



**Douglas
College**

EFFECTIVE: SEPTEMBER 2001

CURRICULUM GUIDELINES

A.	Division:	Educational Services	Date: February 7, 2001.	
B.	Department / Program Area	Student Development Developmental Studies	New Course	Revision X
			If Revision, Section(s) Revised F,M,N,O,P,R	
			Date Last Revised: 1994-09-26	

C:	DVST 410	D:	Mathematics II	E:	4.5
Subject & Course No.		Descriptive Title		Semester Credits	

F: **Calendar Description:**
The course deals with a variety of topics in algebra and analytic geometry including number and number operations, roots and powers; integer and rational exponents; monomial and polynomial operations, factoring to include combined types; operations with rational expressions; equation-solving and problems leading to linear, quadratic and rational equations; graphs of linear equations, systems of linear equations solved by substitution or elimination; functions and function notation, the graphing and analysis of linear and quadratic functions.

G:	Allocation of Contact Hours to Type of Instruction / Learning Settings	H:	Course Prerequisites: DVST 310 or permission of instructor
	Primary Methods of Instructional Delivery and/or Learning Settings: Instructor directed learning	I:	Course Corequisites: None
	Number of Contact Hours: (per week / semester for each descriptor) 6 hours per week x 14 weeks	J:	Course for which this Course is a Prerequisite DVST 411
	Number of Weeks per Semester: 14 weeks	K:	Maximum Class Size: 20

L: PLEASE INDICATE

	Non-Credit				
X	College Credit Non-Transfer				
	College Credit Transfer:	Requested	Granted	X*	

*As Math 11 requirement for Business & Commerce courses at Douglas College, and for credit as ABE Advanced Level Mathematics (Developmental) for the Adult Dogwood.
SEE BC TRANSFER GUIDE FOR TRANSFER DETAILS (www.bccat.bc.ca)

<p>M:</p>	<p>Course Objectives / Learning Outcomes</p> <p>The aims of the course are for students to:</p> <p>consolidate and extend experience with selected topics in algebra and analytic geometry for application in sequent courses in mathematics or in courses from other disciplines which incorporate mathematics. gain experience with some of the technologies associated with mathematics: scientific calculators, graphing calculators, computers. increase problem-solving skills through practice in techniques which include analysis of linear and quadratic functions: the slope as rate of change, determination of a minimum or maximum value, derivation of equations from graphs as mathematical models, manipulation of formulas for a desired variable, the use of variables and an equation derived from a verbal relationship in order to determine one or more unknown numerical quantities. increase attention to detail, skills in documenting a solution or simplification, ability to follow instructions carefully and carefully.</p>
	<p>Course Content:</p> <p>Number and Number Operations</p> <p>a. integers, rational numbers and order of operations exponent law for integer exponents and rational exponents c. roots and powers of integers</p> <p>2. Algebra operations with variable bases combined with integral and rational exponents monomial operations, polynomial operations including binomial x binomial, binomial x binomial x binomial, powers of binomials combinations of types of factoring the domain and simplification of rational expressions operations with rational expressions, solving equations with rationals rational equations with extraneous roots linear equations and inequalities in one variable, application quadratic equations, solved by factoring, the square root property, or the quadratic formula</p> <p>3. Analytic Geometry determination of the slope and intercepts, the slope as “rate of change” zero and undefined slopes; equations of lines having these slopes standard form and slope-intercept forms of linear equations</p> <p>d. graphing equations and inequalities in two variables e. graphing parabolas in standard form deriving equations of straight lines systems: solving by graphing, substitution and elimination methods problems using systems of linear equations</p> <p>4. Functions relations and functions, vertical line test for functions</p>

	domain and range <ul style="list-style-type: none">c. graphing and analyzing linear functionsd graphing general functions by constructing a table of valuese graphing and analyzing quadratic functions in standard form
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O:	<p>Methods of Instruction</p> <p>A combination of different instructional methods will be used in order to balance instructional efficiency with individual student needs. Group instruction, individual assistance in lab tutorial or scheduled appointments and student-directed learning will be selected where appropriate and possible.</p>												
P:	<p>Textbooks and Materials to be Purchased by Students</p> <p>Students are required to supply a three-ring binder, paper, pen, pencil.</p> <p>Required Textbook: <i>Intermedite Algebra (3rd Edition)</i>. Tobey and Slater. Prentice Hall. The text is provided on a semester-long loan from the library.</p> <p>Scientific calculator---needs y key, 1/x key, +/- key, sin, cos, tan key, etc. but not a graphing calculator.</p>												
Q:	<p>Means of Assessment</p> <p>Attendance is a course requirement. The final grade may be UN if more than 30% of classes are missed or if less than 70% of items for evaluation are undertaken.</p> <p>Evaluation will be based on examinations and assignments in accordance with college policy. Details regarding the number and weighting of individual components will be announced in a "Course Information" handout at the beginning of the semester.</p> <p>Letter grades will be assigned as follows:</p> <table data-bbox="341 1066 990 1161" style="margin-left: 40px;"> <tr> <td>A+ 95-100%</td> <td>B+ 80-84%</td> <td>C+ 65-69%</td> <td>P 50-54%</td> </tr> <tr> <td>A 90-94%</td> <td>B 75-79%</td> <td>C 60-64%</td> <td>F 0-49%</td> </tr> <tr> <td>A- 85-89%</td> <td>B- 70-74%</td> <td>C- 55-59%</td> <td></td> </tr> </table>	A+ 95-100%	B+ 80-84%	C+ 65-69%	P 50-54%	A 90-94%	B 75-79%	C 60-64%	F 0-49%	A- 85-89%	B- 70-74%	C- 55-59%	
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R:	<p>Prior Learning Assessment and Recognition: specify whether course is open for PLAR</p>												
Course Designer(s)	Education Council / Curriculum Committee Representative												
Dean / Director	Registrar												