Pol Sci 390 Political Data Analysis (On-line Section) Summer, 2011

Professor

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If you want to check out some of my own uses of political statistics, go to <u>www.politics-by-the-numbers.blogspot.com</u>

IMPORTANT: Please remember that I will be sending everything to <u>your **UWM** email</u> <u>account</u>. If you don't regularly use that account, make sure you check it or forward it to an account you do use regularly.

This course is designed to provide you with a broad introduction to the statistical basis of political data analysis. Although you will learn about statistics, this is not purely a statistics course. Instead, it can be thought of as a course on the quantitative aspects of political science. The math-phobic among you need not get too worked up about studying statistics. Although a minimum amount of mathematic ability is required, this course stresses an intuitive rather than a mathematical understanding of statistics.

Required Material:

The textbook is:

Statistics: A Tool for the Social Research 9th edition, by Joseph Healey (Wadsworth Press).

Be sure you buy the 9th edition, as there are a number of important changes from the previous editions. These types of books can be somewhat expensive, so try to find a used copy if you can.

If you buy a copy online, be sure to pay enough for shipping so you will be able to use it next week.

You will also need a copy of SPSS software. There are a number of options for obtaining this software. First, you can buy the student version (limited but will do everything required in the SPSS exercises from the book) for \$29 directly from Pearson Education:

 $\frac{http://www.pearsonhighered.com/educator/product/SPSS-Student-Version-180-Valuepack-6E/9780205020997.page}{}$

I've also placed an order for the same software at the UWM bookstore.

Another alternative is to buy a more complete "gradpack" SPSS program though the Wisconsin Integrated Software Catalog (WISC) at:

http://wiscsoftware.wisc.edu/wisc/productInfo.asp?id=58516&institution=1029

This costs \$45 but will give you more flexibility if you want to use the software for other purposes.

If you have access to campus computer labs, or SPSS on another computer, you don't need to buy the software. If you choose this route, though, it is up to you to make sure you can get access to the program in time to finish your assignments. The most recent version of SPSS is Version 19. If you already have a copy of an earlier version it should work all right, though there could be a few unexpected hiccups, especially for versions earlier than Version 14.

Suggested Reading:

The following texts are suggested for students who need additional explanations of statistical concepts. These books can be obtained through various on-line vendors and may also be available in the library or the UWM bookstore.

Cuzzort, R. P., and James Vrettos. 1996. *The Elementary Forms of Statistical Reason* New York: St. Martin's Press.

Gonick, Larry, and woolcott Smith. 1993. *The Cartoon guide to Statistics*. New York: Harper Collins.

Lane, David. Hyperstat Online. (www.davidmlane.com/hyperstat)

Rowntree, Derek. 1981. *Statistics Without Tears: A Primer for Non-Mathematicians* New York: Charles Scribner's Sons.

Salkind, Neil J., 2000. *Statistics for People who (Think They) Hate Statistics*. Thousand Oaks, CA: Sage Publications.

Voelker, David, and Peter Orton. 1993. *Cliffs Quick Review: Statistics*. Lincoln, NE: Cliffs Notes.

I strongly urge you to seek out one of these sources for additional help if you are having trouble with the course material.

<u>Instructor Availability</u>: You should feel free to contact me with any questions you have regarding the course. The best way to contact me is via email, during the day (9:00am-4:30pm), during the work week (Monday-Friday). I will do our best to respond to your questions promptly but you may end up waiting a day or two. Hence, you should not wait until the end of the week to ask questions about assignments that are coming due, or about material that is relevant to upcoming quizzes, as I might not get back to you in time to be helpful.

<u>Flow of the Class</u>: For our purposes this semester, a week will start on Saturday at 12:01AM and end on Friday at 11:59 PM (except the first week, which starts on a Tuesday). Each week, I will

post power point slides that cover material from the book, as well as "lecture" notes that complement the readings. These notes will include my own elaboration on the assigned reading materials, as well as some material from outside the books. These notes, combined with power point slides and the textbook, will constitute the materials for that week.

<u>Quizzes.</u> Instead of having a midterm and a final exam we will have a quiz at the end of each week of the semester. These quizzes will cover material from the book and lecture material for that week. The quizzes will be made available at 12:01 AM on Thursday and are due by 11:59 p.m. on Friday.

You can take each quiz anytime during the period it is available, but you *can only start the quiz once*, and there will be a strict 15-minute time limit for taking the exam. The quizzes will be multiple-choice in format. The time limit is designed so that you will not be able to spend time searching the books or notes for answers—you must study for the quizzes, and be ready to answer questions without the books or notes, just as you would if you were in the classroom.

Assignments. A number of problems from the book will be assigned each week of the semester. These problems will usually be a mix of "computational" and SPSS assignments. You are required to answer these problems and submit your responses using the "drop box" function of D2L. From the Course D2L page you can click on "Drop Box" and then upload your assignment each week. All assignments must be submitted as either MS Word (.doc) or Rich Text Format (.rtf) documents. If you submit an assignment in a format that I am not able to read, I will not grade it.

Please note that you need to format your homework so it is easy to read. This shouldn't be a problem for the computational problems but can be a bit trickier for the SPSS problems. The best rule is to follow the format suggested in the textbook. Also, answers for the computational problems must show as much work as possible. While is it sometimes difficult to do this in a word processor, it is very difficult to evaluate your answers (especially if they are incorrect) without seeing the steps you took to get them.

Assignments are listed on the schedule grid on the last page of the syllabus and are due by 11:59 p.m. on Friday of the week they are assigned (recall that Friday is the last day of our work week).

<u>Study Group:</u> Students are encouraged to participate in an online study group. A discussion area will be provided each week for students to post questions, comments, or suggestions related to the course material. What I hope to foster here is an online community through which students can help each other learn. I will monitor this discussion area and will occasionally weigh in with guidance if necessary.

Your Grade:

Homework 50% Ouizzes 50% Grades will be calculated on the following scale (%):

A	93-100	A-	89-92	
B +	86-88	В	82-85	
В-	78-81	C +	75-77	
C	71-74	C-	67-70	
D+	64-66	D	60-63	
D-	56-59	${f F}$	0-55	

Make-up Policy: As a general rule I do not allow students to make up missed assignments and exams or turn in late papers. Only in the and most severe and rare circumstances (death in the family, severe illness, etc.) will I make exceptions to this policy. This means that it is better to turn in a partially completed assignment or paper and receive partial credit than to turn it in late and receive no credit.

University Policies: For specific information on UWM policies regarding religious observances, incompletes, academic misconduct, grade appeals, final examinations, students called to military service, discriminatory conduct, and complaint procedures, please go to www.uwm.edu/Dept/SecU/SyllabusLinks.pdf

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Schedule

Week	Topic	Reading	Computational Problems	SPSS Work (You are the Researcher)
May 31-June 4	Research Process	Prologue Chapter 1 Appendices F,G	1.4	
	Descriptive Statistics	Chapter 2	2.8 (not d & e)	Researcher
	Central Tendency	Chapter 3	3.2, 3.12	Researcher (choose just five variables)
June 5-11	Measures of Dispersion	Chapter 4	4.2, 4.8 (life expectancy only)	Project 1
	Probability and Sampling	Chapter 5, 6	5.2, 5.10, 5.14	Researcher, Chapter 6
	Confidence Intervals	Chapter 7	7.6, 7.18	
June 12-18	Single Sample Hypotheses	Chapter 8	8.4, 8.12	
	Two-Sample Hypotheses	Chapter 9	9.4, 9.14	Project 2
June 19-25	ANOVA	Chapter 10	10.6	Ideology Project
	Chi-square	Chapter 11	11.4, 11.10	Project 1
June 26-July 2	Measures of Association	Chapters 12	12.8	Project 1
	Measures of Association II	Chapters 13, 15	13.6, 15.4	Researcher, Chapter 15
July3-July 10	Regression	Chapter 14, 16	14.4 (no scattergram) 16.2	Project 1, Chapter 14 Project 1, Chapter 16