

**POLITICAL SCIENCE 585N: TECHNIQUES IN POLITICAL ANALYSIS**  
**Autumn 2006**

Instructor: Roman Ivanchenko

Class Hours: 5:30 pm-7:18 pm Tuesdays and Thursdays

Class Location: 0125 Derby Hall

Office Hours: 03:45 pm-5:15 pm Tuesdays and Thursdays

Office Location: 2081 Derby Hall

Note: if I am not in my office during the office hours then I am either in 2037 Derby or 2049 Derby.

Office Phone Number: 292-6550 (I will only answer if I am in my office)

The best way to contact me is via e-mail. My e-mail address is [ivanchenko.1@osu.edu](mailto:ivanchenko.1@osu.edu). Please, don't hesitate contacting me if you have questions.

**COURSE DESCRIPTION**

In this class, I will introduce the concepts involved into theory building, research design, and empirical testing. I will provide you with the basic tools needed to analyze behavior of various political actors. Throughout the class, I will try to provide you with realistic applications of statistical concepts, and I expect you to be comfortable with their use by the end of this class. This class will teach you that statistics is not something to fear. In fact, it is both understandable and useful. It is my hope that you each leave this class with the understanding of the basic statistical concepts and the ability to apply them.

Warning: this class will cover a lot of material. We will average about a chapter of difficult material per class session. Because the subject of the class is likely to be unfamiliar to most of the students, you need to do all readings in advance. After completing a reading for the upcoming lecture, try thinking about what was the most confusing thing and bring it up in the next class. If you choose to slack off and start studying for the tests a few days before them, you will not do well. You simply cannot learn all the material presented in this class by reading it two days before an exam. The solution is obvious: study the class material according to the schedule, don't wait until the exam date to open the book. Since the material is likely to be difficult, I encourage you to ask me to clarify things as we go along. Don't just wait until the last moment. If something presented in class is not clear, don't be afraid to raise your hand, tell me to stop, and to explain it. If anything, I will think highly of your courage.

There are two required textbooks for this class:

Nachmias, David and Chava Frankfort Nachmias. 1999. *Research Method in Social Sciences*. Worth Publishers

Levin, Jack and James Alan Fox. 2004. *Elementary Statistics in Social Research: The Essentials*. Boston, MA: Allyn and Bacon.

There is one recommended textbook:

Newman, W. Lawrence. 2003. *Social Research Methods: Quantitative and Qualitative Approaches*. 5<sup>th</sup> ed. Boston, MA: Allyn and Bacon.

The difference between required and recommended texts:

If the textbook is recommended, you are only responsible for the material from this textbook that was presented in class. If the textbook is required, you are responsible for the material from this textbook that was presented in class, AND you are responsible for the relevant material covered in the textbook that was not presented in class.

## **THE UNIVERSITY EXPECTATIONS**

Goals/Rationale:

Courses in quantitative and logical skills develop logical reasoning, including the ability to identify valid arguments, use mathematical models, and draw conclusions based on quantitative data.

Learning Objectives:

Data Analysis. Students understand statistics and probability, comprehend mathematical methods needed to analyze statistical arguments, and recognize the importance of statistical ideas.

## **GRADING**

Your grade will consist of a quiz, homework, and two tests:

The quiz is worth 20 percentage points of the final grade. It will be administered at the end of a regular lecture/class period. It will not take more than 25-35 minutes, however it is not going to be easy. You will be required to answer 10 to 15 questions relevant to the topics covered in the weeks leading up to the quiz AND you will be expected to correctly answer any questions related to the readings scheduled for the day of the quiz. Please, note that I may and will expect you to calculate certain statistics using provided data.

There are no make-up quizzes. If you skip the quiz without a legitimate reason (legitimacy is determined by a department's policy), you receive 0 as the grade for the skipped quiz. If you skip the quiz due to a legitimate reason, you will be allowed to earn the points by taking a test consisting of essay questions during my office hours.

You are expected to complete one homework. The homework is worth 20 percent of the final grade. The homework will be assigned in the second half of the class. Your task will involve the use of statistical software (SPSS) as well as checking your computer output by doing all calculations by hand. Additionally, you will have to interpret your results in terms of substantive and statistical significance. Failure to provide appropriate interpretation will result in a significant loss of points. You may submit your output as it is, however, the rest of your answers (your own calculations) will need to be typed and appropriately formatted. Failure to properly organize your homework will result in a loss of points.

Obviously, to complete a part of your homework you will require access to statistical software. Whenever it is available, you can use the services of a computer lab at Derby 125, or you can use any other computer with SPSS. You may download the package from [www.oit.ohio-state.edu](http://www.oit.ohio-state.edu) website; however, you will need a license code (otherwise you will only be able to use SPSS for two weeks). To obtain it, you will need to go to 512 Bakers System and show the people there your BuckID.

Your homework is late if it is not in my hands by the end of the class when it is due. Late homeworks will not be accepted. You will have plenty of time to complete this assignment, which means there are absolutely no excuses for not turning it in on time. If you are afraid that your car will not start in the morning and you will be unable to come to class at all, you can always turn in your homework simply by e-mailing it to me.

We will have two tests: the midterm and the final. Both tests are worth 30 points of the final grade. The final is not cumulative. The tests will normally consist of 30 to 50 questions. Some of the questions may involve calculating particular statistics. Although, you may use calculators during the test, you are not allowed the use of scientific calculators. People who developed the statistics we will study in this class did not have the advantage of high powered calculators; the best they could hope for was a couple of rocks and an abacus. If you would like to use an abacus during one of the tests, you may do so.

The skipped test policy is the same as my policy for skipped quizzes, except the make-up essays are much longer and much more difficult.

**Regrading Policy:** after I distribute graded assignments back to students, you will have 10 days to appeal your grade (10 days from the date of distribution regardless of whether you were in class on that day). If you think that there is a problem with your grade, you may resubmit your assignment, and I will regrade it. I will regrade the whole thing, not just the parts that you think are problematic. If you fail to resubmit your assignment during this ten day window, and you still want to challenge the grade, you need to pursue other avenues of appeal.

Grading Scale:

93-100%: A  
90-92.9: A-  
87-89.9: B+  
83-86.9: B  
80-82.9: B-  
77-79.9: C+  
73-76.9: C  
70-72.9: C-  
67-69.9: D+  
60-66.9: D  
<60: E

## **ACADEMIC MISCONDUCT**

This is an upper-level class, which means that I do not need to worry about academic misconduct. However, if you have any confusion about what constitutes academic misconduct, it is your obligation to consult the Ohio State University Code of Student Conduct. Should you ignore the guidelines of honest academic behavior, you will be punished in accordance with the university policies.

## **ETHICAL BEHAVIOR**

You are all responsible and intelligent adults, which means that the following warnings/requests are superfluous, however, please, make sure that you behave respectfully toward other individuals in the classroom. Everyone (including your instructor) will avoid offensive language. It is understandable that some of the topics that we will discuss are politically and emotionally charged; however, learn to express your opinions in a non-offensive manner. Believe me, if anything this ability will help you progress in your lives long after college. I reserve the right to conduct discussions in a parliamentary manner: all questions and comments would be directed toward and the recognition of speakers will come from the moderator/me. Additionally, please make sure to turn your phones/pagers off before the class. Also, sleeping in class is considered to be an invitation for an exercise in Socratic questioning.

## **STUDENTS WITH DISABILITIES**

Any student who needs assistance with the class due to a disability must notify me to make appropriate arrangements. You must contact the university's Office of Disability Services (292-3307) to receive appropriate documentation.

## **SCHEDULE** (subject to change)

Day 1 (September 21st) Introduction of the class material. Science and the social science methods of research.

Read: Nachmias and Nachmias, Chapter 1

Day 2 (September 26th) Conceptual Foundations of Research.

Read: Nachmias and Nachmias, Chapter 2

Day 3 (September 28th) Elements of Research

Read: Nachmias and Nachmias, Chapter 3

Day 4 (October 3rd) Ethics in Social Science Research

Read: Nachmias and Nachmias, Chapter 4

Day 5 (October 5th) Experiments

Read: Nachmias and Nachmias, Chapter 5

Day 6 (October 10th) Cross-Sectional and Quasi-Experimental Designs

Read: Nachmias and Nachmias, Chapter 6

**Day 7 (October 12th) Measurement**

**Read: Nachmias and Nachmias, Chapter 7**

**Quiz**

Day 8 (October 17th) Organizing Data

Read: Levin and Fox, Chapter 2

Day 9 (October 19th) Measures of Central Tendency and Measures of Variability

Read: Levin and Fox, Chapter 3 and Chapter 4

**Day 10 (October 24th) Midterm**

Day 11 (October 26th) Introduction to Probabilities

Read: Levin and Fox, Chapter 5

Day 12 (October 31st) Probability Distributions

Read: Levin and Fox, Chapter 5

Day 13 (November 2nd) Samples and Populations

Read: Levin and Fox, Chapter 6

Day 14 (November 7th) Samples and Populations

Read: Levin and Fox, Chapter 6

Day 15 (November 9th) Difference of Means Test  
Read: Levin and Fox, Chapter 7

Day 16 (November 14th) Analysis of Variance  
Read: Levin and Fox, Chapter 8

Day 17 (November 16th) Non-Parametric Tests of Significance  
Read: Levin and Fox, Chapter 9

Day 18 (November 21st) Correlation  
Read: Levin and Fox, Chapter 10

Day 19 (November 28th) Regression Analysis  
Read: Levin and Fox, Chapter 11

**Day 20 (November 30th) Non-Parametric Measures of Correlation**  
**Read: Levin and Fox, Chapter 12**  
**Homework Due Date**

The final exam will be held on Tuesday, December 5<sup>th</sup>, between 5:30 pm and 7:18 am. (BUT CHECK THE OFFICIAL UNIVERSITY EXAM SCHEDULE)