CAMOSUN COLLEGE
School of Access
Mathematics Department
MATH 072 Advanced Mathematics 1
SELF PACED   COURSE OUTLINE   S01/S02   Fall 2013

1. Instructor Information

Instructor: James Stevenson   Office: Ewing 342B
Phone: 370-3303

E-mail: jstevenson@camosun.bc.ca

2. Class Times: 5:30-7:50

3. Math Lab: Ewing 342

This is a drop-in centre where you can work on your math homework by yourself or with your classmates and get free help from a tutor.

4. Required Materials:

(a) textbook: *Intermediate Algebra*, 11th edition, Marvin Bittinger
(b) scientific calculator: The Sharp EL 531W model will be the only calculator allowed for this course and most math courses at Camosun.
Supplementary Materials
(c) *Student's Solutions Manual*, Judith Penna (for sale at the bookstore, reference library)

5. Prerequisites:

Prerequisite for Math 073:   C+ in Math 072 (or 062), or a C in Math 11, or assessment
Prerequisite for Math 115 (Math 12): Recent B+ (80%) in Math 063/073.

6. Workload/Tips for Success

Out-of-class Workload: 5-10 hours each week.
1. Please do your homework every day. If you fall behind, it will be difficult to catch up. This is not a course that you can put on the "back burner".
2. Attend and participate in every class.
3. If you don't understand something seek help right away. Help is available from friends, your instructor, the tutor in the math room, plus MATHXL.com. Course ID XL0E-T1PP-801Y-42L2

4. Work thoughtfully through the material; don't just try to get it done. LEARN TO LEARN

7. Course Objectives:

The four very ambitious objectives of the course are:

- 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.

- *To be able to solve problems involving simple calculations without the aid of a calculator.*

- *To learn to write mathematics correctly and also to be able to write about the mathematics that you are learning.*

- *To be able to talk about the mathematics you are learning.*

9   O72 text: *Intermediate Algebra*, **11th edition, Marvin Bittinger**

072 text	MATH 072 course content		
NO CALCULATOR	*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 and 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-d	Absolute-value equations		
	Summary and review (S/R), ChapterTest (CT)		
	Unit 2 final test		
NO CALCULATOR	*Unit 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 slope		
2.5	More on graphing linear equations		
2.6	Finding equations of lines; applications		
	Summary and 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		
3.7ab	Inequalities in two variables		
	Summary and 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: $ax^2 + bx + c, a \neq 1$		
4.6	Special factoring		
4.7	Factoring: a general strategy		
	Summary and review, Chapter Test		
	Unit 5 final test		
	MATH 072 review		
	MATH 072 final exam		

8.   Assessment (Grades)

Your mark is based on 5 tests, and a final exam.

Grade Calculation: 5 Tests   50%
                          Final Exam   50%

*The final exam will count for 50% or 100%, whichever is to your advantage. It will be written prior to April 20.   Part of the exam will have a non-calculator section

Withdrawal Dates:

Sept 17– re-imbursement of fees

Nov 4– last day to withdraw to avoid an F on your transcript.

If you decide not to continue in the course, please go to registration before **Oct 8**   to avoid getting an F on your transcript. In addition, please come and see me to discuss options.

Grade Scale: (You must score at least 50% on the final exam and have an overall average of 60% to receive a grade of C or higher in the course.)

A+ 90 - 100	B+ 77 - 79	C+ 65 – 69	F< 50
A 85 – 89	B 73 – 76	C 60 - 64	
A- 80 -84	B- 70 – 72	D 50 – 59	

AN "IP" WILL BE GIVEN FOR INCOMPLETE WORK PROVIDING: THERE IS A 50% COMPLETION OF MATERIAL OR 75% ATTENDANCE OTHERWISE THER WILL BE AN "F"

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.bc.ca

ACADEMIC CONDUCT POLICY

There is an Academic 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.

www.camosun.bc.ca/divisions/pres/policy/2-education/2-5.html **Tentative Pacing Schedule**

10 Course Content and Homework Assignments

(a)   Do all the odd-numbered questions in the sections listed below. Check your answers in the back of the text.

(b)   To prepare for the final test for each unit, do the odd-numbered Summary and Review(S/R) exercises and do all the questions in the Chapter Test (CT) at the end of each chapter. Check your answers in the back of the text.

Odd-numbered questions only