

Math 308: Applied Statistics  
Fall, 2002  
MWF 10:00-10:50 Jones 302

**Instructor:** Larry Leemis  
**Office:** Jones 101C (Phone: 221-2034)  
**Office hours:** MWF 11:00-12:00, or by appointment

**Purpose:**

A student completing this course should understand basic probability and statistical concepts and how to apply them to real-world situations.

**Prerequisites:**

Univariate calculus, Math 111 and Math 112.

**Text:**

Trosset, Michael (2002), *An Introduction to Statistical Inference and its Applications*.

**Grades:**

Course grades will be determined by these weights:

Homework	20%	(staple, box answers, no spiral, open hands policy)
Exam I	25%	(part in-class, part take-home)
Exam II	25%	(part in-class, part take-home)
Final exam	30%	(in-class)

The grading scale for the course will be:

90 - 100%	A
80 - 90%	B
70 - 80%	C
60 - 70%	D

Pluses and minuses may be added to those grades at the top and bottom of the scale.

**Homework:**

A homework set will be distributed at the end of every Wednesday class period. This homework set is due at the beginning of the next Wednesday class period. This schedule may be altered based on the progress that is made through the class notes.

**Course outline:**

1. Experiments
2. Mathematical Preliminaries
3. Probability
4. Discrete Random Variables
5. Continuous Random Variables
6. Quantifying Population Attributes
7. Sums and Averages of Random Variables
8. Data
9. Inference
10. 1-Sample Location Problems
11. 2-Sample Location Problems
12. k-Sample Location Problems
13. Association
14. Simple Linear Regression