

CAPSTONE IN HUMAN ECOLOGY

11:374:499 **Peter J. Guarnaccia, Ph.D., Professor** Spring 2017

Wednesday 9:15-12:15

Foran 138-A

Course Description

This class will help students prepare to ‘exit’ their undergraduate career by:

- improving their resumes/personal statements/career portfolio
- reflecting on their strengths/weaknesses in preparation for future careers
- providing an opportunity to create a final project to showcase their training in EPIB.

This seminar provides a forum for reflecting on the learning goals of EPIB for seniors who are majors or minors in the department. Students will draw on knowledge from our interdisciplinary program of study to demonstrate their ability to make meaningful contributions to crucial debates concerning the themes of EPIB.

According to the student’s individual interests and needs, the student will develop an individual “Capstone Project,” which may take the form of a research paper, a freestanding project proposal, a proposal directed at a particular funding opportunity, a policy report or “white paper”, an informative website, a creative piece such as a video or artistic portfolio, etc., which will be decided on in discussion with faculty. Ideally this Capstone project would build on a previous course project. During the Capstone course the students will engage in research, writing, peer review, editing drafts, presenting ideas, and produce a final project that will be shared with the Human Ecology community.

In the Capstone, students will expand and develop their ideas further to create a product that would be useful in the next stages of their careers. Students considering taking an independent study in EPIB or their home department may want to use a research proposal developed through their Capstone project as the motivation for an actual independent research project, to be carried out with the guidance of a Rutgers faculty member. For other students, the Capstone project will serve as a demonstration of what they are capable of doing. Students will be expected to contact other professors in Human Ecology or elsewhere for specific guidance on content for Capstone projects.

Learning Goals: At the end of this course, students will be able to:

1. Review, describe and apply key theoretical concepts in Human Ecology
2. Use multiple sources and perspectives to demonstrate competency with interdisciplinary approaches to research and problem solving
3. Expand and refine critical thinking skills through engagement with the scholarly debates on your chosen topic within Human Ecology
4. Design and execute a Capstone paper or project
5. Reflect on how your experiences in Human Ecology and at Rutgers have prepared you for the next step in your career/personal development.

Required Textbook

Koomey, Jonathan. 2008. Turning Numbers into Knowledge: Mastering the Art of Problem Solving. Oakland, Analytics Press. 2nd Ed.

Reserve: All articles and chapters, besides the textbook, will be available electronically on the Sakai site for the course.

Course Requirements

Weekly Assignments & Discussion	50%
Final Capstone Project	50%

Office: Room 206 Cook Office Building
T: 848.932.9231
E: *guarnaccia@aesop.rutgers.edu*

Office Hours: Wednesday 3:00-4:30 pm and by appointment

COURSE SCHEDULE

Jan 18 ORGANIZATIONAL MEETING & INDIVIDUAL MEETINGS

In class: Overview of the goals and approaches of the Capstone course. Provide list of possible project formats. During the second half of the class, we will meet individually to begin discussing course projects and topics (sign up for an in-class time).

Assignment due following week: Collect and bring to class copies of your resumes/portfolios

Jan 25 REFLECTIONS ON EDUCATIONAL EXPERIENCES IN EPIB & INDIVIDUAL MEETINGS

In class: Revisit resumes/portfolios/websites. During the second half of the class, we will meet individually to begin discussing course projects and topics (sign up for an in-class time).

Readings: Koomey, Chap 3, "Information, Intention and Action"

Materials from Rutgers Career Services on CV/Resume Writing

Selection of sample essays from Asher, Graduate Admissions Essays (Sakai)

Assignment due following week: Personal narrative (1-2 pgs.) on what you think you will do when you graduate and how the courses you have taken have prepared you for that next step. Reflect on the skills and requirements necessary for that career path and how the Capstone project will prepare you for the next steps (use the 'Cycle of Action' in Koomey, Chap. 3, to help you plan your strategy).

Feb 1 REFLECTIONS ON INTERDISCIPLINARITY

In class: Review of what interdisciplinarity means; how it is practiced in EPIB.

Readings: Selections from special issue of *Nature* on 'Interdisciplinarity' (Sakai)

Assignment due following week: List of courses you have taken, brief reaction to the readings on what interdisciplinarity means and a statement of how you would characterize your own interdisciplinarity. Statement of how your approach to interdisciplinarity influenced your choice of research topic.

Feb 8 REFLECTIONS ON THEORY

In class: Revisit selected theories from previous HE courses through small group presentation and discussion.

Reading: Koomey, Chaps. 1, 5; selected theoretical articles (Sakai)

Assignment due following week: Write a brief statement on the theoretical approach you will choose for your project and why (with references using an approved format).

Feb 15 REFLECTIONS ON THE RESEARCH PROCESS

In class: Examine an academic research proposal or policy brief example that relies on research. Evaluate these materials using Koomey's questions and tools (among others).

Reading: Koomey, Part III: Assess their Analysis

Use American Public Health Association's materials on climate change & health (Sakai)

Assignment due following week: Outline of your project and steps needed to get there

Feb 22 REFLECTIONS ON SOURCES

In class: Research session at Chang Library from 10-12 am.

Assignment due following week: First draft of an annotated bibliography for project, comprising at least 5 sources.

Mar 1 REFLECTIONS ON WRITING & INDIVIDUAL MEETINGS

In class: Examples of good and bad scientific/policy writing; peer review of methods sections. During the second half of the class, we will meet individually to discuss progress on course projects (sign up for an in-class time).

Readings: Koomey, Chaps 24-28

Assignment due following week: Write up the abstract and background section of project, paying attention to language and argumentation.

Mar 8 REFLECTIONS ON METHODS & INDIVIDUAL MEETINGS

In class: Review selected methods of interest to the students and discuss how to use those methods in a research project (focus groups – Prof. Guarnaccia; survey methods – Prof. Cuite). During the second half of the class, we will meet individually to discuss progress on course projects (sign up for an in-class time).

Reading: TBD based on method selection (Sakai)

Assignment due following week: Draft methods section for proposed project (actual or proposed methods).

Mar 15 SPRING BREAK

Mar 22 REFLECTIONS ON EVIDENCE & CLAIMS

In class: Discussions of how to marshal evidence to make an argument using material from APHA's campaign on climate change & health or Anti-Vaccination Movement.

Reading: Koomey, Part III: Assess their Analysis; Hughes, Critical Thinking, Chaps 1, 16 (Sakai)

Assignment due following week: Analysis of a scientific paper related to your topic/project and how evidence and claims are used.

Mar 29 REFLECTIONS ON ETHICS

In class: Case studies of ethical problems

Reading: TBD

Assignment due following week: Preliminary draft of project in a form ready for presentation/communication (PPT, PechaKucha, Video, Website, etc.).

Apr 5 REFLECTIONS ON COMMUNICATION

In class: Discussion of types and outlets for communication

Readings: Koomey, Part V: Show Your Stuff

Apr 12 ORAL PRESENTATIONS

Apr 19 ORAL PRESENTATIONS

Apr 26 CONCLUSION

In class: Wrap up and evaluations

Assignment: Final Projects due