#### RESEARCH METHODS

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#### **Spring 2015**

Croft Room 107

Class: MW, 3:00 - 3:50 pm

Office Hours: MW 11 am – 12 pm and other times by appointment using SignUpGenius (www.SignUpGenius.com/go/10C0D4BA5A72BA4F85-office1). 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 commonalities 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 able to critically evaluate causal claims and identify possible challenges to inference

#### II. Evaluation:

Students will be evaluated *on the plus/minus grading scale* on the basis of the following assignments. Please be advised that assignments and readings may change over the course of the semester. It is students' responsibility to retain all graded assignments until after final grades have been assigned.

• 10 percent: Class Attendance and Participation (see Attendance Policy)

- 10 percent: Human Subjects Research Ethics Quiz (outside of class), due
  Monday, Feb. 9
- 15 percent: Qualitative Methods Assignment, due Wed., April 1
- 20 percent: Experimental Protocol, due **Wednesday**, **Feb. 25**
- 25 percent: Final Write-Up of Experiment and Results, due **Wed., April 22**
- 20 percent: Final Exam (during final exam period), **Thurs.**, **May 7 (4 pm)**

## **Class Attendance and Participation:**

Attendance and active participation in course meetings is required (also see Attendance Policy). Participation in class discussion and in-class "lab" exercises are an essential component of the course. You should come to class having read the assigned readings carefully and tried to understand them to the best of your ability. To improve your understanding of the research design topics presented in the course, I also encourage you to read popular news and magazine articles summarizing the results of social scientific studies and critique them, both in and out of class.

#### **Human Subjects Research Ethics Quiz:**

All students must complete the Abbreviated Human Subjects Training and pass the Human Subjects Research Ethics Quiz by Monday, Feb. 9. 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 Monday, Feb. 9. The quiz and a link to the training materials are both found here: https://www.research.olemiss.edu/ACITI/

## **Group Field Experiments:**

You will be asked to participate in a semester-long group project consisting of a simple field experiment, which should be modeled after the suggested field experiments in Appendix B of the Gerber and Green book. Each group will design and implement a randomized field experiment, as well as analyze the results of the experiment. Each group will submit an experimental protocol describing the design of their experiment (due Feb 25), 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.

#### **Qualitative Methods Exercise:**

You will be asked to select a paper that makes a causal argument, which you have already written for another course or that you are currently in the process of writing. You will then be asked to apply the principles of experimental and/or quantitative research to improve the paper. This may consist of developing or improving a controlled comparison, identifying additional empirical implications of your hypothesis that you can evaluate, or something else. You will then write a 5 page (single-spaced) memo in which you describe your research strategy, its strengths and its weaknesses. For example, if you choose to develop or improve a controlled comparison, you should describe the comparison you will make, justify why it can reasonably be considered a "controlled comparison", identify any theoretically relevant variables that this comparison fails to control for, and consider the implications of this failure for the paper's conclusions. Additional details will be provided closer to the assignment due date.

#### **Course Policies:**

There are a number of common-sense course policies that I will adhere to consistently over the course of this semester to ensure fairness and equal opportunity for all students. If you have any questions about the course policies, please ask for clarification. The policies laid out in this syllabus form an agreement, or contract, between you and me.

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.

Statement on 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. You must fully and unambiguously cite all work that is not your own in written assignments and give credit to those whose ideas or language you are using. Failure to do so constitutes plagiarism and will be subject to academic discipline. 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. Given the seriousness of these infractions, they come with no second chances and no leniency. Please avoid them at all costs. If you are ever in doubt, please make sure to carefully read Section I of the M Book and/or to consult with me.

Attendance Policy: You are expected to attend and make a productive contribution to each course session. Course sessions will expand considerably on the material covered in the readings, so there is no substitute for attending class. With that said,

it is understood that you may sometimes have to miss course sessions. You may miss up to three <u>regular</u> course sessions (non-exam or quiz days) *for any reason* without penalty. There is no need to present a documented excuse; in fact, I will not accept such excuses. In the event that you have to miss additional sessions, you should obtain a documented excuse in advance of the missed session (if the mitigating circumstance is known in advance) and consult with me. *Please note that I reserve the right to accept or reject documented excuses based on the circumstances.* 

Students who miss more than three course sessions without a documented excuse approved by me will receive a "0" on Class Participation and will be penalized by one letter grade on the Group Presentation and Report, as students who miss an excessive number of course sessions will not be able to contribute effectively to their group.

A final note on the flu and flu season: If you have flu symptoms, please do not come to class and expose your colleagues and me. Please go to the Health Center and obtain a documented excuse. I will always accept such excuses as long as students do not abuse the policy (i.e. if you claim to have the flu twice in a semester, I may not accept a documented excuse the second time.)

Grading Policy: I cannot discuss grading concerns over e-mail. Please come to my office hours if you have any questions about your grades. 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 without an approved excuse will receive a ``0" on that assignment. There will be no exceptions.

Communications: Essential course materials, including the course syllabus, handouts, readings, and course-related links can be found on the web site on Blackboard. Important announcements will also be made in class and by e-mail. Students are responsible for keeping up to date. The best way to reach me is via e-mail at <a href="mailto:yzeira@olemiss.edu">yzeira@olemiss.edu</a>. 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 5 pm on Friday, don't count on hearing from me until Monday.

*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.

#### III. Agenda of Topics and Readings

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

Kellstedt, Paul M. and Guy D. Whitten. 2013. *The Fundamentals of Political Science Research, 2nd edition.* Cambridge: Cambridge University Press.

*Stata* statistical software, version 13. Students may purchase a six-month license of Small Stata here: http://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 as follows.

#### **UNIT 1. CAUSALITY AND EXPERIMENTS**

#### Week 1. Introduction (Jan. 21)

Wednesday: Introduction

#### Week 2. Causality (Jan 26-30)

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

Kellstedt, Paul M. and Guy D. Whitten. 2013. "Evaluating Causal Relationships." In *The Fundamentals of Political Science Research.* Cambridge: Cambridge University Press. (CHAPTER 3 ONLY)

*Wednesday*:

First read: "Distinguishing between Normative and Empirical Statements"

Then: Levitt, Steven D. and Steven J. Dubner. 2005. "Where Have All the Criminals Gone?" In *Freakonomics: A Roque Economist Explores the Hidden Side of Everything.*"

#### Week 3. Introduction to Randomized Experiments (Feb 2-6)

*Monday:* Gerber, Alan S. and Donald P. Green. 2012. *Field Experiments: Design, Analysis and Interpretation.* W.W. Norton & Company. Chapter 1 and Appendix B

*Wednesday*: Wantchekon, Leonard. 2003. "Clientelism and Voting Behavior." *World Politics* 55(3): 399-422.

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 4. Randomized Experiments, continued (Feb 9-13)

Monday: Why Randomize, and How?

Glennerster, Rachel and Kudzai Takavarasha. *Running Randomized Evaluations: A Practical Guide.* Princeton: Princeton University Press. [Chapters 2 and 4 ONLY]

HUMAN SUBJECTS RESEARCH ETHICS QUIZ: PROOF OF COMPLETION DUE IN CLASS

*Wednesday*: Shelef, Nadav G., and Yael Zeira. "Recognition Matters!: UN State Status and Attitudes Towards Territorial Compromise." Manuscript, University of Wisconsin, Madison and University of Mississippi.

#### Week 5. Natural Experiments (Feb 16-20)

Monday: Dunning, Thad. 2012. Natural Experiments in the Social Sciences: A Design-Based Approach. Cambridge: Cambridge University Press. CHAPTER 1 ONLY.

*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 6. Observational Studies (Feb 23-27)

*Monday*: Theory of Regression

Glennerster, Rachel and Kudzai Takavarasha. *Running Randomized Evaluations: A Practical Guide.* Princeton: Princeton University Press. [Review Chapter 2: sections on multiple regression and matching]

Levitt, Steven D. and Steven J. Dubner. 2005. "What Makes a Perfect Parent?" In Freakonomics: A Rogue Economist Explores the Hidden Side of Everything."

*Wednesday:* Blaydes, Lisa and Drew A. Linzer. 2008. "The Political Economy of Women's Support for Fundamentalist Islam." *World Politics* 60(4).

EXPERIMENTAL PROTOCOLS AND IRB APPLICATIONS DUE IN CLASS FEB. 25

#### Week 7. Qualitative Methods (Mar 2-6)

*Monday*: The Comparative Method

Laitin, David D. 1995. "National Revivals and Violence." *European Journal of Sociology* 36(1).

Wednesday: What Else Can We Do with Qualitative Research?

Collier, David. 2011. "Understanding Process Tracing." PS: Political Science and Politics 44(4).

King, Gary, Robert O. Keohane and Sidney Verba. 1994. *Designing Social Inquiry: Scientific Inference in Qualitative Research*. Princeton, NJ: Princeton University Press. Chapter 6 ONLY

## Week 8. SPRING BREAK (Mar 9-13)

## Week 9: Other Disciplinary Approaches (Mar 16-20)

*Monday*: Interpretive Approaches

Guest visit by Professor Kate Centellas,, Croft Assistant Professor of Anthropology and International Studies

Reading to be announced

Wednesday: Historical Research

Presentation by head archivist and/or historian [speaker TBD]

"What Does It Mean to Think Historically?", found here: http://www.historians.org/publications-and-directories/perspectives-on-history/january-2007/what-does-it-mean-to-think-historically

#### **UNIT 3. DATA ANALYSIS**

## Week 10. Introduction to Data Analysis (Mar 23-27)

*Monday*: Describing Data

Kellstedt and Whitten, Ch6, pp 104-119

Wednesday: Data Analysis with Stata

Choice of the week: TBD by students

## Week 11. Data Analysis II (Mar 30-Apr 3)

Monday: Sampling and Inference

Kellstedt and Whitten, Ch 7, pp 120-132

Wednesday: Hypothesis Testing I

Kellstedt and Whitten, Ch 8, pp 134-158

QUALITATIVE RESEARCH EXERCISE DUE IN CLASS WED., APRIL 1

## Week 12. Hypothesis Testing (Apr 6-10)

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

Review Kellstedt and Whitten, Ch 8, pp 134-158

Choice of the week: TBD by students

Wednesday: Bivariate Regression

Read Kellstedt and Whitten, Ch 9, pp 159-182 on "Bivariate Regression Models"

## Week 13. Regression Models (Apr 13-17)

*Monday*: In-class lab: bivariate regression

Review Kellstedt and Whitten, Ch 9, pp 159-182

Choice of the week: TBD by students

Wednesday: NO CLASS

## Week 14. Multivariate Regression (Apr 20-24)

*Monday*: Multivariate regression

Read Kellstedt and Whitten, Ch 10, pp 183-201

Wednesday: In-class lab: multivariate regression

Review Kellstedt and Whitten, Ch 10, pp 183-201

Choice of the week: TBD by students

## APRIL 22: EXPERIMENTAL WRITE-UPS DUE

# Week 15. In-Class Presentations (Apr 27-May 1)

Students will present their group field experiments in class.