Logistics
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Office hours: Tuesday & Thursday 9:30–10:00 am or by appointment
Class times: Tuesday & Thursday 8:00–9:30 am
Class location: McGowan South room 206
Final exam: none
Textbook: none

Course overview
From the Course Catalog, “The purpose of this course is to improve the skills of environmental science majors in using various forms of information technology (e.g., indexes and databases, journals, Internet, WWW, etc.), and in writing research proposals. Students will select a topic and then write a thorough and detailed research proposal. Prerequisite(s): ENV 394 or consent of program director.” [NB: ENV 394 no longer exists—it has been combined into ENV 360.] In practice, the major goal of this course is to develop your research proposal for fulfilling the Environmental Science senior thesis requirement. To accomplish this, we will discuss generally how environmental research is conducted and specifically what topics the Environmental Science faculty members explore. During the quarter, you will identify a research project associated with an Environmental Science faculty member; produce an annotated bibliography on your topic; write a research proposal; and present that proposal orally to the rest of the class.

Course philosophy
We will strive to have an interactive discussion on the topics addressed in this class. Science is difficult to learn passively—classroom participation promotes active learning. Student learning is the focus of this class, and I expect student participation and feedback in reaching the objectives of the course. Students will be encouraged to provide both formal and informal feedback throughout the semester on course direction, topics and teaching methodology. Also, helpful criticism is always appreciated via email, office hours and after class.

Class structure
The first two weeks of class will be dedicated to introductory material and presentations from the Environmental Science faculty. For the next seven weeks, we will alternate between focusing on student research and topics of good experimental design. All classes will be lead by students. On Tuesdays, the focus will be on papers related to experimental design, while Thursdays will cover papers related to student research topics. Thursday’s research papers will be selected by the presenting student. Tuesday’s methods papers will be selected by the class as a whole.
Assignments

**Annotated bibliography:** After your project is identified, you are responsible for producing an annotated bibliography of ten sources. Of these sources, five must be peer-reviewed literature (as will be defined in class). For each source, you need to write a minimum of a 100-word summary of the article that relates to your proposed project. This assignment will be due on Thursday, *Apr 29* and will account for 20% of your class grade.

**Project proposal:** The main deliverable for this course is a research proposal that will guide you towards the completion of your senior thesis. The first step in this process is creating your annotated bibliography. Next, you will submit a 400-word abstract that outlines your research idea and how you will test your hypothesis (20% of your grade). Your project proposal will include a research statement (typically, a hypothesis), a statement of why your research is important, and your proposed methods (including a timeline). This will be an iterative process: you will first submit a draft (Thursday, *May 13*, 20%) and then a final version (Thursday, *May 27*, 60%). Overall, your project proposal will account for 40% of your class grade.

**Project presentation:** During the final week of classes (Jun 1 & 3), you will share your proposal with the class during a 15-minute oral presentation worth 20% of your class grade. This will both allow you to polish your presentation skills and receive feedback from the entire class on your proposed research.

Policies

**Academic Integrity:** According to the DePaul University *Student Handbook*, “Violations of academic integrity include but are not limited to the following categories: cheating; plagiarism; fabrication; falsification or sabotage of research data; destruction or misuse of the university’s academic resources, alteration or falsification of academic records; academic misconduct; and complicity.” The Handbook also states that, “If an instructor finds that a student has violated the Academic Integrity Policy, the appropriate initial sanction is at the instructor's discretion.” To support this policy, your assignments may be submitted to the website turnitin.com. For more information, definitions, and examples, see DePaul University’s Academic Integrity website at [http://academicintegrity.depaul.edu](http://academicintegrity.depaul.edu).

**Blackboard:** In an effort to reduce paper usage, all class materials and grades will be available on the Blackboard site. I will post all lectures on the Blackboard site within 24 hours after the class. All assignments will be submitted via Blackboard.

**Attendance:** Attendance is required for all classes. Students will be allowed to miss two classes without penalty during the quarter. This should cover all ‘routine’ absences such as colds, doctor appointments, etc. Further excused absences will only be granted in exceptional circumstances with appropriate documentation. After the first two absences, one point for each missed class will be taken off your final grade. Any exceptions to this policy must be arranged in advance (e.g., athletic competitions).

**Late assignments:** Late assignments will receive a 10% per day grade penalty (i.e., within 24 hours = -10%, within 48 hours -20%, etc.).
Grading
Grades in this class will be determined on the following scale:

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I may change these grade boundaries, but this will always be in favor of the students and will be applied uniformly to the entire class. Grades will be determined from the individual components of the course by the following allocation:

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Sources of help
If you think you may have special learning needs, please see me as soon as possible, and every effort will be made to reasonably accommodate your needs.

- **PLuS Program**: for students with learning disabilities and/or attention deficit disorders
- **Writing Center**: for students who need help with writing
- **OSD**: for students with physical disabilities
- **Dean of Students**: accommodations with health or family emergencies

Learning objectives
Students will:

- Learn the different research interests of the Environmental Science faculty
- Identify a research problem and faculty member for their senior thesis project
- Understand the different methods of experimental design common in environmental science
- Be aware of common pitfalls in the scientific process
- Appreciate how ethics informs science