

**YOUNGSTOWN STATE UNIVERSITY**  
**Department of Mathematics and Statistics**  
**Course outline for Statistics 3717**

**Course Title:** *Statistical Methods: The purpose of this course is for students to learn some fundamental principles of statistics and basic elements of statistical thinking. It includes data exploration and summarization, basic concepts in statistical inference and design of experiment. The main goal is for students to be able to understand and critically evaluate statistical results and conclusions. This knowledge can be applied when readings reports, books or journals both in other courses and in their non-academic lives.*

**Course Credit:** 4 s.h.

**Text:** Statistics, 10th Edition, by McClave and Sincich

**Course Prerequisites:** Math 1549, Math 1570, or Math 1571

**Course Assignments:**

Chapter	Sections	Contents
1	1.1 - 1.6	Statistics, Data and Statistical Thinking
2	2.1 - 2.9	Methods for Describing Sets of Data
3	3.1 - 3.8	Probability
4	4.1 - 4.5	Discrete Distributions
5	5.1 - 5.3	Continuous Distributions
6	6.1 - 6.3	Sampling Distributions
7	7.1 - 7.5	Inference for Single Sample: Confidence Interval
8	8.1 - 8.5	Inference for Single Sample: Tests of Hypotheses
9	9.1 - 9.5	Inference for Two Samples
10	10.1 - 10.5	Analysis of Variance
11	11.1 - 11.9	Simple Linear Regression
12	12.1 - 12.2	Multiple Regression
13	13.1 - 13.3	The Chi-Square Test
14	14.1 - 14.6	Nonparametric Statistics

Optional Sections: 3.9, 4.6, 5.5, 5.6

**Students with Disabilities:** In accordance with University procedure, if you have a documented disability and require accommodations to obtain equal access in this course, please contact the Office of Equal Opportunity and Disability Services at the beginning of the semester or when given an assignment for which an accommodation is required. Students with disabilities must verify their eligibility through the Office of Disability Service (330-941-3370) intake procedure.

The course will use SPSS or statistical software determined by the instructor.

Theft or misuse of information technology (including the downloading of pornography or visiting pornographic web sites) is a violation of "The Code of Student Rights, Responsibilities, and Conduct." Violating "The Code" will result in disciplinary action, which may include suspension or expulsion from the University.

**Semester:** Spring 2007

**Last Day to Withdraw with a "W":** Thursday, March 29, 2007