how I interpreted the results...")

**Do not linger on the introduction** and/or summarize the entire history of the field. Minimize time on background information in order to present methods, results and discussion. You should provide enough information to give a general understanding of why you are asking the question you are asking. The introduction should last no more than 1-2 minutes and consist of **1-2 slides**.

**Data should be the bulk of your talk.** The point of giving the talk is to present your data. Therefore, spend as much time as possible doing so. Do not be afraid to jump right into the data – limiting the use of transition slides allows for a smoother presentation. You do not need to go into extreme details of the methods used unless it is absolutely critical for proper interpretation of the data. If people are curious about how you did something, they will ask. Data should be limited to **3-6 slides** and last 6-8 minutes.

**Have data tables or graphs** and explain them. But, show only relevant data - anything more will just confuse the audience. Help the audience by 'walking through' each table or figure with a pointer. If you say "look only at this column" then take the other columns out! .

**The conclusion** is the part of the talk in which you interpret your results in light of the question posed at the beginning of the talk. An effective conclusion can fit onto **1 slide** and be stated in 1-2 minutes. *Do not include a reference slide. Don't end the presentation with "That's all."*

**Breathe and relax.** It is only 10 minutes and remember--you know more about your topic than anyone else in the room. **Don't panic** if you make a mistake.

**Practice! Practice! Practice!** This cannot be stressed enough. Go through the talk at least 2-3 times before actually giving it. You will be surprised how long it will be the first time around. Practice out loud, and edit the talk until you can do it in less than 10 minutes. Many times the presentation takes longer than you think it will. This will give you breathing room for questions and any technical difficulties. Practice with friends, other students, or even your advisor—they will have invaluable feedback.

#### Powerpoint Tips

1. Have one main point per slide. Do not show a collection of assorted data. Try not to use more than 4 or 5 bullets per slide
2. Try to use a font that is 28 point or larger for readability on a large screen

3. Make slides simple, clear, and easy to understand. If the audience is trying to figure out what the slide is showing, then they are not paying attention to what you are saying. You may use any design template in PPT - but make sure that it is not too busy and does not distract the audience from the words/data on the slide
4. Expand margin lines of text boxes in order to increase font size for readability, but not to gain more space to add more information on the slide.
5. Slides should be free of nonessential information- other data will only distract and confuse. Do not show a table with comprehensive data; just show the important stuff. Save the rest for the paper!
6. Avoid using full sentences; use phrases and key talking points as a prompt for you to say more.
7. Avoid abusing PPT animation. A successful talk should rely on data, not Power Point prowess. More often than not, animation is distracting and sometimes even condescending.
8. Use Arial font. No gradient backgrounds (light backgrounds and dark text always works best). Most people use white background since colors show best (some use white/yellow text on a blue background. Use common sense with visual contrast: No black text on blue background.
9. Use notes portion of PPT to remember facts and things that you would like to point out for each slide. Remember to print out the notes pages of your presentation. **DO NOT READ YOUR NOTES TO THE AUDIENCE**

#### Poster Planning and Preparation

- 1) The preparation *process takes longer than you think*, so get started early. Write introduction and methods now!
- 2) Review text and poster approach with advisor and other major collaborators!!
- 3) Look for illustrations or photos to shorten needed text. They may be reproduced from books or slides via color photocopy.
- 4) Preparing a poster is very different from preparing a paper. Your main objective in preparing text for this presentation is to edit it down to concise language. Use bullets and numbers to break text visually and aid you in the interactive use of your poster.
- 5) A suggested title format is 90 pt Helvetica or a sans serif font, use bold as this reads better from a distance. Sub titles should be 72 pt.
- 6) Divide your title information into: Title; Name(s); Program; CUNY School of Public Health.
- 7) Within the poster presentation space divide information into - Introduction; Methods; Results; Summary; Acknowledgments (optional). Provide references in handout form as they are not necessary for poster presentations and reduce needed space.
- 8) Other poster text should be 18 pt; space and a half; bold. Never use smaller than 14 pt print. If your poster is legible when printed on A4 paper and held at arm's length, then it is about right.
- 9) Spell-check and proof text very carefully before your final print out.

#### Other Poster How-To's:

- Organization:** Use headings to help readers find what they are looking for (fieldwork setting, objectives, results, conclusions, etc.). Most experts suggest a columnar format: top to bottom, left to right. The width of the poster should be greater than its height. Use pleasing and balanced arrangement of graphics, text, colors. Remember that people prefer shapes in the golden ratio, and tend to look at the top right corner.
- Less is more:** Keep the verbiage to a minimum. Again, this is not simply pages of text. All text should be in fonts large enough to be read from 3-6 feet away (minimum font size: 18 pt). Titles should be in larger font sizes to be read from far away. Use simple fonts (e.g., Arial, Helvetica) and do not use more than 2 types.
- Colors:** Use a theme of 2-3 colors; avoid overly bright (neon) colors. Dark colors on a light background are easiest to read.
- Graphics:** Use graphics (simple charts, tables, graphs) and photos as appropriate. Not only do pictures help tell the story, they also help attract the audience.

#### Resources for Posters:

Designing conference posters (2015). Retrieved September 12, 2015, from <http://colinpurrington.com/tips/poster-design/>

Hess G, Tosney K, Liegel L. [Creating effective poster presentations](http://www.ncsu.edu/project/posters/) (2013). Retrieved September 12, 2015, from <http://www.ncsu.edu/project/posters/>.

Kirkeby K. Preparing professional scientific posters (n.d.). Retrieved September 12, 2015, from <http://www.ce.umn.edu/~smith/supplements/poster/guide.htm>

Reynolds G. *Presentation Zen. Simple Ideas on Presentation Design and Delivery, 2<sup>nd</sup> ed.* Berkeley: New Riders: 2011.

#### **Part IV: The Portfolio/Reflection**

Why is a portfolio required? The portfolio serves many functions:

- To provide a means of self-assessment indicating how you achieved core and concentration- specific competencies through master's courses and fieldwork, community service, and paid volunteer work experience.

- To demonstrate to the graduate faculty that you have attained at least entry-level public health competencies in the core public health areas. IOW: The portfolio is a means for faculty to assess educational outcomes.
- To provide information that will be used by the Council on Education in Public Health to assess the curriculum's effectiveness in providing students with the opportunities necessary to become competent in the core public health areas and in specialized areas.
- The portfolio is intended to be a useful career tool for you. With the portfolio, you should be able to promote yourself by showcasing your professional development, skills, experience. Your portfolio organizes critical information for potential employers while it showcases your accomplishments and abilities.
- Because learning and development are a continual part of professional life, a portfolio remains useful to you throughout your career. Keeping copies of your completed portfolio forms can help you demonstrate to yourself (and others) the paths you have taken and assist you in determining future growth and career directions.

#### Review and Evaluation of the Portfolio

The portfolio is submitted as a component of the capstone course. The capstone course is taken during the last or next-to-the-last semester of your graduate degree training. As the portfolio will not be returned to you, we urge you to keep an electronic copy for yourself.

You and your program academic advisor are responsible for periodically reviewing your portfolio. From time to time, your advisor will ask to discuss the portfolio with you. By tracking progress on achievement of competencies during your MPH/MS training, you can identify any areas that are deficient in your program of study and work with your academic advisor to make certain that those shortcomings are addressed before graduation. Courses and other learning experiences should be selected to strengthen competence in specific areas. Ultimately, the final product is evaluated by your capstone faculty member.

#### Components of the Portfolio

##### (1) Title page

This page contains general information for each student.

- Student's full name
- Contact information (address, phone, e-mail, fax)
- Area of specialization

##### (2) Table of contents

Insert a table of contents to make the portfolio easy to search.

##### (3) Professional mission statement

State your public health focus and your expertise, and how you expect to promote yourself as a public health practitioner. Write this as a concise statement of your individual, focused purpose in your public health career and the specific contribution you hope to make.

#### Reflect

- Think about your goals and how your unique knowledge, skills, and experience will help you reach those goals.
- Think about what you have to offer professionally as a public health practitioner and what specific contribution you can make to the public health field.

#### Write

- Communicate these thoughts in a concise professional statement that reflects your goals, focus and skills, and the contribution you expect to make to public health. Be as focused and specific as possible. "To improve the public's health" is neither focused nor specific; everyone with an MPH wants to do that.

Distinguish yourself from the others by indicating your specific area of focus and the specific way in which you hope to improve the public's health. You may want to consult the following resources which describe how to write an effective professional mission statement:

- State your professional mission and goals.
- Reflect on those mission and goals. As you reflect, you may find that you have refined your mission and goals over time.
- Discuss the extent to which you have realized your mission and achieved your goals.
- Suggest future actions you might take to further realize your mission and goals.

#### (4) Résumé

This section contains your professional résumé.

Minimum requirements include:

1. Name
2. Contact information
3. Education completed
4. Public health and other relevant work experience (in chronological order)
5. Honors and awards (chronological order)
6. Special skills

The career development office offers counseling and guidance for writing résumés, as well as other professional services. There are many sites on the internet with instructions for preparing resumes.

#### (5) Experience in public health

This section provides documentation and evidence of commitment and experience in the field of public health.

Minimum requirements include:

1. Certification of IRB training (CITI certificate)
2. A chronological list of all the public health experiences you have had. Include dates, agency name & address, your supervisor's name, credentials & title, your title and responsibilities. Use these section headings:
  - Paid professional experience
  - Volunteer experience
  - Fieldwork experience
  - Other

#### (6) Core competencies

In this section, indicate the extent to which you have acquired the core competencies required of all graduates of public health programs. Use the worksheet on the next page to explain how you know you have acquired each core competency. Your statement for each competency may be as long as needed. Where possible, provide in an appendix documentation that illustrates how you know the competency has been achieved, such as your written (or other) response to an assignment in a particular course, a letter acknowledging your paid or volunteer activity, a certificate of completion for a CE course, and so on. When you are attaching documentation, indicate in your statement the name of the document so we know what to look for in the appendix.

At Lehman, students complete two reflection assignments during Supervised Fieldwork. The first is to prepare an in-depth reflection paper that identifies and discusses the fieldwork experiences with regard to satisfaction with the extent to which learning goals were met, challenges encountered during the fieldwork experience and how they were addressed and how the fieldwork experience informed or influence the student's practice within public health. The second assignment is a public health organizational analysis of the setting where fieldwork was conducted. Under guidelines based on key core competencies, the student assesses the extent to which the organization applies the core public health functions of assessment, policy development and assurance to the development and analysis of public health problems and their solutions; applies ethical principles to public health activities; applies the core orientation and values of public health in professional practice. Specifically, students assess competencies by way of analysis of the leadership and management of the organization, staff competencies, organizational culture, degree to which organizational mission and goals are met, and evidence of commitment to health equity and social justice. The outcome of this assignment is to identify the implications for public health practice within the community served.

#### (7) Specialization-specific competencies

Students in these areas must provide evidence of membership in at least one professional organization related to their specialized area. Each specialization has its own competencies. These concentration-specific competencies specify the skills graduates need to have in order to receive the master's degree. In this section of the portfolio you provide documentation and evidence of competence in your specific program. Complete only the worksheet for your specialized area from the list above. Use the worksheet to explain how you know you have acquired each specialization competency. Your statement for each competency may be as long as needed. Where possible, provide in an appendix documentation that illustrates how you know the competency has been achieved, such as your written (or other) response to an assignment in a particular course, a letter acknowledging your paid or volunteer activity, a certificate of completion for a CE course, and so on. When you are attaching documentation, indicate in your statement the name of the document so the public health faculty member who is reviewing your portfolio knows what to look for in the appendix.

#### (8) Community service

This section provides documentation and evidence of community involvement and service outside of the academic environment. Include at least two examples of community involvement.

#### (9) Fieldwork

This section provides documentation and evidence of the student as a reflective public health practitioner. Fieldwork may include aspects of your employment in a healthcare, public, occupational or environmental health agency.

Minimum requirements include:

1. List of fieldwork placements. For each, provide: dates, preceptor (name, credentials, title), your responsibilities, tangible products of the fieldwork experience
2. Reflections about your fieldwork experiences, including:
  - Reflections on the extent to which your course work at Hunter prepared you for the fieldwork experience.
  - Reflections on the quality of on-site supervision you received during your fieldwork. Was someone generally available to answer your questions and provide feedback (even if you didn't seek it)? Discuss the usefulness and value of the feedback you received.
  - Reflections on challenges or problems you encountered during the fieldwork and how they were addressed. What technical or human obstacles did you encounter? Were there any deviations from your original plan or expectations for the fieldwork (for better or worse!). Discuss things you hoped to get out of the fieldwork experience, but didn't.

- Reflections on the overall quality of the fieldwork. Were there particular skills, knowledge or lessons that you acquired unexpectedly? Explain. Was the fieldwork a good educational experience – why or why not? How did it provide you with a better sense of the skills needed for employment in the profession? Discuss recommendations for improving your fieldwork experience. What were the most valuable lessons you learned? Explain why you would or would not recommend that other students conduct fieldwork with the same department or agency.

(10) Other

Use this section to present and discuss other topics that have contributed to your professional development. Some examples of additional areas include leadership activities, conferences attended, non-credit courses completed, and track-specific competencies attained outside of your specific area.

## **APPENDIX**

### **Contents**

- 1 Capstone paper evaluation rubric
- 2 Response letter template
- 3 Oral presentation evaluation rubric

Appendix 1: Capstone Paper Evaluation Rubric

**Student's Name** \_\_\_\_\_

**Degree** MPH in \_\_\_\_\_ or EOHS-MS \_\_\_\_\_

**Title of paper** \_\_\_\_\_

**Category of paper** (circle one): Practice Project Report    Research Project Report    Policy Analysis    Grant  
Proposal    Written Plan for a Program    Evaluation of an Existing Program    Manual    Systematic Review of the Literature

**Reviewer** \_\_\_\_\_ **Date** \_\_\_\_\_

	<b>Capstone Paper Grading Rubric</b>	
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understanding and application of core public health disciplines)	Biostatistics					
	Social and Behavioral					
	Public Health Administration					
	Environmental Health					
<b>References and Bibliography</b>	Correct referencing style: at least 12 peer-reviewed articles					
<b>Style</b>	Effective use of headings and subheadings					
<b>Quality of Writing</b>	Basic mastery of written English: grammar, syntax, word usage, spelling, etc.					
<b>Graphics</b>	Tables, graphs, maps, diagrams, photographs used					
<b>Recommendation</b>						
<input type="checkbox"/> Accept <input type="checkbox"/> Accept with minor revisions <input type="checkbox"/> Accept with major revisions <input type="checkbox"/> Do not accept						
<b>Comments</b>						

Appendix 2: Response Letter Template

[Insert date here]

Dear Dr. *or* Professor *or* Ms. *or* Mr. [insert 1<sup>st</sup> & 2<sup>nd</sup> readers' last names]:

Re: Revisions to capstone paper, “[insert title of your paper]”

Thank you for your comments and suggestions on my manuscript. They were helpful and enabled me to improve the quality of my paper. The following pages contain point-by-point responses to your remarks. *My responses are in script.* I also use **yellow highlight** for additions, and ~~strikethroughs~~ for deletions. For example: “In accordance with the suggestions of the Reader, **[insert changes you made according to suggestions]**”

I hope that you find the revisions in the manuscript and accompanying responses are satisfactory

Yours sincerely,  
[insert your name, degrees & title, if appropriate]

-----new page -----

Responses to the comments of Reader #1

1. [insert 1<sup>st</sup> reader's 1<sup>st</sup> comment; if the comment is lengthy, copy and paste it here directly from the reader's letter]  
Response: **[insert your response]**
2. [insert 1<sup>st</sup> reader's 2<sup>nd</sup> comment: copy and paste it here directly from the reader's letter]  
Response: **[insert your response]**
3. ...*and so on.*

Responses to the comments of Reader #2

1. [insert 2<sup>nd</sup> reader's 1<sup>st</sup> comment: if the comment is lengthy, copy and paste it here directly from the reader's letter]  
Response: **[insert your response]**
2. [insert 2<sup>nd</sup> reader's 2<sup>nd</sup> comment: copy and paste it here directly from the reader's letter]  
Response: **[insert your response]**
3. ...*and so on.*

Appendix 3: Oral Presentation Evaluation Rubric

Student's name \_\_\_\_\_ Reviewer \_\_\_\_\_

Degree MPH in \_\_\_\_\_ or EOHS-MS \_\_\_\_\_ Date \_\_\_\_\_

Title of presentation \_\_\_\_\_

Category of work presented (circle one): Practice Project Report    Research Project Report    Policy Analysis    Grant Proposal    Written Plan for a Program    Evaluation of an Existing Program    Manual    Systematic Review of the Literature

Oral presentation components	Max score	Score	Comments
Title	0		
Background and Significance	10		
Methods, or Project Description	10		
Results, or Project Outcomes	10		
Discussion and Conclusions	10		
Recommendations	10		
Overall presentation style and demeanor	40		
Handout	10		
<b>Total</b>	<b>100</b>		

**Evaluation of Capstone Oral Presentation**

1. Title of presentation \_\_\_\_\_
2. Brief background and significance of research/project (10 pts)
  - a. Public health scope of problem
  - b. Importance of project to public health community and knowledge
3. Methods or Project description (data collection etc...) (10 pts)
  - a. Sample
  - b. Data collection or description of processes (project paper)
  - c. Analytic framework
4. Results or project outcomes (must include at least 2 tables for a research paper or at least 1 table for project paper) (10 pts)
  - a. Table quality and ability to convey results
  - b. Explanation of results
5. Discussion of results and Conclusions drawn from research or project (10 pts)
  - a. Analysis, synthesis and interpretation of results
  - b. Limitations and strengths
  - c. Draws conclusions about results

6. Recommendations (which can include but not limited to additional research, policy and/or practical implications) (10 pts)
7. Overall presentation style and quality (40 pts)
  - a. Speech quality
  - b. Graphics
  - c. Timing
  - d. Response to questions
8. One-page handout (10 pts)