ACADEMIC AFFAIRS

Course Number: ALGB 083   Department: Mathematics

Course Title: Algebra 1 - Third Module   Semester: Spring   Year: 1999

Objectives/Competencies

Course Objective	Competencies
First course in developmental algebra which covers the topics of sets, the arithmetic of real numbers, variables, exponents, integers, equation solving, simplifying rational expressions, solving rational equations. 1. Recognize and use the cancellation property, $\dfrac{ax}{ay} = \dfrac{x}{y}$ 2. Recognize that $\dfrac{a}{b} = \dfrac{c}{d}$ if and only if $ad = bc$ and $bd \neq 0$. 3. Classify natural numbers as either prime or composite. 4. Find the lowest common denominator of fractions and rational expressions. 5. Add and subtract fractions and rational expressions. 6. Recognize a polynomial. 7. Find: a.	a. a. The product of a monomial and a polynomial b. The product of two binomials c. The product of a sum and a difference d. The square of a binomial

Course Objective	Competencies
8. Divide:	a. A monomial by a monomial b. A polynomial by a monomial
9. Factor:	a. A common monomial factor from a polynomial expression b. The largest common monomial factor from a polynomial expression c. The difference of two squares d. A trinomial into the product of two binomials