

PSY 612.01W: Psychological Statistics (Spring 2016)
COURSE SYLLABUS (subject to change until first class day)

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Office Hours: Due to the online nature of this course, it would be best to email me questions.

Textbook: *Discovering Statistics Using SPSS*, 4th edition, by Andy Field

Required software: IBM SPSS Statistics (preferably version 21 or newer)

CATALOG DESCRIPTION OF THE COURSE:

This course, a Graduate School approved level II research tools course, is an introductory level course that concentrates on statistical methods applicable to educational and psychological research procedures and interpretations.

Note: Students will be required to use computational software to assist in the analysis and interpretation of data.

One of our course objectives follows NASP Model 10 Domains of Practice:

2.9: Research and Program Evaluation. You will gain knowledge of research design, statistics, measurement, varied data collection and analysis techniques, and program evaluation sufficient for understanding research and interpreting data in applied settings.

GENERAL INFORMATION:

This is an online course, which is not to be interpreted as self-paced. Rather, you are required to log on regularly in order to succeed. You may consume the material at a more rapid pace than set by the below schedule, but assignments and exams will still take place according to the schedule. The time and effort required for this course is equivalent for any graduate level statistics course that you might take face-to-face. A high level of both your time and effort will be necessary to succeed.

REQUIRED MATERIALS:

- 1) The textbook mentioned above.
- 2) A calculator or knowledge of using formulas in Excel.
- 3) Access to IBM SPSS Statistics, preferably version 21 or newer, but as old as v18 is acceptable. Your textbook relies on version 21, but there is not a big difference across recent versions. A recent version should be available in Henderson 214 (Psychology department computer lab) as well as on library computers (and many academic libraries and computer labs have some version of SPSS). Do keep in mind that many versions of SPSS are not backwards-compatible, so you must be very careful when saving/exporting your work. For data files, just save as the default file type, which should be accessible in any version of SPSS. However, for output files, the story is different. You must always export these files (e.g., to pdf) rather than simply saving them.

ASSIGNMENTS (20%):

There will be several assignments, worth a range of points depending on difficulty, adding up to 20% of your grade. You may work with others in the class on these assignments, but quizzes and exams are to be taken individually.

QUIZZES (20%):

There will be a few quizzes, worth a range of points depending on the number of items, adding up to 20% of your grade. These are meant to be taken closed-book, therefore time to take them is

limited (i.e., you must study well for each, and will not have time to look answers up in the book and are not allowed to do so anyway). You must contact me **prior** to the scheduled quiz to re-schedule if you absolutely cannot take the quiz that particular week.

EXAMS (60%):

There are four exams (60% of your overall grade), the value of each breaks down as follows: Exam 1 (10%), Exam 2 (14%), Exam 3 (16%), Exam 4 (20%). **Due to the nature of the material, these will be cumulative: On each exam, there will be questions relating to material covered on the previous exam(s).** The questions will require not only recognition of concepts and correct answers, but will be designed to test comprehension and application of concepts as well. Material for the exams will be drawn from the textbook and the online lectures. Each exam will be open to take via eCollege during a particular week. There will be no make-up exams except as mandated by University policy for University-excused absences, religious holidays and major illnesses. You must contact me **prior** to the scheduled exam to re-schedule if you absolutely cannot take the exam that particular week. Each exam is to be taken closed-book, therefore time to take each is limited.

Students with Disabilities:

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services
Texas A&M University-Commerce
Gee Library
Room 132
Phone (903) 886-5150 or (903) 886-5835
Fax (903) 468-8148
StudentDisabilityServices@tamuc.edu

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. (See Student's Guide Handbook, Policies and Procedures, Conduct).

There are 100 points available. You need 90 points or better for an 'A', 80 points or better for a 'B', 70 points or better for a 'C', and 60 points or better for a 'D'. A total below 60 points will result in an 'F'.

A&M-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

Though we will try to abide by the following schedule, it is possible that it may change.

<u>Dates</u>	<u>Topic</u>
Jan 19-22	Introductions, Syllabus, Introduction to Descriptive Statistics; Ch. 1
Jan 23-29	More Descriptive and Some Inferential Stats; Ch.2; <i>Quiz 1</i>
Jan 30 - Feb 5	Learning SPSS; The Normal Distribution; Ch. 3; Assignments 1 & 2 ; <i>Quiz 2</i>
Feb 6-12	Exploring Assumptions; Hypothesis Testing; Ch. 5; Assignment 3
Feb 12	EXAM 1
Feb 13-19	Correlation; Ch. 7; Assignment 4
Feb 20-26	Regression; Ch. 8
Feb 27 – Mar 4	Probability; Assignment 5
Mar 4	EXAM 2 (cumulative)
Mar 5-11	Comparing Two Means: <i>t</i> -test; Ch. 9; <i>Quiz 3</i>
Mar 12-20	SPRING BREAK
Mar 21 – Apr 1	Comparing Several Means: ANOVA; Ch. 11; Assignment 6
Apr 2-15	Factorial ANOVA; Ch. 13
Apr 16-22	Repeated-Measures ANOVA; Ch. 14
April 22	EXAM 3 (cumulative)
Apr 23-29	Categorical Data; Ch. 18
Apr 30 – May 6	Non-Parametric Tests; Ch. 6
May 6	EXAM 4 (cumulative)