

# School of Access Community Learning Partnerships MATH 053 S17 Intermediate Mathematics 2



Course Outline – Winter 2013

Instructor: Morgan Sargent E-mail: <a href="mailto:sargentm@camosun.ca">sargentm@camosun.ca</a> Phone #: 250-544-2192 Office Hours: Mo, Fr: 8:30-9:30

# **Calendar Description**

This course covers the second part of ABE Intermediate Math, and provides the introductory algebra and problem-solving skills required for further study in advanced-level algebra, math for technology, and any course or program that requires Math 10. Topics include: real numbers, algebraic expressions, equations, inequalities, graphing, and polynomials.

Prerequisite(s): MATH 052, or assessment.

http://camosun.ca/learn/calendar/current/web/math.html

### **Required Materials**

- (a) textbook: *Developmental Mathematics*, 6<sup>th</sup>/7<sup>th</sup>/8<sup>th</sup> edition, Marvin Bittinger/Judith Beecher
- (b) scientific calculator (Sharp EL-531X or EL-531W for next level MATH 072 or 135)

# Course Content and Schedule - Self-paced Instructions

The course is designed to be completed in one term. However, it can be completed sooner, depending on a number of factors including the students' beginning level of math skills, motivation, learning rate, and how much time they can actually study (average 15 20 hours per week to complete in 4 months).

If you do not understand something seek help right away. In addition to online, resources include your family and friends, your instructor, and /or the Math Tutor Center.

Contact your instructor to get permission to write the unit exam. These exams will be written face-to-face.

Grade Calculation<sup>1</sup>: 5 Unit Exams worth 75% and a Final Exam worth 25%

<sup>&</sup>lt;sup>1</sup> As this is a mastery-based course, the goal for each test is 75% or better. If you scored less than 75% then you will need to rewrite the test before you continue. Note: Tests can only be rewritten once for a total of two times and all test scores are averaged to calculate a final mark

**Grading System** 

Percentage	Grade	Grade Point Equivalency
90-100%	A+	9
85-89%	Α	8
80-84%	A-	7
77-79%	B+	6
73-76%	В	5
70-72%	B-	4
65-69%	C+	3
60-64%	С	2
50-59%	D	1
<50%	F	0
In Progress	IP	N/A

For information on Camosun College's grading policy, see the webpage <a href="http://camosun.ca/about/policies/education-academic/e-1-programming-&-instruction/e-1.5.pdf">http://camosun.ca/about/policies/education-academic/e-1-programming-&-instruction/e-1.5.pdf</a>

# **Academic Progress**

There is an Academic Progress Policy designed to enhance a learner's likelihood of success. Students should become familiar with the content of this policy. The policy is available in each School Administration Office, Registration, and on the College web site in the Policy Section.

http://camosun.ca/about/policies/education-academic/e-1-programming-&-instruction/e-1.1.pdf

Text	MATH 053 course content	Required or Optional		
Unit 1 Real Numbers and Algebraic Expressions (20 days)				
	Unit 1 Pre-test	Required		
7.1	Introduction to algebra	Optional		
7.2	The real numbers	Optional		
7.3	Addition of real numbers	Optional		
7.4	Subtraction of real numbers	Optional		
7.5	Multiplication of real numbers	Optional		
7.6	Division of real numbers	Optional		
7.7	Properties of real numbers	Optional		
7.8	Simplifying expressions; order of operations	Optional		
	Summary and review	Optional		
	Unit 1 Post-test	Required		
	Unit 1 Exam	Required		
Unit 2 Solving Equations and Inequalities (30 days)				
	Unit 2 Pre-test	Required		
8.1	Solving equations: the addition principle	Optional		
8.2	Solving equations: the multiplication principle	Optional		
8.3	Using the principles together	Optional		
8.4	Formulas	Optional		
8.5	Applications of percent	Optional		
8.6	Applications and problem solving	Optional		
8.7	Solving inequalities	Optional		
8.8	Applications and problem solving with inequalities	Optional		
	Summary and review	Optional		
	Unit 2 Post-test	Optional		
	Unit 2 Exam	Required		
	Unit 3 Graphs of Linear Equations (22)	<u> </u>		
	Unit 3 Pre-test	Required		
9.1	Graphs and applications	Optional		
9.2	Graphing linear equations	Optional		
9.3	More with graphing and intercepts	Optional		
9.4	Slope and applications	Optional		
	Summary and review	Optional		
	Unit 3 Post-test	Required		
	Unit 3 Exam	Required		

Unit 4 Polynomials: Operations and Factoring (28 days)			
	Unit 4 Pre-test	Required	
10.1	Integers as exponents	Optional	
10.2	Exponents and scientific notation *** after 10.2, complete	Optional	
	supplementary exercises on exponents (#1-25)***		
10.3	Introduction to polynomials	Optional	
10.4	Addition and subtraction of polynomials	Optional	
10.5	Multiplication of polynomials	Optional	
10.6	Special products	Optional	
10.7	Operations with polynomials in several variables	Optional	
10.8	Division of polynomials	Optional	
11.1	Introduction to factoring	Optional	
11.2	Factoring trinomials of the type x2 bx c	Optional	
	Summary and review	Optional	
	Chapter test	Optional	
	Unit 4 Post-test	Required	
	Unit 4 Exam	Required	
	MATH 053 review	Optional	
	MATH 053 final exam day 105	Required	

# Recommended Materials or Services to Assist Students to Succeed Throughout the Course

### LEARNING SUPPORT AND SERVICES FOR STUDENTS

There are a variety of services available for students to assist them throughout their learning. This information is available in the College Calendar, Registrar's Office or the College web site at:

http://www.camosun.ca

### STUDENT CONDUCT POLICY

There is a Student Conduct Policy. It is the student's responsibility to become familiar with the content of this policy. The policy is available in each School Administration Office, Registration, and on the College web site in the Policy Section, or the College web site at:

http://camosun.ca/about/policies/education-academic/e-2-student-services-&-support/e-2.5.pdf

### STUDENT GRADING POLICY

A new student grading policy is in effect for students in the School of Access. This information is available in the College Calendar, Registrar's Office or the College web site at:

http://camosun.ca/about/policies/education-academic/e-1-programming-&-instruction/e-1.5.pdf

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