Math 125E Technical Mathematics Enhanced

Credit Hours: 0

Scheduled hours per week:

Lecture: 0
Lab: 2
Other: 0

Catalog Course Description: Topics include study of real numbers, basic algebraic operations, solving linear equations and inequalities, graphing linear equations. Includes applications and activities to build skills in problem solving.

Pre-requisites: None

Co-requisites: Math 125

Course Learning Outcomes:

A. Demonstrate an understanding of real numbers, their operations and basic properties.
B. Simplify and evaluate variable expressions and translate a verbal expression into a variable expression.
C. Solve linear equations and inequalities.
D. Translate and solve word problems using techniques for solving linear equations.
E. Graph linear equations.
F. Find the slope of a line. Find the equation of a line.
G. Estimate a “reasonable” answer to an application problem.
H. Display several standard problem-solving techniques.
I. Demonstrate an understanding of the study skills necessary for success in mathematics courses.

Topics to be studied:

Variables, real numbers, and mathematical models
Addition, Subtraction, Multiplication and Division of real numbers
Order of Operations
Rules of exponents
Linear equations and inequalities in one variable. Problem solving.
Linear equations in two variables. Graphing linear equations using intercepts and a slope. Forms of linear equation.
Negative exponents and Scientific Notation.

Relationship of Course to Program or Discipline Learning Outcomes:

(What program outcomes are being met by this course?
For general education courses, a listing of the general education competencies that are met.)

Relationship of Course to Mathematics (MATH) Student Learning Outcomes:	
Demonstrate understanding of the language of mathematics, by their use of symbols, definitions, word phrases, and representations.	x
Display proficiency in mathematical computations.	x
Implement mathematical techniques to solve applied problems.	x
Employ appropriate technology to demonstrate knowledge of mathematical concepts.	x
Exhibit mastery of core course competencies.	x
10/20/2017	

Relationship of Course to General Education Learning Outcomes:	
Composition and Rhetoric Students illustrate a fundamental understanding of the best practices of communicating in English and meet the writing standards of their college or program-based communication requirements.	
Science & Technology Students successfully apply systematic methods of analysis to the natural and physical world, understand scientific knowledge as empirical, and refer to data as a basis for conclusions.	
Mathematics & Quantitative Skills Students effectively use quantitative techniques and the practical application of numerical, symbolic, or spatial concepts.	
Society, Diversity, & Connections Students demonstrate understanding of and a logical ability to successfully analyze human behavior, societal and political organization, or communication.	
Human Inquiry & the Past Students interpret historical events or philosophical perspectives by identifying patterns, applying analytical reasoning, employing methods of critical inquiry, or expanding problem-solving skills.	
The Arts & Creativity Students successfully articulate and apply methods and principles of critical and creative inquiry to the production or analysis of works of art.	
5/3/2016	

Special requirements of the course: None

Additional Information: This is a computer mediated class environment.

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