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.

The goal of this course is to learn how to ask empirical questions; how to answer these questions scientifically using appropriate types of evidence; and how to clearly convey our arguments, evidence, and conclusions to others. Earlier part of the course will discuss the logic of the scientific method, the measurement of political concepts, research design and methods of data collection, and the principles of statistical inference. We will then consider particular research designs – experimentation, observation, social surveys, archival research, and text analysis, using scholarly articles that utilize each design.

Through learning methodological tools, the course prepares students with the skills necessary to produce a basic statistical analysis for their masters’ thesis and the ability to understand and critique statistical reports in newspapers and any other data analytic sources.

Prerequisite
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.ccnmtl.columbia.edu/projects/qmss/

Grading
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.
• Class Participation (10%): 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.

• Response memos (20%): As a means of preparing for the class discussion, you will submit a short response memo whenever topic readings are assigned. For each topic reading, make three-point statements: 1) Summarize major findings identifying the dependent and independent explanatory variables in one or two sentences; 2) Discuss the analytical strategy you liked about the paper; 3) Criticize the choice of data, the estimation strategy or the interpretation of the findings that you think could be improved. The statement should not exceed one page in total. The memos will be collected only in the weeks in which topic readings are assigned.

• Class Presentation (10%): Students will be assigned to present an overview of the “special topics” readings in class.

• Assignments (20%): 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 – 15 page paper will be turned in at the end of the semester. It should clearly state the research question highlighting why it is an important and interesting question; introduce what is known so far based on previous findings from the literature; why other scholars could not answer the question properly; how your paper will make a contribution to the literature; and how to collect and analyze the data. (Double-spaced, Time New Roman, 12-pt font size)

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

Books

There are three required texts for this course. The first will be used each week as preparation for class. The other two are required reading occasionally and are designed to be resources for your thesis process. Singleton & Straits is on reserve at Butler and available for purchase at the Book Culture Bookstore on 112th between Broadway and Amsterdam.


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 Outline

Weeks 1 and 2: The “Science” of Social Science and the Role of Statistical Models

• Singleton & Straits, chapters 1, 2, 4
• Thesis Reading: The Craft of Research, Chapter 3

Weeks 3: Causality and Causal Inference


Topic: Race- and Class-Based Health Differences in the United States


Week 4: Measurement

• Singleton and Straits, Chapter 5, “Measurement”

Topic: Social Capital


• Thesis Reading: *The Craft of Research*, Chapters 4,7 and 8.

**Week 5: Rational Choice**


*Topic: Explaining Human Decision making*


**Assignment 1 due**

**Week 6 & 7: Experimentation**

• Singleton and Straits, *Approaches to Social Research*: Chapters (3), 7 and 8


*Topic: Racial Discrimination (Week 6)*


**Topic: Voter Turnout (Week 7)**


*A Rulebook for Arguments*, Pages 49-72.

**Thesis topic proposal due (1-2 pages) (October 21)**

**Week 8: Observation and Quasi-Experiments**

• Singleton and Straits, Chapter 11 “Field Research”


**Topic: Civil Conflicts**


**Assignment 2 due**
Week 9: Sampling

- Singleton and Straits, Chapters 6, “Sampling.”


Week 10: Surveys

- Singleton and Straits, Chapters 9 and 10, “Survey Research” and “Survey Instrumentation.”


**Topic: National Longitudinal Survey of Adolescent Health**


Week 11: Archival Data

- Singleton and Straits, Chapter 12, “Research Using Available Data.”

**Topic: Factors Responsible for Mortality Decline**


Week 12
(No Class: Happy Thanksgiving!)

Week 13: Proposal Presentations (December 2)

Week 14: Data Mining


Topic Readings: Activities on Social Media


Drafts returned and final revision due next week (December 16)