

**COLUMBUS STATE COMMUNITY COLLEGE  
MATHEMATICS DEPARTMENT COURSE SYLLABUS**

**COURSE NUMBER:** Math 277

**COURSE NAME:** Probability and Statistics I

**CREDIT HOURS:** 5

**FOLLOW UP COURSE:** Math 278

**PREREQUISITE:** Math 254 with a grade of "C" or higher or placement by COMPASS

**COURSE DESCRIPTION**

Introduction to probability theory, discrete and continuous random variables, probability distributions, expected value, the Normal Distribution, and descriptive statistics. Applications to problems in science, engineering, computer science, and related areas. MATH 277 – 278 is intended primarily for students majoring in the sciences, engineering, mathematics, or computer science, or for other students needing a calculus-based sequence in probability and statistics.

**GOALS OF COURSE**

To master the major concepts and methods of analysis in probability and statistics, to apply those concepts and methods to the solution problems arising in science, engineering, computer science, and related areas, and to develop problem-solving skills and skill in the statistical interpretation of solutions.

**TEXTBOOK AND SPECIAL EQUIPMENT REQUIRED**

*Probability & Statistics for Engineering and the Sciences*, 8<sup>th</sup> ed., Jay Devore, 2008.

A graphing calculator; the TI 83 or TI 84 is highly recommended.

**SECTIONS OF TEXTBOOK TO BE COVERED**

Chapter 1 1.1 - 1.4

Chapter 3

3.1 - 3.6

Chapter 5 5.1-5.5