

PSY 612.01W: Introduction to Statistics for Psychology COURSE SYLLABUS: Fall 2024

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Office Hours (zoom): M 9-11a, W 9-10:30a, F 9-10:30a

https://tamuc.zoom.us/j/96313631935

COURSE INFORMATION

Materials – Textbooks, Readings, Supplementary Readings:

<u>Textbook</u>: *Discovering Statistics Using SPSS* (5th or 6th edition, but the materials in D2L are largely based on 5th edition), by Field

<u>Additional resources</u>: Andy Field's youtube channel with many helpful videos: https://www.youtube.com/profandyfield

- Also see https://edge.sagepub.com/field5e for more online resources linked to his 5th edition textbook.

Software Required: IBM SPSS Statistics (version 21 or newer). A recent version should be available in Henderson 214 (Psychology department computer lab) as well as on library computers (and many academic libraries and computer labs have some version of SPSS). Keep in mind that many versions of SPSS are not backwards-compatible, so you must be very careful when saving/exporting your work. For data files, just save as the default file type, which should be accessible in any version of SPSS. However, for output files, the story is different. You must always export these files (e.g., to pdf) rather than simply saving them.

Student Learning Outcomes

- 1. You will learn about the normal distribution, hypothesis testing, t-tests, ANOVA, correlation, regression, how to deal with categorical data, and some information about non-parametric tests.
- 2. You will learn how to use SPSS.

Course Description

This course, a Graduate School approved level II research tools course, is an introductory level course that concentrates on statistical methods applicable to educational and psychological research procedures and interpretations.

The syllabus/schedule are subject to change.

Note: Students will be required to use computational software to assist in the analysis and interpretation of data.

One of our course objectives follows NASP Model 10 Domains of Practice: 2.9: Research and Program Evaluation. You will gain knowledge of research design, statistics, measurement, varied data collection and analysis techniques, and program evaluation sufficient for understanding research and interpreting data in applied settings.

CACREP Standards (for Counseling students)

Doc Standard	Learning Activity or Assignment	Assessment
2.C.5. Design, implementation, and	Textbook chapters, SPSS	Quizzes,
analysis of quantitative and qualitative	assignments	exams, and
research.		assignments
	Textbook chapters, SPSS	Quizzes,
2.C.6. Models and methods of	assignments	exams, and
assessment and use of data.	-	assignments
4.E.1. Understands univariate and	Textbook chapters, SPSS	Quizzes,
multivariate research designs and data	assignments	exams, and
analysis methods.		assignments
4.E.3. Knows models and methods of	Textbook chapters, SPSS	Quizzes,
instrument design.	assignments	exams, and
		assignments

COURSE REQUIREMENTS

Minimal Technical Skills Needed

Ability to use SPSS, Microsoft Word, and Excel.

Instructional Methods

This is an online course, which is <u>not</u> to be interpreted as self-paced. Rather, you are required to log on regularly in order to succeed. You may consume the material at a more rapid pace than set by the below schedule, but assignments and exams will still take place according to the schedule. The time and effort required for this course is equivalent for any graduate level statistics course that you might take face-to-face. A high level of both your time and effort will be necessary to succeed.

GRADING

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

A = 90%-100%

B = 80%-89%

C = 70% - 79%

D = 60%-69%

F = 59% or Below

The syllabus/schedule are subject to change.

Assessments

ASSIGNMENTS (20%):

There will be several assignments, worth a range of points depending on difficulty, adding up to 20% of your grade. You may work with others in the class on these assignments, but quizzes and exams are to be taken <u>individually</u>.

QUIZZES (20%):

There will be a few quizzes, worth a range of points depending on the number of items, adding up to 20% of your grade. These are meant to be taken closed-book, therefore time to take them is limited (i.e., you must study well for each, and will not have time to look answers up in the book and are not allowed to do so anyway). You must contact me **prior** to the scheduled quiz to re-schedule if you absolutely cannot take the quiz that particular week.

EXAMS (60%):

There are four exams (60% of your overall grade), the value of each breaks down as follows: Exam 1 (10%), Exam 2 (14%), Exam 3 (16%), Exam 4 (20%). <u>Due to the nature of the material, these will be cumulative: On each exam, there will be questions relating to material covered on the previous exam(s).</u> The questions will require not only recognition of concepts and correct answers, but will be designed to test comprehension and application of concepts as well. Material for the exams will be drawn from the textbook and the online lectures. Each exam will be open to take via D2L during a particular week. There will be no make-up exams except as mandated by University policy for University-excused absences, religious holidays and major illnesses. You must contact me **prior** to the scheduled exam to re-schedule if you absolutely cannot take the exam that particular week. Each exam is to be taken closed-book, therefore time to take each is limited.

TECHNOLOGY REQUIREMENTS

LMS

All course sections offered by Texas A&M University-Commerce have a corresponding course shell in the myLeo Online Learning Management System (LMS). Below are technical requirements

LMS Requirements:

https://community.brightspace.com/s/article/Brightspace-Platform-Requirements

LMS Browser Support:

https://documentation.brightspace.com/EN/brightspace/requirements/all/browser_support.htm

https://inside.tamuc.edu/campuslife/CampusServices/CITESupportCenter/Zoom_Account.aspx?source=universalmenu

ACCESS AND NAVIGATION

Note: Personal computer and internet connection problems do not excuse the requirement to complete all course work in a timely and satisfactory manner. Each student needs to have a backup method to deal with these inevitable problems. These methods might include the availability of a backup PC at home or work, the temporary use of a computer at a friend's home, the local library, office service companies, Starbucks, a TAMUC campus open computer lab, etc.

Technical Support

If you are having technical difficulty with any part of Brightspace, please contact Brightspace Technical Support at 1-877-325-7778. Other support options can be found here:

https://community.brightspace.com/support/s/contactsupport

COMMUNICATION AND SUPPORT

If you have any questions or are having difficulties with the course material, please contact your Instructor.

Interaction with Instructor Statement

It is best to communicate with me via email (curt.carlson@tamuc.edu). I will respond to emails within 24-48 hours. Please do not re-send your email unless at least 48 hours have passed since your last email.

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Specific Procedures/Policies

No quizzes, exams, or homework will be accepted after the deadline unless permission is provided in advance of the deadline by the instructor.

Syllabus Change Policy

The syllabus is a guide. Circumstances and events, such as student progress, may make it necessary for the instructor to modify the syllabus during the semester. Any changes made to the syllabus will be announced in advance.

University Specific Procedures

Student Conduct

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. The Code of Student Conduct can be found at https://www.tamuc.edu/student-code-of-conduct/.

If you believe someone has engaged in behaviors that do not align with the Code of Student Conduct or you have other concerns, please visit the File a Report page at https://www.tamuc.edu/office-of-student-rights-and-responsibilities/concerns-incident-reporting/

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum: https://www.britannica.com/topic/netiquette

Academic Integrity

Students at Texas A&M University-Commerce are expected to maintain high standards of integrity and honesty in all of their scholastic work. For more details and the definition of academic dishonesty see the following procedures:

Undergraduate student academic dishonesty policy Undergraduate Academic Dishonesty 13.99.99.R0.03

Undergraduate student academic dishonesty policy Undergraduate Student Academic Dishonesty Form

Graduate student academic dishonesty policy:

https://inside.tamuc.edu/aboutus/policiesproceduresstandardsstatements/rulesProcedures/13students/graduate/13.99.99.R0.10.pdf

Graduate student academic dishonesty form:

https://inside.tamuc.edu/academics/graduateSchool/faculty/GraduateStudentAcademic DishonestyForm.pdf

TAMUC Attendance

For more information about the attendance policy please visit the Attendance webpage.

Artificial Intelligence

Texas A&M University-Commerce acknowledges that there are legitimate uses of Artificial Intelligence, Chatbots, or other software that has the capacity to generate text, or suggest replacements for text beyond individual words, as determined by the instructor of the course.

Any use of such software must be documented. Any undocumented use of such software constitutes an instance of academic dishonesty (plagiarism).

Individual instructors may disallow entirely the use of such software for individual assignments or for the entire course. Students should be aware of such requirements and follow their instructors 'guidelines. If no instructions are provided the student should assume that the use of such software is disallowed.

In any case, students are fully responsible for the content of any assignment they submit, regardless of whether they used an AI, in any way. This specifically includes cases in which the AI plagiarized another text or misrepresented sources.

Students with Disabilities-- ADA Statement

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Services Velma K. Waters Library- Room 162

Phone (903) 886-5930

Fax (903) 468-8148

Email: <u>StudentDisabilityServices@tamuc.edu</u>

Website: http://inside.tamuc.edu/campuslife/campusServices/StudentDisabilityS

ervices/default.aspx

Mental Health and Well-Being

The university aims to provide students with essential knowledge and tools to understand and support mental health. As part of our commitment to your well-being, we offer access to Telus Health, a service available 24/7/365 via chat, phone, or webinar. Scan the QR code to download the app and explore the resources available to you for guidance and support whenever you need it.



A&M-Commerce Supports Students' Mental Health

The Counseling Center at A&M-Commerce, located in the Halladay Building, Room 203, offers counseling services, educational programming, and connection to community resources for students. Students have 24/7 access to the Counseling Center's crisis assessment services by calling 903-886-5145. For more information regarding Counseling Center events and confidential services, please visit www.tamuc.edu/counsel

Nondiscrimination Notice

Texas A&M University-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

Campus Concealed Carry Statement

Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in Texas A&M University-Commerce buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and A&M-Commerce Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations.

For a list of locations, please refer to the <u>Carrying Concealed Handguns On Campus</u> document and/or consult your event organizer.

Web url:

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all A&M-Commerce campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.

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COURSE OUTLINE / CALENDAR

This schedule is to be used as a guide. It is possible for it to change, but you will be notified via email if it does.

Week Topic

8/26 – 8/30	Introductions, Syllabus, Introduction to Descriptive Statistics; Ch. 1	
9/2 – 9/6	More Descriptive and Some Inferential Stats; Ch.2; Quiz 1	
9/9 – 9/13	Learning SPSS; The Normal Distribution; Ch. 4; Assignments 1 & 2; Quiz 2	
9/16 – 9/20	Exploring Assumptions; Hypothesis Testing; Chs. 5-6; Assignment 3	
9/20	EXAM 1	
9/23 – 9/27	Correlation; Ch. 8; Assignment 4	
9/30 – 10/4	Regression; Ch. 9	
10/7 – 10/11	Probability; Assignment 5	
10/11	EXAM 2 (cumulative)	
10/14 – 10/18	Comparing Two Means: <i>t</i> -test; Ch. 10; <i>Quiz 3</i>	
10/21 – 10/25	Comparing Several Means: ANOVA; Ch. 12; Assignment 6	
10/28 – 11/1	Factorial ANOVA; Ch. 14	
11/4 – 11/8	Repeated-Measures ANOVA; Ch. 15	
11/8	EXAM 3 (cumulative)	
11/11 – 11/15	Categorical Data; Ch. 19	
11/18 – 11/22	Non-Parametric Tests; Ch. 7	
11/25 – 11/29	Thanksgiving	
12/2-12/6; 12/9	Prepare for Exam; EXAM 4 (cumulative) on Monday 12/9	