

# Youngstown State University

Department of Mathematics and Statistics

Course Outline for Statistics 2601

**Course Title:** Introductory Statistics

**Text:** Bluman, A. (2010). *Elementary Statistics: A Brief Version*. 6th Edition. New York: McGraw-Hill

**Course Credit:** 3 s.h.

**Course Prerequisite:** MATH 1507 or Level 40 on Math Placement Test.

**Course Description:** A course designed for students from different disciplines who desire an introduction to statistical reasoning. Topics include collecting and summarizing data, concepts of randomness and sampling, statistical inference and reasoning, correlation and regression.

**Course Objectives:** The purpose of this course is for students to learn some basic statistical concepts and methodology. The goals for students in the course include:

1. developing an understanding of the fundamental concepts in statistics and their applications
2. developing data analysis, report writing and critical thinking skills
3. developing the ability use the modern computer technology in basic model building, data analysis and decision making

## Course Assignments:

Chapter	Sections	Contents
1	1.1 - 1.5	The Nature of Probability and Statistics
2	2.1 - 2.4	Frequency Distributions and Graphs
3	3.1 - 3.4	Data Description
4	4.1 - 4.5	Probability and Counting Rules
5	5.1 - 5.3	Discrete Probability Distributions
6	6.1 - 6.3	The Normal Distribution
7	7.1 - 7.3	Confidence Intervals and Sample Size
8	8.1 - 8.4	Hypothesis Testing
9	9.1 - 9.4	Testing the Difference between Two Means (optional)

10	10.1 - 10.2	Correlation and Regression
11	11.1 - 11.2	Chi-Square Tests

Optional Sections: 6.4, 7.4, 8.5, 8.6, 9.5, 10.3, 11.3

The course will include the use of statistical software (to be determined by the instructor). Lab assignments that require the use of statistical software and at least one statistics project will be required as part of the course grade.

**Note:** 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.

**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 at 275 Fifth Avenue (330-941-3370) intake procedure.

**Class Cancellation Notice:** If this class is being cancelled for any one day because of instructor illness, or other reasons, a message will be sent to the student address <...@student.yzu.edu> as soon as possible.

**Last Day to Withdraw with a “W”:** Saturday, October 25, 2014

**Semester:** Fall 2014