



**PSY 317: Statistical Methods in Psychology**

*Texas Common Number: PSYC 2317*

**Course Format:** Online, Self-Paced

**Course Authors:** Clarke Burnham, Ph.D. and Patrick Carroll, Ph.D.

**Instructor:** Ryan Will, Ph.D. Contact using the Inbox tool in Canvas.

**Course Credits:** 3

**Prerequisites:** PSY 301 with a grade of at least C.

**How This Course Works**

This course is online and is self-paced. Students have five months from their date of enrollment to complete the course. All coursework and proctored exams are submitted or taken online.

While this course is self-paced in terms of when you complete the work and submit assignments, periodic assessments are critical to ensuring that students receive adequate support and are able to achieve the intended learning outcomes. Thus, this course is organized into modules that must be completed in order. Students will only be able to move forward once they have received a grade on all assessments within a given module.

Review the course outline and assignment descriptions carefully. Computer-graded assignments are scored immediately. You can expect to receive feedback on instructor-graded assignments or exams within three business days following submission. This does not include weekends or holidays. Requests for expedited grading are not accommodated, so please plan accordingly. During certain times (end of semester, spring break, etc.), instructors may experience higher-than-usual demands on their time and may need additional time for evaluation. Students should reach out to University Extension at [uex@austin.utexas.edu](mailto:uex@austin.utexas.edu) with any concerns regarding grading turnaround.

University Extension strongly advises students to be aware of when they may need a course grade to be recorded on their transcript. It can take up to two weeks after the final exam is complete for a grade to be officially recorded with the Office of the Registrar.

**Course Overview**

Psychology 317 is designed to give students a foundation in the practical application of statistics. It is an introductory statistics course in the behavioral sciences. The focus of the course will be on understanding statistics and statistical operations and procedures. Upon course completion, students will be competent to perform many statistical analyses of data and will know when to perform these analyses.

## **Required Materials**

Required Text: Gravetter, Frederick J., and Larry B. Wallnau. *Essentials of Statistics for the Behavioral Sciences, 6th Edition*. Thomson Wadsworth. 2008. ISBN-10: 0-495-38394-5 or 13: 978-0495-38394-9

Study Guide: Gravetter, Frederick J., and Larry B. Wallnau. *Study Guide, Essentials of Statistics for the Behavioral Sciences, 6th Edition*. Thomson Wadsworth. 2008. ISBN-10: 0-495-38529-8 or 13: 978-0-495-38529-5

Calculator: For homework problems, you can choose to use a calculator or an application like EXCEL.

## **Course Organization**

There are five modules containing 16 lessons, a midterm exam, and a final exam in this course. In general each lesson contains these sections: a lesson overview, a set of learning objectives, learning resources, instructor's commentary, recommended practice exercises, a computer-graded assignment, and an instructor-graded assignment. The commentary for each lesson serves as a sort of lecture for the lesson. There will be an instructor-graded assignment and a computer-graded assignment for each lesson except the last one. Students must receive a grade on all assignments in a module before the next module will open.

### ***Computer-Graded Assignments***

The computer-graded assignments in this course consist of multiple-choice questions and true/false questions.

### ***Instructor-Graded Assignments***

Instructor-graded assignments contain problems requiring calculations and/or written explanations. You must show your calculations to receive credit. For conceptual questions, the answer must demonstrate a clear and complete response to the problem to receive full credit.

### ***Exams***

This course requires that you take two proctored exams. The midterm exam covers the first nine lessons and the final exam is comprehensive (covering all the lessons).

**You must pass the final exam to pass the course.**

## Course Outline

Module	Topics	Assessments
1	Lesson 1: Introduction to Statistics	<ul style="list-style-type: none"> <li>▪ Computer-Graded Assignment 1</li> <li>▪ Instructor-Graded Assignment 2</li> </ul>
	Lesson 2: Frequency Distributions	<ul style="list-style-type: none"> <li>▪ Computer-Graded Assignment 3</li> <li>▪ Instructor-Graded Assignment 4</li> </ul>
	Lesson 3: Central Tendency	<ul style="list-style-type: none"> <li>▪ Computer-Graded Assignment 5</li> <li>▪ Instructor-Graded Assignment 6</li> </ul>
2	Lesson 4: Variability	<ul style="list-style-type: none"> <li>▪ Computer-Graded Assignment 7</li> <li>▪ Instructor-Graded Assignment 8</li> </ul>
	Lesson 5: z -Scores	<ul style="list-style-type: none"> <li>▪ Computer-Graded Assignment 9</li> <li>▪ Instructor-Graded Assignment 10</li> </ul>
	Lesson 6: Probability	<ul style="list-style-type: none"> <li>▪ Computer-Graded Assignment 11</li> <li>▪ Instructor-Graded Assignment 12</li> </ul>
3	Lesson 7: Probability and Samples	<ul style="list-style-type: none"> <li>▪ Computer-Graded Assignment 13</li> <li>▪ Instructor-Graded Assignment 14</li> </ul>
	Lesson 8: Introduction to Hypothesis Testing	<ul style="list-style-type: none"> <li>▪ Computer-Graded Assignment 15</li> <li>▪ Instructor-Graded Assignment 16</li> </ul>
	Lesson 9: Introduction to the t Statistic	<ul style="list-style-type: none"> <li>▪ Computer-Graded Assignment 17</li> <li>▪ Instructor-Graded Assignment 18</li> </ul>
MIDTERM EXAM		
4	Lesson 10: The t test for Two Independent Samples	<ul style="list-style-type: none"> <li>▪ Computer-Graded Assignment 19</li> <li>▪ Instructor-Graded Assignment 20</li> </ul>
	Lesson 11: The t test for Two Related Samples	<ul style="list-style-type: none"> <li>▪ Computer-Graded Assignment 21</li> <li>▪ Instructor-Graded Assignment 22</li> </ul>
	Lesson 12: Introduction to Analysis of Variance	<ul style="list-style-type: none"> <li>▪ Computer-Graded Assignment 23</li> <li>▪ Instructor-Graded Assignment 24</li> </ul>
5	Lesson 13: Repeated-Measures and Two-Factor Analysis of Variance	<ul style="list-style-type: none"> <li>▪ Computer-Graded Assignment 25</li> <li>▪ Instructor-Graded Assignment 26</li> </ul>
	Lesson 14: Correlation and Regression	<ul style="list-style-type: none"> <li>▪ Computer-Graded Assignment 27</li> <li>▪ Instructor-Graded Assignment 28</li> </ul>
	Lesson 15: The Chi-Square Statistic	<ul style="list-style-type: none"> <li>▪ Computer-Graded Assignment 29</li> <li>▪ Instructor-Graded Assignment 30</li> </ul>
	Lesson 16: Selection of Tests	
FINAL EXAM		

## Grade Calculation

Your final grade for the course will be calculated as follows:

15 Instructor-Graded Assignments	960 points
15 Computer-Graded Assignments	540 points
Midterm Exam	1500 points
Final Exam	2000 points
Total	5000 points

**You must pass the final exam to pass the course.** You must also earn an overall passing grade:

A	5000-4623	B+	4472-4323	C+	3972-3823	D+	3472-3323	F	2972-0
A-	4622-4473	B	4322-4123	C	3822-3623	D	3322-3123		
		B-	4122-3973	C-	3622-3473	D-	3122-2973		

## Getting Help

- Technical Support: [uextechsupport@austin.utexas.edu](mailto:uextechsupport@austin.utexas.edu)
- For content questions or questions about assignment and grades, use the Inbox tool within Canvas to contact the course instructor.
- For other questions (registration, transcripts, etc.), contact University Extension.

## University Extension Policies

Full University Extension policies for self-paced courses may be found on the University Extension website.

## Scholastic Dishonesty

Students in this course are expected to work independently, without direct supervision, and to conduct themselves responsibly in accordance with that freedom. To obtain the greatest benefit from their course work, and for the sake of everyone enrolled in our courses, students must demonstrate the willingness to exercise self-discipline, personal responsibility, and scholastic integrity.

We expect the course work and exams that you submit for course credit to be yours and yours alone. Plagiarism and other forms of scholastic dishonesty are serious academic violations that will not be tolerated. The penalties for scholastic dishonesty include the possibility of failure in the course. Scholastic dishonesty in examinations will automatically result in a grade of *F* on the exam and an *F* in the course.

## University Extension Contact Information

[uex@austin.utexas.edu](mailto:uex@austin.utexas.edu)

512-471-2900