

**J. Sargeant Reynolds Community College  
Course Content Summary**

**Course Prefix and Number:** MTH 146

**Credits:** 3

**Course Title:** Introduction to Elementary Statistics

**Course Description (including lecture hours, lab hours, total contacts)**

Introduces the methods of statistics including sampling from normally distributed populations, estimation, regression, testing of hypotheses, point and interval estimation methods. Lecture 3 hours per week.

**General Course Purpose**

The purpose of this course is to serve as a basic introduction to elementary statistics for those students required to complete MTH 146. It also serves as an endorsement course for teachers in school systems. MTH 146 was designed for those seeking the Algebra I Add-on Teaching Endorsement. Each prospective teacher's transcripts will be reviewed by the State Department of Education for completion of certification requirements. Students are urged to obtain written approval from the State Department of Education prior to taking MTH 146.

**Course Prerequisites/Corequisites** (*Entry-level competencies **required** for enrollment*)

Prerequisites: a placement recommendation for MTH 146 and Algebra I or equivalent.

**Course Objectives** (Each item should complete the following sentence.)

Upon completing the course, the student will be able to:

- a. Display Distributions using Graphs
- b. Describe Distributions with Numbers
- c. Compute Probabilities and Compound Probabilities
- d. Understand the Normal Distribution
- e. Interpret Linear Correlation and Regression Lines
- f. Understand Sample and Experimental Design
- g. Find the Interpret Point and Interval Estimations
- h. Perform Hypothesis Tests Concerning Means and Proportions

**Major Topics to be Included**

- a. Statistical Methods
- b. Elementary Methods
- c. Sampling from Normally Distributed Populations
- d. Estimation
- e. Regression
- f. Hypothesis Testing
- g. Point and Interval Estimation Methods

**Effective Date of Course Content Summary (Month, Date Year):** Fall 2008