Douglas College

EFFECTIVE: SEPTEMBER 2010
CURRICULUM GUIDELINES

A.	Division:	Education	Effective Date:	September 2010
B.	Department / Program Area:	Mathematics Faculty of Science & Technology	Revision	

M: Course Objectives / Learning Outcomes

At the end of this course, the successful student will have reviewed and strengthened their algebraic skills and have a level of algebraic proficiency which will allow them to continue their mathematical studies to an in-depth study of functions and their associated graphs (specifically, precalculus courses).

At the end of this course, the successful student should be able to:

distinguish between different sets of real numbers
read and use a variety of notations signifying sets / subsets of real numbers, including set builder, number line, inequality and interval notation
appropriately use
understand the concept of a solution set
work with two-dimensional Cartesian co-ordinate system
work with function notation
determine if an equation in two variables represents a function or a relation
determine the domain and range of a function
correctly apply properties of commutativity, associativity, distribution, inequality, equality and

N: Course Content:

1. Sets of numbers: integers, rationals, reals
2. Basic algebraic techniques - absolute values, exponents, factoring methods, rational expressions
3. Quadratic, polynomial, rational, and absolute value equations
4. Inequalities
5. Functions and relations; domains and ranges
6. Graphing of linear, quadratic, and absolute value functions
7. Mathematical modeling (story problems)
8. Basic geometric formulas
9. Systems of equations in 2- and 3-variables
10. Radicals