

PSY 681.01W: Intermediate Statistics COURSE SYLLABUS: Summer II 2024 Online

July 8 - August 8, 2024

INSTRUCTOR INFORMATION

Instructor: Mei Jiang, Ph.D.

Office Location: Henderson 205A Email Address: mei.jiang@tamuc.edu Preferred Form of Communication: Email

Communication Response Time: 24-48 hours on weekdays

Note. Emails without proper salutations or not sent from LEOMAIL will NOT be responded to.

COURSE INFORMATION Materials – Textbooks, Readings, Supplementary Readings

Textbook(s) Required: Discovering Statistics Using SPSS, 5th edition, by Field. ISBN-13: 978-1-5264-3656-6

Software Required: IBM SPSS Statistics (version 21 or newer), with Advanced Statistics add-on. Your textbook relies on version 21, but there is not a big difference across recent versions. 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.

Course Description

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

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 analysis of quantitative and qualitative research. | Textbook chapters, SPSS assignments | Quizzes, exams, and assignments |
| 2.C.6. Models and methods of assessment and use of data. 4.E.1. Understands univariate and multivariate research designs and data analysis methods. | Textbook chapters, SPSS assignments Textbook chapters, SPSS assignments | Quizzes, exams, and assignments Quizzes, exams, and assignments |
| 4.E.3. Knows models and methods of instrument design. | Textbook chapters, SPSS assignments | Quizzes, exams, and assignments |

Student Learning Outcomes

- 1. You will learn about the normal distribution, hypothesis testing, t-tests, ANOVA, MCPs, ANCOVA, correlation, regression, multiple regression, how to deal with categorical data, and some information about non-parametric tests.
- 2. You will build upon your knowledge from Introductory Statistics, including your ability to use SPSS.

COURSE REQUIREMENTS Minimal Technical Skills Needed

Ability to use SPSS, Microsoft Word, and Excel.

Instructional Methods

This is an online course, which is not 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 The *syllabus/schedule* are *subject to change*.

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

Assessments

ASSIGNMENTS (30%):

There will be three assignments, each worth 10% of your grade. You may work with others in the class on these assignments, but quizzes and exams are to be taken individually.

QUIZZES (40%):

There will be four quizzes, each worth 10% 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 day.

EXAMS (30%):

There are two exams, each worth 15% of your grade. *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).* 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 any 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

Zoom Video Conferencing Tool

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

ACCESS AND NAVIGATION

You will need your campus-wide ID (CWID) and password to log into the course. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at 903.468.6000 or helpdesk@tamuc.edu.

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.

COMMUNICATION AND SUPPORT

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

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

The syllabus/schedule are subject to change.

Interaction with Instructor Statement

I am here to support you. My Zoom office hours are listed on the top of the syllabus. If you would like to set up a Zoom meeting, please email me to schedule a time. Office hours are subject to change, and I will inform students via D2L if there are any changes. My normal email response time is 24 hours but may take up to 48 hours. If you do not hear back from me within 2 business days, please email me again in case I did not receive your message.

COURSE AND UNIVERSITY PROCEDURES/POLICIES

EMAIL POLICY

If you would like to schedule an appointment, the best way is to email. We can then set up a time to chat when it is convenient for both of us.

Course Specific Procedures/Policies

Plagiarism: Texas A&M University-Commerce views plagiarism as a serious offense. Plagiarism occurs when individuals take ideas and/or words from another source and claim these ideas as their own without giving credit to the original author(s). This can include copying words from an Internet website, reading an article and taking the authors ideas without giving them credit, or writing work that is remarkably similar to other written work (e.g., Changing words to synonyms is still plagiarism). If any written work contains ideas that are not your own, you need to give credit to the author(s) by including citations. Instructors are obligated to report instances of plagiarism to university officials. Please refer to the American Psychology Association (APA) manual for instructions on citing materials. When in doubt, ask me. Ignorance will not be tolerated as an excuse for plagiarism. Acts of plagiarism on any written assignment, including discussion postings, will result in severe consequences, including the possibility of receiving a zero in the course. Acts of plagiarism will be reported to the department head.

Scholarly Expectations: All works submitted for credit must be original works created by the scholar uniquely for the class. It is considered inappropriate and unethical to make duplicate submissions of a single work for credit in multiple classes, unless specifically requested by the instructor. Duplication may result in a zero on an assignment.

Late Work: Please submit all assignments on time. No late work is accepted.

Please note that computer issues will not be considered as an excuse for failing to submit any assignment on time. It is the student's responsibility to make sure that assignments are turned in on time. Therefore, do not wait until the very end to complete an assignment. This will help ensure that you turn in the assignment on time if you are having a technology issue (i.e., you can find another computer, call the Help Desk for support, etc.).

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 is described in detail in the Student Guidebook.

http://www.tamuc.edu/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.as px

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

13.99.99.R0.03 Undergraduate Academic Dishonesty

13.99.99.R0.10 Graduate Student Academic Dishonesty

TAMUC Attendance

For more information about the attendance policy please visit the <u>Attendance</u> webpage and <u>Procedure 13.99.99.R0.01</u>.

http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/academic/13.99.99.R0.01.pdf

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 Academic Dishonesty 13.99.99.R0.03

Undergraduate Student Academic Dishonesty Form

The syllabus/schedule are subject to change.

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/documents/13.99.99.R0.03UndergraduateStudentAcademicDishonestyForm.pdf

Graduate Student Academic Dishonesty Form

http://www.tamuc.edu/academics/graduateschool/faculty/GraduateStudentAcademicDishonestyFormold.pdf

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf

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 Resources and Services

Texas A&M University-Commerce

Velma K. Waters Library Rm 162

Phone (903) 886-5150 or (903) 886-5835

Fax (903) 468-8148

Email: studentdisabilityservices@tamuc.edu

Website: Office of Student Disability Resources and Services

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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/34Safet yOfEmployeesAndStudents/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.

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

Course Calendar

| Module | Date | Topic |
|--------|-------------|---|
| 1 | 7/8 - 7/11 | Topic 1: Introductions, review of PSY 612 materials |
| 2 | 7/12 – 7/16 | Topic 2: Regression |
| 3 | 7/17 – 7/20 | Topic 3: ANOVA |
| | | Assignment 1 & Quiz 1 (due 7/20) |
| 4 | 7/21 – 7/24 | Topic 4: ANCOVA |
| | | Exam 1 (due 7/24) |
| 5 | 7/25 – 7/27 | Topic 5: Factorial ANOVA |
| | | Assignment 2 & Quiz 2 (due 7/27) |
| 6 | 7/28 – 7/31 | Topic 6: Repeated measures ANOVA |
| | | Quiz 3 (due 7/31) |
| 7 | 8/1 – 8/6 | Topic 7: Mixed Design ANOVA |
| | | Assignment 3 & Quiz 4 (8/6) |
| 8 | 8/6 - 8/8 | Topic 8: Categorical Data |
| | | Final Exam (due 8/8) |