



Curriculum Description for St. Francis Baccalaureate

College Algebra (Mathematics 110)

Course Description:

A study of fundamental operations, factoring, fractions, exponents, linear and quadratic equations, logarithmic and exponential functions, the binomial theorem, and systems of quadratic equations.

Pre – requisites:

Mathematics 105, or two years of high school algebra and a score of at least 25 on the college level mathematics part of the Accuplacer test, or departmental consent.

Outcomes:

1. Knowledge of the real number system, equations and inequalities, and the ability to use this in problems pertaining to the routine life.
2. Acquire the basic vocabulary of college algebra including functions and graphs, polynomials and rational functions, exponential and logarithmic functions, and factoring.
3. Acquire knowledge of functions and equations and their applications in mathematics and other branches of science.

Objectives:

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

1. Demonstrated knowledge of the real number system, intervals and integer exponents.
2. Demonstrate knowledge of polynomials, factoring, rational exponents and radicals, and complex numbers.
3. Solve problem pertaining to linear and quadratic equations, absolute value equations and inequalities.
4. Solve linear and quadratic functions and demonstrate knowledge of the algebra of functions and inverse functions.
5. Demonstrate knowledge of the polynomial division and synthetic division.
6. Work with exponential and logarithmic functions and their graphs.
7. Demonstrate knowledge of systems of linear equations in two or more variables and systems of non linear equations.
8. Demonstrate knowledge of Gauss-Jordan Elimination method and the binomial theorem.

Course Requirements:

Students will be evaluated based on Quizzes, Tests and Final Exam.