

# School of Access Community Learning Partnerships MATH 034 S16 Fundamental Mathematics 7



Course Outline – Winter 2013

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# **Calendar Description**

This course provides the basic computational and problem solving skills required for many aspects of daily life, and for further study in trades math and in intermediate-level algebra, geometry, and trigonometry. Topics include: whole numbers, fractions, decimals, proportion, percent, graphs, statistics, measurement, and geometry.

Prerequisite(s): MATH 033 or Assessment.

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

### **Required Materials**

- (a) Textbook: Developmental Mathematics, 7th edition, Marvin Bittinger & Judith Beecher
- (b) Scientific calculator (Students going on to MATH 072 should purchase a Sharp EL531W)

## 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! Please arrange a date and time with your instructor to write unit exams. These exams will be written face-to-face.

Grade Calculation<sup>1</sup>: Six Unit Exams: 100%

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<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 034 course content <sup>2</sup>	Required or Optional
	Unit 1 Whole Numbers (for 4-month completion: 15	
	Unit 1 Pre-test	Required
1.1	Standard notation; order	Optional
1.2	Addition and subtraction	Optional
1.3	Multiplication and division; rounding and estimating	Optional
1.4	Solving equations	Optional
1.5	Applications and problem solving	Optional
1.6	Exponential notation and order of operations	Optional
1.7	Factorizations	Optional
1.8	Divisibility	Optional
1.9	Least common multiples	Optional
	Summary and review	Optional
	Chapter test	Optional
	Unit 1 Post-test	Required
	Unit 1 Exam (no calculator)	Required
	Unit 2 Fraction Notation (20 days)	•
	Unit 2 Pre-test	Required
2.1	Fraction notation and simplifying	Optional
2.2	Multiplication and division	Optional
2.3	Addition and subtraction; order	Optional
2.4	Mixed numerals	Optional
2.5	Applications and problem solving	Optional
2.6	Order of operations; estimation	Optional
	Summary and review	Optional
	Chapter test	Optional
	Unit 2 Post-test	Required
	Unit 2 Exam	Required
	Unit 3 Decimal Notation (15 days)	
	Unit 3 Pre-test	Required
3.1	Decimal notation, order, and rounding	Optional
3.2	Addition and subtraction	Optional
3.3	Multiplication	Optional
3.4	Division	Optional
3.5	Converting from fraction notation to decimal notation	Optional
3.6	Estimating	Optional
3.7	Applications and problem solving	Optional
	Summary and review	Optional
	Chapter test	Optional
	Unit 3 Post-test	Required
	Unit 3 Exam	Required

<sup>&</sup>lt;sup>2</sup> Before starting unit 1, students must pass a competency test to demonstrate that they can add, subtract, multiply, and divide whole numbers, fractions, and decimals *without the use of a calculator*.

	Unit 4 Percent Notation (for 4-month completion: 20 da	ays)
	Unit 4 Pre-test	Required
4.1	Ratio and proportion	Optional
4.2	Percent notation	Optional
4.3	Percent and fraction notation	Optional
4.4	Solving percent problems using percent equations	Optional
4.5	Solving percent problems using proportions	Optional
4.6	Applications of percent	Optional
4.7	Sales tax, commission, discount, and interest	Optional
4.8	Interest rates on credit cards and loans	Optional
	Summary and review	Optional
	Chapter test	Optional
	Unit 4 Post-test	Required
	Unit 4 Exam	Required
	Unit 5 Data, Graphs, and Statistics (15 days)	
	Unit 5 Pre-test	Required
5.1	Averages, medians, and modes	Optional
5.2	Tables and pictographs	Optional
5.3	Bar graphs and line graphs	Optional
5.4	Circle graphs	Optional
	Summary and review	Optional
	Chapter test	Optional
	Unit 5 Post-test	Optional
	Unit 5 Exam	Required
	Unit 6 Measurement and Geometry <sup>3</sup> (15 days)	
	Unit 6 Pre-test	Required
Α*	Linear measures: American and metric units (*Appendixes)	Optional
B*	Weight and mass; medical applications	Optional
C*	Capacity; medical applications	Optional
D*	Time and temperature	Optional
6.2	Perimeter	Optional
6.3	Area	Optional
6.4	Circles	Optional
6.5a	Volume and surface area	Optional
	Summary and review	Optional
	Unit 6 Post-test	Required
	Unit 6 Exam	Required

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<sup>&</sup>lt;sup>3</sup> Unit 6 includes the Appendices A-D at the back of the text in addition to parts of chapter 6.

# 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

### **ACADEMIC PROGRESS POLICY**

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