

Research Design and Analysis
PSY 6313-010
Fall 2019
Course Syllabus

Instructor: Cheryl Stenmark

Office Location: A104E

Office Hours: M: 12pm-4pm; T/Th: 12:15pm-3:15pm

E-mail address: cstenmark@angelo.edu

REQUIRED READINGS:

Text: Cohen, B. H. (2014). *Explaining Psychological Statistics* (4th ed.). Hoboken, N.J.: Wiley.

Additional Materials: There may be additional readings for you to read and discuss and/or datasets for analysis throughout the semester. They will be posted on Blackboard for you to download.

Course Materials Online: The syllabus, announcements, and grades for this class may be found on Blackboard. I encourage students to access this site regularly for important information pertaining to the course.

To Contact Me: The most reliable way to contact me is via e-mail. I *try* to respond to e-mail within 24 hours. If students need to speak with me “in person,” I am available to meet with students during office hours. If a student is unable to attend office hours due to a scheduling conflict, the student must make an appointment.

COURSE DESCRIPTION

This course is intended to provide you with an understanding of the use and interpretation of basic statistics for psychological research. Students will learn a variety of descriptive and inferential statistical techniques. Throughout the semester, we will review statistical procedures, including a brief introduction to descriptive statistics, t-tests, power, correlation and regression, and ANOVA (through two-way mixed designs). The course includes practical applications of the procedures, including the use of statistical software and interpretation of the results produced by the software.

STUDENT LEARNING OBJECTIVES:

- Exposure to statistical techniques
- Proficiency in these techniques
- Understanding of the underlying theory in the application of the techniques
- Knowledge of when and where to apply the statistical techniques
- Exposure to different analytic strategies and philosophies

GRADING:

Homework Assignments: Homework pertaining to the current topic will be assigned throughout the semester. These are designed to help students keep up with and apply the material. There will be 13 homework assignments, each worth 10 points. The highest ten scores will be used to calculate a student’s final homework grade (for a total of 100 points).

Exams: There will be two (2) exams: the midterm and the final, covering material from the textbook as well as class lectures and discussions. The exams are worth 100 points each. These exams may include multiple choice, matching, true/false, short answer, and calculation items.

Course Project: During the course of Overlap, you will design a proposal for a study. If you intend to conduct a Master’s thesis, I would highly suggest that you design a study which could be used for your thesis. Each week, during the overlap of this course with the second year students, we will discuss a different element of the study (which will serve as graded

deliverables for class). You will team up with second year students who will serve as advisors in the design of your study. At the end of this course, you will present your project proposal in its entirety to the class.

Available Points:

100	10 Overlap project deliverables @ 10 pts. each
100	Final project proposal
100	10 homework assignments @ 10 pts. each
<u>200</u>	<u>2 exams @ 100 pts. each</u>
500	Total points available

Note: At the instructor's discretion final grades will be reviewed to ensure a student's overall performance is well-represented.

Attendance and Class Policies: Attendance is expected and required to do well in the course. Included in the syllabus is a tentative class schedule. Students should read the pertinent chapter(s) **prior** to class. Students will be responsible for and tested over both text and lecture material. Consequently, to benefit fully from this course it is important for students to read the text, stay current with the material and attend class. If a student misses a class for a pre-excused or unexcused absence it is the student's responsibility to request/obtain material/information (e.g., notes, schedule modifications, announcements, etc.) from a classmate.

Please note that tardiness and early departure is disruptive to others in class; therefore students should arrive on time for each class session and remain until class dismissal. In addition, the ringing or use of cell phones is disruptive to others; consequently it is requested that students mute cell phones prior to the beginning of class. Violation of these policies may result in a grade decrement.

Student Disability Services

ASU is committed to the principle that no qualified individual with a disability shall, on the basis of disability, be excluded from participation in or be denied the benefits of the services, programs or activities of the university, or be subjected to discrimination by the university, as provided by the Americans with Disabilities Act of 1990 (ADA), the Americans with Disabilities Act Amendments of 2008 (ADAAA) and subsequent legislation.

Student Disability Services is located in the Office of Student Affairs, and is the designated campus department charged with the responsibility of reviewing and authorizing requests for reasonable accommodations based on a disability. It is the student's responsibility to initiate such a request by contacting an employee of the Office of Student Affairs, in the Houston Harte University Center, Room 112, or contacting the department via email at ADA@angelo.edu.

Title IX at Angelo State University:

Angelo State University is committed to providing and strengthening an educational, working, and living environment where students, faculty, staff, and visitors are free from sex discrimination of any kind. In accordance with Title VII, Title IX, the Violence Against Women Act (VAWA), the Campus Sexual Violence Elimination Act (SaVE), and other federal and state laws, the University prohibits discrimination based on sex, which includes pregnancy, and other types of Sexual Misconduct. Sexual Misconduct is a broad term encompassing all forms of gender-based harassment or discrimination and unwelcome behavior of a sexual nature. The term includes sexual harassment, nonconsensual sexual contact, nonconsensual sexual intercourse, sexual assault, sexual exploitation, stalking, public indecency, interpersonal violence (domestic violence or dating violence), sexual violence, and any other misconduct based on sex. You are encouraged to report any incidents involving sexual misconduct to the Office of Title IX Compliance and the Director of Title IX Compliance/Title IX Coordinator, Michelle Boone, J.D. You may submit reports in the following manner:

Online: www.angelo.edu/incident-form

Face to Face: Mayer Administration Building, Room 210

Phone: 325-942-2022

E-Mail: michelle.boone@angelo.edu

Note, as a faculty member at Angelo State, I am a mandatory reporter and must report incidents involving sexual misconduct to the Title IX Coordinator. Should you wish to speak to someone in confidence about an issue, you may contact the University Counseling Center (325-942-2371), the 24-Hour Crisis Helpline (325-486-6345), or the University Health Clinic (325-942-2171).

For more information about resources related to sexual misconduct, Title IX, or Angelo State's policy please visit: www.angelo.edu/title-ix.

ACADEMIC INTEGRITY AND CONDUCT

For information on ASU's honor code, please visit the following website: <http://www.angelo.edu/forms/pdf/honorcode5.pdf> . If you have any doubts or questions about what constitutes misconduct—inform yourself. Not knowing—is not an excuse! Academic dishonesty will not be tolerated in my class. Students involved in misconduct will be prosecuted according to University regulations and procedures.

STUDENT ABSENCE FOR OBSERVANCE OF RELIGIOUS HOLY DAYS

A student who intends to observe a religious holy day should make that intention known in writing to the instructor prior to the absence.

Tentative Class Schedule

(this schedule is subject to change)

Week	Date	Topic	Chapter
1	August 26	Introduction	1
2	September 2	Labor Day: No Class	
3	September 9	Frequency Tables, Graphs, and Distributions Measures of Central Tendency and Variability	2 3
4	September 16	Standardized Scores and the Normal Distribution	4
5	September 23	Introduction to Hypothesis Testing: The One-Sample z Test	5
6	September 30	Interval Estimation and the t Distribution	6
7	October 7	The t Test for Two Independent Sample Means	7
8	October 14	Midterm Review	
9	October 21	MIDTERM	1-7
10	October 28	Statistical Power and Effect Size	8
11	November 4	Linear Correlation	9
12	November 11	Linear Regression	10
13	November 18	The Matched t Test	11
14	November 25	One-Way Independent ANOVA	12
15	December 2	Two-Way ANOVA	14
16	December 9	FINAL	8-12, 14