

SES 660A Demonstration of Professional Competence

A/K/A Capstone

Spring 2019

Mondays: 5 - 7:50pm, HHN 102

Professors

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Capstone Committee

Professors Leonel Ponce, Gita Nandan, Gelvin Stevenson, Damon Chaky, Samara Swanston and Paul Mankiewicz

Welcome to Capstone - a course, a workshop and a dress rehearsal for the project management, systems analysis, design, and implementation you will be involved with in the professional world.

Capstone is about both process and product. The processes we explore throughout the semester build on the ones you described in your proposal. These skills include problem/solution identification, interviewing, note-taking, researching and analyzing policy and programs, while communicating, justifying and conducting structured analysis. Developing these abilities, and demonstrating progress throughout all stages of the project, are just as important as the final deliverables (a paper, poster and presentation).

In the course, and throughout the Capstone process, we hope to help you sharpen the following skills:

- Research & Critical Thinking
- Client Communication & Relationship Building
- Strategy and Process Design
- Command of Current Literature
- Innovative Research Contribution
- Professionalism
- Standard of Excellence
- Communication: Verbal, Written and Visual
- Writing: Focus, Depth and Style
- Mapping and Infographics

COURSE GOALS:

By taking this course, you will:

Gain a deeper understanding of the current state of a particular research topic or challenge in the world of sustainability systems through a comprehensive literature search and best practices.

Exercise client communication and relationship building.

Become familiar with the best practices within your selected research topic.

Become familiar with the strengths, opportunities, weaknesses and threats inherent in a specific organization, policy or approach.

STUDENT LEARNING OBJECTIVES:

By the end of this course, you should be able to:

Identify and describe where work or research (in your area of study) has already been done and articulate as well as think critically about the findings and practices.

Identify best practices and problem practices. You should research and write full case studies for best practices and/or approaches.

Justify qualitatively and quantitatively the specific recommendations arrived at during your research.

Discuss and debate the implications of your recommendations and their implementation.

Demonstrate a deep understanding of the sustainable environmental systems associated with your study.

Develop mechanisms to evaluate your proposal and include indicators, metrics and benchmarks as appropriate.

Communicate this effectively to a broad audience.

WHAT IS A CAPSTONE?

Capstone is an independent research project meant to reflect how you've learned to identify challenges to sustainability by analyzing the environmental systems associated with a particular challenge or opportunity; designing and proposing new or adjusted systems; identify strategies; and set and measure goals.

Capstone is the time to apply what you have learned, or have yet to learn, on a topic of your choosing. The resulting deliverables should be of professional quality you are proud of and that you may utilize to propel your professional advancement.

To see completed capstones, visit the archive: <https://commons.pratt.edu/sesresearch/> where you'll see a range of topics, scopes, and formats which reflect the diversity of our program alumni.

Capstone challenges you to form and express a new understanding or hypothesis about how places manage air, energy, water, waste, community, economy, social justice and equity. You'll research the context for the problem you've perceived, describe case studies that suggest alternative approaches that

would ameliorate it, and propose steps that specific parties can take to begin changing relevant policies, practices, and frameworks, all in the context of client and stakeholder realities .

Successful capstones use storytelling methods and data analysis to clarify an obscure injustice, inefficiency or underutilized system. If you bring a narrative skill other than writing, such as filmmaking, art ,music, etc., you may submit a plan to use it in tandem with writing.

PURPOSE:

To integrate your skills in identifying, designing, analyzing and evaluating data to describe how sustainable systems function and can be reinvented and/or improved.

METHOD:

This class, unlike prior SES courses, focuses on developing professional competence and is driven by **your** desire to improve and/or develop skills and abilities. **We** will work together on these items in the context of research, revision, writing, presentation, and client management and your openness and willingness to accept suggestions and direction will be critical.

READINGS:

Required: Cuomo, Mario. Forest Hills Diary: The Crisis of Low Income Housing, Vintage Books, 1974 See Course Summary and LMS for assignments.

It is expected that your paper will be submitted in Modern Language Association (MLA) style or a style as otherwise mutually agreed upon. See <https://style.mla.org/formatting-papers/> . We **recommend** you obtain two general writing guides, each listed below. They are offered as supplemental reading to your process and you are highly encouraged to read at least the first 35 pages of Zinsser's "On Writing Well".

Zinsser, William. *On Writing Well*. Harper Paperbacks, 2013.

Strunk, William, and E.B. White. *The Elements of Style*, Allyn and Bacon, 2000.

ASSIGNMENTS:

1. A weekly journal entry is required. This assignment is due no later than 5pm each Sunday during the semester. Your journal entries can be your project tracker , class notes, brainstorm or outline work, reflections on readings, interviews or interactions during the course of the semester. There may be specific topics assigned by the professors from time to time. You may keep a manual or electronic journal. Please submit journal pages (entries) via Google Slides and give both professors access.

2. A minimum of three interviews are required (professor, client, stakeholder) - see course schedule for due dates.

3. Other assignments are included in the syllabus. Starting after midterm presentations, a draft of your paper is due by 5pm every other Friday, for discussion the following week.

GRADING:

10% Class Participation

Including attendance at each class and participation in each workshop

30% Assignments

Reflects the promptness and consistency, as well as the cumulative thought, care and clarity in your weekly assignments prior to midterm.

10% Midterm Presentation

Reflects the quality and rigor of your midterm presentation. At this point you will be given a midterm grade which is indicative of your performance to date.

20% Outlines and Drafts for your final paper and presentation

Reflects how openly and thoroughly you develop and expand outlines and address your research question on the way to writing your paper and presenting your final slides.

30% final Paper and Presentation

Reflects clear and thorough case studies, writing and visual clarity, thorough and consistent citations, critical thinking and a novel contribution to the study.

ATTENDANCE:

Attendance in this class is very important. Students with more than one unexcused absence will be dropped a letter grade for each additional absence.

Finally...

Seek out graduates whose work you admire. Hear how they may have struggled and prevailed or took off and landed. Enjoy yourself!!

COURSE SCHEDULE

January 28th: A Capstone Needs a Touchstone (self assessment/goals/journal)

We'll read through the syllabus together, set terms and expectations, and agree on how we'll treat the course and each other. We'll also look through past capstones and discuss them.

In Class Exercises:

1. Elevator speech your project: Three minute description of the research question, client, context, where you are headed, foreseen challenges.
2. Define professional competence together as a group.

Assignment 1: What is your research question? Review comments from instructors and Capstone Committee on previously submitted, draft project proposals. Update your proposal with added clarity,

details and focus. Include a description of your client. List 10 sources (in MLA style) which you have consulted during your research. Integrate them into your written assignment using footnotes or in text citation. **Due Friday February 1.**

Journal Entry 1: What are some qualities of professional competence discussed in class that surprised you and how will you incorporate these into your capstone project? **Due Sunday February 3.**

February 4th: Problem Framing & Client Relationship (interview skills)

In Class Exercise:

1. Refine the description of your client: include its budget, business model, operating style, mission, form of organization and challenges if any. What are the opportunities and threats for your client to take on this work or for you to be inserted in the process?

2. Problem & Solution Framing: Develop a “problem framing tree” (see https://drive.google.com/file/d/1WIAq5pgj5ZTRH3o94kTIO_CRrWrAfMKO/view).

Write a three-sentence prescription for solving the system stresses, addressing the threats and seizing the opportunities of the client to a classmate. Give that person your idea or solution.

Now take the idea your classmate provided for their project and write three or four items, concepts, skills, and/or relationships you would need to know or understand, to describe how to make success happen.

Discuss.

2. Interview skills review.

Assignment 2: Generate a Systems Diagram. Have fun with this! Do several iterations, hand draw it if you prefer for quicker turn around and editing to present at the next class. Refer to the LMS and Pratt Commons for systems diagrams examples and resources. **Due February 11th, in class.**

Interview 1: Stakeholder/client interview #1 is **due February 11th, in class.**

February 11th: Systems Diagram Workshop

In Class Exercises:

1. Negotiation and mediation skills (role play 1 - “Dirty Laundry”). Materials and roles to be distributed prior.

2. Present your systems diagrams.

- a) Workshop with peers and faculty. Are all elements of the system represented? Are all stakeholders and their interests accounted for? Why or why not? What are the options? Revise
- b) If you weren't doing this research, what specific metric would go missing from the discourse?

How can you most strongly make the case for this metric? Where is this metric best placed in the system?

Assignment 3: Generate a work plan for the semester. Follow the *Gantt Chart* format (Google, Microsoft Project, Excel provide many examples and templates) with weekly milestones. Acquisition of data and the type of data should be included in your work plan. Be prepared to share this product in class on **February 18th. Due 9pm Sunday, February 17th.**

In addition, generate a list of scientific sources (journals, articles) and come prepared with this list to the Research Workshop (**2/18**) with Architectural Librarian Maggie Portis. Also be prepared to discuss three proprietary sets of data with your colleagues and Ms Portis. Explain your source and three to five limits on its currency, relevance, accuracy, or its impartial point of view. Explain your plan for overcoming or offsetting these limits.

February 18th: Research and Citation Workshop with Architectural Librarian Maggie Portis (research)

Location: Library Resource Room

Assignment 4: Case Study Research. At this point you should have a few case study leads. Further refine one of them to be presented Pecha Kucha style during the next class. Keep in mind that this case study will be a piece of your final paper and presentation. When drafting your presentation consider how this content will be utilized in your final deliverables. **Due February 25th, in class.**

Examine and reflect upon a case study in your assigned past Demonstrations

Interviews 2 & 3: Your second and third stakeholder/client interviews are **due February 25th, in class.**

February 25

Case Study Presentations (pecha kucha)

Each student will present one of their case studies Pecha Kucha style. Peers and faculty will assess each student's research and presentation style. Assessment forms provided.

Assignment 5: Generate a draft outline for your paper and a storyboard for your presentation (digital or hand drawn). **Due Sunday March 3rd, by 9pm.**

March 4th: Analysis Is Iterative (share interviews)

In Class Exercise:

1. Share interviews and experience.
2. Pair up and share the proposal question you brought to this class in Week One, how you first encountered an answer, what that answer made you doubt or question, and what you're noticing that could

use a redesign or reform. Use your draft outline and storyboard as guides. One student talks and the other jots notes.

Then the jotter finds three to five missing pieces in what the sharer has described. Has the sharer thought about budget? Available workforce? Unintended ecological or social impacts? What else will change if the sharer's proposal goes through? What effects will follow?

Share out, and switch roles.

Assignment 6: Prepare your midterm presentation. Pay careful attention to citations. **Due March 18th, in class.**

March 11 Spring Break!!

March 18th: Recorded Midterm Presentation.

Bring a polished, audience-ready 10-minute presentation. Choose either a 10-minute walk through of your research process so far or a 10-minute draft of your final presentation. We will record the presentations and share them with you.

Assignment 7: (Journal) Write a self assessment of your presentation. What was the feedback you received for both content and style. Address these items and articulate how you addressed them in your write up. **Due Sunday March 24 by 9pm.**

Assignment 8, Paper Draft #1: Generate a draft of your paper, including an outline and revised diagrams, and have your interviews documented and ready to discuss in class. **Due March 24th, by 9pm.**

March 25nd: Writing & Presentation Workshop

In Class Exercise:

1. Bring a **revised outline of your paper** so far that includes your problem's scope, metrics, existing conditions, proposed change, research method, and recommendations. Bring a preliminary draft of the paper (**Draft #1**) that expands on the revised outline. Break up into groups. Each person gets a turn hearing measurement or process questions from the other two, and then a group reporter summarizes. Jot down three or four tactics you'll bring to the task of writing out your argument.

April 1: Find Your Voice (2hr role play negotiation)

In Class Exercise:

Multiparty negotiation - "Dirty Stuff". Roles and confidential instructions distributed in advance.

Continue work on presentation and report. Drafts and revisions due Friday.

April 8th: Revisions

In Class Exercises:

1. Writing and presentation workshop with one on one desk crits and working time.
2. Discussion: Group discussion of why we cite and why faculty requires extensive credit for others' work. Ask questions- all of them are smart!- about what and how to cite, and (if time allows) pair off to inspect each others' drafts.

Assignment 9: Bring an expanded paper draft (**Draft #2**) that shows how you responded to group critique from the previous week. Recreate/present a final systems diagram. This draft should include full paper template, written introduction with abstract/thesis statement, written case study section. **Due April 29th, in class.**

April 15th: Clean copy

In Class Exercise:

Pair off to discuss and diagram how you've implemented your research method and how your writing style will explain this method's benefits and limits. Writing and presentation workshop with one on one desk crits and working time.

Assignment 10: Draft final presentation, ready to be given to the class. **Due May 6th, in class.**

April 22nd: Bringing It All Together. Presentation Dry Runs

In Class Exercise:

Come with a draft of your paper and a draft of your slides. Students to present to the class.

Continue work on presentation and report. Drafts and revisions due Friday.

April 29: Revisions optional

Pair up and review topic sentences, transitions and citations. Writing and presentation workshop with one on one desk crits and working time

Continue work on presentation and report. Drafts and revisions due Friday.

May 6th: Revisions (optional class)

Review topic sentences, transitions and citations. Writing and presentation workshop with one on one desk crits and working time

Friday, May 10th:

FINAL PRESENTATION TO THE CAPSTONE COMMITTEE, CLIENTS AND STUDENTS

FINAL REPORTS DUE May 12, 2019 by 9pm

GRADING:

10% Class Participation

Including attendance at each class and participation in each workshop

30% Assignments

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Finally...

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