



Department of Sociology
University of Utah
<http://uonline.utah.edu>

Social Statistics (Online)

SOC 3112-090
Fall Semester, 2013
Credit hours: 4

Important Note: This syllabus is subject to change. It is the student's responsibility to check *Canvas* for corrections or updates to the syllabus. Any changes will be clearly noted in advance through course announcement or *Canvas* email.

Instructor:

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Department of Sociology

University of Utah

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COURSE STRUCTURE

This course will be delivered ENTIRELY online through the *Canvas* learning management system (see the **ONLINE LEARNING** section of this syllabus). You are expected to communicate with your instructor and other classmates about specific assignments. Most of your work, however, is done on your own through reading required text and accompanying lecture materials. This course is not self-paced. You will have weekly assignments with weekly due dates. In order to successfully complete this course, you must submit your assignments on time.

COURSE SUMMARY¹

This four-credit course fulfills the Quantitative Reasoning (QB) and Quantitative Intensive (QI) requirement of the University of Utah. It is designed for students to gain a basic understanding of common statistics widely applied in the analysis of social science data. Statistics is a set of tools and techniques researchers use to organize, summarize, and communicate information in the attempt to describe and draw conclusions about human conditions as well as the world around us.

Descriptive statistics and inferential statistics are main components of this course. Descriptive statistics will allow you to summarize and describe data. Inferential

¹ To create this syllabus, I drew from Dr. Vincent Kang Fu and other instructors who taught or are teaching the same course in the sociology department.

statistics will allow you to make estimates about a population (i.e. all the students in the U) based on a sample (i.e. 200 or 500 students in the U). The course also covers hypothesis testing and the basics of regression analysis.

COURSE OBJECTIVES

The student will become an educated consumer of statistical information, capable of applying what is learned in this course to deal with statistical information presented in daily life and in their academic field, as well as of analyzing and discerning the uses and abuses of statistics.

COURSE TEXT

Frankfort-Nachmias, C. and A. Leon-Guerrero. 2011. *Social Statistics for a Diverse Society*. Sixth edition. Thousand Oaks, California: Pine Forge Press.

You can also use an earlier edition (i.e. fourth or fifth) of this text if you want to save money or you happen to have one. You can order the text online or get it from the U’s campus bookstore.

You can use your personal computer to do the calculations, or you will need a scientific calculator (with square-root function) in your daily study.

COURSE REQUIREMENT AND GRADING

***Overview of Course Requirements**

Grades in this class come from your performance on problem sets, lab assignments, quizzes, and exams. Grades are structured as follows:

Requirements	Description	Points	Due
1	Online Exam 1	15	By 11:59PM of Sept. 22 (Starting from Sept. 16)
	Online Exam 2	15	By 11:59PM of Nov. 2 (Starting from Oct. 28)
	Online Exam 3	16	By 11:59PM of Dec. 15 (Starting from Dec. 9)
2	Online quizzes (3 in total)	18 (=6×3)	By 11:59PM of the corresponding Sunday
3	Online problem sets (12 in total)	24 (=2×12)	
4	Labs (12 in total)	12 (=1×12)	
Total Points Possible		100	

1 Online Exams (46%)

There will be *three* online exams throughout the semester. Each examination will include all materials covered in the class within this exam duration (i.e. exam 2 will

cover materials lectured during the period from the end of exam 1 to the end of exam 2 while exam 3 tests information learned from the end of exam 2 to the end of the semester). All exams will be timed, open notes and open book exams completed online in **Canvas**. **You may use whatever materials you wish to help you out, but you must not consult another person.** You will have a week in which to take the exam, but only 120 minutes to complete it. Do not open the exam before you plan on taking it! Once you begin the exam, the timer starts and you will be unable to stop it. Make sure you are ready to take the exam and you are in a stable computer environment before starting it. These exams will consist mainly of problems that resemble the problems from the online quizzes. All your steps must be shown in solving the problems assigned and partial credit will be given accordingly. All the three exams are worth 46 percent of your final grade.

***Make-up Exams**

If you are unable or unwilling to take an exam at the specified time, you must make an arrangement with the instructor and take the exam earlier. You cannot take an exam late. Exceptions are given to emergencies only. If you miss an exam, you will receive zero. To request an exception, you must present the document showing an emergency or a legitimate reason to the instructor.

2 Online Quizzes (18%)

There will be *three* quizzes completed online in **Canvas** throughout the semester, designed to function as exam reviews. Working as a team for quizzes is encouraged. You can form an online study group to finish the quizzes together and submit one copy of your answers with all the group member names on it.

Unlike exams, you can spend as much time as you like on these quizzes and submit them via WebCT by **Midnight of Sunday**. However, if you can treat the quizzes in the way you will treat the exams, you will get a feel of how the exam process would be like. Quizzes will be fully graded and the keys might also be posted on **Canvas**. Each quiz is worth 6 percent of your final grade.

3 Online Problem Sets (24%)

Practicing problem sets is essential to improve your statistical skills. There will be *twelve* online problem sets throughout the semester, evenly distributed in every week (with the exception of the fall break and exam weeks) and posted on **Canvas**, together with the lab assignment mentioned later on. The questions asked may come directly from the textbook. Although problem sets might be graded on completion, the way in which your answer is derived might be checked. Problem sets are individual works and must be finished independently. Each problem set assignment is worth 2 percent of your final grade.

4 Labs (12%)

Since almost all social science data are processed using various software packages on computer, lab sessions are designed for you to conceptualize the abstract ideas you are encountering in your statistics study in a more hands-on way by using the

SPSS software.

On campus lab meetings are not required for students enrolled in the online class (although you are welcome to do so - schedule would be posted on **Canvas** as well). Instead, you may do your weekly lab assignment by yourself, save your output, and submit them via **Canvas** like your regular problem sets. There will be *twelve* lab assignments. Lab assignments are individual works and must be finished independently. Each lab assignment is worth 1 percent of your final grade.

To get access to SPSS: you can use the CSBS Virtual Lab, available at <http://apps.csbs.utah.edu> or you can use computers on campus.

***Grading Scale**

Final grades assigned for this course will be based on the percentage of total points (rounded) earned and are assigned as follows:

A 100%-94%	B + 89%-87%	C + 79%-77%	D + 69%-67%	E 59%-0%
	B 86%-83%	C 76%-73%	D 66%-63%	
A - 90%-93%	B - 80%-82%	C - 70%-72%	D - 60%-62%	

***Late Policy**

The deadline is enforced electronically by **Canvas** based on its server's clock of **Utah Time**. All submissions (including quizzes, problem sets and lab assignments) will be due at 11:59PM on the corresponding Sundays. Be sure to pay close attention to deadlines. It is your responsibility to submit on time.

No late submission will be accepted. There is no exception. A late/missed assignment will receive zero automatically.

Please remember that being late by one second is late. Do **not** ask the instructor to accept your submission because it is "only one second late." Do **not** send your assignment by email because it is late. Please also note that **no** make-up quizzes/problem sets/lab assignments will be given, even for emergency situations.

NOTE: Computer related problems (i.e. electronic or equipment failure) are never a valid excuse for not completing or submitting an assignment on time. It is your responsibility to maintain your computer and related equipment in order to participate in the online portion of the course. Therefore it is advisable to complete the assignments early enough to take into account any problems that may occur.

***Show Your Work & Partial Credit**

All submissions done for this class must show all steps (i.e., the formulas used, step by step calculations). To receive any credit for an answer, all work must be shown. No credit will be awarded for providing only the "final" answer. Even if you may not arrive at the correct answer for some serial questions, showing your work will

enable me to see how your answer is derived and partial credit (sometimes even full credit) might be given accordingly.

***Viewing Grades in Canvas**

Points you receive for graded activities will be posted to the **Canvas** Grade book. Click on the “Grades” link on the left of the course homepage navigation to view your points. Your instructor will update the online grades each time a grading session has been complete—typically 7 days following the completion of an activity.

ADVICE

Many of you may find the materials encountered challenging since math, formulas, and calculations cannot be avoided. This course requires, however, only the most elementary mathematics-arithmetic and very simple algebra. Don't be discouraged by the presence of minimal math: You can do it!

Although an online environment seemingly provides a more flexible pace, remember to make sure that you are not falling behind in our schedule since this is a quite intense and fast-paced course, which builds upon itself from day one. This not only means that the topics covered in later weeks require a good grasp of material covered in earlier weeks, but also means that the materials we cover increases in difficulty as the semester progresses.

To improve chances of success in this course, you must buckle down at the beginning of the semester. Past experiences show that students who stuck to the schedule tightly and treated homework assignments seriously did much better in exams. If you start falling behind or feeling overwhelmed, please let me know. I am more than happy to help you.

ONLINE LEARNING

If this is your first online class, this section is very important reading! Even if you have taken an online class before, please review this information.

Often students new to online learning perceive and expect online courses to be easy and involve little to no work on their part. This is a misperception, and in fact, online courses may be more demanding than a face-to-face course depending on the learning style of the student. Online courses are not recommended for all students.

***Canvas Learning Management System**

You must use **Canvas** to participate in this course. You will use your uID account to login to the course from the **Canvas** login page (www.cis.utah.edu).

In **Canvas**, you will access online lessons, course materials, and resources. At designated times throughout the semester you will use **Canvas** to participate in a blend of evaluation activities, consisting of discussion forums, quizzes, homework assignments, and exams. You will use **Canvas'** built-in communication techniques

such as emails, discussion boards to communicate with the instructor and your classmates.

***Course Materials**

Syllabus, announcements, class notes, discussions, problem sets and lab assignments, quizzes, exams, grades, etc. are all posted on **Canvas**. Viewing the class material and lectures are important to doing well in the course, and best viewed after completing the weekly reading. They provide the information that would normally be presented in-class if this course met face-to-face, so notes should be taken just as you would for an in-class lecture.

***Participation**

Every student is expected to take an active role in the online learning setting by finishing all assigned readings as scheduled, submitting quizzes/problem sets/lab assignments on a timely fashion, taking exams at allotted time periods and contributing to online discussions by asking questions and answering other students' questions.

***Weekly Time Commitment**

Expect to spend an average of six to nine hours per week on this condensed four-unit online course. Even though this course does not have a weekly face-to-face meeting, the time commitment per week is the same as a four-unit lecture class. Look carefully at your work schedule, school schedule, and family obligations and allow plenty of time for each.

Please check the course website and your email via **Canvas** system on a regular basis. It is highly encouraged that you follow the course schedule closely and not get lagged behind.

***If You Have Questions**

When taking an online course you must take the initiative to ask your instructor questions if you do not understand the material, either through Course Discussion Forum or **Canvas** email. Your response from the instructor may not be instantaneous. You must take the response time into consideration when completing your work and must not wait until the last day, or you may not have time to receive a response before your assignment is due.

Please do not email your instructor questions about the course material; use the Course Discussion Forum so that your classmates may also benefit from the answer. In addition, your instructor will also post information and updates to this forum. It is your responsibility to read all the posts in the Course Discussion Forum in a timely manner.

If you find that you have any trouble keeping up with assignments or other aspects of the course, make sure you let your instructor know as early as possible. Make

sure that you are proactive in informing your instructor when difficulties arise during the semester so that the instructor can help you find a solution.

*** Netiquette Rules**

Online etiquette is important to keep in mind when communicating with others on the Internet. Discussion threads, e-mails, and chat rooms are all considered to be equivalent to classrooms, and student behavior within those environments shall conform to the Student Code. Specifically:

- Adhere to the same standards of behavior online that you follow in real life.
- Posting photos or comments that would be considered off-topic in a classroom is still off-topic in an online setting.
- Off-color language and photos are never appropriate.
- Using angry or abusive language online will not be tolerated, and will be dealt with according to the Student Code.
- Do not use ALL CAPS, except for titles, since it is the equivalent of shouting online, as is overuse of certain punctuation marks such as exclamation points e.g. !!!! and question marks e.g. ?????.
- Course e-mails, discussion postings and other online course communications are part of the classroom and as such, are university property and therefore will be subject to GRAMA regulations and the Student Code. Privacy regarding these communications between correspondents must not be assumed and should be mutually agreed upon in advance, in writing.

AMERICANS WITH DISABILITIES 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. All written information in this course can be made available in alternative format with prior notification to the Center for Disability Services.

ACADEMIC INTEGRITY AND PLAGIARISM

Academic misconduct, including plagiarism, is a serious offense. The following regarding academic integrity and plagiarism is taken from the University of Utah's Student Code: *"Academic misconduct" includes, but is not limited to, cheating, misrepresenting one's work, inappropriately collaborating, plagiarism, and fabrication or falsification of information.... It also includes facilitating academic misconduct by intentionally helping or attempting to help another to commit an act of academic misconduct.*

It is assumed that all work submitted for evaluation will be your own work (except for group assignments). Zero-tolerance for academic misconduct applies to this course. All instances of academic misconduct will be referred to the Department

Chair or the Dean of the College. For detailed definitions and possible academic sanctions please see: <http://www.admin.utah.edu/ppmanual/8/8-10.html>.

COURSE OUTLINE AND READING SCHEDULE

Week 1 (8/26–8/30)

- Introduction to Statistics: Key Terminology
- Chapter 1: The What and Why of Statistics
- Chapter 2: Organization of information: Frequency Distributions
- Problem set 1 & lab assignment 1

Week 2 (9/2–9/6)

- Chapter 3: Graphic Presentation
- Chapter 4: Measures of Central Tendency
- Problem set 2 & lab assignment 2

Week 3 (9/9–9/13)

- Chapter 5: Measures of Variability
- Problem set 3 & lab assignment 3
- Quiz 1

Week 4 (9/16–9/20)

- **Exam 1: Descriptive Statistics**

Week 5 (9/23–9/27)

- Chapter 6: The Normal Distribution
- Problem set 4 and lab assignment 4

Week 6 (9/30–10/4)

- Chapter 7: Sampling and Sampling Distributions
- Problem set 5 and lab assignment 5

Week 7 (10/7–10/11)

- Chapter 8: Estimation
- Problem set 6 and lab assignment 6

Week 8 (10/14–10/18)

- **No Class (Fall Break)**

Week 9 (10/21–10/25)

- Chapter 9: Testing Hypotheses
- Problem set 7 and lab assignment 7
- Quiz 2

Week 10 (10/28–11/1)

- **Exam 2: Hypothesis testing**

Week 11 (11/4–11/8)

- Chapter 10: Relationships Between Two Variables: Cross-Tabulation
- Problem set 8 and lab assignment 8

Week 12 (11/11–11/15)

- Chapter 11: The Chi-Square Test
- Problem set 9 and lab assignment 9

Week 13 (11/18–11/22)

- Chapter 12: Measures of Association for Nominal and Ordinal Variables
- Problem set 10 and lab assignment 10

Week 14 (11/25–11/29)

- Chapter 13: Regression and Correlation
- Problem set 11 & lab assignment 11

Week 15 (12/2–12/6)

- Chapter 14: Analysis of Variance
- Problem set 12 and lab assignment 12
- Quiz 3

Week 16 (12/9–12/13)

- **Exam 3: Relationships between variables**