

SOC 332: 01W:

Methods of Statistical

Analysis

COURSE SYLLABUS: Fall 2023

Please, click on the following link to access A&M-Commerce Covid 19 Information, <u>https://new.tamuc.edu/coronavirus/</u>

INSTRUCTOR INFORMATION

Instructor: Dr. Nicole Farris, Professor Office Location: BA Room 102 Office Hours:: M/W: 8:00am to 9:00am; 11am to Noon on campus; Tuesday 10-11 am online and by appointment Office Phone: 903-886-5169 Office Fax: 903-886-5330 University Email Address: Nicole.Farris@tamuc.edu Preferred Form of Communication: Email Communication Response Time: 24-48 Hours, Monday through Friday, 8am to 5pm

COURSE INFORMATION

Materials - Textbooks, Readings, Supplementary Readings

Textbook(s) Required: Caldwell, Sally. 2012. Statistics Unplugged. Cengage. ISBN: 978-0840029430

Calculator Required: The Texas Instruments TI 30 X II S (About 13 dollars at Wal Mart) This is the best calculator I've found for our needs for this class. It is easy to use

and maintains batteries well. No cell phone calculators are allowed.

The syllabus/schedule are subject to change.

Course Description

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SOC 332 - Mthds of Stat Analys

Hours: 4

Mthds of Stat Analys. Four semester hours. (3 lecture, 1 lab) This course provides an in-depth introduction to descriptive and inferential statistics that are especially appropriate in quantitative analysis used in the social sciences (including t tests, z scores, regression, measures of central tendency, etc.). Setting up data files, manipulating variables and running statistical programs using SPSS (Statistical Package for the Social Sciences) are integral components of the course. Prerequisites: Sociology 1301, and 331 or SWK 350, and MATH 1314 or 1324 or 179.

Sociology 331 introduces students to the basic conceptual foundations of social science research. That course involved only very basic principles of social statistics. This course is different. Here, we will rely more heavily on the math that is required to allow students to obtain a basic working knowledge of inferential statistics. We will use a hands-on approach to introduce students to significance testing through the use of simple t-tests, chi-square, and regression. The course will emphasize formal statistical computations and quantitative data analysis. In addition to required readings and class discussions, students will become familiar with social science research methods through weekly assignments involving the secondary analysis of existing data from the General Social Survey and other datasets using SPSS data analysis software.

This course is delivered entirely online, and your labs will be held online as well. The labs will directed by the Teaching Assistant, who will also be responsible for grading, answering questions, and holding office hours.

Student Learning Outcomes (Should be measurable; observable; use action verbs)

The purpose of the course will be to gain a basic understanding of statistical analysis procedures. By the end of this course students should be able to demonstrate knowledge in:

- 1. Statistical Theory and Content: Students will be able to sufficiently synthesize theoretical knowledge in Social Statistics. Addressed via: Exams/In Class Assignments
- 2. Research Methods: Students will be able to sufficiently synthesize research knowledge. Addressed via: Exams/In Class Assignments
- 3. Measures of Central Tendency/Probability Normal Distribution/Population Parameters/Sample Statistics: Addressed Via: Laboratory Assignments
- 4. Increase of over all knowledge of statistics: Addressed via: Pre/Post Test

Student Responsibilities or Tips for Success in the Course

.**Do the reading ahead of time**: Reading about a definition or issue and then hearing about it in class will help to cement your knowledge of the definition or issue. This will be very beneficial when it comes time to study for your exam. I will deliver the lecture material under the assumption that you have already read the assigned chapter for the week.

Take Notes: I will use a lecture style presentation for this class, however this will not allinclusive. I will provide a powerpoint for you to follow along with, but I will be calculating, by hand, examples on the board as well as writing down relevant information.

Face Your Fears: Ask questions in class. I do realize that this can be hard, especially in a large class. However, asking questions is the only way to find out information you want to know, and it is likely that your classmates may have the same question. **Make Yourself Known**: Showing an interest and letting me know you have an interest will help you understand the material, and help me understand you. Talk to the instructor! If you have a situation arise during the semester that will impede your ability to succeed in the class, COME TALK TO ME SOONER RATHER THAN LATER. I will be better equipped to help you in whatever way I can the sooner you talk to me. If you wait until the very last minute, my hands will likely be tied and my options will be more limited as far as help is concerned.

Practice, Practice, Practice: Practicing the statistical computations is the best way to learn. I encourage you to do the practice problems at the end of each chapter and I will also give you problems to work on at your own discretion.

GRADING

Final grades in this course will be based on the following scale:

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A = 270-300 points B = 240-269 points C = 210-239 points D = 180-209 points F = 179 or less points

Assignment	SLO Addressed	Points

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Mini Exams (5@30 points)	1;2;3	150
Final Exam (Comprehensive)	1;2;3;4	75
Assignments/Labs (10)	1;2;3	75
Total Points		300

COURSE OUTLINE / CALENDAR

Tentative and Subject to Change Note: All assignments are due Sundays at 11:59pm unless otherwise noted

Week	Торіс	Read	Assignm ents	Due Date
1: 8/28	Syllabus/Int ro	Caldwell Ch 1	Syllabus Quiz (5pts)	9/3
2: 9/4	Review/Dat a	Caldwell Chs 1/2	Pre Test (5 pts)	9/10
3: 9/11	Distribution/ Data	Caldwell Chs 2/3	Calculator Purchase (5pts)	9/17
4: 9/18	Data/Norm al Curve	Caldwell Chs 3/4	Classroo m Contributi on (10pts)	9/24
5: 9/25	Normal Curve/4 Concepts	Caldwell Chs 4/5	Mini- Exam 1 Chs 1/2 (30 pts)	10/1
6: 10/2	4 Concepts/C I	Caldwell Chs 5/6	Classroo m Contributi on (10pts)	10/8
7: 10/9	CI	Caldwell Chs 6/7	Mini- Exam 2 Chs 3,4,5 (30 pts)	10/15
8: 10/16	Hyp Testing (Single Sample)	Caldwell Chs 7/8	Classroo m Contributi on (10 pts)	10/22

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9: 10/23	Hyp Testing (Two Samples)	Caldwell Chs 7/8	Classroo m Cont. (10pts)	10/29
10: 10/30	Hyp Testing Wrap Up/Chi Square	Caldwell Chs 7/8/Ch 11	Mini Exam 3 Chs 6, 7, 8 (30 pts)	11/5
11: 11/6	Chi Square/ Regression	Caldwell Ch 11/Ch 12	Classroo m Contributi on (10 pts)	11/12
12: 11/13	Regression	Caldwell Ch 12	Mini Exam 4 Chs 11, 12 (30 pts)	11/19
13: 11/20	SPSS In Class	SPSS	Classroo m Contributi on (5 pts)	11/26
14: 11/27	SPSS In Class	SPSS	Classroo m Contributi on (5 pts)	12/3
15: 12/4	SPSS In Class		Post Test	12/10

Final Exam: Due 12/10 by 11:59pm