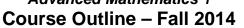


# School of Access Community Learning Partnerships MATH 072 S18

### Advanced Mathematics 1





### **Calendar Description**

This course is the first half of Math 11 and provides the algebra skills required for statistics, criminal justice and some business programs. Topics include: linear equations and inequalities, rearranging formulas, linear equations in two variables, systems of linear equations, integer and rational exponents, polynomials and factoring.

**Prerequisite(s):** "C" in Principles of Math 10, or Foundations of Math & Pre-calculus 10, or Pre-calculus 11, or Foundations of Math 11, or MATH 053, or MATH 057; or "C-" in Principles of Math 11; or assessment.

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

#### **Exit Grade:**

A grade of C+ (65%) or better in Math 072 is necessary to continue into Math 073 (Advanced Mathematics 2), Math 116 (Elementary Statistics) as well as certain programs such as Criminal Justice, Business Administration, Golf Management, and Hotel and Restaurant Management.

### **Required Materials:**

- (a) Textbook: *Intermediate Algebra*, 10th edition, Marvin Bittinger. NOTE: Same textbook for 073.
- (b) Scientific calculator: The Sharp EL 531W model will be the only calculator allowed for this course and most math courses at Camosun.
- (c) NOTE: Calculators will not be allowed on Tests 1 or 3.

### **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.

Your final grade is based the unit exams and the final exam.



## MATH 072 S18 Advanced Mathematics 1 Course Outline – Fall 2014



Grade Calculation: \*Five Unit Exams 50%

\*\*Final Exam 50% or 100%

\*\* If your term average is at least 50% and all your assignments are complete and if your final exam mark is higher than your term average, then your final course grade will be based 100% on your final exam mark.

### **Course Objectives:**

The objectives of the course are:

- 1. To learn the basic algebra skills necessary to be successful both in your chosen field of study and in future math courses. This involves learning the vocabulary, notation, rules, and techniques of intermediate algebra, as well as solving applied problems.
- 2. To be able to solve problems involving simple calculations without the aid of a calculator.
- 3. To learn to write mathematics correctly and also to be able to write about the mathematics that you are learning.
- 4. To be able to talk about the mathematics you are learning.

**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



## MATH 072 S18 Advanced Mathematics 1 Course Outline – Fall 2014



### Math 072 Course Content

Unit	Unit 1 - Review of Basic Algebra		
	(NO CALCULATOR)		
R.1	The set of real numbers		
R.2	Operations with real numbers		
R.3	Exponential notation and order of		
	operations		
R.4	Introduction to algebraic		
	expressions		
R.5	Equivalent algebraic expressions		
R.6	Simplifying algebraic expressions		
R.7	Properties of exponents and		
	scientific notation		
Summary & Review/Chapter Test			
Unit 1 final test			
Unit	2 – Solving Linear Equations		
	and Inequalities		
1.1	Solving equations		
1.2	Formulas and applications		
1.3a	Applications and problem solving		
1.4	Sets, inequalities, and interval		
	notation		
1.5	Intersections, unions, and		
	compound inequalities		
1.6a-	Absolute-value equations		
d			
Su	ımmary & review/Chapter Test		
	Unit 2 final test		
Un	it 3 – Graphs, Functions, and		
Applications (NO CALCULATOR)			
2.1	Graphs of equations		
2.2	Functions and graphs		
2.3	Finding domain and range		
2.4	Linear functions: graphs and		

2.5	More on graphing linear	
	equations	
2.6	Finding equations of lines;	
	applications	
Summary & review/Chapter Test		
Unit 3 final test		
Unit 4 - Systems of Equations		
3.1	Systems of equations in two	
	variables	
3.2	Solving by substitution	
3.3	Solving by elimination	
3.4a	Solving applied problems: two	
	equations	
3.7a,	Inequalities in two variables	
b		
Summary & review/Chapter Test		
Unit 4 final test		
Unit 5 – Polynomials and Polynomial		
Functions		
4.1	Introduction to polynomials and	
	polynomial functions	
4.2	Multiplication of polynomials	
4.3	Introduction to factoring	
4.4	Factoring trinomials: $x^2 + bx + c$	
4.5	Factoring trinomials: $ax^2 + bx + c$ ,	
	a ≠ 1	
4.6	Special factoring	
4.7	Factoring: a general strategy	
Sı	ummary & review/Chapter Test	
Unit 5 final test		
	NAA TILLOZO	
MATH 072 review		
MATH 072 final exam		



### MATH 072 S18 Advanced Mathematics 1 Course Outline – Fall 2014



### 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**

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 or the College web site at:

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