

SOCI 3443 Social Statistics

Sociology Department

4 Credit Hours
Fall 2017

Instructor: Eugenia Conde, MEd, MSPH, PhD.
Email: exc110@shsu.edu
Office hours: Wednesday 6:00 – 7:30pm (or by appointment)
Course website: <http://shsu.blackboard.com>

Course Description

This course introduces undergraduate students to the basic statistical concepts and methods that are used commonly to answer sociological questions. The students will learn how to apply, interpret, and evaluate descriptive statistics, measures of association and inferential statistics. Throughout the semester, students will learn the material using web applications, real data sets and statistical software (SPSS). The lectures, homework assignments and test will focus on training students to have conceptual and practical understanding of the statistical methods they learn in the class. To accomplish this goal, homework assignments will consist of exercises that require students to demonstrate their ability to understand, apply and analyze the material, rather than memorize the concepts.

Objectives

At the end of the semester, students will have learned the skills to accomplish the following objectives:

- Recognize the importance of statistical literacy in their daily lives
- Be able to identify the appropriate statistical method to answer a research question
- Demonstrate the ability to critically analyze the weaknesses and strengths of studies presented in mass media and in the academic setting
- Find secondary data (data that have already been collected) online
- Use SPSS to execute the statistical methods they learned in the class
- Explain the statistical concepts in technical and non-technical terms
- Interpret results and understand the underlying concepts and assumptions

Required Text

Agresti, Alan., Christine Franklin & Klingenberg, Bernhard. 2017. *Statistics: The Art and Science of Learning from Data, 4th Edition*, Pearson Education, Inc. Textbook ISBN-13: 9780321997838.

Green, Samuel & Salkind, Salkind. 2017. *Using SPSS for Windows and Macintosh: Analyzing and Understanding the Data, 8th Edition*, Pearson Education, Inc. eText ISBN : 9780134416410, 0134416414

As part of an agreement between Sam Houston State University and the Publisher, Pearson, students have free full access to both eTexts; therefore, students are not required to buy a text. All students will be able to read the text on their computers, phones or ipads, provided that they have the system requirements. In addition, students enrolled in this course will have access to Pearson's MyStatLab website (see link below). This website gives students access to tools that will help them review and understand better the material covered in the texts. Students who prefer paper copies of the texts are free to buy them, and they will nonetheless, have access to the eTexts and MyStatLab. The instructor will provide the students with directions on how to register to access Pearson's eText and MyStatLab. www.pearsonmylabandmastering.com

Software

This course requires students to use the statistical program SPSS. This software is available on campus labs. However, students can also buy a 6-month SPSS student license for \$39.99 + 4.99 the download fee in the following website. Shsu.onthehub.com Once in the website, follow these path: Students>>More Software>>IBM SPSS Statistics 24 Grad Pack>>Choose a platform (Windows or Mac)>> IBM® SPSS® Statistics Base GradPack 24 for Windows (06-Mo Rental). PLEASE check the platform and computer requirements for the program prior to buying it. If you cannot use the newest version 24, you can use Statistics Base GradPack 23. Versions 23 and 24 have the same price.

Calculator

Students will need a calculator that has the square root and exponential function.

Additional Readings

Every week students have to check for additional reading that the instructor might choose to add to the readings list.

Teaching Philosophy

I want my students to know I am passionate about teaching statistics and I firmly believe that every college student should have a solid understanding of the statistical methods covered in this class. However, I am fully aware that not all students learn the material at the same speed. I know that some students are taking this class because it is a requirement, rather than because they are interested in the material. Some students are terrified by numbers and are not looking forward to taking this class - and that is ok.

However, I believe that students have different talents and learning styles. For example, some of the students are very good artists, others very good with numbers, and some can do both very easily. It would be wonderful if we only had to take classes that require us to use only the skills at which we excel. But the reality is that there are subjects that we all need to learn regardless of how easy or hard it is to learn the material. One example, is reading; some college students learned to read very fast, while others took a little longer. Nonetheless in the end, all learned how to read.

I consider basic statistics another subject that we all have to learn. Some people consider statistics, just another form of literacy, but if anything it is easier than learning

how to read in English because in statistics there are very clear rules, unlike learning how to read in English. For this reason, I am certain that all students can learn statistics, if they do the work and spend the necessary time to understand the concepts that they find more difficult.

One of my approaches to teaching is helping students understand the importance of learning statistics to make informed decisions in their daily lives. The following are a few examples: 1) understanding polls in an election (including why sometimes they are not accurate), 2) determining if a new diet actually works, 3) estimating the risk of a disease, 4) determining the chances of winning the lottery, or 5) evaluating the reasons for passing or not passing a law, just to name a few.

As part of my philosophy to teach statistics, I make myself accessible to students to help them identify areas that need more attention or practice. I work to make students feel comfortable asking questions and sharing if they have difficulties in the class. I make sure that students know I start teaching this class knowing that all students can succeed and I am available to help them if they need extra help.

However, students taking this class need to be aware that I cover a lot of material; some concepts might be more difficult than others; therefore, this is not going to be an easy A class. All students are expected to work hard and consistently. This is not a class in which students can wait until the night before the exam to study. Every chapter builds from the previous one; therefore, they cannot stay behind.

My goal and greatest reward is to see students succeed in the class, because being statistically literate is as important as learning how to read.

Grading

The final grade for the course will be calculated as follows

#	Type of Task	# of Pts each	Total
11	Homework Assignments	2	22
5	SPSS Labs	2	10
1	Syllabus Quiz	1	1
1	Anonymous Surveys	2	2
10	Participation in Discussions	1/2	5
4	Exams	15	60
		Total =	100

Extra Credit:

- 11 MyStatLab Extra-credit activities (1/2 pt each) = 5.5 pts Maximum
- Responding correctly to questions posted on the Blackboard (.10 pts on the homework assignment)

Letter Grades will be assigned according the ranges shown below.

A:	90-100
B:	80-89
C:	70-79
D:	60-69
F:	59 or lower

Homework Assignments, Labs, and Exams

All homework assignments, labs and exams will be open-book and untimed. However, students cannot discuss the content of the assignment with anyone other than the instructor. For every task, students have to sign a pledge that she or he did the work alone. Failure to follow this rule will be considered academic dishonesty, which will result in disciplinary action. Late submissions will not be accepted. Homework assignments will consist of a few multiple-choice questions, short answers and short essays.

Participation in Discussions

Students will be expected to participate in discussions. I will keep a record of how often each student participates. There will be a total of 10 topics for discussion and all students are expected to participate with thoughtful comments or questions. I reserve the right to decide what is a substantive contribution. If I decide that a comment does not deserve credit, I will let the student know privately, so he or she can make a second attempt.

Responses to Questions Posted on the Blackboard

Students can post questions on the Blackboard. To give students a chance to answer the question, I will respond no earlier than 12 hours after the question was posted, and no later than 36 hours. All students are encouraged to answer the questions. The first student who answers the question correctly will earn .10 points (5%) extra credit in the homework assignment due the first Sunday after the student answered the question. I will also accept responses that can expand the answer of the first response.

Make-up Exam Policy

Students will have approximately one week to work on the exam; therefore, I do not foresee the need to request a make-up exam. Moreover, I will not accept late exams. In extreme circumstances, I might make an exception, provided that the student has evidence that can substantiate his or her circumstances.

ACADEMIC DISHONESTY

All students are expected to engage in all academic pursuits in a manner that is above reproach. Students are expected to maintain honesty and integrity in the academic experience, both in and out of the classroom. Any student found guilty of dishonesty in any phase of academic work will be subject to disciplinary action. The University and its official representatives may initiate disciplinary proceedings against a student accused of any form of academic dishonesty including but not limited to, cheating on an

examination or other academic work which is to be submitted, plagiarism, collusion and the abuse of resource materials, see: <http://www.shsu.edu/syllabus/>

STUDENT ABSENCES ON RELIGIOUS HOLY DAYS POLICY

Section 51.911(b) of the Texas Education Code requires that an institution of higher education excuse a student from attending classes or other required activities, including examinations, for the observance of a religious holy day, including travel for that purpose. Section 51.911 (a) (2) defines a religious holy day as: “a holy day observed by a religion whose places of worship are exempt from property taxation under Section 11.20....” A student whose absence is excused under this subsection may not be penalized for that absence and shall be allowed to take an examination or complete an assignment from which the student is excused within a reasonable time after the absence.

University policy 861001 provides the procedures to be followed by the student and instructor. A student desiring to absent himself/herself from a scheduled class in order to observe (a) religious holy day(s) shall present to each instructor involved a written statement concerning the religious holy day(s). The instructor will complete a form notifying the student of a reasonable timeframe in which the missed assignments and/or examinations are to be completed. For a complete listing of the university policy, see: [/dept/academic-affairs/documents/aps/students/861001.pdf](http://dept/academic-affairs/documents/aps/students/861001.pdf)

STUDENTS WITH DISABILITIES POLICY

It is the policy of Sam Houston State University that individuals otherwise qualified shall not be excluded, solely by reason of their disability, from participation in any academic program of the university. Further, they shall not be denied the benefits of these programs nor shall they be subjected to discrimination. Students with disabilities that might affect their academic performance should register with the Office of Services for Students with Disabilities located in the Lee Drain Annex (telephone 936-294-3512, TDD 936-294-3786, and e-mail disability@shsu.edu). They should then make arrangements with their individual instructors so that appropriate strategies can be considered and helpful procedures can be developed to ensure that participation and achievement opportunities are not impaired.

SHSU adheres to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations for students with disabilities. If you have a disability that may affect adversely your work in this class, then I encourage you to register with the SHSU Services for Students with Disabilities and to talk with me about how I can best help you. All disclosures of disabilities will be kept strictly confidential. NOTE: No accommodation can be made until you register with the Services for Students with Disabilities. For a complete listing of the university policy, see: <http://www.shsu.edu/dotAsset/7ff819c3-39f3-491d-b688-db5a330ced92.pdf>

VISITORS IN THE CLASSROOM

Only registered students may attend class. Exceptions can be made on a case-by-case basis by the professor. In all cases, visitors must not present a disruption to the class by their attendance. Students wishing to audit a class must apply to do so through the Registrar's Office, see: <http://www.shsu.edu/syllabus/>

Course Schedule^a Social Statistics SOC3443 Fall 2017

Week # & Date	Topic	Tasks, Readings ^b & Videos ^c	Quizzes, Test and/or Homework Assignments	Assignments Due Date ^d
Week # 1 August, 23 th to August, 27 th	<ul style="list-style-type: none"> • Introduction to the Class • Why Study Statistic? 	<ol style="list-style-type: none"> 1. Read syllabus 2. Connect to Blackboard 3. Register with Pearson's MyStatLab and eText. 4. Run MyStatLab Browser Check 5. Buy and install SPSS 6. Watch videos 	<ol style="list-style-type: none"> 1. Complete Student Survey 2. Take Syllabus Quiz 3. Participate in Blackboard discussions: <ul style="list-style-type: none"> ▪ Greet and Meet ▪ How to Study Statistics 	Sun, August, 27 th
Week # 2 August, 28 th to September, 3 rd	<ul style="list-style-type: none"> • Definitions of Basic Statistical Terms • Sample vs. Population 	<ol style="list-style-type: none"> 1. Read learning objectives 2. Read Chapter 1 3. Notes & Power Points 4. Videos 5. Check announcements for additional material 	<ol style="list-style-type: none"> 1. Complete homework # 1 2. Participate in Blackboard discussion 3. Xtra Credit * Chapters 1 	September, 3 rd
Week # 3 September, 4 th to September, 10 th	<ul style="list-style-type: none"> • Exploring Data with Graph and Numerical Summaries 	<ol style="list-style-type: none"> 1. Read Learning Objectives 2. Read Chapter 2 3. Notes & Power Points 4. Videos 5. Check announcements for additional material 	<ol style="list-style-type: none"> 1. Complete homework #2 2. SPSS Lab # 1 3. Participate in Blackboard discussion 4. Xtra Credit * Post-test for Chapter 2 	September, 10 th

^a Schedule is subject to change

^b This material will be posted in the blackboard every Monday by 8:00am

^c Videos will include power points

^d All assignments are due at 11:59pm

Week # 4 September, 11 th to September, 17 th	<ul style="list-style-type: none"> Measures of Association: Contingency, Correlation & Regression Gathering Data 	<ol style="list-style-type: none"> Read Learning Objectives Read Chapter 3 and 4 Notes & Power Points Videos Check announcements for additional material 	<ol style="list-style-type: none"> Homework MyStatLab 3-4 Participate in Blackboard discussion Xtra Credit * Post-test for Chapter 3-4 	September, 17 th
Week # 5 September, 18 th to September, 24 th	EXAM # 1 Exam #1 (Chapters 1-4) Check announcements for additional material			September, 24 th
Week # 6 September, 25 th to October, 1 st	<ul style="list-style-type: none"> Probability in Our Daily Lives 	<ol style="list-style-type: none"> Read Learning Objectives Read Chapter 5 Notes & Power Points Videos Check announcements for additional material 	<ol style="list-style-type: none"> Homework MyStatLab 5 Participate in Blackboard discussion Xtra Credit * Post-test for Chapter 5 	October, 1 st
Week # 7 October, 2 nd to October, 8 th	<ul style="list-style-type: none"> Probability Distributions 	<ol style="list-style-type: none"> Read Learning Objectives Read Chapter 6 Notes & Power Points Videos Check announcements for additional material 	<ol style="list-style-type: none"> Homework MyStatLab #6 Participate in Blackboard discussion SPSS Lab # 2 Xtra Credit * Post-test for Chapter 6 	October, 8 th
Week # 8 October, 9 th to October, 15 th	<ul style="list-style-type: none"> Sampling Distributions 	<ol style="list-style-type: none"> Read Learning Objectives Read Chapter 7 Notes & Power Points Videos Check announcements for additional material 	<ol style="list-style-type: none"> Homework MyStatLab # 7 Participate in Blackboard discussion Xtra Credit * Post-test for Chapter 7 	October, 15 th
Week # 9 October, 16 th to October, 22 th	EXAM # 2 Exam #1 (Chapters 5-7) Check announcements for additional material			October, 22 th

Week # 10 October, 23 rd to October, 29 th	<ul style="list-style-type: none"> • Statistical Inference: Confidence Intervals 	<ul style="list-style-type: none"> • Read Learning Objectives • Read Chapter 8 • Notes & Power Points • Videos • Check announcements for additional material 	<ul style="list-style-type: none"> • Homework MyStatLab #8 • Participate in Blackboard discussion • Xtra Credit * Post-test for Chapter 8 	October, 29 th
Week # 11 October, 30 th to November, 5 th	<ul style="list-style-type: none"> • Statistical Inference: Significance Tests about Hypothesis 	<ul style="list-style-type: none"> • Read Learning Objectives • Read Chapter 9 • Notes & Power Points • Videos • Check announcements for additional material 	<ul style="list-style-type: none"> • Homework MyStatLab #9 • Participate in Blackboard discussion • Xtra Credit * Post-test for Chapter 9 	November, 5 th
Week # 12 November, 6 th to November, 12 th	EXAM # 3 Exam #1 (Chapters 8-9) Check announcements for additional material			
Week # 13 November, 13 th to November, 19 th	<ul style="list-style-type: none"> • Comparing two Groups 	<ul style="list-style-type: none"> • Read Learning Objectives • Read Chapter 10 • Notes & Power Points • Videos • Check announcements for additional material 	<ul style="list-style-type: none"> • Homework MyStatLab #10 • SPSS Lab # 3 • Participate in Blackboard discussion • Xtra Credit * Post-test for Chapter 10 	November, 19 th
Week # 14 November, 20 th to November, 26 th	<ul style="list-style-type: none"> • Association between Categorical Variables 	<ul style="list-style-type: none"> • Read Learning Objectives • Read Chapter 11 • Notes & Power Points • Videos • Check announcements for additional material 	<ul style="list-style-type: none"> • Homework MyStatLab # 11 • SPSS Lab # 4 • Participate in Blackboard discussion • Xtra Credit * Post-test for Chapter 10 	November, 26 th

<p>Week # 15 November, 27th to December, 3th</p>	<ul style="list-style-type: none"> • Association between Quantitative Variables 	<ul style="list-style-type: none"> • Read Learning Objectives • Read Chapter 12 • Notes & Power Points • Videos • Check announcements for additional material 	<ul style="list-style-type: none"> • Homework MyStatLab # 12 • SPSS Lab # 5 • Participate in Blackboard discussion • Xtra Credit * Post-test for 	<p>December, 3th</p>
<p>Thanks Giving Break November 22-24</p>				
<p>Week # 16 December, 3th to December, 7^h</p>	<p>Final Exam (Chapters 10-12) Final Due Thursday, December, 7th at 11:59pm</p>			