PSYC 2300-001: Intro to Statistics for Psychology

Summer 2023

Monday-Thursday @1-3pm in LS 122

Instructor Information

Instructor

John M. Adams, PhD

Office Number

LS 407

Email Address

John.Adams@uta.edu

Office Hours

By appointment

Teaching Assistant

TBD

Course Information

Section Information

PSYC 2300-001

Time and Place of Class Meetings

Monday-Thursday @1pm in LS 122. This is an on-campus course. I will record on MS Teams for immune-compromised students (and so you can access the recordings to review lectures), but I will take attendance and you will be expected to attend class in person (unless you and I have discussed a specific reason why you will have to attend remotely).

Description of Course Content

This course covers descriptive and inferential statistics used in psychological research and assessment. It includes measurement, characteristics of distributions; measures of central tendency and variability; transformed scores; correlation and regression; probability theory; and hypotheses testing and inference. **Prerequisite:** PSYC 1315, MATH 1302 (or equivalent)

Student Learning Outcomes

- Students will be able to demonstrate understanding of...
 - ... different types of data.
 - ... key terminology in statistics.
 - ... distinctions between samples versus populations.
 - central-tendency statistics and their utility for summarizing data.
 - o ... the meaning and use of variance and standard deviation.
 - ... the meaning and utility of z-scores.
 - o ... how to calculate probability and use it to make predictions.
 - o ... the purpose and utility of hypothesis testing and statistical power.
 - ... when to use independent versus dependent t-tests and how to interpret the results.
 - ... when to use analysis of variance and how to interpret the results.

- We will cover the following topics:
 - Types of distributions, graphs, and variables/measurements
 - Measures of central tendency
 - Z-scores; standard deviation; normal distributions
 - Probability & expected value
 - Sampling distributions
 - Hypothesis testing
 - One-sample t-tests
 - Independent-samples t-tests
 - o Repeated-measures t-tests
 - Correlation
 - One-way ANOVA
 - o Chi-square

Required Textbooks and Course Materials

- 1. *The UTA Statistics for Psychology SPSS Manual*. This is a fantastic resource for SPSS guidance. It can be purchased at the bookstore. ISBN = 9781646173372
- 2. FREE open-source textbook: https://open.umn.edu/opentextbooks/textbooks/an-introduction-to-psychological-statistics

Descriptions of major assignments and examinations

Exams (30% of final grade). There will be two exams. The second exam will be cumulative, it will be slightly longer, and it will be worth slightly more. Unless a documented excuse is provided *in advance of* the exam (e.g., conflict with a university athletic event; death in the family), make-up exams will not be offered. Do not email me after the exam has already occurred to say you were sick. If you wake up on the morning of an exam and you feel deathly ill, email me, go to the doctor, and then also email me a photo of the doctor's note. I do not drop your lowest exam score.

Canvas Homeworks/Quizzes (30% of final grade). These will primarily cover LECTURE material. The textbook is also available as a secondary resource. I will tell you what to expect on these guizzes during class.

SPSS Assignments (30% of final grade). These assignments will require you to use SPSS to answer statistical questions. More information on these assignments will be provided during class and on Canvas throughout the semester. There will be relatively few of these assignments, so make sure you don't skip any.

Attendance (10% of final grade). You will be expected to attend every class in person. I will take attendance every day. If you accrue more than 5 unexcused absences, you will be disqualified from making an A in the course.

Technology Requirements

SPSS assignments will require the use of SPSS (software). SPSS is available at any computer lab on campus. It is also available for FREE to UT-Arlington students – compatible with Mac & PC. Instructions for acquiring a free version of SPSS will be provided on the Canvas homepage.

Grading Information

Grading

Note: The automatically generated grade in Canvas is often incorrect.

To calculate your grade:

- 1. Multiply your average exam grade by 0.3
- 2. Multiply your Canvas-Quiz percentage grade by 0.3
- 3. Multiply your average SPSS-Assignment percentage grade by 0.3
- 4. Multiply your attendance percentage grade by 0.1
- 5. Add those four products,. This sum represents your grade in the course.

Course Schedule:

https://docs.google.com/spreadsheets/d/15vWA1PIOBK_J3KO7CiB51mA27Pw0NmlsFZt82usV7yw/edit#gid=0

Note: the schedule will shift throughout the semester. Bookmark this link!

Institutional Information

UTA students are encouraged to review the below institutional policies and informational sections and reach out to the specific office with any questions. To view this institutional information, please visit the Information page (https://resources.uta.edu/provost/course-related-info/institutional-policies.php) which includes the following policies among others:

- Drop Policy
- Disability Accommodations
- Title IX Policy
- Academic Integrity
- Student Feedback Survey
- Final Exam Schedule

Additional Information

Face Covering Policy

While the use of face coverings on campus is no longer mandatory, all students and instructional staff are strongly encouraged to wear face coverings while they are on campus. This is particularly true inside buildings and within classrooms and labs where social distancing is not possible due to

limited space. If a student needs accommodations to ensure social distancing in the classroom due to being at high risk they are encouraged to work directly with the Student Access and Resource Center to assist in these accommodations. If students need masks, they may obtain them at the Central Library, the E.H. Hereford University Center's front desk or in their department.

Attendance

At The University of Texas at Arlington, taking attendance is not required but attendance is a critical indicator of student success. Each faculty member is free to develop his or her own methods of evaluating students' academic performance, which includes establishing course-specific policies on attendance. As the instructor of this section, I will not count attendance toward your final grade. However, while UT Arlington does not require instructors to take attendance in their courses, the U.S. Department of Education requires that the University have a mechanism in place to mark when Federal Student Aid recipients "begin attendance in a course." UT Arlington instructors will report when students begin attendance in a course as part of the final grading process. Specifically, when assigning a student a grade of F, faculty report must the last date a student attended their class based on evidence such as a test, participation in a class project or presentation, or an engagement online via Canvas. This date is reported to the Department of Education for federal financial aid recipients.

Emergency Exit Procedures

Should we experience an emergency event that requires evacuation of the building, students should exit the room and move toward the nearest exit, which is located [insert a description of the nearest exit/emergency exit]. When exiting the building during an emergency, do not take an elevator but use the stairwells instead. Faculty members and instructional staff will assist students in selecting the safest route for evacuation and will make arrangements to assist individuals with disabilities.

Academic Success Center

The Academic Success Center (ASC) includes a variety of resources and services to help you maximize your learning and succeed as a student at the University of Texas at Arlington. ASC services include supplemental instruction, peer-led team learning, tutoring, mentoring and TRIO SSS. Academic Success Center services are provided at no additional cost to UTA students. For additional information visit: Academic Success Center. To request disability accommodations for tutoring, please complete this form.

Emergency Phone Numbers

In case of an on-campus emergency, call the UT Arlington Police Department at **817-272-3003** (non-campus phone), **2-3003** (campus phone). You may also dial 911. Non-emergency number 817-272-3381