**GOVERNMENT 3999**

**HOW DO YOU KNOW THAT?**

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“Things are seldom what they seem .. Skim-milk masquerades as cream…”  
*Gilbert and Sullivan, from* **HMS Pinafore**

“I love rumors! Facts can be so misleading…”  
*Colonel Hans Landa in Quentin Tarantino’s* **Inglorious Basterds**

**Course Description:** Does allowing citizens to carry concealed weapons reduce violent crime? Do affirmative action policies at law schools cause black students to fail the bar? What caused the real “pirates of the Caribbean” to adopt democratic, egalitarian rules of organization? Does the death penalty save lives by deterring murders? Do micro-finance policies make the poor better off? Does something about democratic political institutions cause their militaries to fight better in the field than those of non-democracies? Answering questions like these implies cause and effect knowledge: if we implement policy X, we will get effect Y. But on what evidence should answers to questions like these rest? How do you know the answer, and under what conditions *can* you know the answer? Providing robust answers to cause-and-effect questions in a (mostly) non-experimental field like political science is devilishly difficult. In this course, we will become acquainted with the pitfalls that make it so hard to evaluate evidence in the public policy realm, how to judge the quality of evidence cited in the media, and how to ask the right questions to get the best possible evidence. We’ll do so by working through the evidence supporting “yes” or “no” answers to the questions listed above.
My goal in this class is not for students to master any specific substantive material (although of course you will learn a bit about a wide range of topics); rather, it is to develop a “tool kit” of skills useful for evaluating knowledge claims and the evidence invoked to support them. Each of our topics addresses an interesting question, but each is also chosen to make a specific point about interpreting (or mis-interpreting) evidence.

The class will be run as a lecture-seminar hybrid. I’ll be using power-point to explain important concepts and introduce topics, but we will also engage in discussion and in-class exercises during “lecture” sessions. The success of this class thus depends on a high level of student preparation and participation; the quality of lectures will be, to a considerable extent, what you make of it.

**Requirements and Grading:** You are expected to do all of the reading and to participate actively in lecture discussions. You should come to lecture having done the readings and ready to talk about them. In terms of written work, we will have three types of assignments.

**First,** we are going to work hard on applying the concepts covered in class, and to this aim I will ask you to write a number of very brief (1-2 pages) “thought pieces” in which you present a possible example of the problem we have discussed the previous week or provide a brief discussion of an example of the type of problem we are working on. Moreover, these brief pieces may be used in lecture, and I will choose a couple each time we do them to share with the entire class. Your examples can come from any walk of life, and I encourage you to draw on your own experience to think about campus life or local politics.

**Second,** one of the goals of this class is to sharpen your analytical skills and ability to think critically about evidence for the effects of public policies. You’ll be asked to choose an issue and write an opinion or “letter to the editor” piece about it. Again, this can come from any area: it could be campus life (and targeted at the Daily Sun), local politics, state politics, national politics, or international affairs. Your examples can come from any walk of life, and I encourage you to draw on your own experience to think about campus life or local politics. It can even be about sports or facets of social life. We’ll take some of the ones with the strongest chances for publication and encourage you to submit them to newspapers.

**Third,** the **capstone assignment** will be a group project analyzing some issue/policy using the concepts developed in this class. The final product or “deliverable” will be a 20 page paper and a Power-point presentation. At the end of the semester, we’ll have a special session or two in which groups share their Power-point presentations with the class. As with the op-ed assignment, the topic can come from any area as long as it can be construed as analyzing the causal effect of something we can think of as a policy. You do not have to actually do a full-blown analysis (since you’ll often find it difficult to get relevant information within a couple months’ time frame and some of the required analytical techniques may be too advanced); the goal is rather to point out the difficulties involved, criticize weak/faulty conclusions, and outline a strategy for actually getting believable results. This is an exercise in applied knowledge, in which you are asked to apply the “tool kit” of knowledge we’ve developed in the class to a new substantive problem.
In a sense, you might think of your project as a more academically oriented version of an episode of NPR’s *Planet Money*, a podcast which is highly recommended. On that show, they often start with a provocative or counter-intuitive claim/example, and then investigate whether or not it is actually true. You’ll be doing the same kind of thing here, although in a bit more of a nerdy social science manner and with more of an emphasis on assessing the evidence behind a claim, but it wouldn’t hurt to bring a little bit of their entertaining style into your presentation.

You will be placed in groups of three or four students for this project. The project work will start after Fall Break and you will have several staged assignments building up towards the final product. One of the goals of this assignment is to help you learn how to work in groups effectively. To that end, you’ll be given some concrete tips on how to proceed and asked to do self-evaluations of yourself and the group as work proceeds. Again, part of the goal here is for you to develop the “soft skills” of effective team work which is valued highly by prospective employers of social science majors.

Course grades will be based on these three types of assignments as well as active participation in class, with a breakdown of 20-20-10-50 for short assignments/op-ed/class participation/final project.

**Course Readings:** One and only one book is required: *The Numbers Game*, by Anthony Blastland and Andrew Dilnot. You can purchase this at the Campus Store or on an internet site such as Amazon. It is an inexpensive book. Other than that, there is nothing to purchase. Everything else is going to be on the Blackboard course website.

**Cornell University Policies and Regulations:** Participation in this class commits students and instructors to abide by Cornell’s expectations and policies regarding equal opportunity and academic integrity. Further, it implies permission from students to submit their written work to services that check for plagiarism (such as Turnitin.com). Each student in this course is expected to abide by the Cornell University Code of Academic Integrity. It is your responsibility to familiarize yourself with university policies regarding plagiarism and other violations of academic integrity. In particular, please make yourself familiar with the definition of plagiarism, and be aware that you may not turn in the same piece of work (or part thereof) for credit in multiple classes, either in the same semester or while at Cornell in general. Violations of the University Code of Academic Integrity will be firmly dealt with in this class. The Code can be found on the web at (a link to the Code can also be found on the Government 386 web page):

http://cuinfo.cornell.edu/Academic/AIC.html

A Cornell tutorial called “Recognizing and Avoiding Plagiarism” can be found at:

http://plagiarism.arts.cornell.edu/tutorial/index.cfm

Please make yourself familiar with the contents of these documents.
In addition, this instructor observes all university policies addressing racial, ethnic, gender, sexual preference, or religious discrimination and all forms of harassment; he conducts class in conformance with provisions of the Americans with Disabilities Act. Students are expected to familiarize themselves with pertinent policies and to bring any concerns related to them to the attention of the instructor.

Course Schedule and Outline:

Introduction

*Topic:* Introduction and class overview.

*Date:* August 23

*Readings:* None.

Conceptual Module 1 – What ‘s Wrong with this Picture?

*Topic:* Some claims seem easy to dismiss, even when backed by what seems like pretty good evidence. Yet it can sometimes be surprisingly difficult to explain exactly *why* we dismiss them. To start off the course we look at a handful of arguments/studies that seem hard to believe. The challenge for us is to articulate exactly *where* they go wrong. Then again, sometimes weird findings can be right ….

*Date:* August 28

*Readings:*


*Date:* August 30 – no class, I will be at APSA. Enjoy the sun!

*Date:* September 4

*Readings:*


**Conceptual Module 2 – Common Inferential Errors: Chance and Regression to the Mean**

*Topic:* Simple, common errors of inference can cause us to believe in patterns or causal relationships where none exist. This week we focus on two such errors. The first error is our proclivity to detect patterns where none exist. We are hard-wired pattern-recognition creatures, and often infer meaning to patterns that emerge simply by chance. The second, related error is our tendency to assign causal meaning to random variation over time. Making either error can cause us to adopt policies or make decisions that are ill-advised, or to evaluate incorrectly the effects of policies/decisions.

*Date:* September 6

*Readings:*

• Michael Blastland and Andrew Dilnot. 2009. “Chance: The Tiger that Isn’t.” Chapter 3 of *The Numbers Game*.

*Date:* September 11

*Readings:*

• Michael Blastland and Andrew Dilnot. 2009. “Up and Down: A Man and his Dog.” Chapter 4 of *The Numbers Game*.
• Simon Kuper. 2010. “Magical Managers Have No Effect on League.” *Financial Times*, January 15. (if you are a soccer fan, also look up Kuper’s Jan 17, 2012 FT piece “Football’s best managers”).

**Conceptual Module 3 -- Good, Bad, and Ugly Comparisons: Does the United States Have the Best (Worst) Health Care System Among Rich Countries?**

*Topic:* How can we answer “big” questions like this one? It is “big” not just in the sense that it is important and controversial, but also in that health care systems are complex things consisting of many different policies and practices. Can we answer such questions, and how do you spot particularly bad answers?

*Date:* September 13

*Readings:*

• Michael Blastland and Andrew Dilnot. 2009. “Comparison: Mind the Gap.” Chapter 11 of *The Numbers Game*.


**Date:** September 18

**Readings:** You’ll be engaging either:

- QS World University rankings, or
- US News National University rankings

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**Conceptual Module 4 – The Need for Evidence-Based Decision Making**

**Topic:** Evidence-based policy has gotten a lot of press in recent years. But what is it exactly, and why is a focus on something as seemingly obvious as evidence-based decision making so important (yet hard to achieve)? Our primary examples of manifestly non-evidence based decision making come from the world of business and professional soccer (apologies to non-sports fans).

**Movie Assignment:** This would be a great week to watch *Moneyball* if you have not already seen it.

**Date:** September 20

**Readings:**

- Michael Blastland and Andrew Dilnot. 2009. “Data: Know the Unknowns.” Chapter 9 of *The Numbers Game*.

**Date:** September 25

**Readings:**

Conceptual Module 5 – This is What it is All About: Causality in Experimental and Observational Settings.

**Topic:** The experimental method is considered the “gold standard” as a research strategy, and for good reason. Yet in social sciences the vast bulk of information we work with is non-experimental; rather, it is what we call observational data. This week we encounter the currently dominant “counter-factual model” of causation. Some of the difficulties of drawing causal inferences with observational data are illustrated with an example: the fact that Catholic schools seem, by several measures, to do a better job than public schools. But then again, things are seldom as simple as they seem… And finally, an example of an experiment in the social sciences.

**Date:** September 27

**Readings:**


**Date:** October 2

**Readings:**


Application 1 -- Does Microfinance Help the Poor?

**Topic:** The field of development policy and aid is woefully lacking in reliable causal knowledge about how to help lift people and countries out of poverty. Yet in recent years one rather small policy has garnered enormous attention (not to mention a Nobel Peace Prize): micro-credit or micro-lending to the poor. It sounds simple, it sounds easy to implement (partly because it is profitable for lenders), and perhaps it sounds almost too good to be true. So, is it true?

**Date:** October 4

**Readings:**

• Listen to this Planet Money podcast: “What’s Better for Helping the Poor – Greed or Charity?” Broadcast Sept 28, 2010, and you can listen to it at:


Date: October 11

Readings:


Application 2 – Does Allowing People to Carry Concealed Weapons Reduce Crime?

Topic: To many of us, the idea that allowing people to carry concealed weapons results in a safer society seems rather, ahem …., unlikely. But the facts seem to back up this claim. Can it be true? Should we pass laws allowing concealed carry as a result of this evidence? Or is one of the tricky errors of inference inherent in observational studies causing people to misinterpret the evidence?

Date: October 16

Readings:


Date: October 18

Readings:


Application 3 -- Does Suicide Terrorism Work?

Topic: Is suicide terrorism an effective strategy for leaders of extremist movements? Is it an effective means towards achieving specific ends such as gaining territory, driving enemies away, or gaining influence over governments? Is its use associated with foreign occupations, and are religious groups more likely to try it? An influential study offers evidence that supports a “yes” answer to these
questions. But is the author interpreting the evidence correctly? Or is yet another one of the tricky aspects of interpreting observational evidence leading him astray?

**Date:** October 23

**Readings:**


**Date:** October 25

**Readings:**


**Application 4 -- Does Law School Affirmative Action Cause Students to Fail the Bar?**

**Topic:** Does affirmative action ironically harm those it is intended to benefit? Affirmative action is used in a range of settings, but here we look at one of personal interest to many social science majors: law school. Once again, some pretty good looking evidence seems to suggest that affirmative action is counter-productive for the beneficiaries. Is that right? Should law schools cancel affirmative action programs because the evidence shows that it simply does not work?

**Date:** October 30

**Readings:**


**Date:** November 1

**Readings:**

Application 5 – Why were Pirates equality-loving Social Democrats whereas Street Gangs are like Wall Street capitalists?

**Topic:** Most of the topics we have been looking at thus far are relatively “easy” ones in that they cover well-delimited, well-documented, high profile public policies. Yet what if you are interested in something a little less transparent, say, for example, illegal activities? Devising policies against groups involved in illegal activities can be tricky because we often don’t know how these groups work. Devising effect policies first requires understanding the nuts and bolts of these activities. We look at two examples: street gangs and pirates.

**Date:** November 6

**Readings:**


**Date:** November 8

**Readings:**


Application 6 -- Does Democracy Cause Militaries to Perform Better?

**Topic:** Do democratic political institutions and political culture cause their militaries to do a better job? Judging by some (important) indicators, democracies seem to do a better job fighting wars than non-democracies. Some take this to indicate that democracy creates better armies, navies, and air forces. What kind of evidence would cause us to believe that claim?

**Date:** November 13

**Readings:**


**Date:** November 15

**Readings:**

*** November 20: Joe and I will be available to consult with groups on their projects, but we will not have a required lecture session ***

Application 7 -- Does the Actually Death Penalty Work After All?

Topic: To make our last session lively, I’ve chosen a particularly interesting and value-charged question: does the death penalty work by deterring crime? For many years, the answer seemed a clear “no.” But upon closer inspection, studies supplying that answer were deeply flawed. New evidence seems to suggest a different, “yes,” answer, and some people (like Cass Sunstein) consider the evidence so strong that it creates a moral imperative in favor of the death penalty. But is that evidence as strong as it seems?

Date: November 27

Readings:


Date: November 29

Readings:


Study Period: December 3 - 5
Final Exam Period: December 5 – 14
Project presentations will be during our final exam period
Our Final Exam: Thursday, December 6, 7:00 – 9:30 PM.
Location: TBA