

Empirical Research Methods

INTA 6003

Fall 2012

M 6:05-8:55

Habersham G-17

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Hours: M 10-12, or by appt.

The purpose of this class is to introduce you to the methods of social science research and to give you an understanding of how to use empirical research methods to support an argument or position. Learning this is of benefit to you because application of scientific methods to social phenomena imposes logical rigor—and a lot of common sense—to your efforts to understand those phenomena. This discipline makes you much more certain of precisely what you know and don't know, guides you in terms of what to do next so that you know more, and makes what you have done more transparent and compelling to others. While some believe that success in political argumentation is dominated by timing and presentation—and in the short term there is a lot of truth to that—in the long run the argument supported by evidence usually wins out. And even in the short run, a position that is well articulated and supported by evidence is formidable.

I believe that social scientific methods complement more history-oriented analyses, and the two approaches should not be viewed as being mutually exclusive. This class focuses on the scientific method because I believe it is for most individuals not immediately intuitive what needs to be done to execute the method properly. On the other hand, the common sense that underlies so much of scientific research will be useful to you even if you never do a social scientific study after this class. What comprises a sound logical argument supported by evidence will probably never be the same for you.

More concretely, this class will cover the various aspects of empirical research methods including statistical analyses of sizeable datasets. The class first concentrates primarily on what social science really is and why one might want to use a social scientific approach as opposed to alternatives. The class then covers how to begin doing social science research and spends some time on a topic typically ignored by most texts, that is the development of models to guide one's thinking about a particular problem. After that we return to more of the mechanics of doing social science research. This class will attempt to give you a familiarity with a subset of the broad range of techniques or methodologies used by those who study international affairs. Some of the methods are common to almost any study one may wish to conduct. Others are determined by the kind of question one wishes to answer. For that second set of methods we will look at what are appropriate techniques for particular questions. So that these methods are more than abstractions, an emphasis of this class is hands-on experience with a number of techniques. For example, we will go through computer analyses of data using the computer and a projection system in the classroom. My intent is to "walk" you

through the steps of sample analyses so that you can then conduct real analyses and “graduate” from the class fully able and perhaps even eager to use these techniques in subsequent classes and later in your careers.

To make the topics of the class even more concrete, you will execute one of two types of empirical research projects through the 16 weeks of the course. The first alternative is to execute your own project, possibly with another student. For this alternative I want you to research a topic that is amenable to being addressed using information from many examples. For example, do wars that concern the creation of a new state from an existing state typically last longer than other wars? The second alternative is to participate in a group attempt to determine the answer to a nontrivial question. For example, is there a strong relationship between a country’s GNP per capita or level of industrialization and the likelihood it can build and sustain a democracy? During the class we will periodically discuss your progress and the problems and challenges that emerge to confront you. There is nothing like actual execution of a task to teach you what it is about. You should immediately give serious thought about the topic of your project or what aspect of the group project you would like.

I expect adherence to the Georgia Tech Code of Conduct. Note also that to get an A with respect to class participation, you must do more than simply attend regularly. You need to ask questions or make relevant comments. A good rule of thumb for discerning whether you are doing A-level participation is whether I know your name when I call upon you.

Make use of the library, especially Mary Axford, who supports INTA (mary.axford@library.gatech.edu). She is very helpful.

Texts

Johnson and Reynolds, Political Science Research Methods.

Peter Bernstein, Against the Gods.

E. O. Wilson, The Creation.

Lawrence A. Kuznar, Reclaiming a Scientific Anthropology (on reserve).

Your choice of one of these three books:

William Bernstein, A Splendid Exchange

Niall Ferguson, The Ascent of Money

Francis Fukuyama, The Origins of Political Order

I will make other documents available T-square. These will include my Powerpoint slides and parts of papers I have written that are directly relevant. My slides and lectures will include references to other documents available on the web.

Schedule

Aug. 20 Introduction and Structure of Class

- Aug. 27 Developing Models/Acquiring Knowledge
 Read: Johnson and Reynolds, Chapters 1 & 2
 Bernstein, Introduction through Chapter 2
- Sept. 3 NO CLASS
- Sept. 10 Alternative Approaches
 Read: Kuznar, pp. 1-172
 Wilson
- Sept. 17 Types of Research and Making Inferences
 Read: Johnson and Reynolds, Chapters 3 & 5
 Bernstein, Chapter 3 through Chapter 5
- Sept. 24 Building Blocks of Social Science
 Read: Johnson and Reynolds, Chapters 4 & 6
 Bernstein, Chapter 6 through Chapter 11
- Due on Sept. 24: approximately 1000-word research project proposal (problem, background, model, and evidence needed)
- Oct. 1 Elements of Research Design: Observations and Evidence
 Read: Johnson and Reynolds, Chapters 7 & 8
 Bernstein, Chapter 12 through Chapter 15
- Oct. 8 Sampling and Survey Methods
 Read: Johnson and Reynolds, Chapters 9 & 10
- Due on Oct. 8: 500-1000 word book analysis in which you identify innovations
- Oct. 15 NO CLASS
- Oct. 22 Introduction to Probability and Statistics
 Read: Bernstein, Chapter 16 through Chapter 19
- Due on Oct. 22: 500-1000 word report of survey design, execution, and results
- Oct. 29 Descriptive Statistics
 Read: Johnson and Reynolds, Chapter 11
- Nov. 5 Hypothesis Testing
 Read: Johnson and Reynolds, Chapter 12
- Nov. 12 Analyzing Interval-level Data
 Read: Johnson and Reynolds, Chapter 13
- Nov. 19 Analyzing Categorical and Mixed Data
 Read: Johnson and Reynolds, Chapter 14
- Due on Nov. 19: STATISTICAL ANALYSIS EXERCISE

Nov. 26 Presentation of Research Findings

Dec. 3 Presentation of Research Findings
Due on Dec. 3: approximately 3000-word final paper

Determination of Final Grade

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| class participation (which is more than attendance) | 20% |
| research project proposal | 10% |
| book analysis | 10% |
| survey report | 10% |
| statistical analysis exercise | 15% |
| presentation and paper of research project | 35% |