

School of Access Community Learning Partnerships MATH 053 DS19 Intermediate Mathematics 2 Course Outline – Winter 2018

The Approved Course Description is available on the College website http://camosun.ca/learn/calendar/current/web/math.html

 $\Omega$  Please note: the College electronically stores this outline for five (5) years only. It is **strongly recommended** you keep a copy of this outline with your academic records. You will need this outline for any future application/s for transfer credit/s to other colleges/universities.

### **Instructor Information and Schedule:**

Name: Pooja Gupta	Email: guptap@camosun.ca
Phone: 250-370-4481	Office: CBA 149

#### My class schedule this term:

	Monday	Tuesday	Wednesday	Thursday	Friday
9:30 – 12:20	<b>In class</b> Saanich Adult Education Centre	<b>In class</b> Songhees Wellness Centre	<b>In class</b> Saanich Adult Education Centre	In class Songhees Wellness Centre	<b>Online class</b> (9:30 – 1:50) CBA 159 <b>Office time</b>
12:30 – 2:20	Online class/ Office time Meetings by appointments only		Online class/ Office time Meetings by appointments only		Department Meetings

#### **Important Dates this Winter term:**

January 8 – Term Starts February 12 – Family Day (College closed) February 13 to 16 – Reading break (College closed) February 13 – Foundation Bursaries Deadline to apply for winter 2018 February 23 – T2202A Education Tax Receipts available March 30 – Good Friday (College closed) April 2 – Easter Monday (College closed) April 13 – Last day of instruction April 16 to 20 – Exams April 20 - 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.

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: <u>http://www.pearsonmylabandmastering.com/northamerica/mathxl/students/get-registered/index.html</u>
- (f) Course ID: gupta73042

## Intended Learning Outcomes:

(Complete ABE Intermediate Mathematics learning outcomes at ABE Articulation Handbook website <a href="https://www2.gov.bc.ca/assets/gov/education/post-secondary-education/adult-education/abe\_guide.pdf">https://www2.gov.bc.ca/assets/gov/education/post-secondary-education/adult-education/abe\_guide.pdf</a>)

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

## **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.

Math 053 course content				
Section	Торіс	Suggested	Suggested	Suggested
		Time (Days)	Date	Week
Unit R	Arithmetic Review (no calculator)			
	[This is a Separate Booklet]			
	Pre-test			
R.1	Place value	.5	Jan 8	1
R.2	Comparing numbers	.5	Jan 8	1
R.3	Rounding numbers	1	Jan 9	1
R.4	Adding and subtracting whole numbers and decimals	1	Jan 10	1
R.5	Multiplying whole numbers and decimals	1	Jan 11	1
R.6	Powers – repeated multiplication	1	Jan 11	1
R.7	Dividing whole numbers and decimals	1	Jan 12	1
R.8	Order of operations	1	Jan 15	2
R.9	Operations with fractions	1	Jan 16	2
R.10	Equivalent fractions	1	Jan 16	2
R.11	Adding and subtracting fractions	1	Jan 17	2
R.12	Multiplying fractions	1	Jan 18	2
R.13	Dividing fractions	1	Jan 18	2
R.14	Converting fractions and decimals	1	Jan 19	2
R.15	Estimation	1	Jan 22	3
	Post-test			
	Unit R test (no calculator)		Jan 23	3
Unit 1 : Chapter 7	Introduction to Real Numbers			
	and Algebraic Expressions			
	Pre-test			
7.1	Introduction to algebra	2	Jan 25, 26	3
7.2	The real numbers	2	Jan 29, 30	4
7.3	Addition of real numbers	1	Jan 31	4
7.4	Subtraction of real numbers	1	Feb 1	4
7.5	Multiplication of real numbers	1	Feb 2	5
7.6	Division of real numbers	1	Feb 5	6
7.7	Properties of real numbers	1	Feb 6	6
7.8	Simplifying expressions; order of operations	2	Feb 7, 8	6
	Post-Test (timed 3hrs.)			
	Unit 1 Final Test (timed 3hrs.)		Feb 9	6
Unit 2 : Chapter 8	Solving Equations and Inequalities			
	Pre-test			
8.1	Solving equations: the addition principle	1	Feb 12	7
8.2	Solving equations: the multiplication principle	1	Feb 13	7
8.3	Using the principles together	2	Feb 14, 15	7



8.4	Formulas	2	Feb 16, 19	7/8
8.5	Applications of percent	1	Feb 20	8
8.6	Applications and problem solving	2	Feb 21, 22	8
8.7	Solving inequalities	1	Feb 23	8
8.8	Applications and problem solving with inequalities	2	Feb 26, 27	9
	Post-Test (timed 3hrs.)			
	Unit 2 Final Test (timed 3hrs.)		Feb 28	9
Unit 3: Chapter 9	Graph of Linear Equations			
	Pre-test			
9.1	Graphs and applications of linear equations	1	Mar 1, 2	9
9.2	More with graphing and intercepts	1	Mar 5	9
9.3	Slope and applications	1	Mar 6	9
9.4	Equations of lines	1	Mar 7, 8	9
9.5	Graphing using the slope and y-intercept	1	Mar 9	9
	Post-Test (timed 3hrs.)			
	Unit 3 Final Test (timed 3hrs.)		Mar 12	10
Unit 4: Chapter	Polynomials: Operations & Factoring			
10/11				
	Pre-test			
10.1*	Integers as exponents	2	Mar 13, 14	10
10.2*	Exponents and scientific notation	2	Mar 15, 16	10
	* after 10.2, complete supplementary exercises on exponents #1-25	2	Mar 20, 21	11
10.3	Introduction to polynomials	1	Mar 22	11
10.4	Addition and subtraction of polynomials	2	Mar 23, 26	11/12
10.5	Multiplication of polynomials	2	Mar 27, 28	12
10.6	Special products	2	Mar 29, 30	12
10.7	Operations with polynomials in several variables	2	Apr 2, 3	13
10.8a	Division of polynomials by a monomial	1	Apr 4	13
11.1ab	Introduction to common factoring	2	Apr 5, 6	13
11.2	Factoring trinomials of the type $x^2 + bx + c$	2	Apr 9, 10	14
11.5cd	Factoring differences of squares	2	Apr 11, 12	14
	Post-Test (timed 3hrs.)			
	Unit 4 Final Test (timed 3hrs.)		Apr 13	14
	MATH 053 Final Pre-test			
	MATH 053 Final Post-test			
	MATH 053 Final Exam (timed 3hrs.)		Apr 18	

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%	А	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.



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