GR4010: Theory and Methodology in the Social Sciences  
Quantitative Methods in the Social Sciences (QMSS)  
Columbia University, Fall 2017  
Wednesdays, 4:10-6:00 pm

Instructor: Michael Parrott  
Office: TBD, Thursdays, 1 to 3 pm and by appt  
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E-mail: mp3675@columbia.edu (primary contact)  
Class Room: TBD  
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Course Description

This course, one of the two foundational courses in the QMSS program, introduces various analytical approaches that contemporary social scientists use to investigate fundamental questions about social phenomena. This class is designed to guide students through some of the theoretical, methodological, and practical issues associated with the development of research design in the social sciences. Students will learn how to ask empirical questions; how to answer these questions scientifically using appropriate types of evidence; and how to clearly convey arguments, evidence, and conclusions to others. Rather than focusing on specific statistical tests or tools, we will focus on the logic and design of social research, beginning with some concepts and topics common to research across the social sciences. We will then consider different methodologies – experimentation, observation, social surveys, and archival research, using examples drawn from the literatures.

Prerequisites

It is assumed that you have basic knowledge on regression analysis. QMSS offers short tutorials at the following link if you need review: [http://www.ccmtl.columbia.edu/projects/qmss/](http://www.ccmtl.columbia.edu/projects/qmss/)

COURSE MATERIALS

Required texts:


The majority of the other course readings are available through the University’s electronic journals. We will have links to these on the course web page.

COURSE REQUIREMENTS

Attendance is expected and reading assignments are to be completed before each class session. All written work must be original and produced exclusively for this class. You are expected to follow the University’s guidelines for the submission of written work.

The class will be a combination of lectures and focused discussions. Discussions will be based in part on student responses to weekly assignments. These assignments, which will coincide with the readings, must be done by all students and must be done on a timely basis.
The final grade for the course will be based on your successful completion of each of the following requirements:

• **Assignments** (30%): There will be two assignments that will help you practice what you have learned from the readings and class discussions.

• **Research Proposal** (30%): Throughout the course of the semester, you will work on a research proposal. This 12 to 15 page paper will be turned in at the end of the semester.

• **Proposal Presentation** (10%): Each student will present their research proposal to the class and receive feedback at the end of the semester.

• **Presentation of Class Readings** (10%): Students will be assigned to present an overview of, and lead a discussion about, the special topics readings in class.

• **Class Participation** (20%): This course is designed to be a mixed lecture/discussion class. Students are expected to read all readings before each class and actively participate in class discussion.

**COURSE OUTLINE AND READINGS**

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<tr>
<th>Weeks 1&amp; 2 (September 6, 13): The “Science” of Social Science and the Role of Statistical Models</th>
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<tr>
<td>Singleton and Straits, <em>Approaches to Social Research</em>: Chapters 1-4.</td>
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<td><em>The Craft of Research</em>. Chapter 3.</td>
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<th>Week 3 (September 20): Causality and Causal Inference</th>
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<td><strong>Topic:</strong> Race- and Class-Based Health Differences in the United States</td>
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<tr>
<td><em>The Craft of Research</em> Chapters 9,10, and 11.</td>
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<td><em>A Rulebook for Arguments</em> pages 31-36.</td>
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Week 4 (September 27): Concepts and Measurement


**Topic: Social Capital**


*The Craft of Research* Chapters 4, 7 and 8.

Week 5 (October 4): Bringing It Together: Theories and Critics of Rational Choice

**Assignment 1 (Individual Assignment) Due 10/4**


**Topic: Explaining Human Decision making**


*The Craft of Research* Chapters 5 and 6.

Weeks 6 & 7 (October 11 & 18): Randomization and Experimental Method

**Research Proposal Brief Overview (1-2 pages) Due 10/18**

Singleton and Straits, *Approaches to Social Research*: Chapters 7 and 8, “Experimentation” and “Experimental Design.”


*IRB discussion during class (Oct 11)*
**Topic: Racial Discrimination (October 11)**


**Topic: Voter Turnout (October 18)**


*The Craft of Research* Chapter 12.

*A Rulebook for Arguments* Pages 49-72.

**Week 8 (October 25): Observation and Quasi-Experimentation**

Singleton and Straits, *Approaches to Social Research*: Chapter 11 “Field Research”


**Topic: Crime, Related Policies and Their Effects**


*The Craft of Research* Chapter 15.
**Week 9 (November 1): Sampling**

**Assignment 2 (Group Assignment) Due 11/1**
Singleton and Straits, *Approaches to Social Research*: Chapters 6, “Sampling.”


*The Craft of Research* Chapters 13, 14, and 16.

**Weeks 10, 11 (November 8, 15): Survey Research**

**Rough Draft of Full Proposal Due 11/15**
Singleton and Straits, *Approaches to Social Research*: Chapters 9 and 10, “Survey Research” and “Survey Instrumentation.”


**Topic: National Longitudinal Survey of Adolescent Health (To be presented on 11/8)**


Week 12 (November 22): Happy Thanksgiving! No class.

Week 13 (November 29): Proposal Presentations

Week 14 (December 6): Archival Data

**Drafts Returned, Final Revision Due 12/20.**

Singleton and Straits, *Approaches to Social Research*: Chapter 12, “Research Using Available Data.”


**Topic: Factors Responsible for Mortality Decline**

