Instructor: Adriana Espinosa, PhD
Office Hours: Wednesdays 2-4 PM or by appointment
Office: NAC 7/114 A
E-mail: aespinosa@ccny.cuny.edu

Course Description - The purpose of this course is to teach students how statistical methods can help us make factual conclusions about the social, economic and political world. In class, students will obtain the knowledge of statistical theory and corresponding empirical implementation to test policy and program effectiveness. At the end of the semester students should be able to prepare, analyze and present data to answer key public policy and administration questions.

This course will employ the use of Excel to manipulate and interpret data.

This class meets on Mondays 7:15 – 9:15 PM in NAC 6/150.

Prerequisites – PSM B1877 or equivalent.

Learning Objectives – At the end of this course students should be able to:

- Understand how basic policy and public administration theories and hypotheses can be substantiated through empirical investigation.
- Demonstrate knowledge of statistical models to examine a relation.
- Have the ability to identify a causal relationship through data and make corresponding conclusions.
- Identify the most common statistical problems that exist when analyzing data and recognize potential solutions for them.


Final Grade - Your final grade will depend on the following:

- Problem Sets – 10%
- Midterm - 30%
- Final Exam - 30%
- Final Project (see attached)- 30%

Problem Sets - Grading of problem sets will be based on a 0–3 scale, where a 0 corresponds to not doing the assignment. The purpose of these assignments is to prepare
you for the exams, as most of the material you will be tested on will be based on these problems. It is strongly encouraged that you take these problem sets very seriously. *Unless otherwise specified, all problem sets are from Meier & Brudney.*

**Study Groups** – I strongly encourage you to form/join a *study group of 2 or 3 individuals* to work on problems, study for exams and generate ideas for your final project. At the very least, this exercise will make your class experience more enjoyable.

**Late Assignments** – I will not accept any late assignments.

**Course Materials** – Course information, assignments, selected special announcements, solutions to problem sets, and sample exams will be made available via Blackboard.

**Communication** – I will regularly send e-mail with special class announcements via Blackboard. Please make sure the e-mail address you have registered with Blackboard is valid and check it frequently.

**Make Up Exams** - None

**Final Research Project** - An essential requirement for this course is completion of a research paper due on Monday, May 20th at 5 PM EST. The purpose of the paper is to give you experience in data analysis. Please refer to the attached guidelines for further details about this project.

**Policies:**

**CUNY Policy on Academic Integrity** - Academic dishonesty of any sort is strictly prohibited at The City College of New York. Go to: [http://www1.ccny.cuny.edu/upload/academicintegrity.pdf](http://www1.ccny.cuny.edu/upload/academicintegrity.pdf) to download a copy of the University's academic integrity policy handout.

**Policy on Lateness and Absence** - Students are expected to attend and be on time to every class in which they are enrolled. The instructor has the right to drop a student from a course for excessive absence or lateness, with no distinction made between excused and unexcused absences. Go to: [http://www1.ccny.cuny.edu/CCNYBulletin/upload/CCNY-Graduate-Bulletin-2008-10-2.pdf](http://www1.ccny.cuny.edu/CCNYBulletin/upload/CCNY-Graduate-Bulletin-2008-10-2.pdf) for more information on this college policy.

**Course Calendar** *(Subject to change at instructor’s discretion)*

<table>
<thead>
<tr>
<th>Day</th>
<th>Chapters / Material Covered</th>
</tr>
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<tbody>
<tr>
<td>Jan 28</td>
<td>Review of Descriptive Statistics</td>
</tr>
<tr>
<td>Feb 4</td>
<td>Ch 7, 8, 11 – Introduction to probability and inference</td>
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<tr>
<td>Feb 11</td>
<td>Ch 7, 8, 11 – “cont” Confidence intervals</td>
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Feb 18  NO CLASSES- COLLEGE CLOSED
Feb 20  MONDAY SCHEDULE – Ch 12 – Hypothesis Testing
Feb 25  Ch 14 – Testing differences between 2 groups
March 4  Ch 14 “cont”
March 11  Ch 15, 16, 17, 18 - Contingency Tables, Chi-Square test of independence
March 18  Exam # 1
March 25  SPRING RECESS – NO LECTURE
April 1  SPRING RECESS – NO LECTURE
April 8  Ch 18 – Introduction to Regression Analysis (correlation and scatterplots)
April 15  Ch 18, 19 – Linear regression “cont”
April 22  Ch 20 – Time Series Analysis
April 29  Ch 21, 22, 23 – Multiple Linear Regression
May 6  Student Presentations – Proposals due
May 13  FINAL EXAM (In Class)
May 20  FINAL PROJECT REPORT DUE AT 5:00 PM