“I can calculate the motions of heavenly bodies, but not the madness of men.”
- attributed to Isaac Newton (disputed)

“Test everything; hold fast to what is good”
- Saint Paul

The Logic of Political Inquiry
PSC 691.001
Fall 2014
Maxwell 315, 3:45-6:30, Wednesdays

Matt Cleary
127 Eggers Hall
maclery@maxwell.syr.edu
443-4288
Office Hours: Tuesdays 1-4pm

Course Summary
This seminar introduces students to the principles of research design in mainstream political science. We begin with some questions in the philosophy of science as they apply to the social sciences. Then we review the purpose of theories, as well as different approaches to generating and evaluating them. Next, we discuss the purpose and form of hypotheses, focusing on how to derive hypotheses from theories; how to develop and implement hypothesis tests; how to treat competing explanations for observed phenomena of interest; how to measure theoretical constructs; and what to do (and not to do) with data. Finally, we explore how different research designs (including the construction of counterfactuals, comparative case studies, quasi-experiments, and experiments) may be used to help researchers make valid causal inferences. The course will introduce students to elementary methods of data analysis, but no knowledge of advanced statistics or econometrics is presupposed.

Readings
All required readings for the class are available at either the SU Bookstore (in the Schine Student Center), on library reserve, or electronically through Blackboard. When possible I have made the reserve readings available electronically. Students are advised to obtain copies of the following books, which are available for purchase at the SU Bookstore:

Shively, W. Phillips. 2010. The Craft of Political Research, *8th Ed* (9th should be ok)
**Grading and Assignments**

Each student will complete several assignments, which are designed to help students master the course material and to think about issues of research design in their own work. I will distribute detailed information on the assignments throughout the semester. In addition to the written assignments, students are expected to be prepared for class discussions each week and to *participate actively*. Course readings should be read before the class for which they are listed below. Active class participation is essential for this course to be a success.

Final course grades will be calculated according to the following formula.

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Weight</th>
<th>Due Date</th>
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<tbody>
<tr>
<td>Class Participation</td>
<td>20%</td>
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</tr>
<tr>
<td>Assignment 1</td>
<td>10</td>
<td>given 9/24, due 10/1</td>
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<tr>
<td>Assignment 2</td>
<td>20</td>
<td>given 10/8, due 10/22</td>
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<tr>
<td>Assignment 3a</td>
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<td>Assignment 3b</td>
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<tr>
<td>Assignment 4 draft</td>
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<td>given 10/1, due 11/21</td>
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<tr>
<td>Assignment 4 final</td>
<td>30</td>
<td>---, due 12/12</td>
</tr>
<tr>
<td>TOTAL</td>
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Plagiarism and Academic Integrity
There is no room for academic dishonesty in this class. I do submit formal reports to the Dean of the College of Arts and Sciences when I suspect academic dishonesty or plagiarism. I encourage all students to update their understanding of what counts as academic dishonesty by visiting this website: http://academicintegrity.syr.edu/.

At the same time, I encourage cooperative work among students during the semester. You should engage in as much discussion with each other as possible, and you should feel free to trade drafts of papers for comments and criticism. You should NOT work collaboratively on Assignment 2.

Disability-Related Accommodations
Students who are in need of disability-related academic accommodations must register with the Office of Disability Services (ODS), 804 University Avenue, Room 309, 315-443-4498. Students with authorized disability-related accommodations should provide a current Accommodation Authorization Letter from ODS to the instructor and review those accommodations with the instructor. Accommodations, such as exam administration, are not provided retroactively; therefore, planning for accommodations as early as possible is necessary. For further information, see the ODS website, Office of Disability Services http://disabilityservices.syr.edu/

Religious Observances
SU’s religious observances policy, found at http://supolicies.syr.edu/emp_ben/religious_observance.htm, recognizes the diversity of faiths represented among the campus community and protects the rights of students, faculty, and staff to observe religious holy days according to their tradition. Under the policy, students are provided an opportunity to make up any examination, study, or work requirements that may be missed due to a religious observance provided they notify their instructors before the end of the second week of classes. For fall and spring semesters, an online notification process is available through MySlice/Student Services/Enrollment/My Religious Observances from the first day of class until the end of the second week of class.

*** All students should feel free to discuss any of the issues *** mentioned on this page with me at any time.
Weekly Schedule

I. Philosophy of Social Science

August 27
Topics: the scientific method; causal analysis (vs. descriptive, conceptual, interpretive, or critical social science); social science as puzzle solving and research as a craft
Read: Hempel, *Philosophy of Natural Science*, Ch. 2
Brady & Collier, *Rethinking Social Inquiry*, Glossary
Gerring, *Social Science Methodology*, Glossary
(obviously, just flip through the glossaries and become familiar with them)

September 3
Topics: Causality and causal analysis; prediction and explanation; falsifiability; inductive and deductive theorizing
King et al., *Designing Social Inquiry*, Ch 3.

II. Theories

September 10
Topics: What are theories and how are they generated?
Read: Elster, *Explaining Social Behavior: More Nuts and Bolts for the Social Sciences*. Read chapters 1-2, then select a few more that interest you. Select from different sections of the book.
Skocpol, Theda. 1979. *States and Social Revolutions*, pp.3-18.

September 17
Topics: rational choice as method of theory generation
Green and Shapiro, *Pathologies of Rational Choice Theory*, Chs 1-3, 7, 8
[continued on next page]


### III. From Theories to Hypotheses

**September 24**

Topics: How to generate hypotheses; the characteristics of good hypotheses; auxiliary hypotheses; hypotheses and test implications

Read: Hempel, *The Philosophy of Natural Science*, Chs. 3-4

*Assignment 1 given*

### IV. Testing Hypotheses: General Principles

**October 1**

Topics: logic of causal inference; logical fallacies; spuriousness; conditional probabilities; null hypotheses; alternative hypotheses; supporting vs “confirming” and disconfirmation

Shively, *The Craft of Political Research*, Ch 10

*Assignment 1 due today*

*Assignment 4 given*

**October 8**

Topics: Cases, case selection, identifying the universe of cases, selection bias; model specification in quantitative analysis

Read: King et al., *Designing Social Inquiry*, Chs. 4-5.

*Assignment 2 given*

*Instructions for ICPSR dataset to be handed out*

**October 15**

Topics: Measurement; types of empirical evidence; constructs and indicators; measurement validity; bias and inefficiency; collecting and coding data

Gerring, *Social Science Methodology*, Ch.7.

[continued on next page]


ICPSR dataset and codebook – this reading is not on reserve; instructions to be handed out in class.

*Second half of class will be in Eggers 030*

V. Styles of Hypothesis Testing

**October 22**

**Topics:** General introduction; Experimentation; natural experiments


[Read at least one of the following 3 examples]


[Read at least one of the following 2 examples]


*Assignment 2 due today*

*Assignment 3 given*

**October 29**

**Topics:** Quasi-experiments; statistical analysis; large-N analysis; surveys


Lewis-Beck, *Data Analysis*, pp.41-74


[continued on next page]
Almond, Gabriel, and Sidney Verba. 1963. The Civic Culture, pp.35-44, Ch. 3, and Ch. 5.

Review Gilens and Gadarian readings from last week.

Assignment 3a due today

November 5
Topics: Comparative Case Studies – small-N but N>1
King et al, Designing Social Inquiry, Chs, 1, 6.


Assignment 3b due today

November 12
Topics: Single-Case Studies: N=1; process tracing; qualitative versus quantitative approaches
Brady and Collier, Rethinking Social Inquiry, Ch. 1 (just pp.15-26), and Chs. 4 (by Bartels), 8 & 9 (by Collier/Brady/Seawright), and 10 (By Bennett, on process tracing).
Mahoney, James, and Gary Goertz. 2006. “A Tale of Two Cultures: Contrasting Quantitative and Qualitative Research” Political Analysis, 14, pp.227-49.
VI. Concluding Sessions

November 19
Topics: Philosophy of social science; paradigms and research programs
[after reading Lustick, read as much of the next three articles as you feel you need to]

*Assignment 4 draft due Friday 11/21*

November 26  NO CLASS -- THANKSGIVING BREAK

December 3
Topics: Grants, writing, visual presentation of evidence, the profession

December 12 (Friday; no class)
*Assignment 4 final due by 5:00PM*