

Public Administration 9914  
**RESEARCH METHODS and STATISTICS**

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The purpose of this course is to introduce students to the research process. The principles and techniques covered here will be useful both for academic work (including the required MPA research report) and for applied administrative and policy research. As well, it is designed to help you evaluate research that you encounter in academic work and on the job.

There are two components to the course. First is the discussion of research methods, which begins with notions of theory and inductive and deductive approaches, and proceeds through survey design to the logic of experimentation and to qualitative research techniques.

Second, we will cover the elementary statistics that are basic to quantitative research. This will be done in a straightforward way, and individual help will be available. We will discuss simple descriptive statistics, sampling and probability, measures of association and tests of significance, and analysis of variance and regression.

**Read as much as possible before class begins!**

### Books

O'Sullivan, Elizabethann, Gary R. Rassel, and Maureen Berner, (2008). *Research Methods for Public Administrators*, 5<sup>th</sup> ed., New York: Pearson Longman. [hereafter O'S]

It is advisable to get the latest edition, because in class we will often be looking up particular pages for examples, and page numbers change from edition to edition.

### Evaluation

Students will do three short assignments during the course (10% each). A group assignment can win bonus marks. Students will also be graded on class participation (10%). There will be a take-home examination on statistics (worth 30%). This will be **due November 21, 2011**. The second major assignment involves designing a research project (30%). This will be **due January 16, 2012**. Late penalties will be applied.

## **PA 9914 OUTLINE**

Classes are in SSC 4255.

### **Monday, October 17:**

9:00 - 12:00: Introduction: theories, hypotheses, variables, operationalization  
O'S: ch 1, 2 (25-38), 4.

1:15 - 4:30: Statistics: variables, descriptive statistics  
O'S: ch 11 (323-52)

### **Tuesday, October 18:**

9:00 - 10:30: Methods: sampling  
O'S: ch 5 (133-50)  
10:30 - 12:00: Methods: surveys and questionnaires  
O'S: ch 6 (172-91), 7  
1:00 - 2:00: Statistics: indexes  
O'S: ch 10 (299-312)  
2:00 - 4:30: Statistics: the normal curve, estimation and inference  
O'S: ch 11 (352-4)  
Assignment #1 handed out; Assignment 2 described.

### **Wednesday, October 20:**

9:00 - 11: Statistics: more about estimation, sample size  
O'S: ch 5 (150-63, and appendixes)  
11:00-12:00: Assignment 2.  
1:00 - 2:30: Statistics: hypothesis testing, tests of significance  
O'S: ch 12, including appendixes  
2:30 - 3:30: Methods: causal analysis; experimental design  
O'S: ch 3  
3:30-4:30: Methods: library research (with Bruce Fyfe)  
Assignment #3 handed out; tomorrow's group exercise explained.

### **Thursday, October 21:**

9:00 - 10:30: Statistics: relations between two or more variables  
O'S: ch 13 (396-413, and appendix [re:  $V$  and  $\gamma$  only])  
10:30 - 11:00: group exercise about validity  
11:00 -12:00: Statistics: analysis of variance  
O'S: Ch 13 (413-418); xeroxed handout  
1:00 - 2:30: Methods: fundamental design choices; qualitative methods  
O'S: ch 9 (270-80) , 2 (38-49), 6 (191-206)  
Julie Ann McMullin, Lorraine Davies and Gale Cassidy, 'Welfare Reform in Ontario:  
Tough Times in Mothers' Lives', *Canadian Public Policy*, 28:2 (2002), 297-  
313 [handout].  
2:30 - 4:00: Ethics; Research proposal (with Andrew Sancton)  
O'S: ch 8

### **Friday, October 22:**

9:00 - 12:00: Statistics: regression  
O'S: ch 14 (430-38)  
1:30 - 2:30: Multiple regression  
O'S: ch 14 (439-56)  
2:30 - 4:00: Discussion of take-home examination and research proposal