ENVST 950 ADVANCED TOPICS IN ENVIRONMENTAL STUDIES: HONORS SEMINAR

TERM/HOURS: Spring 2022/W 5-7:30pm
PROFESSOR: Jennifer Jacquet, jj84@nyu.edu
OFFICE HOURS: Sign up: http://goo.gl/QMPxO
OFFICE LOCATION: Virtual office: https://nyu.zoom.us/j/720886224
PREREQUISITE: 3.65+ GPA in general and in Environmental Studies

OVERVIEW:
WELCOME! And congratulations. You have each shown that you are outstanding at absorbing knowledge, as well as demonstrating you can learn. This course builds on that skill and aims to push you a bit further and encourage you to produce your own research in the realm of environmental studies with the aim of preparing you for graduate school. You will be expected to formulate your own research question, and will be required to put together a large literature review, methods/research design, and hopefully a pilot study and even some results. Areas covered include preparing research proposals, using the literature in devising and evaluating research, statistical analysis, library facilities, research ethics, and communicating science. By the time we have finished, you should understand the differences between qualitative and quantitative research, various methods of both types of research, as well as many of the inner-workings of research. You are expected to find the edge of a problem and push it further, however incrementally, by producing some excellent research of your own.

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FACULTY MENTOR:
You will each have a faculty mentor that you are expected to meet with roughly 2-3 times over the semester. These will be assigned early in the spring semester.

REQUIRED TEXTS:
See the articles and book chapters listed on the daily calendar. Additional readings will be announced so that I can tailor the course to your interests, needs, research questions, and methods. The majority of the class will be focused around YOUR RESEARCH, but these readings provide good context to discuss bigger picture issues.

Mandatory plagiarism statement: I expect no issues with this, but know that plagiarism results in failure in the class and referral to an academic dean. Plagiarism includes: copying sentences or fragments from any source without quotes or references; not citing every source used in your papers; citing internet information without proper citation; presenting someone else’s work as your own; or copying verbatim from any source. You are subject to CAS’s guidelines on plagiarism: http://cas.nyu.edu/page/ug.academicintegrity

Student Wellness:
In a large, complex community like NYU, it’s vital to reach out to others, particularly those who are isolated or engaged in self-destructive activities. Student wellness (https://cas.nyu.edu/content/nyu-as/cas/academic-programs/student-wellness.html) is the responsibility of all of us.

The NYU Wellness Exchange is the constellation of NYU’s programs and services designed to address the overall health and mental health needs of its students. Students can access this service 24 hours a day, seven days a week - wellness.exchange@nyu.edu; (212) 443-9999. Students can call the Wellness Exchange hotline (212-443-9999) or the NYU Counseling Service (212-998-4780) to make an appointment for Single Session, Short-term, or Group counseling sessions.

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THE GRADE: Your grade is made up of many assignments. This is strategic so that you keep momentum toward the ultimate goal, your thesis. It also means that if you do poorly on a single assignment, you should not panic. I give four
grades in honors on assignments: A, A-, B+, B. If you are doing below B work (very uncommon) I'll ask that we speak and figure out how to move forward.

**TALKS (4 TOTAL; 5% EACH; 20% OF TOTAL GRADE):** 5-minute talks consisting of however many slides you need but timed to end after 5 minutes (e.g., five slides for one minute each, 10 slides for 30 seconds each, etc.). This should be related to the week’s topic. Email me your slides by 4:30pm the day of class.

**TALK #1** Please present the methods from a paper you will cite in your research. Explain what the study accomplished, how the researchers deployed the methods, whether there are statistical tests involved, as well as the strengths and weaknesses of that particular method (this will require reading up on that method).

**TALK #2** Present your research idea. How will you go about tackling the question you are asking? What is your timeline for research?

**TALK #3** This talk is a little bit like TALK #1 but rather than focusing on the METHOD please focus on DATA from a paper you will cite in your research. Explain what the study accomplished, how the researchers collected and analyzed their data, whether there are statistical tests involved, as well as the strengths and weaknesses of that particular kind of data (this will require reading up on that particular kind of data).

**TALK #4** This talk focuses on visual displays of information (figures, tables, etc.). You should present at least one visualization you like, one that you don’t (both from papers relevant to your topic, that you likely cite in your own research), and one you will be using in your own paper (that you create yourself).

**PARTICIPATION (20%):** All research improves significantly with constructive criticism from one's peers. You are expected to contribute to class and to others’ research projects significantly and are expected to give critical but constructive feedback on both your peers’ drafts and presentations.

1. Comments on first drafts (25%)
2. Comments on third drafts (25%)
3. Comments during class and on presentations (40%)
4. IRB test score (10%)

**THESIS (60% OF TOTAL GRADE):**
1. the draft proposal (10%) This should put your project in context and then discuss your idea, including background, methods, and your timeline. The proposals should be no more than 5 double-spaced pages and include at least 15 references (which are separate from the 5-page count).
2. the draft outline (10%) (at least 20 references)
3. the revised outline (10%) (at least 25 references)
4. the first draft (10%)
5. second draft (10%)
6. presentation (20%)
7. third draft (10%)
8. final draft (20%) Maximum of 40 pages double-spaced. Note that longer DOES NOT mean better. References are crucial and separate from the page count. Note that the proposal, presentation, and final report will be much better with STRONG VISUALS, including tables, graphs, diagrams, etc.

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FOR PROPOSALS, OUTLINES, DRAFTS, AND TALKS, PLEASE JUST EMAIL THE FILES.
THE SCHEDULE:

CLASS 1 (JAN 26): THE BIG PICTURE

5:30-6:30 WHAT DOES IT MEAN TO THINK? PROFESSORS DALE JAMIESON, MICHAEL STREVENS, AND SONALI MCDERMID

QUESTIONS YOU SHOULD BE ABLE TO ANSWER AFTER CLASS:
What is expected of you in this class? What does the ‘field’ of environmental studies look like? What is a journal? How can you find the ‘edge’ of knowledge?

READINGS:
The Two Cultures and Scientific Revolution, CP Snow, 1961
Scientific Uncertainty and the Political Process, Dale Jamieson, 1996
Save the Whales, Screw the Shrimp, Joy Williams
The Climate Responsibilities of Industrial Meat and Dairy Producers, by Lazarus, McDermid, Jacquet
Joshua Rothman’s review of Michael Strevens’ The Knowledge Machine “How Does Science Really Work?”

CLASS 2 (FEB 2): DOING RESEARCH DUE: DRAFT PROPOSAL

5-6 PM VISIT FROM NYU LIBRARIES ABOUT RESEARCH
6-6:30PM VISIT FROM EXPOSITORY WRITING

QUESTIONS YOU SHOULD BE ABLE TO ANSWER BY THE END:
Why do research? What kinds of questions make for the best research? What research tools and reference managers are available to you? What are their strengths and weaknesses? What is a good research question (size, scope, how does it push the edge of knowledge)?

CLASS 3 (FEB 9): METHODS DUE: TALK #1 (a method from a paper you will cite)

QUESTIONS YOU SHOULD BE ABLE TO ANSWER AFTER CLASS:
What is basic vs. applied research? What is qualitative vs. quantitative research? What is a review, meta-analysis, qualitative review, experiment, ethnography, empirical study?

READINGS:

CLASS 4 (FEB 16): WRITING A RESEARCH PAPER DUE: TALK #2 (research idea) + DRAFT OUTLINE

QUESTIONS YOU SHOULD BE ABLE TO ANSWER BY THE END:
What makes a good literature review? What are the various formatting styles? What are the conventions for authorship across disciplines? What are the ethics of citation?
READINGS:

CLASS 5 (FEB 23): ONE-ON-ONE MEETINGS

CLASS 6 (MAR 2): WHAT IS DATA? DUE: TALK #3

QUESTIONS YOU SHOULD BE ABLE TO ANSWER BY THE END:
What counts as data? Statistical analysis? What is new data, existing data, big data? Are anecdotes data?

READINGS:

CLASS 7 (MAR 9): PUBLISHING/AUTHORSHIP DUE: 1st DRAFT + 1st DRAFT REVIEWS FRIDAY AT 10PM -- MUST INCLUDE YOUR CONFERENCE ABSTRACT

QUESTIONS YOU SHOULD BE ABLE TO ANSWER BY THE END:
Why publish? What role does publishing play in career promotion? How do you review a paper? What are the ethics and norms when it comes to reviewing papers?


REGISTRATION FOR UNDERGRADUATE RESEARCH CONFERENCE BEFORE FRIDAY, MARCH 11TH
https://cas.nyu.edu/content/nyu-as/cas/undergraduate-research/undergraduate-research-conference.html
• Application includes submission of project abstract (250 word limit)
• Participants will have until Friday, May 13 to submit a revised/updated abstract for Inquiry
• Abstracts will be published in Inquiry
  o Consult the Inquiry Style Guide for information on correctly formatting abstracts

MAR 16: NO CLASS; SPRING BREAK!

CLASS 8 (MAR 23): CONFERENCES/COMMUNICATING DUE: + TALK #4 (visual display of information)

QUESTIONS YOU SHOULD BE ABLE TO ANSWER BY THE END:
What makes a great research presentation? Why?

READINGS:
CLASS 9 (MAR 30): TOPICS IN ETHICS / DATA
DUE: IRB TEST

QUESTIONS YOU SHOULD BE ABLE TO ANSWER BY THE END:
What are some concerns with non-human animal research? What are some of the major concerns with human subjects research? What is the ‘reproducibility crisis’? What is a p-value? What is p-hacking?

READINGS:

CLASS 10 (APR 6): ES CAREER SERIES EVENT

CLASS 11 (APR 13): IN CLASS PEER WORKSHOP 2ND DRAFTS
DUE: 2ND DRAFT
2ND DRAFT REVIEWS DUE FRIDAY AT 10PM

CLASS 12 (APR 20): CALLING BULLSHIT

5-6:30pm GUESTS CARL BERGSTROM AND JEVIN WEST

READINGS:
Calling Bullshit: The Art of Skepticism in a Data Driven World by Carl Bergstrom and Jevin West

CLASS 14 (APR 27): ONE ON ONE MEETINGS
DUE: 3RD DRAFT DUE MONDAY BY 10PM

CLASS 14 (MAY 4): PRESENTATION WORKSHOP
DUE: PRESENTATION

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UNDERGRADUATE RESEARCH CONFERENCE FRIDAY, MAY 6TH! ATTENDANCE IS MANDATORY
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FINAL DRAFT DUE BY MIDNIGHT ON MAY 10th
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