Soc 3112-090   Introduction to Social Statistics
Spring 2013   4 Credit Hours

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Class Time & Location
It is an online course installed in the Canvas System
(https://utah.instructure.com/login?no_auto=true), and after registering for the course in the CIS system, students could log in the Canvas system and visit the course homepage. Throughout the semester, students should check the course pages frequently.
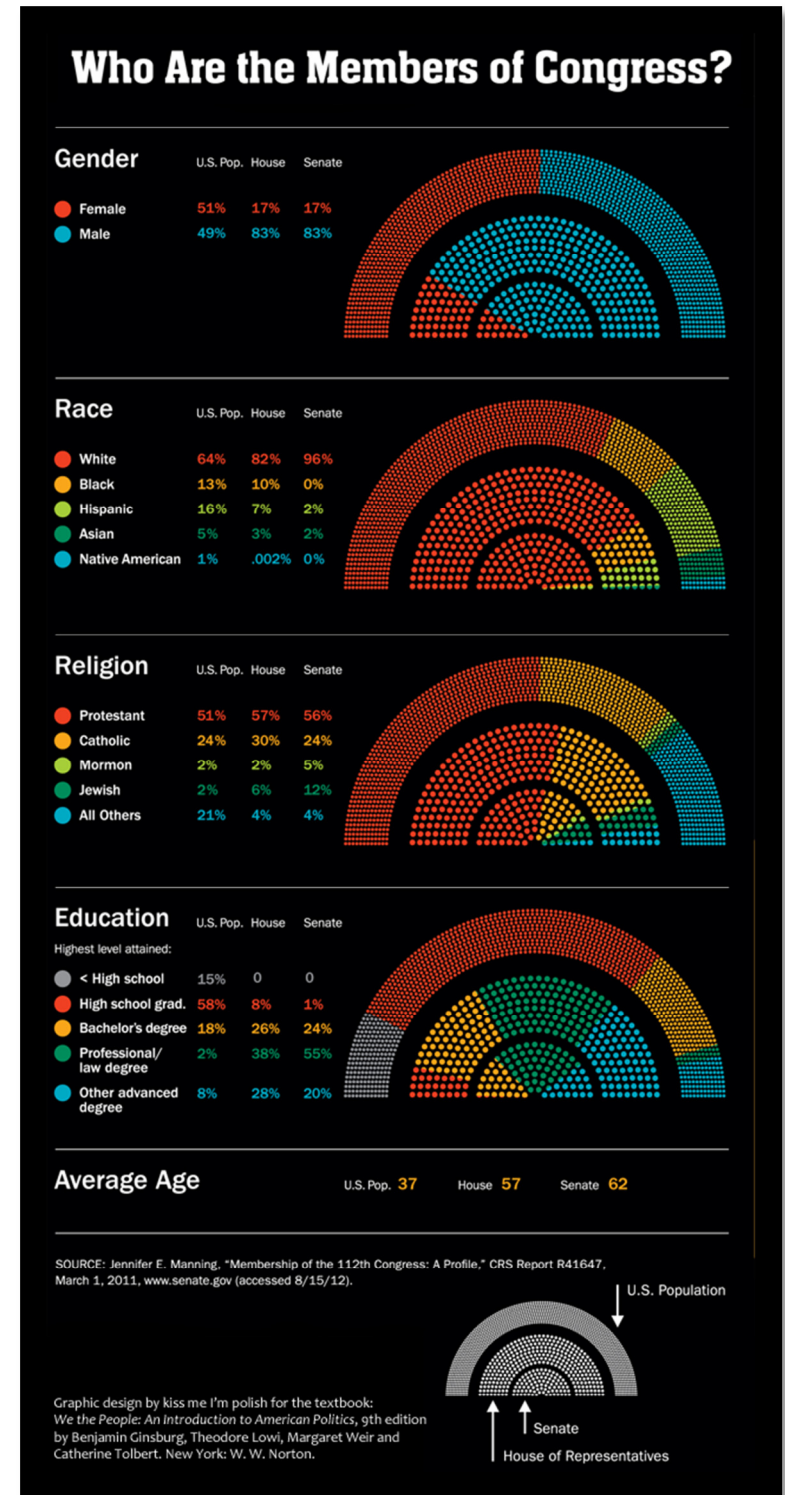
Course Summary
Statistics is a set of tools and techniques researchers use to describe and draw conclusions about the world. The course covers the fundamental concepts and calculations for applied statistics in the context of social science. It serves to equip the students with the building blocks to understand various statistical conclusions on newspapers, TV broadcast and academic articles. Well beyond them, by the end of the semester, you know how to reason the statistical world and conclude safe and sound---***controlling the uncertainty***. The truth is that, a wise man just could not afford knowing nothing about statistics.

This course starts with descriptive statistics including frequency distributions, graphs, measures of central tendency and variability. Next we learn methods to describe relationships between variables, and measures of association. Last, we cover the basic inferential statistics, including t-tests, ANOVA, and chi-square, and learn how to draw well-reasoned conclusions about the population from a sample. This course fulfills the Quantitative Reasoning (QB) or Quantitative Intensive (QI) requirement of the University of Utah.

Suggested Textbook
   Kentor, J. 2009. *Social Statistics*. Dubuque: Kendall Hunt. (ISBN# 9780757569654)

Who Are the Members of Congress?

Gender

	U.S. Pop.	House	Senate
Female	51%	17%	17%
Male	49%	83%	83%

Race

	U.S. Pop.	House	Senate
White	64%	82%	96%
Black	13%	10%	0%
Hispanic	16%	7%	2%
Asian	5%	3%	2%
Native American	1%	.002%	0%

Religion

	U.S. Pop.	House	Senate
Protestant	51%	57%	56%
Catholic	24%	30%	24%
Mormon	2%	2%	5%
Jewish	2%	6%	12%
All Others	21%	4%	4%

Education
Highest level attained:

	U.S. Pop.	House	Senate
< High school	15%	0	0
High school grad.	58%	8%	1%
Bachelor's degree	18%	26%	24%
Professional/law degree	2%	38%	55%
Other advanced degree	8%	28%	20%

Average Age

U.S. Pop.	House	Senate
37	57	62

SOURCE: Jennifer E. Manning. "Membership of the 112th Congress: A Profile," CRS Report R41647, March 1, 2011, www.senate.gov (accessed 8/15/12).

U.S. Population
Senate
House of Representatives

Graphic design by kiss me I'm polish for the textbook:
We the People: An Introduction to American Politics, 9th edition by Benjamin Ginsburg, Theodore Lowi, Margaret Weir and Catherine Tolbert. New York: W. W. Norton.

Calculator with square-foot function

Course Requirements & Grading
Your grade will be based on the following requirements:

Exams (3)	…………….....	60%
Quizzes (3)	..………….. ..	20%
Homework (Lab assignment included) (10)	..…..……	20%
		100%

***** I acknowledged and appreciated help from Vincent Fu, Jessica Winitzky, and Kelin Li in writing this syllabus.

1) Exams: there will be **_3 paper exams_** (calculators allowed), each worth 20% of your grade. They are a mix of short answer questions and problems. You are allowed **_2 hours_** for each exam, proctored at the University of Utah campus or one of its extension sites at Bountiful, Murray, or Sandy. To take the exam, you need first register online, and go to the testing center during the week of the exam. Out-Of-Area students living far away from the above exam locations may contact the U Online Exam Coordinator (801-585-5959) and they will help you set up Out-Of-Area Proctored Exams.

⌂ for help to register exams   http://uonline.utah.edu/jsps/students/index.jsp
⌂ testing centers info   http://uonline.utah.edu/jsps/general/selectMaps.jsp

2) Quizzes: there will be **_3 quizzes_** posted on Canvas before exams throughout the semester, totally worth 20% of the grade. Quizzes are designed to review major concepts, and help you practice for exams. These are open book and open note, and working with other students is encouraged. Students who work in groups can submit one assignment with the names of each student.

3) Homework: practicing problems is essential to improve your statistical skills, and also the key to succeed in this course. There will be **_10 homework_** posted under the "*Assignments*" on Canvas. They will not be fully graded, but are part of your final grade. They are designed to familiarize you with the application of statistics in social science research, and prepare you for quizzes and exams. Previous class performance showed that students who carefully went through homework came out much better in exams and final grade.

4) Lab: you will learn how to use the statistical analysis software SPSS so that you can handle larger datasets and perform more complex analyses. Note that students enrolled in the online class are not required to attend lab meetings on campus, though you are more than welcome to do so. Instead, you may do the exercises yourself, save your output, and email them to me. For those who want to attend the lab, you could choose one in the three sections every week: *Monday 9:40am - 10:30am, Wednesday 10:45am-11:35am and Thursday 8:00am-8:50am, All labs in BEH S 101*. Lab materials are provided under the "*Modules*" on Canvas. To get access to SPSS: for those off campus, you can use the CSBS Virtual Lab at https://apps.csbs.utah.edu/Citrix/XenApp/auth/login.aspx ; for those on campus, you could use campus computers.

All exams, quizzes, and homework must be completed sometime within the week in which it is due. The hard deadline is **Midnight on Sunday**. I will not, under any circumstances, accept late exams, quizzes or homework.

Final grade breakdowns:

A	93-100	A-	90-92	B+	87-89	B	83-86

B-	80-82	C+	77-79	C	73-76	C-	70-72
D+	67-69	D	63-66	D-	60-62	E	0-59

Late work will not be accepted, under any circumstances.

Class Schedule

Week	Date	Chapter	Homework	Quiz/Exam
1	1/7 – 1/13	1 Introduction & 2 Collecting Data		
2	1/14 – 1/20	3 Organizing Information	Homework 1	
3	1/21 – 1/27	4 Central Tendencies	Homework 2	
4	1/28 – 2/3	5 Variability	Homework 3	Quiz 1
5	2/4 – 2/10			Exam 1
6	2/11 – 2/17	6 Probability	Homework 4	
7	2/18 – 2/24	7 Estimation	Homework 5	
8	2/25 – 3/3	8 Logic of Hypothesis Testing	Homework 6	Quiz 2
9	3/4 – 3/10			Exam 2
10	3/11 – 3/17	*Spring Break! Yeah!*		
11	3/18 – 3/24	9 Testing the Value of One Mean/Variance		
12	3/25 – 3/31	10 Comparing 2 Means/Variances	Homework 7	
13	4/1 – 4/7	11 Anova	Homework 8	
14	4/8 – 4/14	12 Bivariate Tables	Homework 9	
15	4/15 – 4/21	13 Regression and Correlation	Homework 10	Quiz 3
16	4/22 – 4/28			Exam 3

* The course design is subject to changes.

Advice

Many of you may feel anxiety about learning material that requires math and equations. It would be dishonest to claim that statistics employs no math, but this course requires only the most elementary mathematics–arithmetic and very simple algebra. Do not be put off by this minimal math: You can do it!

On the other hand, this is not the kind of course where you could easily to bring up the grade at the end of the semester by studying extra hard for the last exam and later quizzes. The material we cover increases in difficulty as the semester progresses. Students usually find that the material covered in the beginning of the class is much more straightforward than the topics at the end of the semester. To improve chances of success in this course, you must

buckle down at the beginning of the semester.

American with Disability Act (ADA)
The University of Utah seeks to provide equal access to its programs, services and activities for people with disabilities. If you will need accommodations in the class, reasonable prior notice needs to be given to the Center for Disability Services, 162 Olpin Union Building, 581-5020 (V/TDD). CDS will work with you and the instructor to make arrangements for accommodations.

Academic Standards
It is assumed that all assignments submitted will be your own work. Plagiarism, cheating, misrepresenting one's work, and falsification of information are serious offenses that warrant severe sanctions. Students should be familiar with the formal definitions of academic misconduct, as outlined in the University of Utah Student Code.