

PSY 301-01W UNDERSTANDING STATISTICS

COURSE SYLLABUS: SUMMER 2022 MWF 2:00pm – 2:50pm, McDowell Administration Building - 106

INSTRUCTOR INFORMATION

Instructor: Dr. Rachel Wong

Office Location: Henderson 201A

Office Hours: BY APPOINTMENT (since this is an online course, office hours will be held

over Zoom)

Email Address: rachel.wong@tamuc.edu Preferred Form of Communication: Email

Communication Response Time: Within 48 hours

Note. I will NOT respond to emails without proper salutations (i.e., Dr. Wong/ Professor

Wong).

COURSE INFORMATION

Materials – Textbooks, Readings, Supplementary Readings

Textbook(s) Required:

Moore, D. S., & Notz, W. I. (2020). Statistics: Concepts and controversies (10th ed.). MacMillan Learning. ISBN:9781319109028
 (Please use the 10th edition and not any other edition.)

Calculator:

 A calculator is required. Any calculator that can process square root will do. I recommend a TI – 30Xa or Casio FX-260 SOLAR. Any other models will need my approval.

Course Description

An introductory applied statistics course that focuses on descriptive and inferential statistical methods. Emphasis will be placed on learning statistics through application and experience. Topics include visual displays of data, measures of central tendency and variability, standardized scores, normal distributions, probability, sampling distributions, hypothesis testing, correlation, and regression.

In general terms, this course is about understanding the conceptual background of psychological statistics to provide you with a strong foundation for PSY 302, the next statistics

course in your degree plan. The more you understand in this class, the better advantage you will have going forward into PSY 302.

I strongly encourage you to keep your textbook and any materials you accumulate. They will be a beneficial reference going forward.

COURSE REQUIREMENTS

Minimal Technical Skills Needed

- Using the learning management system (D2L)
- Using word processing software (e.g., Microsoft Word)
- Using statistical software package and/or spreadsheet software (e.g., EXCEL)
- Using a regulator calculator to complete simple statistical computations.

Student Responsibilities or Tips for Success in the Course

This is an online course through D2L learning management system. Since this is 5 week-long course you can expect the course to go by VERY quickly. The course will include a variety of activities: individual homework assignments, textbook readings, exit tickets, and exams. Each day, you will be assigned a new chapter for reading and the instructor will provide an overview lecture (accessible via D2L) of major concepts. Please note that these lectures are not exhaustive. You are responsible for reading the entire chapter and understanding the chapter content.

To successfully complete the course, students should read the textbook and materials on D2L watch the lecture videos, and complete homework assignments in a timely manner. Reviewing the course material thoroughly is essential for preparing for the exams and assignments.

GRADING

Course grades will be determined by the following scale. See the Assessments section for more information.

A = 89.5% - 100% B = 79.5% - 89.4% C = 69.5% - 79.4% D = 59.5% - 69.4% F = Less than 59.5%

Note: Grades will not be rounded!

Assessments

The course grade will be calculated by your performance in the following exams and assignments:

❖ Exit Ticket (5% of final grade): Statistics is NOT a spectator sport. To do well in this class, you need to be fully engaged with the material and ensure that you watch the lecture videos. and complete the assignments in a timely manner.

To ensure that students are familiar with course content students will have to complete DAILY exit tickets and include the following in the tickets:

- > 1 thing you need further clarification on
- > 1 thing you are familiar with

These exit tickets will let me know what students are struggling with in class and how I can better provide support. Exit ticket questions will be addressed at the weekly review sessions.

- ❖ Exams (2 exams: midterm exam: 25%; final exam: 30%): There will be a midterm and a final exam. Exams 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 text and the lectures. There will be no make-up exams except as mandated by University policy for University-excused absences, religious holidays, and major illnesses. Students should contact the instructor prior to the scheduled exam if possible, or within 24 hours of missing the exam due to accident or illness. Each exam is worth 30% of your overall grade.
- ❖ Assignments (4 assignments; 40% of overall grade): There will be four (4) homework assignments during the term. These assignments are designed to increase your understanding of the topics being covered and give you the opportunity to apply course material. Due dates for homework assignments are listed in the course outline/calendar (at the bottom of this syllabus). Some assignments may require the student to work out problems by hand. For these cases, students will need to either use an app like Evernote Scannable which allows one to convert an image into a PDF or upload images of the worked problems. Each homework assignment is worth 10% of your overall grade.
 - 1. Assignments are to be turned into the assignment Dropbox in D2L by the date and time specified in the course outline/calendar. I will accept emailed assignments on an emergency basis only.
 - 2. Show your work when working a problem involving formulas. At minimum you should show each complete formula in its basing form filled in with numbers, at least one intermediate step, and the final answer. Mark final answers clearly (e.g., by highlighting or placing a box around them). Answers that are difficult to find will not be graded.
 - 3. Include your name on each assignment.
 - 4. No late assignments will be accepted unless special circumstances have been discussed with the instructor. Under these circumstances, 10% will be deducted from the student's assignment grade for every day that the assignment is late. For example, if an assignment is three days late, then 30% of the assignment grade will be deducted. In this example, the student would be able to make, at best, 70% on the assignment. No late homework assignments will be accepted after five days past

- the due date. Since final grades will be due very quickly after the final exam, no late submissions will be accepted for the final homework assignment.
- 5. Homework assignments are intended to be completed individually.

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

YouSeeU Virtual Classroom Requirements:

https://support.youseeu.com/hc/en-us/articles/115007031107-Basic-System-Requirements

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

Interaction with Instructor Statement

I am here to support you. Since this is an online course, my office hours are by appointment only. If communicating via email, I do my best to respond within 2 business days of receiving an email. If you do not hear back from me within 2 business days, please email me again in case I did not receive your message. Your assignments will be graded and returned to you within a week.

EMAIL GUIDELINES

In an attempt to provide a framework for professional communication, emails must contain the following:

- Subject Line: Course (e.g. PSY 301); additional information if desired (e.g. Hypothesis testing)
- Address the Reader: Open with "Dr. Wong..."
- Use good grammar and avoid acronyms (i.e., do not write like you text)
- If asking for assistance with an issue, please list at least 3 things you have done to try and remediate the issue prior to contacting me (these should probably include looking at the syllabus/ course rubrics/ eCollege, contacting a colleague, and checking your text, etc.)
- Close with your name

Please send emails from your University account. The instructor will not discuss grades over email. If you would like to discuss your grade, please make an appointment during office hours.

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Specific Procedures/Policies

This class provides a <u>child-friendly environment</u>. Students are welcome to bring their child/family under the age of 18 to class when other arrangements are not available. No prior approval is required.

Exam: Exams will be posted on D2L and will be taken in-class unless otherwise specified. On exam days, students are expected to bring their laptops to class. No make-up exam* is allowed unless prearranged 48 hours prior to the actual exam date and time.

*Make up exams will ONLY be administered to students who miss an exam for a university-approved reason (i.e., illness requiring a visit to the doctor or hospital, death in the family, court-mandated appointment). Official documentation (i.e., doctor's or hospital note, funeral notice or obituary, court document) must be submitted to instructor before a make-up exam will be administered. If you miss an exam, you are responsible for contacting the instructor on the day of or before the day of the exam.

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. When an assignment is submitted past the deadline, a 10% penalty will be imposed for each day that the assignment is submitted past the due date, up to 5 days. After which, the assignment will automatically be scored as a zero (i.e., no credit granted). 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/student guidebook/Student Guidebook.pdf

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

TAMUC Attendance

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

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

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

Graduate Student Academic Dishonesty 13.99.99.R0.10

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/graduate/13.99.99.R0.10GraduateStudentAcademicDishonesty.pdf

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 Gee Library- Room 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

http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServices/

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 Carrying Concealed Handguns On Campus 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.

COURSE OUTLINE / CALENDAR

Wee k	Date	Topic	Readings	Assignment Due
1	6/6	Introduction; Syllabus		
	6/7	Where do data come from?	Ch. 1	
	6/8	What do samples tell us?	Ch. 3	
	6/9	Measuring	Ch. 8	
	6/10	Review		Homework Assignment 1 (chapters 1, 3, 8) due 11:59pm 6/11
2	6/13	Describing distribution with numbers	Ch. 12 + Ch. 11	
	6/14	Describing distribution with numbers	Ch. 12 + Ch. 11	
	6/15	Normal Distribution	Ch. 13	
	6/16	Normal Distribution – standard scores & percentiles	Ch. 13	
	6/17	Review		Homework Assignment 2 (chapters 12, 13) due 11:59pm 6/18
3	6/20	Midterm Exam (chapters 1, 3, 8, 12, & 13)		
	6/21	Thinking about chan c e	Ch. 17	
	6/22	Thinking about chance	Ch. 17	
	6/23	Probability	Chap. 18	
	6/24	Probability	Chap. 18	
4	6/27	Review		Homework Assignment 3 (chapters 17, 18) due 11:59pm 6/25
	6/28	What is a confidence interval?	Ch. 21	
	6/29	What is a confidence interval?	Ch. 21	
	6/30	What is a test of significance?	Ch. 22	
	7/1	What is a test of significance?	Ch, 22	
5	7/5	Review (can be done over Zoom at students' request)		
	7/6	No lecture – study for final exam		
	7/7	Final Exam (cumulative)		

Homework Assignments:

Be sure to notice that each homework assignment includes problems from the end of the chapters + 1-2 written response questions. These written response questions are described at the end of this document. Written response questions should be answered in a few (e.g., 2-3) sentences using **your own words**. Please type all answers to written response questions. If this means that you will need to submit more than one document (e.g., one for the worked problems scanned as a PDF and one for the typed responses in a Word document) then that is fine. Also make note that students are expected to show work for homework problems.

Specific homework problems will be posted to D2L.