



# Alabama Community College System

## MTH 265 Elementary Statistics

### I. MTH 265 Elementary Statistics– 3 Semester Hours

### II. Course Description

This course provides an introduction to methods of statistics and includes the following topics: sampling, frequency distributions, measures of central tendency and variation, probability, discrete and continuous distributions, graphic representation, hypothesis testing, confidence intervals, regression, and applications.

### III. Prerequisite

Grade of C or higher in MTH 100 or appropriate placement score

### IV. Textbook

Due to the varied selection of quality college level textbooks, each college will select the textbook needed to meet the requirements of this course.

### V. Course Objectives

By the end of the course, students will be able to:

1. collect and organize data,
2. analyze data using descriptive statistics,
3. estimate population parameters, and
4. perform hypothesis tests.

### VI. Course Outline of Topics

1. Types of Data
2. Collecting Data Samples
3. Frequency Distributions for Organizing and Summarizing Data
4. Measures of Central Tendency
5. Measures of Variation
6. Normal Distribution
7. Graphical Descriptions of Data

8. Correlation and Regression
9. Probability
10. Measures of Relative Standing
11. Discrete Probability Distributions
12. Continuous Probability Distributions
13. Sampling Distributions and Estimators
14. Central Limit Theorem
15. Confidence Intervals
16. Hypothesis Testing

## **VII. Evaluation and Assessment**

Grades will be given based upon A = 90 – 100%, B = 80 – 89%, C = 70 – 79%, D = 60 – 69%, and F = below 60%.

## **VIII. Attendance**

Students are expected to attend all classes for which they are registered. Students who are unable to attend class regularly, regardless of the reason or circumstance, should withdraw from that class before poor attendance interferes with the student's ability to achieve the objectives required in the course. Withdrawal from class can affect eligibility for federal financial aid.

## **IX. Statement on Discrimination/Harassment**

It is the official policy of the Alabama Community College System and entities under its control, including all Colleges, that no person shall be discriminated against on the basis of any impermissible criterion or characteristic, including, without limitation, race, color, national origin, religion, marital status, disability, sex, age, or any other protected class as defined by federal and state law. (ACCS Policies 601.02 and 800.00)

## **X. Americans with Disabilities**

*The Rehabilitation Act of 1973 (Section 504)* and the *Americans with Disabilities Act of 1990* state that qualified students with disabilities who meet the essential functions and academic requirements are entitled to reasonable accommodations. It is the student's responsibility to provide appropriate disability documentation to the College.