DEPARTMENT: Environmental Health  
COURSE NUMBER: EH 594  
SECTION NUMBER: 000  
SEMESTER: Spring 2018  
CREDIT HOURS: 4  
COURSE TITLE: Capstone Seminar: Skills for Environmental Health Professionals  
DATE/TIME: Wednesday, 3:00-4:50 pm; January 16 – May 8, 2018  
LOCATION: GCR 115

INSTRUCTOR: Stefanie Sarnat, ScD  
EMAIL: sebelt@emory.edu  
PHONE: 404-712-9636  
OFFICE/MAILBOX LOCATION: CNR 2035  
OFFICE HOURS: By appointment

COURSE DESCRIPTION
This course provides a productive, supportive and critical environment for Environmental Health (EH) and Global Environmental Health (GEH) students who are completing a capstone project for their culminating experience. The course is comprised of two parts: in-class work for 2 hours a week and substantial individual work for an additional 6-8 hours per week. It is expected that students will use the individual work time to complete homework assignments for the class, as well as to meet with their instructors, mentors, or others critical to their capstone and to work on their capstone projects.

The course prepares students, using their capstone project as a platform, with skills and competencies needed for successful careers in environmental health. Students will identify topics of interest, engage with scholars and literature on their topic, and through a series of written, poster, and oral presentations, make an original, substantive contribution to the field. Environmental health skills gained during the EH and GEH programs are applied and integrated, including critical thinking on methodological and policy issues surrounding the topical issues presented; effective communication strategies for complex environmental health topics; and applying environmental health theory and principles to practical public health situations and professional practice. Further, students will critically review each other’s work with an emphasis on methodological understanding, appropriate assessment of applied and research needs posed by the topic, intended audience, communication methods, and policy concerns.

LIST SCHOOL LEVEL, DEPARTMENT, AND/ OR PROGRAM COMPETENCIES
- Integrate the broad base of public health knowledge and skills acquired from coursework, practicum and other learning activities into a culminating experience (thesis, special studies project, capstone)
- Describe major environmental risks to human health ranging from the local to global scale
- Develop the capacity for lifelong learning in public health
- Apply principles of ethical conduct to public health practice
- Design environmental health programs, policies, interventions and/or research intended to improve the health of individuals, communities, and populations
LIST LEARNING OBJECTIVES ASSOCIATED WITH THE COMPETENCIES

The goal of the course is to explore a topic of interest in depth, possibly expanding a course project or practicum experience into new dimensions, to increase practical skills and experience in the practice of environmental health. EH 594 requires students to synthesize and integrate knowledge acquired in coursework and other learning experiences and to apply theory and principles in a practical environmental health situation or a situation that approximates some aspect of professional practice.

Upon completion of the course, the student will have:

- Developed and executed a capstone project encompassing multiple areas from the MPH curriculum, including coursework and/or practicum experiences
- Demonstrated excellence in comprehension and analysis of the environmental health issue chosen for the capstone project
- Enhanced written communication skills through the production of a final capstone paper
- Improved critical thinking skills through conducting peer review evaluations
- Learned to respond to peer review comments from the instructors and the class
- Refined oral presentation skills by developing and presenting a capstone project using several different formats, including an educational 1-2-minute video/slide presentation, 3-5 minute poster presentation, and 12 minute final oral presentation
- Developed an understanding and appreciation for the communication needs of diverse audiences

EVALUATION

The course will be graded based on a series of written and oral presentations, and class participation. The capstone project is the primary assignment of the course, on which these course activities are based. Deliverables include:

1. Project overview presentation (video trailer or slides) (10%)
2. Peer-review exercise (15%)
3. Final poster presentation, including participation drafts process (10%)
4. Final oral presentation (20%)
5. Final written paper, including participation in drafts process (30%)
6. Class participation, based on attendance and contributions to in-class discussion (15%)

Grading:

\[
\begin{array}{ll}
\geq 94\% & \text{A} \\
90 - 93\% & \text{A-} \\
86 - 89\% & \text{B+} \\
82 - 85\% & \text{B} \\
78 - 82\% & \text{B-} \\
70 - 77\% & \text{C} \\
< 70\% & \text{F}
\end{array}
\]

ACADEMIC HONOR CODE

The RSPH requires that all material submitted by a student in fulfilling his or her academic course of study must be the original work of the student.
## COURSE OVERVIEW

EH 594 meets Wednesdays, 3:00-4:50 pm in GCR 115, unless otherwise indicated; Jan 16-May 8, 2018

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topic [Location]</th>
<th>Assignments Due</th>
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<tbody>
<tr>
<td>1</td>
<td>January 18, 2018</td>
<td>Course Introduction [CNR 2015]</td>
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<td>2</td>
<td>January 24, 2018</td>
<td>No Class – work on project update and project overview!</td>
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<tr>
<td>3</td>
<td>January 31, 2018</td>
<td>Individual Meetings [CNR 2035]</td>
<td>● Project update [Jan 30, 9 am]</td>
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<td>● Capstone progress form [Feb 2]</td>
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<td>4</td>
<td>February 7, 2018</td>
<td>Communication Methods I: Project Overviews</td>
<td>● Video trailer or slides</td>
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<tr>
<td>5</td>
<td>February 14, 2018</td>
<td>No Class -- work on paper draft!</td>
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<tr>
<td>6</td>
<td>February 21, 2018</td>
<td>Individual Meetings [CNR 2035]</td>
<td>● Paper draft I [Feb 20, 9 am]</td>
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<td>7</td>
<td>February 28, 2018</td>
<td>Peer Review Methods I: What is Peer Review?</td>
<td>● Paper draft II for peer review</td>
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<td>● Readings (peer review methods)</td>
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<td>8</td>
<td>March 7, 2018</td>
<td>Peer Review Methods II: Responding to Peer Review</td>
<td>● Written peer reviews</td>
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<tr>
<td>9</td>
<td>March 14, 2018</td>
<td>No Class -- Spring Break</td>
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<tr>
<td>10</td>
<td>March 21, 2018</td>
<td>Communication Methods II: Poster &amp; Oral Presentations</td>
<td>● Readings (presentations)</td>
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<tr>
<td>12</td>
<td>April 4, 2018</td>
<td>Individual Meetings – 5 students [CNR 2035]</td>
<td>● Apply for EH Award (optional)*</td>
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<td>13</td>
<td>April 11, 2018</td>
<td>Poster Critique</td>
<td>● Draft poster</td>
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<td>14</td>
<td>April 18, 2018</td>
<td>No Class -- work on final presentation, poster, and paper!</td>
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<tr>
<td>15</td>
<td>April 25, 2018</td>
<td>Final Presentations (class time extended 3-6 pm)</td>
<td>● Final presentation due!</td>
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<td>April 27, 2018</td>
<td>EH Department Poster Presentations &amp; End of Year Gathering</td>
<td>● Final poster and paper due!</td>
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* EH Research Excellence Award applications due by 5 pm on April 3
DETAILED SCHEDULE AND ASSIGNMENTS

1. **January 18, 2018: Course Introduction and Capstone Overview**
   - Course introduction and overview of syllabus
   - Discussion of course goals and opportunities
   - Instructor and student introductions
   - Sign up for individual meeting with Stefanie on January 31

   **Assignment due by January 30 at 9 am, via Canvas**
   a) **Capstone project update.** Please provide a 1-2 page summary of your project progress since the October proposal process that includes: i) an overview of any changes to your objectives and timeline in response to feedback received on your proposal or for other reasons; ii) progress that you have made on carrying out your project; and iii) the dates of and notes from meetings with your mentor.
   b) **Prepare the Capstone Progress Approval Form.** See link on Canvas, also attached at end of syllabus, an EH department requirement, for which students must obtain continued mentor and EH 594 instructor support. Sign, provide updates to your mentor, and obtain his/her signature.

2. **January 24, 2018: No Class – work on project update and project overview!**

3. **January 31, 2018: Individual Meetings: Discussion of Capstone Topic and Plans for your Project**
   - Note: for each student, this will be a 20-minute meeting with Stefanie; timeslots for meetings will be available throughout the day; **bring hard copies of final project progress update and Capstone Progress Approval Form with student and mentor signature.** Stefanie (as EH 594 instructor) will review, sign, and submit to EH ADAP in fulfillment of the EH department requirement by February 2.

   **Assignments due at the start of next class**
   a) **Capstone project trailer,** submitted via Canvas and bring to class on thumb drive. Please prepare a 1-2 minute video (or PowerPoint presentation) introducing your project topic. Viewers should learn what your capstone project is about and why your topic and your project are important; in other words, provide an overview of the significance of your topic and how the outputs of your specific project are important to environmental/public health. Trailers will be viewed and discussed during next class.

4. **February 7, 2018: Communication Methods I: Short Project Overviews**
   - In-class viewing and group critiques of capstone project trailers (videos or presentations)
   - Consider whether the topic was introduced and motivated in a clear and instructive way? Was speech clear? Was tone appropriate? Were visual images and any other audio helpful?
   - Check-in regarding Paper Draft I (due Feb 20)
   - Sign up for individual meeting with Stefanie on February 21

5. **February 14, 2018: No Class – work on paper draft!**

   **Assignment due by February 20 at 9 am, via Canvas**
a) **Capstone paper draft I.** Please prepare and submit a first draft of your capstone paper. Most papers will follow the guidelines included in the *Components of Final Capstone Paper* attached at end of this syllabus. For Draft I, please include a full background and literature review; project objectives; methods or approach; any results or outputs for your project to date; an outline and timeline for tasks that are yet to be completed; and an outline for the discussion section of your paper. For some projects, an alternative paper format may be warranted; please discuss and obtain approval from Stefanie before moving forward with an alternative format. If the project itself involves a significant written work, this may be included as part of the paper with permission from Stefanie.

   - Note: for each student, this will be a 30-minute meeting with Stefanie; timeslots for meetings will be available throughout the day

   Assignments due at the start of next class, via hardcopy and Canvas
   a) **Capstone paper draft II for peer-review.** Prepare a *revised* draft of your capstone paper for the peer-review exercise. In this draft, incorporate instructor and mentor feedback where possible and include placeholders for ideas and sections that you will continue to develop. If you will be following an alternative reporting format, approved by Stefanie, include a description and justification of this in your draft. Please be sure to include *page and line numbers* on this draft, to facilitate the peer review exercise. Submit your revised draft via Canvas, AND bring two hard copies of your draft to class for sharing with classmates.
   b) **Readings** on peer review

7. **February 28, 2018: Peer Review Methods I: What is Peer Review?**
   - What is peer review? Discussion of its purpose, and contexts in which it is used
   - How to peer review? Discussion of how to provide an appropriate, relevant, and constructive peer review, what to focus on, how to frame and phrase criticisms
   - Exchange of capstone paper draft II among classmates for peer review exercise; each student will receive drafts from two classmates to review

   Assignment due at the start of next class, via hardcopy and Canvas
   a) **Peer-review of two classmate’s capstone paper drafts.** Using approaches discussed in class, please prepare two written peer review evaluations (<5 pages each) of each draft paper. Remember, in this context, your job is to be constructive and help your colleagues. Make sure you are convinced that the topic is important and that the content in each section is appropriate and clearly presented. Provide suggestions for clarifications, additional information, and/or considerations that your classmates should take into account before finalizing their projects. Provide page and line numbers corresponding to the specific sections to which each of your comments apply. Submit your peer reviews via Canvas, AND bring three hard copies of each of your reviews to class for in-class discussion.

8. **March 7, 2018: Peer Review Methods II: Responding to Peer Review**
   - What to do with peer review comments? Discussion of how make the most use of peer review comments, how to respond to comments and in what format, agreeing / disagreeing with reviewers; making appropriate edits and/or changes to projects
- Exchange of capstone paper draft II written peer reviews and face-to-face peer feedback in small groups

Assignment for next class  
a) Readings on poster and oral presentations

9. March 14, 2018: No Class, Spring Break -- work on paper draft!

- Discussion of what makes a successful/unsuccessful poster and oral presentations  
- View poster examples  
- Check-in regarding EH symposium, poster, and oral presentations at end of semester, including EH Designing your Poster instructions  
- Check-in regarding Paper Draft III (due March 27 or April 3)  
- Sign up for individual meeting with Stefanie on March 28 or April 4

Assignment due by March 27 or April 3 (depending on individual meeting) at 9 am, via Canvas  
a) Capstone paper draft III. In this draft, incorporate changes made (and/or include placeholders for changes planned) in response to previous instructor, mentor, and peer review feedback. Also include updates to your results and discussion sections, and an outline and timeline for any remaining tasks on your project.

- Note: for 5 students, this will be a 30-minute meeting with Stefanie; timeslots for meetings will be available throughout the afternoon

- Note: for 5 students, this will be a 30-minute meeting with Stefanie; timeslots for meetings will be available throughout the afternoon

Assignment due at the start of next class, via thumb drive and Canvas  
a) Draft poster of your capstone project. Prepare a draft poster of your project, incorporating approaches discussed in class on March 21 and according to instructions laid out in the Designing Your Poster guidelines in the EH Culminating Experience Guide. Posters will be viewed and discussed in small groups during next class.

13. April 11, 2018: Poster Critique  
- Group critique of each student’s draft poster

14. April 18, 2018: No Class – work on final presentation, poster, and paper!

Final assignments due as follows:  
a) Final oral presentation (April 25), submitted via Canvas and bring to class on thumb drive. Prepare a 12 minute presentation of your capstone project. Include the major components of your project, including background and significance, objectives, methods, results, and discussion. Presentation time limits will be enforced and will affect your grade. Be sure to practice your presentation several times and keep within the 12 minute time frame and to
resolve any A/V and clarity issues. Be prepared for 3 minutes of questions after your presentation. Presentations will be made during the last week of class, during an extended 3-hr class time. You are required to attend the entire final presentations session, regardless of when your presentation is scheduled. The session will be attended by EH 594 students and instructors. Capstone mentors are highly encouraged to attend, if feasible, so please invite them. Other EH faculty and first year students will be invited to join the session as well.

b) **Final poster presentation (due April 27)**, submitted via Canvas and presented at the EH Department Poster Presentations & End of Year Gathering. Prepare a final poster of your project, incorporating approaches discussed in class on March 21 and feedback received in class on April 11, and according to instructions laid out in the *Designing Your Poster* guidelines in the EH Culminating Experience Guide. Posters will be evaluated based on content, design, clarity, and presentation. Posters are eligible for the EH Award for Research Excellence, if award application is submitted by April 3. Please submit an electronic version of your poster via Canvas and bring a printed version of your poster to the symposium and mount.

c) **Final capstone paper (due April 27)**, submitted via Canvas. Prepare and submit a final 20 page (double-spaced) capstone paper. Most papers will follow the guidelines included in the *Components of Final Capstone Paper* attached at end of this syllabus. Some students may choose alternative formats, with permission from Stefanie. If the project itself involves a significant written work, this can count as part of the page requirement with permission from Stefanie.

15. **April 25, 2018: Final Presentations**
- All students present their final oral presentations: 12 minutes each plus 3 minutes Q&A
- Online course evaluations
- Plan for extended class session (2-5 pm)

**April 27, 2018: EH Department Poster Presentations & End of Year Gathering**
CAPSTONE PROGRESS APPROVAL FORM
Department of Environmental Health

This form must be completed, signed, and submitted to the EH ADAP by the due date on the EH capstone timeline (page 3 of Culminating Experience Guide). **Purpose**: Students who have an approved capstone plan must obtain continued mentor and EH 594 instructor support. Provide a written summary of your project progress since the October proposal. If you were required to make edits to your proposal, incorporate them into your update. If you submitted a thesis proposal but are now doing a capstone, provide a full capstone proposal now. Your mentor must sign this form so they are aware of your progress and are committed to working with you for the remainder of your project.

Name: ______________________________________
Date(s) Met with Mentor: ______________________

☐ I have switched from thesis to capstone and am submitting an original proposal.

☐ I am continuing with my capstone and have completed the following:

☐ An update about my project that incorporates edit suggestions from my original capstone proposal (2-page maximum).
☐ Discuss general progress, concerns, and IRB progress/challenges with advisor(s).
☐ Submit copy of IRB approval/letter to ADAP if not already on file (if applicable).
☐ Review the timeline and reconfirm all dates with mentor and EH 594 instructor(s) including timeline for meetings about drafts and final due dates.
☐ If your timeline has changed since the original proposal, attach an updated timeline.
☐ Submit to EH ADAP.

Mentor and EH 594 instructor signature indicates full commitment to advising the student through the remainder of the plan. To be cleared for graduation, a passing grade must be earned on the project and in the class.

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<tr>
<th>Mentor (Print Name)</th>
<th>Signature</th>
<th>Date</th>
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<tbody>
<tr>
<td>EH 594 Instructor</td>
<td>Signature</td>
<td>Date</td>
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<tr>
<td>Student Signature</td>
<td>Date</td>
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COMPONENTS OF FINAL CAPSTONE PAPER
(As listed in the Culminating Experience Guide)

Develop a 20-25 page (double-spaced) paper, encompassing the following sections:

1. **Abstract**
   a. A brief one paragraph description (i.e., summary) of the capstone project.

2. **Body of the Paper**
   a. **Introduction/Background/Literature Review**: Motivate the need for the capstone project, through a review of literature, background on similar relevant projects, and a discussion of the public health relevance of the project. This section should also provide any relevant background information or details about this particular project.
   b. **Project Objectives**: Bullet-point description of project objectives.
   c. **Methods**: Describe the methods undertaken to produce the capstone project. This section should include the overall approach to the problem and the specific methods used to accomplish project objectives, as well as a description of the target audience.
   d. **Results/Project Description**: Describe the final product of the capstone project. In some cases (e.g., review of the literature), the paper comprises the final project and this section is where the results are described. In other cases (e.g., training manual), the final project will be placed in an Appendix and should simply be described in this section.
   e. **Discussion/Conclusions**: Describe what was accomplished with this project and how it moves the field forward. What were the conclusions of the study? How does it guide policy for this study area? How will this project advance public health? What were the limitations of the project? What are the next steps? This section is important regardless of the type of project undertaken. It is the opportunity to demonstrate the depth of understanding and innovation associated with the project.

3. **References**
   a. References should be in uniform format.
   b. Examples of a journal format for books, papers, websites, CD-ROMs, etc. can be found at www.aje.oupjournals.org.

4. **Tables & Figures**
   a. Tables and figures can be placed in the body of the text or after the References.
   b. Page number format: sequentially with the body of the project.

5. **Appendices**
   a. Items not included in the text but important for the understanding of the design, implementation, or conclusions of the project.
   b. Appendices should be listed separately in the Table of Contents.

**Consider taking advantage of the Academic Writing Center services available to RSPH students: [https://www.sph.emory.edu/rollins-life/resources/academic-writing-resources/index.html](https://www.sph.emory.edu/rollins-life/resources/academic-writing-resources/index.html). Go to website to make an appointment request. “We can help you organize your ideas, develop a writing plan, and identify grammatical mistakes with our one-on-one, in-person tutoring services.”**