

MATH 0996  
Support for Elementary Statistics (2 hrs.)  
Mathematics Department  
Valdosta State University

Pre-requisites: Placement into course by University guidelines.

Co-requisite: MATH 1 and all needed materials will be available on the first day of class. A code for this support course will be available from the instructor.

CALCULATOR: TI-83, TI-83+, TI-84, or TI-84+ (REQUIRED Same as Math 1401)

COURSE DESCRIPTION: Corequisite support to provide essential quantitative skills needed to be successful in Math 1401. (This course will be taught by the same instructor.)

\*\*\*NOTE: Learning outcomes, education outcomes, and course outline are the same as for MATH 1401. MATH 0996 by itself does not cover these topics per se but serves as support for students who are taking MATH 1401.

LEARNING OUTCOMES: Upon successful completion of this course, students will be able to:

1. Students will produce and interpret descriptive statistics, graphically, numerically, and in tabular format.
2. Students will calculate and interpret probability using union, intersection, and complement rules.
3. Students will compute and interpret expected value, variance, and standard deviation for discrete random variables.
4. Students will use technology to calculate probabilities for the normal and binomial distributions.
5. Students will produce and interpret confidence interval, and hypothesis testing for one and two populations' means using technology.
6. Students will produce and interpret confidence interval, and hypothesis testing for one population's proportion using technology.
7. Students will use correlation analysis to determine strength of a linear relationship between bivariate data and apply linear regression to describe this relationship.

VSU GENERAL EDUCATION OUTCOME:

(Area D)

Students will demonstrate understanding of the physical universe and the nature of science, will use scientific methods and/or mathematical reasoning and concepts to solve problems.

COURSE OUTLINE: (Based on 45 sessions, 3 days per week)

Chapter/Section	Topics	Suggested Days
1.1 – 1.6	Data Collection: Statistical Definitions, Sampling Techniques	1.5
2.1 – 2.2	Organizing and Summarizing Data : Organizing Qualitative and Quantitative Data , Graphical and Tabular Methods , Types of Distributions	3

9.1 – 9.2

Estimating Value of a Parameter :