CAMOSUN COLLEGE
School of Access
Academic and Career Foundations Department
MATH 053 Intermediate Mathematics 2

Fall 2018, Section S02

COURSE OUTLINE

1. Instructor: Nicolas Mai **Phone**: 250-370 – 4481
Office: Interurban: CBA 146 **Email**: mai@camosun.bc.ca
Website: https://sites.camosun.ca/acf-math

Time	Monday	Tuesday	Wednesday	Thursday	Friday
8:30	Math S02 CBA 117	Office CBA 146	Math S02 CBA 117	Office CBA 146	Office CBA 146
10:30		Math S03 CBA 117		Math S03 CBA 117	Math S03 CBA 117
11:20	Lunch		Lunch		
12:20	Math S05 CBA 117	Lunch	Math S05 CBA 117	Lunch	Lunch
1:30 2:30		Help Centre CBA 109		Help Centre CBA 109	Department Meetings
3:20		Office CBA 146		Office CBA 146	

Please contact me at mai@camosun.bc.ca or 250-370-4481 to set up office appointments

2. 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 Advanced-level algebra, math for technology, and other courses and programs

3. Required Materials

(a) textbook: *Developmental Mathematics*, 6th/7th/8th edition, Marvin Bittinger/Judith Beecher
(b) scientific calculator (Sharp EL-531X or EL-531W for next level MATH 072 or 135)

Supplementary Materials

(c) *Student's Solutions Manual*, Judith Penna
(for sale in the bookstore; available for reference in the classroom)
(d) *Instructor's Solutions Manual*, Judith Penna (for reference in the classroom)
(e) website *www.mymathlab.com* (online text, tutorials, videos, and testing)

4. Course Schedule, Content and Instructions

Schedule:

2015W Semester classes run from January 5 - April 10, 2015

Other important dates:	February 9	Holiday, College Closed
	February 12-13	Reading Break
	March 9	Withdrawal Deadline
	April 3 & 6	Holiday, College Closed
	April 10	Last day of classes

Instructions:

The course completion time will vary for each student, depending on a number of factors, including your current level of math skills, motivation, learning rate, and how much time you have to study math, either at the college or at home. Students generally need to spend 5–15 hours of study time per week to complete each math course within 4 months.

(a) before starting unit 1, students must pass a competency test to demonstrate that they can add, subtract, multiply, and divide whole numbers, fractions, and decimals without the use of a calculator – if necessary, use the Arithmetic Review booklet to review these operations before writing the competency test
(b) for each section of the 053 text listed in the table below, read the explanations, study the Examples, do the Margin Exercises, and then work through and check all or at least some of the more difficult odd-numbered problems in the Exercise Set
(c) note that unit 4 includes text chapter 10, 11.1, & 11.2, 11.5, and a supplement on exponents
(d) to prepare for the final test for each unit, do the Summary and Review Exercises and write the Chapter Test at the end of the chapter, and correct all of your errors
(e) review your final test results with the instructor, and proceed to the next unit if you score 75% or better, or rewrite the final test if you score less than 75% (all test scores count)

8th ed'n	7th ed'n	MATH 053 course content		
		Unit R – Arithmetic Review (no calculator)		
R.1	R.1	Place value		
R.2	R.2	Comparing numbers		
R.3	R.3	Rounding numbers		
R.4	R.4	Adding and subtracting whole numbers and decimals		
R.5	R.5	Multiplying whole numbers and decimals		
R.6	R.6	Dividing whole numbers and decimals		
R.7	R.7	Order of operations		
R.8	R.8	Operations with fractions		
R.9	R.9	Equivalent fractions		
R.10	R.10	Adding and subtracting fractions		
R.11	R.11	Multiplying fractions		
R.12	R.12	Dividing fractions		

R.13	R.13	Converting fractions and decimals		
R.14	R.14	Estimation		
		Practice Test		
		Unit R final test (no calculator)		

8th ed'n	7th ed'n	MATH 053 course content		
		Unit 1 – Real Numbers and Algebraic Expressions (20 days)		
7.1	7.1	Introduction to algebra		
7.2	7.2	The real numbers		
7.3	7.3	Addition of real numbers		
7.4	7.4	Subtraction of real numbers		
7.5	7.5	Multiplication of real numbers		
7.6	7.6	Division of real numbers		
7.7	7.7	Properties of real numbers		
7.8	7.8	Simplifying expressions; order of operations		
		Summary and review		
		Chapter test		
		Unit 1 final test		
		Unit 2 – Solving Equations and Inequalities (30 days)		
8.1	8.1	Solving equations: the addition principle		
8.2	8.2	Solving equations: the multiplication principle		
8.3	8.3	Using the principles together		
8.4	8.4	Formulas		
8.5	8.5	Applications of percent		
8.6	8.6	Applications and problem solving		
8.7	8.7	Solving inequalities		
8.8	8.8	Applications and problem solving with inequalities		
		Summary and review		
		Chapter test		
		Unit 2 final test		
		Unit 3 – Graphs of Linear Equations (22 days)		
9.1	9.1	Graphs and applications of linear equations		
9.2	9.2	More with graphing and intercepts		
9.3	9.3	Slope and applications		
9.4	9.4	Equations of lines		
9.5	9.5	Graphing using the slope and y-intercept		
		Summary and review		
		Chapter test		
		Unit 3 final test		
		Unit 4 – Polynomials: Operations and Factoring (28 days)		
10.1*	10.1*	Integers as exponents		
10.2*	10.2*	Exponents and scientific notation		
		* after 10.2, complete supplementary exercises on exponents #1−25		
10.3	10.3	Introduction to polynomials		
10.4	10.4	Addition and subtraction of polynomials		
10.5	10.5	Multiplication of polynomials		
10.6	10.6	Special products		
10.7	10.7	Operations with polynomials in several variables		
10.8a	10.8a	Division of polynomials by a monomial		
11.1ab	11.1ab	Introduction to common factoring		
11.2	11.2	Factoring trinomials of the type $x^2 + bx + c$		
11.5cd	11.5cd	Factoring differences of squares		
		Summary and review		
		Chapter test		

		Unit 4 final test		
		MATH 053 review		
		MATH 053 final exam day 105		

5. Basis of Student Assessment (Weighting)

(a) **Tests** 75% of the course grade is based on the average of **all** unit final test scores for units 1−4 (including both passing and failing test scores)

(b) **Exams** 25% of the course grade is based on the average of **all** final exam scores (including both passing and failing exam scores)

Note: Students with a record of poor attendance OR poor progress may be restricted from re-registering in Academic and Career Foundations Department courses.

6. Grading System

A+	90–100%	B+	77–79%	C+	65–69%
A	85–89%	B	73–76%	C	60–64%
A–	80–84%	B–	70–72%	IP	in progress

7. Learning Support and Services for Students

ACADEMIC UPGRADING HELP CENTRE (CBA 109)

Help with coursework, reference & learning materials library,
computers & printer, quiet testing & study areas

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 http://camosun.ca/services/

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/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 SERVICES** link on the College website at http://camosun.ca/

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.

A. GRADING SYSTEMS http://www.camosun.bc.ca/policies/policies.php

The following two grading systems are used at Camosun College:

1. Standard Grading System (GPA)

Percentage	Grade	Description	Grade Point Equivalency
90-100	A+		9
85-89	A		8
80-84	A-		7
77-79	B+		6
73-76	B		5
70-72	B-		4
65-69	C+		3
60-64	C		2
50-59	D		1
0-49	F	Minimum level has not been achieved.	0

2. Competency Based Grading System (Non GPA)

This grading system is based on satisfactory acquisition of defined skills or successful completion of the course learning outcomes

Grade	Description
COM	The student has met the goals, criteria, or competencies established for this course, practicum or field placement.
DST	The student has met and exceeded, above and beyond expectation, the goals, criteria, or competencies established for this course, practicum or field placement.
NC	The student has not met the goals, criteria or competencies established for this course, practicum or field placement.

B. 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://www.camosun.bc.ca/policies/E-1.5.pdf for information on conversion to final grades, and for additional information on student record and transcript notations.

Temporary Grade	Description
I	*Incomplete*: A temporary grade assigned when the requirements of a course have not yet been completed due to hardship or extenuating circumstances, such as illness or death in the family.
IP	*In progress*: A temporary grade assigned for courses that are designed to have an anticipated enrollment that extends beyond one term. No more than two IP grades will be assigned for the same course.
CW	*Compulsory Withdrawal*: A temporary grade assigned by a Dean when an instructor, after documenting the prescriptive strategies applied and consulting with peers, deems that a student is unsafe to self or others and must be removed from the lab, practicum, worksite, or field placement.