Course Description and Objectives

*Catalog description:* A symposium for graduate students to develop and present thesis and dissertation proposals.

*Rationale for offering this course:* This course provides instruction on designing and conducting research, and opportunities for critical reviews of student research proposals. Instruction focuses on devising appropriate research questions, grounding questions in existing theory, articulation of hypotheses, and ensuring methods are appropriate for addressing the research question and hypotheses proposed. Students will present their research proposals at the spring School of Environment and Natural Resources Graduate Student Research Proposal Symposium.

*Student Performance Objectives:* As a consequence of this course, the participant will demonstrate the ability to:

1. Identify a research question, describe how their question(s) is grounded in existing theory, and articulate a plan (the proposal) for collecting the data needed to address their research question.
2. Prepare and present a scientific research proposal, and engage in scholarly discussion about the proposal.
Methods of Instruction and Course Requirements

This course is divided into three parts.

- First, we’ll spend several weeks introducing concepts critical to formulating a good research proposal (e.g., what is science, what is a research question, what is the relationship between theory and research, how does previous literature play a role, what are methodological options, etc.) and reviewing how to prepare a formal proposal.
- During the second portion of the course, students will not meet formally in class, but rather, are expected to use in- and out-of-class time for the preparation of their draft proposal.
- Finally, during the third part of the course students will give and receive formal feedback on the research question, hypotheses and methods of their proposals, and will develop and present an abbreviated poster form of their proposal at a departmental event.

During the first section of class meetings, students will be expective to (1) read and reflect on the readings before the date on which they will be discussed, and (2) participate in classroom discussions. During the third section of the course, students will participate in critical peer review writing activities, develop a draft proposal and make a poster presentation at the the School’s Graduate Student Research Proposal Symposium.

Required Texts:

Required readings will be provided for student use via the course Carmen/Canvas site. 

Grading

This course is graded S/U. In order to attain a satisfactory grade, students must participate in the seven class meetings and present a satisfactory research proposal at the Graduate Student Research Proposal Symposium. (Note: If you will be absent from a session, notify the instructor before hand, and prepare a 1-2 page reflection based on the readings from the day you miss.)

Admission Procedure

This course is for graduate students, especially those who will be conducting or evaluating scientific research related to environment and natural resources. Prerequisites: none.

Availability of Accommodations

If you need an accommodation based on the impact of a disability, you should contact the instructors to arrange an appointment as soon as possible. At the appointment we can discuss the course format, anticipate your needs and explore potential accommodations. We rely on the Office For Disability Services for assistance in verifying the need for accommodations and developing accommodation strategies. If you have not previously contacted the Office for Disability Services, we encourage you to do so.

Method of Dealing with a Language Barrier

This course will be conducted in English. The instructor does not have the resources necessary to evaluate non-English work. Students who have difficulty communicating in English are encouraged to seek assistance from sources outside the classroom. Arrangements can be made for enabling students with speech, hearing, or visual impairment to participate in the course, e.g., through assistance of transcribers or readers.
Academic Misconduct:

Submitting plagiarized work to meet academic requirements, including the representation of another’s works or ideas as one’s own; the unacknowledged use and/or paraphrasing of another person’s work; and/or the inappropriate unacknowledged use of another person’s ideas; and/or the falsification, fabrication, or dishonesty in reporting research results, shall be grounds for charges of academic misconduct.
Course Calendar (subject to revision)

PART 1: BASIC TRAINING IN RESEARCH PROPOSAL DEVELOPMENT

Session 0 (9-JAN) – Welcome and Introduction to the Course

No required readings

*No class on 16-JAN (MLK Holiday)*

Session 1 – (23-JAN) What is Science? What are your Draft RQs?

REQUIRED READINGS

- Nuemann  Ch 1 Science and Research
- Nuemann  Ch 4 The Meanings of Methodology
- Baker   Ch 2 The Nature and Logic of Science
- Punch   Ch 4 Developing a General Framework for Proposals

ASSIGNMENT

Write 2-page overview of research topic & research questions (ASSIGNMENT 1)
DUE FRIDAY January 20th by midnight

Session 2 – (30-JAN) Incorporating Scientific Theory & Literature

REQUIRED READINGS

- Punch   Ch 5 Using Theory & Dealing with Literature
- Neumann Ch 3 Theory and Research

ASSIGNMENT

Revise Topic/RQ document
Find 5 initial peer reviewed articles/books that provide theoretical and empirical support
for your proposal – write annotated bibliography for each
DUE FRIDAY January 27th by midnight

Session 3 – (13-FEB) Research Design Choices

READINGS

- Neumann  Ch 6 Qualitative and Quantitative Research Designs
- Shadish, Cook & Campbell  Ch 2 Experiments and Generalized Causal Inference
- Singleton & Straits  Ch 5 Measurement (only pp. 130-134 required)

ASSIGNMENT

Find 2 empirical articles that are reasonably good models for the type of research you
propose to conduct; identify key aspects of their research design.
Revise topic/RQ if needed
DUE FRIDAY February 10th by midnight
Session 4 -- (20-FEB) – Methods Café & Workshop

ACTIVITY
Guest panel: Faculty and advanced graduate students discuss their research experiences and provide feedback on appropriate methods.

ASSIGNMENT
Write up 2 page brainstorm of potential methods for your proposal (before class)
Come with methods questions to ask the experts!

Session 5 – (27-FEB) – Structure of Research Proposals

REQUIRED READINGS
Punch Ch 7 Writing the Proposal
Lofland and Lofland Ch 10 Writing Research Reports

ASSIGNMENTS
Write up and submit an outline of your proposal literature review (due Feb 24th midnight)

***** NO CLASS MEETINGS FOR 4-5 WEEKS TO ALLOW TIME TO WORK ON PROPOSALS *****

PART 2: Finalizing Proposal Drafts & Presentations

Session 6 (TBA-Tentative 03-APR) – Writing Workshop

ASSIGNMENT
Submit draft write-up of research design, methods, analysis, expected results, and limitations - DUE WEDNESDAY MARCH 29th (circulate for peer review)

IN-CLASS ACTIVITY
Peer group discussions of drafts (based on feedback)

Session 7 (TBA-Tentative 10-APR) – Poster Presentation Practice Session

ASSIGNMENT
Revise proposal draft
Develop draft poster

IN-CLASS ACTIVITY
Poster presentations in class
Upload your poster presentation to Carmen dropbox before class

(17-APR) Poster Revisions: Any revisions to your poster based upon feedback are due by Midnight (12:00AM) on April 17th. Please upload final presentations to the dropbox.

Final Session (TUESDAY APRIL 25) 10:00-12:00
SENR -- Graduate Student Research Proposal Spring Symposium