POL 242 Y1Y
Research Methods for Specialists

Summer 2011

University of Toronto
Department of Political Science

Instructor

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Teaching Assistants

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Classes

Tuesday and Thursday, 6-8pm
Room FE36

Office Hours

Monday and Wednesday, 4-5pm
Location SS 3118

Course Description

This course introduces students of political science to the methods used to gather and analyze evidence. Unlike other political science courses that focus on the classic themes of politics (e.g. democracy, statehood, institutions, actors), this course emphasizes the techniques, and methods, used to explain how and why things happen in politics, providing a toolkit that allows students to conduct their own research and analyze the results. Drawing on political examples when introducing concepts and techniques, the course emphasizes practice (e.g., choice of appropriate statistical procedure, interpretation) over theory (mathematical proofs). As such, no prior background in mathematics is required. Themes covered in this course include: approaches to the study of political science, the decision making in research design and appropriate methods of analysis.

Course Website

The class will rely heavily on the course website, which contains codebooks for data sources, and the statistical package WebStats.

http://groups.chass.utoronto.ca/pol242/

Course Readings

There is one required and one recommended text.

Required: Keith Archer and Loleen Berdahl. Explorations: Conducting Empirical Research in Canadian Political Science, 2nd Edition. (Oxford University Press), 2011.

Recommended: Sally Caldwell. Statistics Unplugged, 3rd Edition. (Wadsworth), 2010.

Beyond the texts, the course will provide any additional required readings, drawn from academic journal articles and book chapters. They will be made available via the course's Blackboard page (available through the University of Toronto Portal).

Student Evaluation

Students will be required to complete **six (6)** short assignments evaluating comprehension of the course material. The assignments will be based on the course readings, lecture, and class discussions.

- **Assignments: (10% each = 60%)**
- **Assignment Handout Date:**
    - **June 2nd (due June 7th at the beginning of class)**
    - **June 16th (due June 21st at the beginning of class)**
    - **June 23rd (due July 5th at the beginning of class)**
    - **July 7th (due July 12th at the beginning of class)**
    - **July 14th (due June 21st at the beginning of class)**
    - **July 26th (due August 2nd at the beginning of class)**

- **Participation:** *(10%)*

Students will be evaluated on class, lab and tutorial attendance and participation. Labs will take place in the second half of a lecture. This will enable students to put into practice what has been taught during lectures.

- **Lab Schedule:**

o **Thursday June 2nd**	o **Tuesday July 26th**
o **Thursday June 23rd**	o **Tuesday August 2nd**
o **Thursday July 7th**	o **Tuesday August 9th**

In addition to labs, a series of one hour tutorials will be offered. The tutorials have two functions. First, it provides students with time to use Webstats and practice techniques learned in class. It is essential for students to have a solid grasp of Webstats to be able to do the assignments for class, thus attendance is essential. Webstats tutorials will be offered at the following times (students will have some choice in which ones to attend):

i) Webstat Tutorials

- *Thursday May 26th (5pm & 8pm)*
- *Thursday June 2nd (5pm & 8pm)*
- *Tuesday June 7th (5pm & 8pm)*
- *Tuesday June 21st (8pm)*
- *Thursday June 23rd (5pm & 8pm)*
- *Tuesday July 5th (5pm & 8pm)*
- *Thursday July 7th (5pm & 8pm)*

- *Tuesday July 12th (8pm)*
- *Thursday July 14th (5pm)*
- *Thursday July 21st (8pm)*
- *Tuesday July 26th (5pm)*
- *Thursday August 4th (5pm & 8pm)*
- *Tuesday August 9th (5pm & 8pm)*

Second, it provides an opportunity for students to come in and work on assignments, with TA support. In essence, this acts as "office hours" for the TAs. Assignment tutorials take place at the following times:

ii) Assignment Tutorials
- *Thursday July 14th (8pm)*
- *Tuesday July 19th (5pm & 8pm)*
- *Tuesday July 26th (8pm)*
- *Tuesday July 28th (5pm & 8pm)*

- **Report:** *(30%)*

Student will be required to complete one 8-page, double-spaced report, due in the political science office on August 15th by the end of the working day (when the office closes). The report aims to get students to apply the methods learned during the course of the class.

Late Penalty

Submitting assignments on time is vital for students to successfully complete the course and obtain important feedback. Summer courses, in particular, are condensed and there is little time for delay.

Late assignments will be assessed a late penalty of 5% for each day the assignment is late. Penalties are assessed starting at the conclusion of each class.

Plagiarism

Plagiarism is a serious offence and will be dealt with accordingly. The definition of plagiarism is broad: Something you think is acceptable may in fact be considered plagiarism. Please be aware of the University's policies. For details, consult the handout available at http://www.writing.utoronto.ca/advice/using-sources/how-not- to-plagiarize. For more general advice files on academic writing, please see www.writing.utoronto.ca.

Writing Centres

While this course is not writing intensive it does require you to be able to describe and evaluate statistical results and as such strong writing skill are important. Throughout the course we will provide strategies as to how to "write with numbers". However, if you feel you require more help, the college writing centres maintain access in the summer. Their teaching approach is described at http://www.writing.utoronto.ca/writing-centres/learning. Students can make appointments online through the following link: https://awc2.wdw.utoronto.ca/awc-login/.

Accessibility Needs

The University of Toronto is committed to accessibility. If you require accommodations for a disability, or have any accessibility concerns about the course, the classroom or course materials, please contact Accessibility Services as soon as possible: disability.services@utoronto.ca or http://studentlife.utoronto.ca/accessibility.

Course Schedule

Tuesday, May 17

Introduction: Organization of the course

Thursday, May 19

Overview of Social Science Research Methods
Theory and Making Inferences
Reading: Archer/Berdahl: Chapter 1, 2

Tuesday, May 24

Concepts, Indicators and Variables
Measurement Types
Reading: Archer/Berdahl: Chapter 3 & 4 (pgs. 67-88, 92-94)

Thursday, May 26

Data Types: Qualitative and Quantitative
Surveys and Survey Data
Introduction to Statistical Programs: SPSS, STAT and Webstats
Reading: Archer/Berdahl: Chapter 4 (pgs. 88-92), Chapter 9
Webstats Tutorial

Tuesday, May 31

Descriptive Statistics for Univariate Measures
Measures of Central Tendency and Dispersion
Reading: Archer/Berdahl: Chapter 15, pgs 243-256

Thursday, June 2

Descriptive Statistics For Univariate Measures Continued:
Putting What We've Learned in Practice
Caldwell: Chapter 2 (Will Supply For You)
Assignment 1 Handed Out
Webstats Tutorial

Tuesday, June 7

Normal Curves and Z-Scores
Reading: Archer/Berdahl: Chapter 15, pgs 257-264
Webstats Tutorial

Thursday, June 9

Sampling Distributions: Fundamental Concepts and Assumptions
Reading: Archer/Berdahl: Chapter 8

Tuesday, June 14

Hypothesis Testing Part I: Univariate Analysis
Populations, Samples and Confidence Intervals
Reading: Archer/Berdahl: Chapter 15, pgs 257-263; Chapter 16, pgs. 265-271
Assignment Tutorial

Thursday, June 16

Univariate Analysis Continued:
Putting What We've Learned in Practice
Caldwell: Chapter 7 (Will Supply For You)
Assignment 2 Handed Out
Assignment Tutorial

Tuesday, June 21

Hypothesis Testing Part II: Bivariate Analysis
Nominal and Ordinal Variables
Reading: Archer/Berdahl: Chapter 17
Webstats Tutorial

Thursday, June 23

Bivariate Cross-Tabulations: Adding a Third Variable
Putting What We've Learned in Practice
Reading: Archer/Berdahl: Chapter 17, pgs 313-319
Assignment 3 Handed Out
Webstats Tutorial

Midterm Break

Tuesday, July 5

Bivariate Analysis: Measures of Association
Reading: Archer/Berdahl: Chapter 17, pgs 293-312
Webstats Tutorial

Thursday, July 7

Statistical Significance: Chi-Square
Putting What We've Learned in Practice
Reading: Archer/Berdahl: Chapter 16, pgs 272-279
Assignment 4 Handed Out
Webstats Tutorial

Tuesday, July 12

Indices: Building Interval-level Variables
Reading: Archer/Berdahl: Chapter 4, pgs 92-94
Webstats Tutorial

Thursday, July 14

Hypothesis Testing III: Bivariate Analysis
Interval Level Variables: T-Test, ANOVA
Reading: Archer/Berdahl: Chapter 16, pgs 279-282
Assignment 5 Handed Out
Webstats Tutorial

Tuesday, July 19

Hypothesis Testing IV: Correlations and Bivariate Regression
Reading: Archer/Berdahl: Chapter 18, pgs 323-335

Thursday, July 21

Hypothesis Testing V: Multivariate Analysis
Regression and Controls
Reading: Archer/Berdahl: Re-read Chapter 17, pgs 313-320; Chapter 18, pgs 335-341
Webstats Tutorial

Tuesday, July 26

Multiple Regression: Dummy Variables
Stylizing Regression Models
Reading: Archer/Berdahl: Chapter 18, pgs 334-335; 341-346
Assignment 6 Handed Out
Webstats Tutorial
Assignment Tutorial

Thursday, July 28

    Multiple Regression: Interaction Terms
    Read: http://groups.chass.utoronto.ca/pol242/interactions.ppt
    Assignment Tutorial

Tuesday, August 2

    Multiple Regressions: Continued
    Putting What We've Learned in Practice

Thursday, August 4

    Logistic Regression: Using Dichotomous Dependent Variables
    Read: http://groups.chass.utoronto.ca/pol242/logitanalysis.html
    Paper Instructions Handed Out
    Writing Tutorial

Tuesday, August 9

    Logistic Regression: Continued
    Putting What We've Learned in Practice
    Writing Tutorial

Thursday, August 11

    Putting What We've Learned in Practice
    Conclusion: Bringing Everything Together