PSY 317: Statistical Methods in Psychology

Texas Common Number: PSYC 2317

Psychology 317 is designed to give students a foundation in the practical application of statistics. Upon course completion, students will be competent to perform many statistical analyses of data and will know when to perform these analyses.

**Prerequisites**

Psychology 301 with a grade of at least C.

**Course Organization**

This course is divided into four learning modules containing a total of sixteen lessons, with most corresponding to one chapter of the textbook. Each lesson contains a lesson overview written by the instructor and a set of learning objectives; a list of learning resources; a written commentary that serves as a sort of lecture for the lesson, focusing on the major topics from the lesson; practice exercises; and assignments to be completed and submitted for grading. All lessons within a learning module must be completed before moving onto the next module. An instructor is available via a message center to answer questions and provide feedback.

Topics include:

**Module 1**

Lesson One: Introduction to Statistics
Lesson Two: Frequency Distributions
Lesson Three: Central Tendency

**Module 2**

Lesson Four: Variability
Lesson Five: z-Scores
Lesson Six: Probability

**Module 3**

Lesson Seven: Probability and Samples
Lesson Eight: Introduction to Hypothesis Testing
Lesson Nine: Introduction to the $t$ Statistic

**Module 4**

Lesson Ten: The $t$ test for Two Independent Samples
Lesson Eleven: The $t$ test of Two Related Samples
Lesson Twelve: Introduction to Analysis of Variance

**Module 5**

Lesson Thirteen: Repeated-Measures and Two-Factor Analysis of Variance
Lesson Fourteen: Correlation and Regression
Lesson Fifteen: The Chi-Square Statistic
Lesson Sixteen: Selection of Tests
Required Materials

The readings for this course are taken from the following texts:


Grading

This course contains fifteen (15) graded assignments, a midterm exam, and a comprehensive final exam. Each assignment contains both computer-graded and instructor-graded components. Both exams must be taken in a proctored location, with arrangements to be made by the student.

Graded Assignments 30%
Midterm Exam 30%
Final Exam 40%

In addition to completing all assignments and earning the minimum number of points to receive a passing grade, students must earn a score of at least 60% on the final exam in order to receive a passing grade in the course.

This course is independent study and is self-paced. Students have five (5) months upon registration in which to complete all coursework, with an additional thirty (30) days allotted for completion of the final exam.

University Extension

For more information about University Extension courses and policies, please visit [www.utextension.org](http://www.utextension.org). Questions may be directed to our office at (512) 471-2900 or uex@austin.utexas.edu. Office hours are M – F, 8 a.m. – 5 p.m. CST.