

School of Access Community Learning Partnerships MATH 053 DS19

Intermediate Mathematics 2

Course Outline – Fall 2017

Instructor Information and schedule:

Name: Pooja Gupta Email: guptap@camosun.ca

Phone: <u>250-370-3848</u> Office: <u>CBA 149</u>

My class schedule this term:

	Monday	Tuesday	Wednesday	Thursday	Friday
9:30 – 11:20	In class Saanich Adult Education Centre	Online class (10:00 – 12:50) Office time Meetings by appointments	In class Saanich Adult Education Centre	Online class (10:00 – 12:50) Office time Meetings by appointments	In class Saanich Adult Education Centre
12:30 – 3:20	In class Belmont High School	only	In class Belmont High School	only	Department Meetings

Important Dates this Fall term:

September 4 - Labour Day, College closed

September 5 - Term Starts

September 19 - Fee Deadline Fall '17

October 9 - Thanksgiving Day, College closed

October 10 - Foundation Bursaries Deadline to apply for Fall 2017

October 19 - ShakeOut - BC provincial preparedness

November 11 - Remembrance Day

November 13 - College closed

December 8 - Last day of instruction

December 11-18 – Exams

December 18 - Term Ends

Note: - Please seek help as soon as possible so that I can help you to be successful this term. As emails are accessible from any location, I prefer **emails** to phone calls.

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, Custom Edition for Camosun College, Marvin Bittinger/Judith Beecher (Content taken from the 9th Edition of Developmental Mathematics by the same authors)
- (b) module: Trigonometry (ABE Intermediate Mathematics module 14), British Columbia
- (c) scientific calculator (Sharp EL-531X or EL-531W for next level MATH 072 or 135)
- (d) Reliable access to the internet
- (e) Registration with MyMathLab:
 http://www.pearsonmylabandmastering.com/northamerica/mathxl/students/get-registered/index.html
- (f) Course ID: gupta35525

Course Content and Schedule

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 Final exam. The Final Exam must be written with an invigilator.

Grade Calculation¹: 5 Unit Exams worth 75% and a Final Exam worth 25%

¹ 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



Intermediate Mathematics 2

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Intended Learning Outcomes

(complete ABE Intermediate Mathematics learning outcomes at ABE Articulation Handbook website http://www.aved.gov.bc.ca/abe/docs/handbook.pdf)

At the end of the course, students will be able to:

- 1. use mathematics at an ABE Intermediate level with competence
- 2. demonstrate knowledge and skills in using the language, principles, and operations of introductory algebra
- 3. apply a variety of strategies in solving math-related problems
- 4. apply knowledge and skills in introductory algebra to solve problems
- 5. use knowledge of introductory algebra as a basis for further study in Advancedlevel algebra, math for technology, and other courses and programs

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 Help Centres:

Ewing 342 (LANS) and CBA 109 (INT): These drop-in centres are available for you to work on math homework and to seek free help from the Instructional Assistant. See the hours posted on the math lab doors or go to

http://camosun.ca/learn/programs/math/labs.html.

Study Tips: It is recommended that approximately 3-6 hours per week be spent studying and completing homework for this course outside of class time. Find a study buddy to discuss math problems and use the math labs.



Intermediate Mathematics 2 Course Outline – Winter 2017

### Unit R: Arithmetic Review Pre-test R.1 Place value R.2 Comparing numbers R.3 Rounding numbers R.4 Adding and subtracting whole numbers and decimals R.5 Multiplying whole numbers and decimals R.6 Dividing whole numbers and decimals R.7 Order of operations R.8 Operations with fractions R.9 Equivalent fractions R.10 Adding and subtracting fractions R.11 Multiplying fractions R.12 Dividing fractions R.13 Converting fractions R.14 Estimation Post-Test (timed 3hrs.) September 23, 2017 Unit 1: Real Numbers and Algebraic Expressions Pre-test T.1 Introduction to algebra T.2 The real numbers T.3 Addition of real numbers T.4 Subtraction of real numbers T.5 Multiplication of real numbers T.6 Division of real numbers T.7 Properties of real numbers T.8 Simplifying expressions; order of operations Post-Test (timed 3hrs.) Pos	MATH 053 course content		
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Office Final rest (timed sins.)	Unit 1	Final Test (timed 3hrs.)	October 12, 2017



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	Leit 2. Colving Equations and Instruction	(Commented) Doe Date
	Init 2: Solving Equations and Inequalities	(Suggested) Due Date
Pre-test		
8.1	Solving equations: the addition principle	
8.2	Solving equations: the multiplication principle	
8.3	Using the principles together	
8.4	Formulas	
8.5	Applications of percent	
8.6	Applications and problem solving	
8.7	Solving inequalities	
8.8	Applications and problem solving with	
	inequalities	
Post-Te	st (timed 3hrs.)	
Unit 2 F	inal Test (timed 3hrs.)	October 27, 2017
	Unit 3: Graphs of Linear Equations	
Pre-test		
9.1	Graphs and applications of linear equations	
9.2	More with graphing and intercepts	
9.3	Slope and applications	
9.4	Equations of lines	
9.5	Graphing using the slope and y-intercept	
Post-Te	st (timed 3hrs.)	
Unit 3 F	inal Test (timed 3hrs.)	November 13, 2017
Ur	nit 4: Polynomials: Operations & Factoring	
Pre-test	<u> </u>	
10.1*	Integers as exponents	
10.2*	Exponents and scientific notation	
	* after 10.2, complete supplementary exercises	
	on exponents #1-25	
10.3	Introduction to polynomials	
10.4	Addition and subtraction of polynomials	
10.5	Multiplication of polynomials	
10.6	Special products	
10.7	Operations with polynomials in several variables	
10.8a	Division of polynomials by a monomial	
11.1ab	Introduction to common factoring	
11.2	Factoring trinomials of the type $x^2 + bx + c$	
11.5cd	Factoring differences of squares	
	st (timed 3hrs.)	
Unit 4 Final Test (timed 3hrs.)		December 8, 2017
MATH 053 Final Exam Pre-Test		December 9, 2017
MATH 053 Final Exam Post-Test		December 10, 2017
	MATH 053 FINAL EXAM	December 13, 2017
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Intermediate Mathematics 2
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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