MTH 152S: College Algebra with Support

This course is designed to present advanced algebra in order to prepare students for precalculus along with topics from developmental math provided in a just-in-time as needed basis. Topics include elementary functions, and their graphs, basic manipulations of functions and the graphical impact of changes to a function, linear and quadratic functions, polynomial functions, solving equations, applications of and related developmental math to support these topics. Co-requisite: MTH 060. Three lecture and three support hours per week. Gen. Ed. Competencies Met: Quantitative and Symbolic Reasoning.

Course Student Learning Outcomes

Students who complete this course successfully will: 1. Demonstrate study skills and habits necessary to succeed in a college math class. 2. Find the domain and range of a function graphically and, where appropriate, algebraically. 3. Determine if a function is even, odd, or neither graphically based on symmetry and algebraically. 4. Identify relations and functions, use the vertical line test to determine if a relation represents a function. 5. Graph elementary functions, piece-wise defined functions, and transformations (translation, stretch/shrink, reflection) of basic functions. 6. Analyze and graph different types of functions including linear function, quadratic function, polynomial functions, and rational functions. 7. Solve real world problems modeled by linear, quadratic, and polynomial functions.

Credits: 3
Co-Requisites:
MTH-060, MTH-60
Program: Mathematics