

Rutgers University – Newark  
School of Public affairs and Administration

**20:834:562:02: APPLIED RESEARCH DESIGN**

Spring 2015

Instructor: Dr. Qiushi Wang

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Classroom: ENG-309

Office hours: Wednesday 2:00-4:30 p.m. or by appointment

Friday: 10:00 a.m.-12:40 p.m.

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**Course Objectives:** This course is designed to teach concepts of the research design and techniques that are most relevant in the public administration and social science literature. Topics covered in the course include how to identify research topics, how to transform raw research ideas into “manageable” research questions, determine and implement research methods, analyze data, present research results, and write research papers. In addition, student will also learn basic knowledge of Stata program and know how to conduct empirical research with this program. By the end of semester, students are expected to become versed in research design and methods, have the ability to conduct rigorous academic research and be well prepared to apply the knowledge and techniques learnt from this class to their capstone projects and future academic pursuit.

**Course Evaluation:**

Elements	Percentage of Grade
Quizzes	30%
Mid-term	20%
Final Project (Presentation)	50%
Total	100%

Grades will be assigned on a strict percentage basis. The percentages that correspond to each grade are listed below.

A 90%  
B+ 85%  
B 80%

C+	70%
C	60%
F	59% and below

**Course Communication:** PowerPoint slides will be used during lectures throughout the course. Electronic copies of these, and other essential course materials, are posted on the class Blackboard site, where they may be downloaded and printed. Check your Blackboard account regularly for course documents and announcements. Please also check your emails frequently, in case the instructor needs to reach you.

**Class Policies:** It is the student's responsibility to take appropriate measures to ensure they keep up with the material. Students should feel free to contact the instructor for help as needed. I am glad to talk with you at mutually convenient times; please contact me if you would like to talk. Please inform me in advance if any of the dates on the class schedule conflict with your religious observances.

**Academic Honesty and Integrity:** Students are responsible for informing themselves about the standards of academic integrity before performing any academic work. The link to Rutgers University's "Policy on Academic Integrity for Undergraduate and Graduate Students" can be found at <http://academicintegrity.rutgers.edu/integrity.shtml>. Evidence of dishonesty will be dealt with severely, and will result in a failing grade for that assignment, without exception.

Books: One textbook is required for this class and they are available in the RU bookstore or online places such as Amazon or Ebay:

- Babbie, E.R. 2013. *The Basics of Social Research*, 6th ed. Belmont, CA: Wadsworth, Inc.
- Additional materials posted on Blackboard.

Two books are recommended for reference:

- de Vaus, D. (2001). *Research design in social research*. Thousand Oaks, CA: SAGE Publications.
- Remler, D.K. and Van Ryzan, G.G. 2011. *Research Methods in Practice: Strategies for Description and Causation*. Thousand Oaks, CA: SAGE Publications.

**Computer requirement:** Students need to have access to a computer with Stata program.

Class notes, assignments, other related materials and announcements are posted on the blackboard. Students should check this site regularly. Some other books on qualitative methods and survey techniques may be helpful and are listed below for your reference:

- Berg, B. L. (2003). *Qualitative research methods for the social sciences* (5<sup>th</sup> ed.). Upper Saddle River, NJ: Prentice Hall
- Creswell, J.W. (2002). *Research design: Qualitative, quantitative, and mixed method approaches*. Thousand Oaks, CA: Sage Publications.
- Salant, P., & Dillman, D. A. (1994). *How to conduct your own survey*. Hoboken, NJ: John Wiley & Sons Inc.
- Trochim, M.K. *Research methods knowledge base*. Available at [www.socialresearchmethods.net/kb/](http://www.socialresearchmethods.net/kb/)

## **Dates and Topics**

### **January 23: Introduction to the Course and Stata program**

#### **January 30: The Logic of Inquiry and Basic Concepts**

- Readings: Babbie Chapter 1 & 2
- Basic operations of Stata

#### **February 6: Research Framework and Research Design Strategies**

- Readings: Babbie Chapter 4
- How to conduct literature review
- Descriptive statistics with Stata

#### **February 13: Qualitative Research---Observation and Interview**

- Readings: Babbie Chapter 10
- Quiz 1

#### **February 20: Unobtrusive & Evaluation Research**

- Readings: Babbie Chapter 11 & 12
- Linear regression with Stata I

#### **February 27: Measurement of Variables**

- Readings: Babbie Chapter 5 & 6
- Linear regression with Stata II

#### **March 6: Sampling**

- Readings: Babbie Chapter 7
- Quiz 2

**March 13: Midterm**

**March 20: Spring Recess. No class.**

**March 27: Primary Data and Survey Research**

- Readings: Babbie Chapter 9
- Diagnostic tests with Stata I

**April 3: Secondary data, Qualitative Data Analysis and Causation**

- Readings: Babbie Chapter 13
- Diagnostic tests with Stata II

**April 10: Experiments**

- Readings: Babbie Chapter 8
- Logit/Probit model with Stata
- Quiz 3

**April 17: Quantitative Data Analysis**

- Readings: Babbie Chapter 14
- Model building with Stata

**April 24: Politics and Ethics of Social Research**

- Readings: Babbie Chapter 3

**May 1: Final Project Presentation I**

**May 8: Final Project Presentation II**