INST 381: RESEARCH METHODS

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Spring 2017

Croft Room 204
Class: MW, 2:00 – 3:15 pm
Office Hours: MW 3:30 – 4:30 pm and by appointment
My office is located inside the political science department, 227 Deupree Hall.

I. Description:

This course offers a design-centered approach to the study of social science research methods. We will review the key methodologies used in contemporary social science research, with a focus on causality and causal inference. We will study experimental methods, including lab experiments, field experiments and “natural experiments”, as well as the advantages they offer for establishing causal relationships (or the absence thereof). We will also study conventional quantitative methods (i.e. statistical methods) and qualitative methods and consider their similarities to and differences from experimental methods. Finally, we will learn the fundamentals of data analysis, including hypothesis testing, correlation and regression. After completing this course, you should:

- Know how to conduct a simple, randomized experiment
- Know how to conduct a basic statistical analysis
- Be able to apply the principles of quantitative research to qualitative research, thereby improving its quality
- Be prepared to critically evaluate causal claims and identify possible challenges to inference

II. Course Readings:

Students are advised to purchase the following materials for the course:


Stata statistical software, version 14. Students may purchase a six-month license of Small Stata here: https://www.stata.com/order/new/edu/gradplans/student-pricing/
Students may also wish to rent or purchase one of the following companions to using Stata:

*A Stata Companion to Political Analysis* (Pollock, Philip H. III.)

*A Gentle Introduction to Stata, Revised Third Edition* (Acock, Alan C.)

All other readings for the course will be made available on Blackboard or in hard copy. The agenda of topics and readings is at the end of the syllabus.

**III. Course Requirements**

**Attendance and Participation:** This is not a lecture course. While lecture will be an important part of the course, *active participation in class is required*. Students are expected to complete the readings by the class for which they are assigned and be prepared to discuss them. Also, students are expected to participate actively in all classroom activities and exercises. Ten percent of your course grade will be based on attendance and participation.

*Attendance is required.* Historical data shows that class attendance is one of the best predictors of your final grade in a course. In order to increase your chances of succeeding in this course, I will be decreasing your participation grade by 3 points for each absence, starting after your 3rd. Please note I do not need to see doctor’s excuses, notes from Mom, or anything else. If you missed class, you burned an absence. The only time I need to see documentation is if you are going to miss an exam or an assignment. Please note that I reserve the right to accept or reject documented excuses based on the circumstances.

**Exams and Quizzes:** The course has *two exams*: a midterm and a final. They are each worth 20% of your final grade (40% total). There will be an in-class review session for the final exam.

All students must also complete the Abbreviated Human Subjects Training and pass the Human Subjects Research Ethics Quiz. You will complete the training and take the quiz independently (outside of class). After completing the quiz, you should print out the final page as proof of successful completion and bring it to class on or by **Wednesday, Feb. 8th**. The quiz and a link to the training materials are both found here: https://www.research.olemiss.edu/ACITI/

**Projects and Assignments:**

**Group Experiments:** You will be asked to participate in a semester-long group project consisting of a simple experiment, which may be modeled after the suggested field experiments in Appendix B of the Gerber and Green book. Each group will design and implement a randomized experiment, as well as analyze the results of the experiment. Each group will submit an experimental protocol
describing the design of their experiment (due **Mar. 8th**), as well as a final report that includes both the design of the experiment and the results. Each group will also present the final report in class during the last week of the course.

Members of the group will be graded individually. Grades will be assigned based on the quality of the project as well as the individual’s contribution to the project; all members of the group will be asked to anonymously grade each other’s contribution to the project. Groups will be assigned in class.

**Article Critique and Presentation:** In addition, you will be asked to do an in-class presentation critiquing a scientific study (from any discipline). You will be asked to find a popular, news article reporting on a scientific study and critique the design of the study as described in the article. Presentations should be about 5-10 minutes. They should briefly describe the study (i.e. research question, design and findings), identify the most important flaw(s) in the study’s design, and state how you would design a better study. Students will sign up for the week in which they present at the beginning of the course. Additional presentations over and above the one required presentation are strongly encouraged and will be counted towards your overall participation grade.

Please be advised that additional assignments may be added over the course of the semester (e.g. pop quizzes).

**IV. Grading**

For calculating the final course grade, the assignments will be given the following weights. Please note that it is your responsibility to keep all graded assignments until after final grades have been assigned.

- 5 percent: Human Subjects Research Ethics Quiz (outside of class), due **Wednesday, February 8th**
- 10 percent: Class Attendance and Participation (see Attendance Policy)
- 10 percent: Article Critique and Presentation (sign up for a date)
- 15 percent: Experimental Protocol, due **Wednesday, March 8th**
- 20 percent: Final Write-Up of Experiment and Results, due **Wed., April 26th**
- 20 percent: Midterm Exam, **on Mon., Feb. 27th**
- 20 percent: Final Exam (during final exam period), **Monday, May 8th (4 pm)**

The final grade for the course will be graded on the +/- grading scale. If you are border-line, i.e. 79.5, the decision to round up or down will be based primarily on your participation grade, which is 10% of your final grade.

**V. Course Policies**

- *No Computers (other than Stata lab sessions)!* A substantial body of research
has demonstrated that most students learn better when they take notes by hand. If you are one of the students who prefer to use a computer, I’m sorry -- there are no exceptions unless with written documentation from the Office of Student Disability Services (see below).

- **Disability Disclosure Statement:** Any student who has a need for accommodation based on the impact of a disability should contact me privately to discuss the specific situation as soon as possible. I will work closely with the student and the Office of Student Disability Services (reachable at (662) 915-7128 in 234 Martindale Center) to coordinate reasonable accommodations for any documented disabilities.

- **Attendance Verification:** The university requires that all students have a verified attendance at least once during the first two weeks of the semester for each course. If attendance is not verified, then a student will be dropped from the course and any financial aid will be adjusted accordingly. Please see [http://olemiss.edu/gotoclass](http://olemiss.edu/gotoclass) for more information. This is a university policy that is not particular to this class. As stated above, you can miss up to 3 sessions of this class for any reason; after that, you will lose points for each class missed.

- **Missed and/or Late Assignments:** Students are expected to attend scheduled exams and complete assignments by their due date and time. Late assignments will be penalized by 1/3 of a letter grade (i.e. from B to B-) for each 24-hour period or any part thereof. Moreover, students who fail to turn in any assignment within a week of the deadline will receive a “0” on that assignment. Exceptions to these rules are granted only under very unusual circumstances and with appropriate documentation. If seeking such an exception, the student must contact me in advance and preferably as early as possible.

- **Communications:** The course materials, including the syllabus, handouts, readings and course-related links can be found on the course website on Blackboard. Important announcements will also be made in class and by e-mail. You are responsible for checking the course website and your university email regularly, and keeping up to date.

For substantive questions about course material and any grading concerns, please come to my office hours. For administrative questions (notifications of illness, absence, arranging a meeting, etc.), the best way to reach me is via email: yzeira@olemiss.edu. You can generally expect me to respond to your emails within 24 hours during the week, but please be advised that it may sometimes take longer for me to respond. Also, if you contact me after 4 pm on Friday, don’t count on hearing from me until Monday.
• **Academic Integrity:** University policy explicitly states, and I fully expect, that every member of this class will adhere to the highest standards of academic honesty. Cheating during exams, or helping someone else cheat on exams, will result in a failing grade in the course and may also result in disciplinary action. Turning in parts of someone else’s work or work that you have completed for a different course without my permission, as well as scanning someone else’s ID for attendance, is also academic misconduct and may result in similar penalties. Finally, note that plagiarism is not just “borrowing” words but also using ideas without a citation and many instances in between. Suspected violations will be subject to disciplinary action according to University policy. If you have questions, please consult the University’s M book or talk to me.

• **Recordings:** No portion of the class may be recorded or transmitted using audio, still or moving image recording devices without express written consent from the instructor.

**VI. Agenda of Topics and Readings**

**UNIT 1. CAUSALITY AND EXPERIMENTS**

**Week 1: Introduction and Causality (Jan 23-27)**

*Monday:* Introduction

*Wednesday:* What is Causality and How Can We Assess It?


**Week 2. Introduction to Randomized Experiments (Jan 30 – Feb 3)**


Also read Gerber and Green, Appendix A: pp 447-51 and
“Professors’ Research Project Stirs Political Outrage in Montana”, found at: http://www.nytimes.com/2014/10/29/upshot/professors-research-project-stirs-political-outrage-in-montana.html?_r=0&abt=0002&abg=1

**Week 3. Randomized Experiments, continued (Feb 6-10)**

*Monday: Why Randomize, and How?*


HUMAN SUBJECTS RESEARCH ETHICS QUIZ: PROOF OF COMPLETION DUE IN CLASS (WED.)

**Week 4. Natural Experiments (Feb 13-17)**


*Wednesday: Blattman, Christopher. 2009. From Violence to Voting: War and Political Participation in Uganda. American Political Science Review 103 (2).*

**UNIT 2. OBSERVATIONAL STUDIES: QUANTITATIVE AND QUALITATIVE**

**Week 5. Observational Studies (Feb 20-24)**

*Monday: Theory of Regression*


**Week 6. Qualitative Methods (Feb 27-March 3rd)**

*Monday: MIDTERM EXAM*
**Wednesday**: The Comparative Method


**Week 7. Qualitative Methods (March 6th – 10th)**

**Monday**: What Else Can We Do with Qualitative Research?


EXPERIMENTAL PROTOCOLS AND IRB APPLICATIONS DUE IN CLASS MAR. 8TH

**Week 8. SPRING BREAK (Mar 13-17)**

**Week 9: Group Experiments (Mar 20-24)**

CLASS CANCELLED THIS WEEK – WORK ON YOUR GROUP EXPERIMENTS

**Week 10. Other Disciplinary Approaches and Introduction to Data Analysis (Mar 27-31)**

**Monday**: Doing History

Guest lecture by Croft Professor Noell Wilson

**Wednesday**: Describing Data

Kellstedt and Whitten, Chapter 5

**UNIT 3. DATA ANALYSIS**

**Week 11. Other Disciplinary Approaches and Data Analysis (Apr 3rd-7th)**

**Monday**: Using Historical Archives

Presentation by Leigh McWhite, Political Papers Archivist at The JD Williams Library
Wednesday: Introduction to Data Analysis with Stata

**Week 12. Data Analysis, Sampling and Inference (Apr 10th-14th)**

*Monday:* Continuing Data Analysis with Stata

*Wednesday:* Sampling and Inference

Kellstedt and Whitten, Chapter 6

**Week 13. Hypothesis Testing (Apr 17th - 21st)**

*Monday:* Hypothesis Testing I

Kellstedt and Whitten, Chapter 7

*Wednesday:* Hypothesis Testing II (in-class lab)

**Week 14. Bivariate Regression (Apr 24-28)**

*Monday:* Bivariate Regression

Kellstedt and Whitten, Chapter 8

*Wednesday:* Bivariate Regression II (in-class lab)

APRIL 26: EXPERIMENTAL WRITE-UPS DUE

**Week 15. In-Class Presentations and Review (May 1-5)**

*Monday:* In-class presentations of group experiments

*Wednesday:* Final exam review