

CAMOSUN COLLEGE School of Access Community Learning Partnerships Department

Camosun College campuses are located on the traditional territories of the Lkwungen and WSÁNEĆ peoples. We acknowledge their welcome and graciousness to the students who seek knowledge here.

Math 053 Intermediate Mathematics 2 Winter 2019

COURSE OUTLINE

The calendar description is available on the web @ http://camosun.ca/learn/calendar/current/web/math.html

 Ω Please note: This outline will not be kept indefinitely. It is recommended students keep this outline for their records, especially to assist in transfer credit to post-secondary institutions.

1. Instructor Information

(a) Instructor	Wendy Seward			
(b) Office hours	3:00 – 5:00 pm, MW			
(c) Location	Belmont School Room A117 3 – 4 pm, A111 4 – 5 p.m			
(d) Phone	Alternative:			
(e) E-mail	sewardw@camosun.ca			
(f) Website	http://camosun.ca/			

2. Intended Learning Outcomes

Complete ABE Intermediate Mathematics learning outcomes at ABE Articulation Handbook website https://www2.gov.bc.ca/assets/gov/education/post-secondary-education/adult-education/abe_guide.pdf

On completion of the course, students will be able to:

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

3. 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) Scientific calculator: The Sharp EL 531W model (or similar) will be the only calculator allowed for this course
- (c) Reliable access to the internet
- (d) Registration with MyMathLab: <u>http://www.pearsonmylabandmastering.com/northamerica/mathxl/students/get-registered/index.html</u>. Course ID will be available at start of term.

4. 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 your beginning level of math-skills, motivation, learning rate, and how much time you can actually study (average 15 to 20 hours per week to complete in 4 months). Contact your instructor to get permission to write the Final exam after you have completed all Unit tests. The Final Exam must be written with an invigilator.

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 Help Centres.

*Math Help: You can get free face-to-face tutoring from our instructional assistants in the Math Help Centres/Labs in E342 (Lansdowne) or CBA 109 (Interurban). Hours are posted on the doors and on the website <u>http://camosun.ca/services/help-centres/</u>.

Section	Math 053 course content Topic	Suggested	Suggested	Suggested
Section	Topic	Time (Days)	Date	Week
Unit R	Arithmetic Review	- (- / - /		
	[This is a Separate Booklet]			
	Pre-test			
R.1	Place value	.5	Jan 7	1
R.2	Comparing numbers	.5	Jan 7	1
R.3	Rounding numbers	1	Jan 8	1
R.4	Adding and subtracting whole numbers and decimals	1	Jan 9	1
R.5	Multiplying whole numbers and decimals	1	Jan 10	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 13	1
R.9	Operations with fractions	1	Jan 14	2
R.10	Equivalent fractions	1	Jan 15	2
R.11	Adding and subtracting fractions	2	Jan 16, 17	2
R.12	Multiplying fractions	1	Jan 18	2
R.13	Dividing fractions	1	Jan 19	2
R.14	Converting fractions and decimals	2	Jan 20, 21	2, 3
R.15	Estimation	1	Jan 22	3
	Post-test			
	Unit R test		Jan 23 – 25	3
Unit 1 : Chapter 7	Introduction to Real Numbers			
	and Algebraic Expressions			
<u> </u>	Pre-test			
7.1	Introduction to algebra	2	Jan 26, 27	3
7.2	The real numbers	2	Jan 28, 29	4
7.3	Addition of real numbers	1	Jan 30	4
7.4	Subtraction of real numbers	1	Jan 31	4
7.5 7.6	Multiplication of real numbers Division of real numbers	1	Feb 1	4
7.6		2	Feb 2, 3	4
7.8	Properties of real numbers Simplifying expressions; order of operations	2	Feb 4, 5	5
1.0		2	Feb 6, 7	5
	Post-Test (timed 3hrs.)		5ab 9 10	
	Unit 1 Final Test (timed 3hrs.)		Feb 8 -10	5
Unit 2 : Chapter 8	Solving Equations and Inequalities			
Unit 2 : Chapter 8	Solving Equations and Inequalities Pre-test			
		2	Feb 11, 12	5, 6
8.1	Pre-test	2 2	Feb 11, 12 Feb 13, 14	5, 6 6
8.1	Pre-test Solving equations: the addition principle			
8.1 8.2 8.3	Pre-test Solving equations: the addition principle Solving equations: the multiplication principle Using the principles together Formulas	2	Feb 13, 14	6
8.1 8.2 8.3 8.4	Pre-test Solving equations: the addition principle Solving equations: the multiplication principle Using the principles together Formulas Applications of percent	2 2	Feb 13, 14 Feb 15, 16	6 6
8.1 8.2 8.3 8.4 8.5 8.6	Pre-test Solving equations: the addition principle Solving equations: the multiplication principle Using the principles together Formulas Applications of percent Applications and problem solving	2 2 3	Feb 13, 14 Feb 15, 16 Feb 17, 18, 19	6 6 6, 7
8.1 8.2 8.3 8.4 8.5 8.6 8.7	Pre-test Solving equations: the addition principle Solving equations: the multiplication principle Using the principles together Formulas Applications of percent Applications and problem solving Solving inequalities	2 2 3 2	Feb 13, 14 Feb 15, 16 Feb 17, 18, 19 Feb 20, 21	6 6 6, 7 7
8.1 8.2 8.3 8.4 8.5 8.6 8.7	Pre-test Solving equations: the addition principle Solving equations: the multiplication principle Using the principles together Formulas Applications of percent Applications and problem solving Solving inequalities Applications and problem solving with inequalities	2 2 3 2 2 2 2	Feb 13, 14 Feb 15, 16 Feb 17, 18, 19 Feb 20, 21 Feb 22, 23	6 6 6, 7 7 7 7
8.1 8.2 8.3 8.4 8.5 8.6 8.7	Pre-test Solving equations: the addition principle Solving equations: the multiplication principle Using the principles together Formulas Applications of percent Applications and problem solving Solving inequalities Applications and problem solving with inequalities Post-Test (timed 3hrs.)	2 2 3 2 2 2 2 2	Feb 13, 14 Feb 15, 16 Feb 17, 18, 19 Feb 20, 21 Feb 22, 23 Feb 24, 25 Feb 26, 27	6 6 6, 7 7 7 7, 8
8.1 8.2 8.3 8.4 8.5 8.6 8.7 8.8	Pre-test Solving equations: the addition principle Solving equations: the multiplication principle Using the principles together Formulas Applications of percent Applications and problem solving Solving inequalities Applications and problem solving with inequalities Post-Test (timed 3hrs.) Unit 2 Final Test (timed 3hrs.)	2 2 3 2 2 2 2 2	Feb 13, 14 Feb 15, 16 Feb 17, 18, 19 Feb 20, 21 Feb 22, 23 Feb 24, 25	6 6 6, 7 7 7 7 7, 8
8.1 8.2 8.3 8.4 8.5 8.6 8.7 8.8	Pre-test Solving equations: the addition principle Solving equations: the multiplication principle Using the principles together Formulas Applications of percent Applications and problem solving Solving inequalities Applications and problem solving with inequalities Post-Test (timed 3hrs.) Unit 2 Final Test (timed 3hrs.) Graph of Linear Equations	2 2 3 2 2 2 2 2	Feb 13, 14 Feb 15, 16 Feb 17, 18, 19 Feb 20, 21 Feb 22, 23 Feb 24, 25 Feb 26, 27	6 6 6,7 7 7 7,8 8
8.1 8.2 8.3 8.4 8.5 8.6 8.7 8.8 Unit 3: Chapter 9	Pre-test Solving equations: the addition principle Solving equations: the multiplication principle Using the principles together Formulas Applications of percent Applications and problem solving Solving inequalities Applications and problem solving with inequalities Post-Test (timed 3hrs.) Unit 2 Final Test (timed 3hrs.) Graph of Linear Equations Pre-test	2 2 3 2 2 2 2 2 2 2 2	Feb 13, 14 Feb 15, 16 Feb 17, 18, 19 Feb 20, 21 Feb 22, 23 Feb 24, 25 Feb 26, 27 Feb 26, 27	6 6 7 7 7 7 7 8 8 8
8.1 8.2 8.3 8.4 8.5 8.6 8.7 8.8 Unit 3: Chapter 9 9.1	Pre-test Solving equations: the addition principle Solving equations: the multiplication principle Using the principles together Formulas Applications of percent Applications and problem solving Solving inequalities Applications and problem solving with inequalities Post-Test (timed 3hrs.) Unit 2 Final Test (timed 3hrs.) Graph of Linear Equations Pre-test Graphs and applications of linear equations	2 2 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Feb 13, 14 Feb 15, 16 Feb 17, 18, 19 Feb 20, 21 Feb 22, 23 Feb 24, 25 Feb 26, 27 Feb 28- Mar 2 Mar 3, 4	6 6 7 7 7 7,8 8 8 8 8 8 8 8 8 8 8 9
8.1 8.2 8.3 8.4 8.5 8.6 8.7 8.8 Unit 3: Chapter 9 9.1 9.2	Pre-test Solving equations: the addition principle Solving equations: the multiplication principle Using the principles together Formulas Applications of percent Applications and problem solving Solving inequalities Applications and problem solving with inequalities Post-Test (timed 3hrs.) Unit 2 Final Test (timed 3hrs.) Graph of Linear Equations Pre-test Graphs and applications of linear equations More with graphing and intercepts	2 2 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Feb 13, 14 Feb 15, 16 Feb 17, 18, 19 Feb 20, 21 Feb 22, 23 Feb 24, 25 Feb 26, 27 Feb 26, 27 Feb 28- Mar 2 Mar 3, 4 Mar 3, 4	6 6 7 7 7,8 8 8 8 8 8 8 8 8 9
8.1 8.2 8.3 8.4 8.5 8.6 8.7 8.8 Unit 3: Chapter 9 9.1 9.2 9.3	Pre-test Solving equations: the addition principle Solving equations: the multiplication principle Using the principles together Formulas Applications of percent Applications and problem solving Solving inequalities Applications and problem solving with inequalities Post-Test (timed 3hrs.) Unit 2 Final Test (timed 3hrs.) Graph of Linear Equations Pre-test Graphs and applications of linear equations More with graphing and intercepts Slope and applications	2 2 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Feb 13, 14 Feb 15, 16 Feb 17, 18, 19 Feb 20, 21 Feb 22, 23 Feb 24, 25 Feb 26, 27 Feb 26, 27 Feb 28- Mar 2 Mar 3, 4 Mar 5, 6 Mar 7, 8	6 6 7 7 7,8 8 8 8 8 8 8 9 9
8.1 8.2 8.3 8.4 8.5 8.6 8.7 8.8 Unit 3: Chapter 9 9.1 9.2 9.3 9.4	Pre-test Solving equations: the addition principle Solving equations: the multiplication principle Using the principles together Formulas Applications of percent Applications and problem solving Solving inequalities Applications and problem solving with inequalities Post-Test (timed 3hrs.) Unit 2 Final Test (timed 3hrs.) Graph of Linear Equations Pre-test Graphs and applications of linear equations More with graphing and intercepts Slope and applications Equations of lines	2 2 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Feb 13, 14 Feb 15, 16 Feb 17, 18, 19 Feb 20, 21 Feb 22, 23 Feb 24, 25 Feb 26, 27 Feb 26, 27 Feb 28- Mar 2 Mar 3, 4 Mar 3, 4 Mar 5, 6 Mar 7, 8 Mar 9, 10	6 6 7 7 7,8 8 8 8 8 8 8 9 9 9 9 9
Unit 2 : Chapter 8 8.1 8.2 8.3 8.4 8.5 8.6 8.7 8.8 Unit 3: Chapter 9 9.1 9.2 9.3 9.4 9.5	Pre-test Solving equations: the addition principle Solving equations: the multiplication principle Using the principles together Formulas Applications of percent Applications and problem solving Solving inequalities Applications and problem solving with inequalities Post-Test (timed 3hrs.) Unit 2 Final Test (timed 3hrs.) Graph of Linear Equations Pre-test Graphs and applications of linear equations More with graphing and intercepts Slope and applications	2 2 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Feb 13, 14 Feb 15, 16 Feb 17, 18, 19 Feb 20, 21 Feb 22, 23 Feb 24, 25 Feb 26, 27 Feb 26, 27 Feb 28- Mar 2 Mar 3, 4 Mar 5, 6 Mar 7, 8	6 6 7 7 7 7,8 8 8 8 8 8 8 9 9 9

	Math 053 course content			
Section	Торіс	Suggested	Suggested	Suggested
		Time (Days)	Date	Week
Unit 4: Chapter 10/11	Polynomials: Operations & Factoring			
	Pre-test			
10.1*	Integers as exponents	2	Mar 15, 16	10
10.2*	Exponents and scientific notation	3	Mar 17 – 19	10, 11
	* 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, 24	11
10.5	Multiplication of polynomials	3	Mar 25 – 27	11, 12
10.6	Special products	3	Mar 28 – 30	12
10.7	Operations with polynomials in several variables	3	Mar 31 – Apr 2	12, 13
10.8a	Division of polynomials by a monomial	2	Apr 3, 4	13
11.1ab	Introduction to common factoring	3	Apr 5 – 7	13
11.2	Factoring trinomials of the type $x^2 + bx + c$	2	Apr 8, 9	14
11.5cd	Factoring differences of squares	2	Apr 10, 11	14
	Post-Test (timed 3hrs.)			
	Unit 4 Final Test (timed 3hrs.)		Apr 12 – 14	14
	MATH 053 Final Pre-test			
	MATH 053 Final Post-test			
	MATH 053 Final Exam (timed 3hrs.)		Apr 15 – 18	

5. Basis of Student Assessment (Weighting)

Five Unit Exams worth 50% | Final Exam worth 50% (You **must** pass final to pass the course. You must write all the unit tests before writing the final exam.)

Note: Students with a record of poor attendance OR poor progress may be restricted from re-registering in Community Learning Partnerships Department courses.

6. Grading System: Standard Grading System <u>http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.5.pdf</u>

A+	90–100%	B+	77–79%	C+	65–69%	D	50-59%
А	85–89%	В	73–76%	С	60–64%	F	40-49%
A–	80–84%	B–	70–72%	IP	in progress		

Temporary Grades

Temporary grades are assigned for specific circumstances and will convert to a final grade according to the grading scheme being used in the course. See Grading Policy at http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.5.pdf for information on conversion to final grades, and for additional information on student record and transcript notations.

7. Recommended Resources to Assist Students to Succeed Throughout the Course

Ask your course instructor FIRST and then you could also go to: ACADEMIC UPGRADING HELP CENTRES (CBA 109 and E342) http://camosun.ca/services/help-centres/math.html

There are many other Camosun services available to help you succeed in and out of the classroom, including education planning, learning and personal support, campus life, work and housing, and getting around. This information is available at Registration or the College web site <u>http://camosun.ca/services/</u>

8. College Supports, Services and Policies

Immediate, Urgent, or Emergency Support

If you or someone you know requires immediate, urgent, or emergency support (e.g. illness, injury, thoughts of suicide, sexual assault, etc.), **SEEK HELP**. Resource contacts @ http://camosun.ca/about/mental-health/emergency.html or http://camosun.ca/about/mental-health/emergency.html or http://camosun.ca/services/sexual-violence/get-support.html#urgent

College Services

Camosun offers a variety of health and academic support services, including counselling, dental, disability resource centre, help centre, learning skills, sexual violence support & education, library, and writing centre. For more information on each of these services, visit the **STUDENT SER VICES** link on the College website at <u>http://camosun.ca/</u>

College Policies

Camosun strives to provide clear, transparent, and easily accessible policies that exemplify the college's commitment to life-changing learning. It is the student's responsibility to become familiar with the content of College policies. Policies are available on the College website at http://camosun.ca/about/policies/. Education and academic policies include, but are not limited to, Academic Progress, Admission, Course Withdrawals, Standards for Awarding Credentials, Involuntary Health and Safety Leave of Absence, Prior Learning Assessment, Medical/Compassionate Withdrawal, Sexual Violence and Misconduct, Student Ancillary Fees, Student Appeals, Student Conduct, and Student Penalties and Fines.