PSYC 3330-501 CRN 27910

PSY 3330-501 Psychological Statistics, offered online, Spring 2024

CRN 27910

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Phone: 936-468-1478
Office Hours: Monday/Wednesday 9:00-9:55
Tuesday/Thursday 12:00-2:00

Course description: Application of descriptive and inferential statistical techniques in processing behavioral data. The course includes normative techniques, parametric and nonparametric applications.

This course will introduce you to statistics and its application to psychological research. Objectives include an understanding of the relation between probability and statistical inference, how to calculate basic equations involved in statistics, how to choose the correct statistical procedure, and how to interpret results.

Course contact hours and study hours:

Please keep in mind that, under federal financial aid eligibility requirements, SFA policy 5.4 defines the credit hour as “(1) Not less than one hour of classroom or direct faculty instruction and a minimum of two hours out-of-class student work each week for approximately fifteen weeks for one semester hour of credit, or the equivalent amount of work over a different amount of time, or (2) at least an equivalent amount of work as outlined in item 1 above for other academic activities as established by the institution including laboratory work, internships, practicum, studio work, and other academic work leading to the award of credit hours.” Thus, a three-credit-hour face-to-face course in the fall term should approximate three hours of classroom time/direct instruction and at least six hours of out-of-class work per week. Online or hybrid courses should employ various strategies for creating student-professor contact and are held to the same standard for contact hours and out-of-class work as face-to-face classes.
You’ll need it as soon as possible. I have made the first two chapters available on D2L/Brightspace in black-and-white scans. Our book is available in an online version and through Amazon and other outlets. Given its age of four years, I imagine the price for used books has approached reasonableness.


You will need a handheld calculator that will compute square roots, etc. Advanced calculators are not necessary. You should be able to find one for **under $10**.

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<tr>
<th>Program Learning Outcomes or PLO</th>
<th>Proficiency Level</th>
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The student will demonstrate familiarity with major concepts, theoretical perspectives, empirical findings, and historical trends in psychology.  
Advanced

The student will understand and apply research methods in psychology, including research design, data analysis, and interpretation.  
Advanced

The student will respect and use critical and creative thinking, skeptical inquiry, and, when possible, the scientific approach to solve problems related to behavior and mental processes.  
Intermediate

The student will understand and apply psychological principles to personal, social, and organizational issues.  
Intermediate

The student will value empirical evidence, tolerate ambiguity, act ethically, and reflect other values that are the underpinnings of psychology as a science.  
Intermediate

<table>
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<tr>
<th>Student Learning Outcomes</th>
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<td>A learner will demonstrate the ability to use statistics to describe data, including frequency distributions, percentiles, and histograms/polylongs.</td>
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<td>A learner will demonstrate the ability to identify and calculate several measures of central tendency and variability.</td>
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<td>A learner will demonstrate the ability to use the hypothesis testing process.</td>
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<td>A learner will demonstrate an understanding of probability.</td>
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<td>A learner will demonstrate the ability to compute measures of correlation and test for statistical significance.</td>
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<td>A learner will demonstrate the ability to compute statistics, testing statistical significance of differences in means (t and z).</td>
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<tr>
<td>A learner will demonstrate the ability to compute statistics, testing statistical significance of differences in variances (F and t).</td>
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<td>A learner will demonstrate an understanding of single-factor (between- and within-participants) ANOVA and factorial ANOVA (between-participants).</td>
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<td>A learner will demonstrate facility with statistical calculators and software (SPSS).</td>
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**Point distribution**
Tests (68.0%): 5 @ 136 points apiece = 680
Homework, (12.6%): 14 @ 9 points apiece = 126
Quizzes (16.0%): 5 @ 32 points apiece = 160
Checklists (2.7%): = 27
Points given to reach 1,000 (0.7%) = 7
Total Points: 1,000

Grade distribution:
A 90-100%
B 80-89%
C 70-79%
D 60-69%
F below 60%

Schedule: I have made a daily schedule that includes information and due dates on all 42 of our “class days.”

That is not to say that students should read and watch relevant videos only on those days named in the schedule. However, for the sake of efficiency, I imitated the schedule of the in-person class offered Spring 2024 to add some coherence in suggesting a 42-class-period online “schedule.” Thus, all due dates for quizzes, tests, and homework assignments fall on a Monday, Wednesday, or Friday.

Use of videos: I have narrated and captioned over 100 videos that follow the chapters. They average about 5 minutes, 30 seconds. Your total viewing time over the course would be about nine hours, a reasonable proposition. (In about five of the videos, I reference the Spring 2020 COVID period, as some of the videos were created in March and April, 2020. Only those have dated references.)

I believe you will enjoy the videos, given their brevity and pertinence to the quizzes and tests. I enjoyed making them.

Tests: There will be five online tests. Each test is worth 136 points or 13.6% of the course grade. All tests are closed-note and closed-book. We will take tests online as though they were quizzes. In effect, tests are merely long quizzes. The format is mixed between multiple choice and written-answer. Students should be prepared to do calculations on scratch paper and then record answers directly onto D2L.

If a student has a conflict that he/she is aware of now or in advance of the test, the fastest and most effective way to reach me is at drurygs@sfasu.edu.
Quizzes: We will have five quizzes that precede tests by one “class period” as indicated on the schedule, or 2-3 calendar days, practically. The point of the quizzes is to prepare for tests. Because quizzes represent a first attempt of sorts, they “weigh” less grade-wise, only 16% total. Upon the quiz being finished, I immediately post the answers in order for students to prepare for the tests. I think you will find them reasonable and short enough to complete easily.

Homework: There will be 10 homework assignments that we will complete in support of the chapters. I pledge to make these meaningful and short. The point is to augment concepts that will appear on our tests. A reasonable effort on these assignments is likely to yield full credit or all of the 12.6% allotted.

Checklists: Checklists are merely an expression that the student has completed an activity. They are on the honor system. There are due dates established for each of the chapters. A reasonable effort on these checklists is likely to yield full credit or all of the 2.7% allotted. If you feel uneasy checking the checklist, please be sure to post a question to the discussion board.

Discussion Boards: Discussion Boards are a place for temperature-taking, though they are essentially optional since they do not count toward the grade. I will check them daily. I will respond to every post. Please take advantage of them. Once the semester begins in earnest, I think you will see the value of the Discussion Boards.

Optional “Zooms:” I will have optional Zooms so that students may ask questions. The optional times are Thursdays 2:00-3:00 and Fridays 11:00-12:00. Those periods are yours. These are made by-request. Please let me know and my time is yours.

Institution Absences (University of Texas HOP 04-110)
An Institutional Absence may be granted to a student who participates as a representative of the University in academic (including research), extra- or cocurricular, or athletic activities. Students will be excused for institutional purposes from otherwise required academic activity only when a valid Institutional Absence is approved by the appropriate administrative unit or official and the documentation of approval is provided to the faculty member at least five (5) days in advance.

**Disclaimer:** We have no keystone events. The following is listed because I am required to list it. Institutional absences will not be approved for keystone events, defined as: a special or unique assignment, test, project, experience, or other academic exercise identified by the faculty member as critical for successful completion of standards of the class and unable to be missed. These events must be identified on the syllabus at the beginning of the semester and communicated to the students. Events added to the syllabus at a later date will not qualify for Keystone Event status. Keystone Events where the date/time is changed will no longer be considered a Keystone Event. Students should make themselves aware of any Keystone Events identified in the syllabus to ensure there are no conflicts.

For keystone events where the assignment dates vary, it is incumbent upon the students to work with their faculty member to not select a conflicting date.

More information on Institutional Absences, including how to apply, can be found at [https://www.sfasu.edu/deanofstudents/student-resources/institutional-absences](https://www.sfasu.edu/deanofstudents/student-resources/institutional-absences).

**Withheld-grades policy:** Ordinarily, at the discretion of the instructor of record and with the approval of the academic chair/director, a grade of WH will be assigned only if the student cannot complete the coursework because of unavoidable circumstances. Students must complete the work within one calendar year from the end of the semester in which they receive a WH, or the grade automatically becomes an F. If students register for the same course in future terms the WH will automatically become an F and will be counted as a repeated course to compute the grade point average. For additional information, go to [https://www.sfasu.edu/policies/course-grades-5.5.pdf](https://www.sfasu.edu/policies/course-grades-5.5.pdf).

**Students with disabilities:** To obtain disability-related accommodations, alternate formats, and/or auxiliary aids, students with disabilities must contact the Office of Disability Services (ODS), Human Services Building, Room 235, at 468-3004 or 468-1004 (TDD) early in the semester. Once verified, ODS will notify the course instructor and outline the accommodation and/or auxiliary aids to be provided. Failure to request services in a timely manner may delay your accommodations. For additional information go to [https://www.sfasu.edu/disabilityservices/](https://www.sfasu.edu/disabilityservices/).
Student Wellness and Well-Being: SFA values students’ overall well-being, mental health and the role it plays in academic and overall student success. Students may experience stressors that can impact both their academic experience and their personal well-being. These may include academic pressure and challenges associated with relationships, emotional well-being, alcohol and other drugs, identities, finances, etc.

If you are experiencing concerns, seeking help, SFA provides a variety of resources to support students’ mental health and wellness. Many of these resources are free, and all of them are confidential.

On-campus Resources:

The Dean of Students Office (Rusk Building, 3rd floor lobby)
www.sfasu.edu/deanofstudents
936.468.7249
dos@sfasu.edu

SFA Human Services Counseling Clinic Human Services, Room 202
www.sfasu.edu/humanservices/139.asp
936.468.1041

The Health and Wellness Hub “The Hub”
Location: corner of E. College and Raguet St.

To support the health and well-being of every Lumberjack, the Health and Wellness Hub offers comprehensive services that treat the whole person – mind, body and spirit. Services include:

- Health Services
- Counseling Services
- Student Outreach and Support
- Food Pantry
- Wellness Coaching
- Alcohol and Other Drug Education
www.sfasu.edu/tehub
936.468.4008
tehub@sfasu.edu

Crisis Resources:
- Burke 24-hour crisis line: 1.800.392.8343
- National Suicide Crisis Prevention: 9-8-8
- Suicide Prevention Lifeline: 1.800.273.TALK (8255)
- joh Crisis Text Line: Text HELLO to 741-741
Chapter 1: Introduction to Statistics
Chapter 2: Frequency Distributions
Chapter 3: Central Tendency
Chapter 4: Variability
Chapter 5: Z-scores, Location of Scores, and Standardized Distributions
Chapter 6: Probability
Chapter 7: Probability and Samples: The Distribution of Sample Means
Chapter 8: Introduction to Hypothesis Testing
Chapter 9: Introduction to the $t$ Statistic
Chapter 10: The $t$ Test for Two Independent Samples.
Chapter 13: Introduction to Analysis of Variance