

Rutgers, the State University of New Jersey  
Bloustein School of Planning and Public Policy

34:833:530

**METHODS I**

Summer 2017 COURSE SYLLABUS

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Office Hours: Tuesday & Thursdays 5:00 pm to 6:00 pm; and by appointment

Lecture: Tuesday and Thursday, 6:00– 10:00 pm, CSB 113

**Course Description and Teaching Style**

This course is designed to introduce graduate students to basic research design methods and statistical principles used in public policy analysis. The main goal is for you to learn to design and interpret research so you can solve problems and make informed decisions. During this semester, you will learn how to ask questions, probe for answers, and evaluate the answers we get from research. While the course emphasizes how to design and interpret quantitative research, you will be introduced to the foundations of qualitative methods so you are better informed about the strengths and limitations of different research designs. The emphasis of the class is on gaining the ability to think logically and critically about social science research.

Although I do not assume any previous work in methodology for this class, there is an expectation that you have a basic understanding of theories in statistics. We also expect that you will obtain IRB certification prior to the start of Methods II for Bloustein students. Certification must be provided to your instructor at the first class. The modules for completing this certification are part of our Sakai course site.

The goal of this class is NOT to make you into expert statisticians and methodologists, but to give you the skills to become educated consumers and critics of the research. This course is also structure to provide you with a foundation for other policy classes, as well as ensure a smooth transition to Methods II. Equally important, this class should give you a firm foundation as you complete your graduate research.

From a skills perspective, you will also gain experience in researching, analyzing data and writing about public policy issues through short written assignments and class presentations.

The class meetings include two class lectures; however, a mixture of lecture and hands-on lab work may be incorporated into the sessions as noted on the syllabus. Lab work may consist of take-home homework on some class sessions. I am a firm believer of active learning; thus, I will attempt to use discussion and case study analysis in place of traditional lectures whenever possible. I highly encourage questions and expect class participation. Readings should be completed *prior* to the lecture.

My office hours are posted on the syllabus above. I generally respond to emails within 24 hours. If you do not receive a response from me during this time frame, please resend your message. I care deeply about prompt and accurate responses. If you require access to the Bloustein labs, please request access found at:

<http://bloustein.rutgers.edu/its/labs/>

## **Course Objectives**

The goals of this course are to provide students with:

1. An understanding of the logic of scientific inquiry/empiricism and how to conceptualize research problems and measure concepts
2. The skill to use a statistical computer package
3. An ability to conduct, interpret and present descriptive statistics
4. The foundation necessary to register for the Methods II class

## **Required Text**

*Research Methods in Practice: Strategies for Description and Causation* by [Dahlia K. Remler](#) and [Gregg G. Van Ryzin](#) (2011) and published by Sage Publishers.

## **Optional (but Recommended Text)**

*Statistics: A Tool for Social Research*, 9<sup>th</sup> ed., by Joseph Healy and published by Wadsworth.

*Just Plain Data Analysis: Finding, Presenting, and Interpreting Social Science Data* by Gary Klass and published by Rowman & Littlefield Publishers, Inc.

## Required Articles

Any additional required readings will be posted as PDFs on the course Sakai site.

## Grading

Numerical grades will be calculated on a simple percentage basis as follows:

3 Problem Sets	60% (20% each)
Final	40% total
Pre-proposal	(10% of Final)
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Total	100%

Letter grades will be assigned as follows:

90 to 100% = A
86 to 89% = B+
80 to 85% = B
76 to 79% = C+
70 to 75% = C
60 to 69% = D
0 to 59% = F

## Expectations

Collegial and respectful conduct is expected in class. Class members should consider themselves colleagues who will collaborate to help each other develop a solid understanding of materials and concepts. To facilitate this process, class will start and end on time. While I understand emergencies occur, timely arrivals and departures should be the norm.

Please turn off your cell phones and other electronic devices during class.

All assignments must be completed on time. They should be typed in 12-point font and submitted in hard copy. Late work will be penalized. Assignments turned in the following week will be marked down an entire grade. Assignments cannot be submitted later than one week after the due date; missed assignments will receive a failing grade.

Cheating, plagiarism and other forms of academic dishonesty will not be tolerated. Such actions will result in a failing grade on the assignment and disciplinary action will be pursued. For further information about academic misconduct and a full explanation of the University's policies, please see the University's *Policy on Academic Integrity for Undergraduate and Graduate Students* located on the web at <http://ctaar.rutgers.edu/integrity/policy.html>.

My office hours are listed on the top of the syllabus. If any questions or concerns arise, please come see me. If you cannot make my office hours, please make an appointment. Any student in this course who has a disability or requires an accommodation that may prevent him or her from fully demonstrating his or her abilities should contact me as soon as possible so we can discuss accommodations necessary to ensure full participation and to facilitate your educational opportunities.

### Lecture, Assignment and Reading Schedule

Lecture	Date	Topics	Readings ( <i>Italicized rdgs. optional</i> )	Key Elements
Lecture 1	May 30	Overview: The Scientific Method; Applied Research	R&V Chapter 1 & 2; Tuft: Visual Presentations	<ul style="list-style-type: none"> <li>The Scientific Method</li> <li>Quant vs Qual Methods</li> <li>Types of Research</li> <li>Problem &amp; Hypothesis Formation</li> </ul>
Lecture 2	June 1	Conceptualization and Measurement; Research Ethics	R&V Chapter 4 and pp 517-523; Healey Ch 1: Introduction	<ul style="list-style-type: none"> <li>Concepts</li> <li>Measurement &amp; Operationalization</li> <li>Discrete and Continuous Variables</li> <li>Levels of Measurement</li> </ul>
Lecture 3	June 6 LAB	Research Design: Descriptive Statistics, Univariate & Bivariate Stats	R & V Chapter 11; Healey Ch 2: Descriptive Statistics; SPSS & Video Tutorials	<ul style="list-style-type: none"> <li>Percentages and Proportions</li> <li>Ratios, Rates and Percentage Change</li> <li>Frequency Distributions</li> <li>Intro SPSS Software</li> <li>Run Frequencies &amp; Crosstabs</li> </ul>
Lecture 4	June 8	Research Design: Experimental, Quasi-Experimental & Non-experimental Designs	R & V Chapter 12 & 14; Case Study Designs	<ul style="list-style-type: none"> <li>Experiments</li> <li>Quasi-Experiments</li> <li>Non-experiments</li> </ul>

Lecture 5	June 13	Survey Design: Overview & Probability Sampling	Chapter 5 and Chapter 7	<ul style="list-style-type: none"> <li>• Probability &amp; MOE</li> <li>• Strengths &amp; Weaknesses</li> <li>• Basic Design Considerations</li> </ul>
Lecture 6	June 15	Questionnaire Design: Question Wording & Context Effects; Survey Modes & Field Work & Weighting	Dillman Ch 4: The Basics of Crafting Good Questions (pdf); Dillman Ch 8: When More than One Survey Mode is Needed; Groves pg. 347-359 (pdf); AAPOR Code of Ethics & Best Practices	<ul style="list-style-type: none"> <li>• Question Wording</li> <li>• Context Effects</li> <li>• Basic Design</li> <li>• Survey Modes <ul style="list-style-type: none"> <li>• Mixed Modes</li> <li>• Fielding a Survey</li> </ul> </li> <li>• Trend Analyses</li> <li>• Weighting</li> </ul>
Lecture 7	June 20 LAB	Data Analysis: Statistical Descriptive Statistics; Measures of Dispersion & The Normal Curve	Healy Ch 3: Measures of Central Tendency; Healy Ch 4: Measures of Dispersion and Healey pp. 118-121	<ul style="list-style-type: none"> <li>• Measures of Central Tendencies (Individual vs. Grouped Data)</li> <li>• Range, Standard Deviation and Variance</li> <li>• Normal Curve</li> </ul>
Lecture 8	June 22	Qualitative Methods: Interviews, Focus Groups, Observations, Case Studies and much more	R & V Chapter 3; <i>Rubin &amp; Rubin Ch 7-9: Qualitative Interviewing: The Art of Hearing Data (pdf)</i>	<ul style="list-style-type: none"> <li>• Differences in Qualitative Methods</li> <li>• Non-probability sampling</li> <li>• Interviews as a tool</li> <li>• Structured vs. non-structured questions</li> </ul>
Lecture 9	June 27	Project Planning Session / No class/Quasi-Experimental Research Design		
Lecture 10	June 29 LAB	Data Analysis	SPSS Tutorials; R & V pp 181-210, Ch17; Klass Ch 7: Finding Data (pdf); Sakai online resources on memo writing	<ul style="list-style-type: none"> <li>• SPSS Syntax / Recode variables</li> <li>• Run frequencies</li> <li>• Run crosstabs</li> <li>• Memorandum Writing Tips</li> </ul>
Lecture 11	July 6 LAB	Course Review & Analysis Workshop	<i>Klass Ch 2 &amp; 3: Constructing Good Tables; Creating Good Charts</i>	<ul style="list-style-type: none"> <li>• Presentation Skills</li> <li>• Tables &amp; Charts</li> </ul>

## Exam and Assignment Schedule

Assignment	Date Due	Covers:
Problem Set 1	June 11 6pm	Defining Concepts & Hypothesis Formation / Selecting and Calculating Descriptive Stats / Level of Measurement / Ratios, Rates & Percent Change / Frequency Distributions & Bivariate Stats
Problem Set 2	June 21 6pm	Random Probability / MOE / Question Wording Design /Weighting
Problem Set 3	June 25 6pm	Central Tendencies / Measures of Dispersion / Normal Curve / Bivariate Interpretation & Analysis
Final	July 11 12 Noon	Comprehensive Memo: Research Design Proposal (Pre-proposal due July 4th @ 8pm)

## Bibliography of Readings

Don A. Dillman, Jolene D. Smyth and Leah Melani Christian. 2009. *Internet, Mail and Mixed-Mode Surveys: The Tailored Design Method*. Third Edition. Hoboken, NJ: John Wiley & Sons, Inc.

Frankfort-Nachmias, Chava and David Nachmias (2007). *Research Methods in the Social Science*, 7th ed., New York: Worth Publishers.

Fowler, Jr. Floyd J. 2009. *Survey Research Methods*. Fourth Edition. Thousand Oaks, CA: Sage Publications, Inc.

Remler, Dahlia and Van Ryan, Gregg. 2015. *Research Methods in Practice: Strategies for Description and Causation 2<sup>nd</sup> Edition*. Thousand Oaks, CA: Sage Publications. (You may use the 1<sup>st</sup> edition but are responsible for reconciling the assigned course readings.

Rubin, Herbert J. and Rubin, Irene S. 2005. *Qualitative Interviewing: The Art of Hearing Data*. Second Edition. Thousand Oaks, CA: Sage Publications.