POLS 8500: Special Topics in Research Methods – Experimental Methods in Political Science

Meeting times: Wednesdays, 3:35 - 6:35 PM
Room: Baldwin Hall / 102
Instructor: Professor Alexa Bankert
Contact: alexa.bankert@uga.edu
Office: Baldwin Hall 380F
Office Hours: Wednesdays 1:30–2:30 or by appointment

This course aims to introduce SPIA doctoral students to experimental methods in political science and beyond by discussing the method’s potential as well as its limitations. For this purpose, we will assess experiments’ ability to examine causal relationships if designed and implemented properly. The latter point is essential: Every good experimental design is based on a strong theoretical foundation that informs all stages of the experiment, including its conception, design, implementation, as well as the analysis of experimental data. From this perspective, this course will also teach you when experiments are useful and when they are not. While causality is nice, not every question in political science can nor need to be addressed with an experiment. Knowing when to utilize experimental methods is as important as knowing how to utilize them.

This course aims to be a hands-on seminar, which means that we will discuss and implement the stages of an experimental research project. This endeavor will include questions of ethics in research with human subjects, external validity, corroboration and reproducibility of experimental results, as well as the seemingly eternal debate surrounding pre-registration.

Overall, this class provides you with a new “toolbox” that expands your prior research methods repertoire and thereby enhances your research agenda.

Required Readings

There are no assigned books. I will make the readings available to you via eLC the week before we discuss a specific topic. Please check eLC on a regular basis.

Course Requirements and Grade Breakdown

1) Participation 10%
2) Homework assignments 30%
3) Project proposal and design presentation 20%
4) Final presentation 20%
5) Final project 20%

Evaluation

1) Participation: You are expected to come to class prepared. The word “prepared” seems to have different meanings to different people so here is what “being prepared” means to me: reading the assigned articles and chapters, taking notes on their main points, raising questions that might have remained unaddressed in the readings, as well as thinking about the implications of the readings for various research agendas. In addition, everyone in class will be discussion leader once during the semester. You can choose your specific week.

2) Project proposal and design presentation: The main goal of this course is to prepare you to design and run your own experiments. For this purpose, I will provide you with the opportunity to collect data using the SPIA undergraduate student pool. You will propose and present an experimental research design to test a specific research question, convincing your classmates and me of its theoretical contribution, its suitability for an experiment, its design and key variable measurement, as well as its current IRB stage. In addition to your presentation, please submit a two-page project proposal to me. It should briefly summarize existing literature in which your research question is rooted, clearly state your hypotheses, and discuss your research design (e.g., treatments, anticipated effects, etc.). The document should also contain a preliminary list of references. Project proposal and presentations are due February 6th.

3) Final project and presentation: In our last class meeting, you will give an in-class presentation of your project. These 15-minute presentations should include the research question, its theoretical framework, the experimental design, results, as well as the contribution and shortcomings of your work. Be prepared to integrate feedback into your final paper. Presentations are due April 24th. Final papers are due May 1st.

4) Homework assignments

Homework 1 (Due January 16th)

Complete the UGA IRB course and submit a print-out of the final certification page. Go to https://research.uga.edu/hrpp/citi-training/.
Homework 2 (Due January 23rd)

Set up a Qualtrics account and design a simple experiment. Write a brief paragraph discussing the nature of the experiment and email me a link to the survey.

Homework 3 (Due January 30th)

Pick five political science articles that apply experimental methods to a topic of your interest. In a short memo, address the following questions:

1) What is the theory?
2) Is an experiment suitable for the theory? Why?
3) What is the experimental design?
4) Is there an alternative design (experimental or observational) that could test the same idea?

Homework 4 (Due February 13th)

You will be assigned to one of the proposal presentations. Write a helpful one-page critique of the design, identifying its strengths and weaknesses, and provide suggestions that could make the design stronger. This critique will be shared with the presenter.

Homework 5 (Due February 20th)

Prepare at least three questions to ask our guest speaker. Please tailor your questions to the expertise of the guest speaker. Email these to me by 11am.

Homework 6 (Due February 27th)

Look again at your five political science articles from Homework 3. Examine their dependent and independent variables, answering the following questions:

1) What are the dependent and independent variables?
2) How are they measured and why?
3) Are there any manipulation checks?
4) Can you come up with alternative measures that could be used instead?
Homework 7 (Due March 27th)

Prepare at least three questions to ask our guest speaker. Please tailor your questions to the expertise of the guest speaker. Email these to me by 11am.

Homework 8 (Due April 10th)

Prepare at least three questions to ask our guest speaker. Please tailor your questions to the expertise of the guest speaker. Email these to me by 11am.

Homework 9 (Due April 17th)

Look again at your five political science articles from Homework 3. Examine the experimental design and results section, answering the following questions:

1) Which parts of the experiment are reported?
2) What statistical methods are used to analyze the data?
3) What methods are used to interpret the data analysis?
4) Are there any robustness checks or supplementary analyses?

Grading Scale for Final Semester Grades

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>100-94</td>
<td>A</td>
</tr>
<tr>
<td>93-90</td>
<td>A-</td>
</tr>
<tr>
<td>89-87</td>
<td>B+</td>
</tr>
<tr>
<td>86-84</td>
<td>B</td>
</tr>
<tr>
<td>83-80</td>
<td>B-</td>
</tr>
<tr>
<td>79-77</td>
<td>C+</td>
</tr>
<tr>
<td>76-74</td>
<td>C</td>
</tr>
<tr>
<td>73-70</td>
<td>C-</td>
</tr>
<tr>
<td>69-67</td>
<td>D+</td>
</tr>
<tr>
<td>66-64</td>
<td>D</td>
</tr>
<tr>
<td>63-60</td>
<td>D-</td>
</tr>
<tr>
<td>59-0</td>
<td>F</td>
</tr>
<tr>
<td>89-87</td>
<td>B+</td>
</tr>
<tr>
<td>83-80</td>
<td>B</td>
</tr>
<tr>
<td>86-84</td>
<td>B-</td>
</tr>
</tbody>
</table>

Course Overview

Week 1: Logic of experiments
Week 2: Ethics of research involving human subjects
Week 3: Connecting a theory to an experiment
Week 4: Designing an experiment and its key measures
Week 5: Project proposals
Week 6: Laboratory experiments
Week 7: Guest speaker I – Field experiments
Week 8: (Online) Survey experiments
Week 9: Natural experiments
Week 10: Bio-physiological measures in experiments
Week 11: Guest speaker II – Experiments in Sociology
Week 12: No class
Week 13: Guest speaker III – Experiments in Psychology
Week 14: Analysis of experimental data
Week 15: Project presentations

Readings

Week 1: Logic of experiments (01/09)


Week 2: Ethics of research involving human subjects (01/16)

Homework #1 due


**Week 3: Connecting a theory to an experiment (01/23)**

**Homework #2 due**


**Week 4: Designing an experiment and its key measures (01/30)**

**Homework #3 due**


**Week 5: Project proposals (02/06)**

No readings!

**Week 6: Laboratory experiments (02/13)**

**Homework #4 due**


**Week 7: Guest speaker I – Field experiments (02/20)**

**Homework #5 due**


**Week 8: (Online) Survey experiments (02/27)**

**Homework #6 due**


**Week 9: Natural experiments (03/06)**


Week 10: Bio-physiological measures in experiments (03/20)


Week 11: Guest speaker II – Experiments in Sociology (03/27)

**Homework #7 due**

Readings TBD

Week 12: No class (04/03)

Week 13: Guest speaker III – Experiments in Psychology (04/10)

**Homework #8 due**

Readings TBD
Week 14: Analysis of experimental data (04/17)

Homework #9 due


Week 15: Project presentations (04/24)

No readings!

Important Policies

Grade Appeals, Incompletes, Late Assignments, and Make-Up Policy
Formal grade appeals must be made in writing, and in the case of a paper, I will re-grade your entire paper. Therefore, your grade can go up or down. A final grade of “Incomplete” will only be given in this course under exceptional circumstances and is solely at the discretion of the instructor. If an incomplete is given, it is the student’s responsibility to complete the necessary requirements as early in the following semester as possible. Legitimate excuses for absence from class (e.g., religious holiday, medical emergency, or illness) must be presented to me prior to the class when feasible. Late assignments will be docked 5 percent per day (half letter grade), for each day that a project is late (including weekends).

Office Hours
Students who are having difficulty with the course materials and/or assignments are encouraged to make an appointment with. Don’t be afraid to come by. However, please note that office hours are for clarification of material, not for recreating a lecture if you skipped class. If you like to talk to me, feel free to stop by my office during office hours but please email me in advance if possible.
Syllabus Policy:
I reserve the right to make changes to the syllabus if necessary. I will give you fair notice (at least a week) if something, such as a reading assignment, is to change.

Disability Resource Center
If you anticipate needing classroom or exam accommodations due to the impact of a disability or medical condition, you must register for services with the Disability Resource Center. Additional information can be found here: http://drc.uga.edu/

Culture of Honesty Policy
You are responsible for knowing and complying with the policy and procedures relating to academic honesty. To understand what constitutes dishonest work, as defined by the University, please carefully review the policy here: