

Environmental Studies
ENV 120 – INTRODUCTION TO ENVIRONMENTAL FIELDWORK
Semester 1, 2023



Environmental research is a diverse area of study that spans the divide between natural sciences, social sciences and humanities, employing a range of qualitative and quantitative methods to understand environments. The purpose of this course is to introduce you to fieldwork as part of an environmental research program. In addition to covering methods used in fieldwork, this course aims to break down the research process into primary components and question why research in the 21st century is done the way it is, guided by fundamental questions such as:

- What makes a research question good or bad?
- What is data? How can patterns in data be used to better understand the world?
- What is theory? How is theory used in research (and vice versa)?
- What are some of the ethical issues environmental researchers face?
- What motivates research? Does research benefit everyone equally?
- What makes doing environmental research unique?

By the end of the course, students will learn how to design a successful field research program, collect and analyze different kinds of data using different techniques and tools, critically assess field research designs, and communicate fieldwork results to different audiences.

Recitations

Tuesdays 1:30PM - 2:20PM, Tisch Library, Room 310

Lectures

Thursdays 1:20PM - 4:20PM, Joyce Cummings Center, Room 302

Course structure

Recitation sessions are held for 50 minutes, once per week. Recitations will provide an opportunity to discuss course topics in more detail and prepare you for assignments, and may include in-class presentations or short activities to reinforce course concepts. Lecture sessions are held for three hours, once per week. Lecture sessions will be used to introduce you to different tools and techniques and that are used in environmental research. These sessions will be held in a range of formats, including seminars, field trips, in-class exercises, and guest speakers. Any presentation slides used in lectures or will be published on Canvas, but it is not recommended that you rely solely on these for course notes.

Some course activities will take place at locations away from the classroom, including in outdoor settings. You will be given advanced notice when these activities will take place, including any expectations for weather, terrain, and physical activity. You are expected to attend all recitation and lecture sessions; if you have any questions or concerns about these activities, please reach out to the convenor as soon as possible.

Rooms and times may be subject to change. Please consult Tufts Student Information System (SIS) for up-to-date information. Any changes to the course structure as listed in this syllabus will be announced on Canvas.

Course Instructor

Ben Davies

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Bromfield Pearson 203

Office hours: Mondays 10-11 AM (virtual), Wednesdays 4 – 5PM (in person or virtual)

Course Readings

Each week has associated readings, listed in this course outline and available through Canvas, that you are expected to read **before the Tuesday recitation**. These readings have been chosen to enhance your understanding of the course topics, facilitate discussions for that week and assist you as you prepare your assignments. Reading them in advance will greatly enhance your learning through attending class, and some of the material in the readings will be used to complete course assignments.

Course Communications

Most course communications will take place using Canvas and your university email account. Please ensure that your correct e-mail address is in the system and that your inbox is not full. Failure to read a message will not be accepted as a reason for failure to perform.

Course Assessment

Final grades in this course are based on your performance on a series of assignments. Brief descriptions on the assignments can be found below; more detailed descriptions and grading criteria are available on Canvas.

Assessment	Weight	Due date(s)	Week number
Tree species presentation	10%	Tuesday 19 th Sept	Week 3
Reading reflections	15%	Weekly	-
Tree inventory report	20%	Friday 13 th Oct	Week 6
Urban forest values report	20%	Friday 3 rd Nov	Week 9
GIS mapping project	15%	Friday 25 th Nov	Week 12
Final project	20%	Friday 10 th Dec	Week 14

Tree species presentation (10%)

The purpose of this assignment is to develop background reading, identification, and presentation skills. You will put together short presentation about a tree species found on or near campus, including qualities used to identify that species using a local exemplar.

Reading reflections (15%)

This assignment is designed to reinforce critical thinking about fieldwork, methods, and the research process. Each week, unless otherwise indicated, you will submit a short reflection and/or question about the weekly readings, and these will be used as prompts to guide in-class discussion of the readings.

Tree inventory report (20%)

This assignment is aimed at developing skills in collecting, analyzing and presenting data about the natural world. Students will work in pairs to conduct a partial tree inventory at a site on campus. Data from the inventory will then be combined with background information and visualizations into an individual site report.

Urban forest values report (20%)

The purpose of this exercise is to practice social research design and methods. Students will work in pairs to design and deploy a survey to record community values of local trees. Students will individually submit complete a short report on their findings, including a reflexive self-assessment of the data collection process.

Urban forest mapping project (15%)

The purpose of this assignment is to familiarize you with mapping using geographic information systems. Students will use data gathered from the course projects and existing datasets to build a map that communicates information about Tufts campus trees.

Final project (20%)

The final project will focus on the dissemination of field research outcomes. Students will assemble information gathered from the course into a stakeholder-facing document such as a white paper, webpage, op-ed article, letter to a policymaker, or other creative communication to a non-specialist audience. Final project ideas must be discussed with the convenor by Week 11.

Submitting assignments

All assignments must be submitted in digital format via the course **Canvas** page unless otherwise indicated.

Extensions and late assignments

This course has assignments due at regular intervals, and students are advised to submit assignments on time to avoid becoming overwhelmed with work. Students will be given some time to work on assignments during lecture sessions, particularly work done in groups, but be prepared to finish assignments outside of class time. **If an extension on an assignment due date is needed, please contact the instructor as soon as possible.** Extensions will be given in cases where there is a relevant and valid reason for inability to complete the assignment on time – usually illness, accident, or bereavement. Reasonable accommodations will be sought, but the duration of any extension is ultimately at the discretion of the instructor. Assignments submitted late without an extension will be issued a grade penalty equivalent to one half-grade per day (e.g., A becomes A-).

Academic integrity

Academic Integrity Policy: Tufts holds its students strictly accountable for adherence to academic integrity. It is critical that you understand the requirements of ethical behavior and academic work as described in Tufts' Academic Integrity handbook. If you ever have a question about the expectations concerning a particular assignment or project in this course, be sure to ask for clarification.

Tufts Libraries has a helpful web resource, **Research Guides@Tufts**, that can help if you have questions about plagiarism and proper attribution.

Plagiarism: <https://researchguides.library.tufts.edu/plagiarism>

Citation Support: <https://researchguides.library.tufts.edu/citation>

Accommodations for students with disabilities

Tufts is committed to providing equal access and support to all qualified students through the provision of reasonable accommodations. If you have a disability that requires reasonable accommodations, contact the StAAR Center at StaarCenter@tufts.edu or 617-627-4539.

Religious accommodations

Tufts University faculty, staff, and administration highly value and acknowledge the religious diversity of its student body. Students seeking religious accommodations related to their holy days are encouraged to collaborate with faculty to make arrangements during the first week of each semester.

Additional course policy statements

Additional course policy statements can be found on Canvas.