

## Psychology 270

### Statistical Methods in Psychology

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**Text:** Moore, Davis, S. The Basic Practice of Statistics, (latest edition).

**Course Description:** This course is designed to help students understand why, as well as, how statistical procedures are performed. Statistical methods will be presented in a research context and applied to the field of psychology. Subject matter will include statistical terms, the research process, graphing methods, measures of central tendency and variability, normal curve and its applications, correlation and regression, and tests of significance.

**Examinations and grading:** There will be five or six exams given throughout the semester. They are usually spaced two to three weeks apart depending on the pace of the class. Tests will be announced one or two class periods before they occur. Each test is worth 100 points. Tests may include definitions, true/false, multiple choice, short answers and problems. Test scores are individual. There is no curve or scale. Wrong answers may be redone with appropriate explanations of concepts after tests are graded and handed back. No make-up examinations will be given unless arrangements are made in *advance*. Exams missed without scheduling a make-up time in advance will result in a score of zero.

Your grade will be the average of all tests taken during the semester based on the following scale. Pluses and minuses will be given:

A	100% - 90%
B	89% - 80%
C	79% - 70%
D	69% - 65%
F	64% or less

Remember, grades are individual and absolute. There is no curve. However, there are a few ways to improve your grade. The first is attending class. Although not required, attendance is taken at each class meeting. It can help your grade at the end of the semester. Second are worksheets. They will be checked periodically. Worksheets are recorded - not necessarily for correctness, but for completion. Doing the worksheets greatly improves comprehension. If you do not understand a question, try it; bring it to class; and discuss it with your classmates or Professor Konoske. Third is discussion and class participation. You are encouraged to ask questions. Class format includes time to work with classmates to solve problems. You will help each other and learn from each other.

**Format:** Class sessions include lecture and workshops. Relevant topics are explained and then applied. Worksheets and problems are often done in class, with ample opportunity provided to interact with other students and the teacher.

### Class Schedule

<b>Week</b>	<b>Date</b>	<b>Topic</b>	<b>Chapter</b>
1		<b>Graphing Distributions</b>	1 & 2
2		<b>Describing Distributions with Numbers</b>	
3		<b>The Normal Distribution</b>	2 & 3
4		<b>Correlation and Regression</b>	4 & 5
5		<b>Least-squares regression</b>	
6		<b>Producing Data Designing Samples Designing Experiments</b>	8 & 9
7		<b>Sampling Distributions</b>	
8-9		<b>Introduction to Inference Estimating with Confidence Tests of Significance Using Significance Test Inference as Decision</b>	11, 16
10-11		<b>Inference for distributions Inference for the mean of a population</b>	14, 15
12		<b>Comparing Two Means</b>	
13		<b>Inference for Two-Way Tables</b>	23
14-15		<b>One-Way Analysis of Variance Inference for Simple Regressions</b>	24 & 25
16		<b>Final</b>	