

Course Number/Name: Psy 3000-001 / Statistical Methods in Psychology

Instructor and email address: Oakley Gordon, Ph.D / Oakley.Gordon@utah.edu

Core Course Information

GOALS AND OBJECTIVES:

Course Description: Applying statistical methods to psychological research, including basic descriptive statistics, hypothesis testing, and correlation. Students sign up for a specific lab section and all students are then added to the lecture section.

Prerequisites: PSY 1010 and MATH 1030 or higher.

Course Goals:

- To teach the basic concepts and formulas of statistical methods used in psychology. By the end of the semester the student should be able to perform the basic statistical procedures expected of undergraduate psychology students.
- To develop a sufficient understanding of statistics for the student to become an informed reader of statistical analyses. Statistics plays an important role in modern life and is a fundamental tool of inquiry in the field of psychology. Even if the student does not have to perform statistical procedures after this course he or she will benefit from having the ability to evaluate the statistical work of others.

Learning Outcomes:

- This course helps students meet the Scientific Enquiry and Critical Thinking learning outcomes for psychology undergraduates. For more information please visit <http://www.psych.utah.edu/undergraduate/>
- In addition, this course helps students meet the Intellectual and Practical Skills learning outcomes for the bachelor's degree at the University of Utah. For more information please visit <http://ugs.utah.edu/gen-ed-reqs/outcomes>.
- The lectures, readings, lab assignments, homework assignments, quizzes, and exams all help to address these learning outcomes, and in particular they further students understanding of quantitative methods specific to the discipline of Psychology. A passing grade in the course provides evidence that the students have met these learning outcomes.

EXPECTATIONS FOR STUDENTS IN COURSE:

Your grade in the class will be based upon your performance on the following:

20% Online Homework Assignments

15% Online Quizzes

55% Exams

10% Lab Grade

Attendance in the lectures is not required. While attendance is not taken in the lab meetings students will be hard pressed to complete the lab assignments without attending the labs. Deadlines are strictly enforced. Incompletes follow the guidelines provided by the university. There is no extra credit available in the class. For more details on these policies please see the course syllabus.

REQUIRED/RECOMMENDED COURSE MATERIALS:

Textbook (required): A Thoughtful Introduction to Statistics (5th Custom Edition), Oakley E. Gordon, Pearson Publishing. As far as I know this book is only available for purchase through the University of Utah bookstore.

Workbook (required): A Thoughtful Introduction to Statistics Workbook (5th Custom Edition), Oakley E. Gordon, Pearson Publishing. This book is also available only through the University of Utah bookstore.

It will be difficult to proceed through the class with older editions of these books. Please note that I do not benefit financially from the sales of these books in the courses I teach.



















Calculator: you will need a calculator for the class, but it does not need to be anything fancy, as long as it computes square roots.

Software: in addition to using Canvas the course also involves the use of custom statistical software. If your browser can handle Canvas it should also be able to handle the custom software. To test your browser's ability to handle the custom software click go to <http://content.csbs.utah.edu/~gordon/OakToolsJS/> and see if a window appears with various probability tools. If not you may need to update the newest version of your browser, change browsers, or move to another computer. This software is essential to the course.





















EXAMS/MAJOR ASSIGNMENT PRELIMINARY SCHEDULE:

There is an online homework assignment for each chapter of the book. There are eight online quizzes during the semester. There are four major exams taken during class (lecture) time.

List begins on next page:

Date	Details	
Wed Aug 30, 2017	 Scientific Approach to Knowledge	due by 11:59pm
Fri Sep 1, 2017	 Measurement	due by 11:59pm
Wed Sep 6, 2017	 Samples and Populations	due by 11:59pm
Fri Sep 8, 2017	 Quiz 1	due by 11:59pm
Mon Sep 11, 2017	 Graphing	due by 11:59pm
Wed Sep 13, 2017	 Central Tendency	due by 11:59pm
Fri Sep 15, 2017	 Variability	due by 11:59pm
Wed Sep 20, 2017	 Stats & Params	due by 11:59pm
Fri Sep 22, 2017	 Quiz 2	due by 11:59pm
Tue Sep 26, 2017	 Exam 1	due by 11:59pm
Wed Sep 27, 2017	 Gate SS	due by 11:59pm
Fri Sep 29, 2017	 Standard Scores	due by 11:59pm
Mon Oct 2, 2017	 Sampling Distribution of the Mean	due by 11:59pm
Wed Oct 4, 2017	 Probability	due by 11:59pm
Fri Oct 6, 2017	 Quiz 3	due by 11:59pm
Mon Oct 16, 2017	 Null Hypothesis Testing	due by 11:59pm
Wed Oct 18, 2017	 t Independent Groups	due by 11:59pm
Fri Oct 20, 2017	 Confounding Variables et al	due by 11:59pm

List continues on next page:

Wed Oct 25, 2017	 One Tail Tests & p Values	due by 11:59pm
Fri Oct 27, 2017	 Power	due by 11:59pm
Mon Oct 30, 2017	 Quiz 4	due by 11:59pm
Tue Oct 31, 2017	 Exam 2	due by 11:59pm
Wed Nov 1, 2017	 Gate H0 1	due by 11:59pm
Fri Nov 3, 2017	 t Dependent Groups	due by 11:59pm
Wed Nov 8, 2017	 ANOVA	due by 11:59pm
Fri Nov 10, 2017	 Quiz 5	due by 11:59pm
Mon Nov 13, 2017	 Comparisons	due by 11:59pm
Wed Nov 15, 2017	 Other Anovas	due by 11:59pm
Fri Nov 17, 2017	 Quiz 6	due by 11:59pm
Tue Nov 21, 2017	 Exam 3	due by 11:59pm
Wed Nov 22, 2017	 Correlation	due by 11:59pm
Mon Nov 27, 2017	 Gate H0 2	due by 11:59pm
	 Regression	due by 11:59pm
Wed Nov 29, 2017	 Quiz 7	due by 11:59pm
Fri Dec 1, 2017	 Chi Square Goodness of Fit	due by 11:59pm
Wed Dec 6, 2017	 Chi Square Test for Association	due by 11:59pm
Fri Dec 8, 2017	 Quiz 8	due by 11:59pm
Wed Dec 13, 2017	 Exam 4	due by 11:59pm

In addition there are nine lab assignments due from the nine lab section meetings during the semester.

For a full description of the course please refer to the course syllabus, this is simply a summary of some of the major elements of the syllabus. The dates given above and the elements of the syllabus may be changed during the semester with sufficient cause and with notice to the students.