

CAMOSUN COLLEGE School of Access Community Learning Partnerships

MATH 052 Intermediate Mathematics 1

2016 Fall

COURSE OUTLINE

The calendar description is available on the web at

http://www.camosun.ca/learn/calendar/current/

W 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 Aubrey Bebar

(b) Office hours By student request

(c) Location CELÁSET program site

(d) Phone N/A Alternative: Facebook messenger

bebara@camosun.ca (e) E-mail N/A

(f) Website

2. Intended Learning Outcomes

- use mathematics at an ABE Intermediate level with competence •
- demonstrate knowledge and skills in using the language, principles, and operations of consumer • math (arithmetic, statistics, measurement), geometry, and trigonometry
- apply a variety of strategies in solving math-related problems •
- apply knowledge and skills in consumer math, geometry, and trigonometry to solve problems •
- use knowledge of consumer math, geometry, and trigonometry as a basis for further study in • Intermediate-level algebra and math for trades

3. Required Materials

- (a) textbook: Developmental Mathematics, 6th/7th/8th edition, Marvin Bittinger/Judith Beecher
- (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)

Supplementary Materials

- (d) Student's Solutions Manual, Judith Penna (for reference in the classroom)
- (e) Instructor's Solutions Manual, Judith Penna (for reference in the classroom)

4. Course Content and Schedule

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 <u>without the use of a calculator</u> – if necessary, use the Arithmetic Review booklet to review these operations before writing the competency test
- (b) for each section of the 052 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 3 is covered by Appendixes A–D at the back of the text, and unit 5 is covered by the supplementary module entitled *Trigonometry*
- (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)

MATH 052 course content on				
Unit R – Arithmetic Review (no calculator)				
Place value				
Comparing numbers				
Rounding numbers				
Adding and subtracting whole numbers and decimals				
Multiplying whole numbers and decimals				
Dividing whole numbers and decimals				
Order of operations				
Operations with fractions				
Equivalent fractions				
Adding and subtracting fractions				
Multiplying fractions				
Dividing fractions				
Converting fractions and decimals				
Estimation				
Unit R final test (no calculator)				
Unit 1 – Percent Notation (for 4-month completion: 25 days)				
Ratio and proportion				
Percent notation				
Percent and fraction notation				
Solving percent problems using percent equations				
Solving percent problems using proportions				
Applications of percent				
Sales tax, commission, discount, and interest				
Simple interest and compound interest; credit cards				
Interest rates on credit cards and loans				
Summary and review				
Chapter practice test				
Unit 1 final test				
Unit 2 – Data, Graphs, and Statistics (15 days)				
Averages, medians, and modes				
Tables and pictographs				

5.3	Bar graphs and line graphs			
5.4	Circle graphs			
0	Summary and review			
	Chapter practice test			
	Unit 2 final test			
	Unit 3 – Measurement (15 days)			
A*	Linear measures: American units and metric units (*Appendixes)			
B*	Weight and mass; medical applications			
C*	Capacity; medical applications			
D*	Time and temperature			
	Summary and review			
	Unit 3 final test			
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	Unit 4 – Geometry (20 days)			
6.2	Perimeter			
6.3	Area			
6.4	Circles			
6.5	Volume and surface area			
6.8	Similar triangles			
	Summary and review			
	Chapter practice test			
	Unit 4 final test			
	Unit 5 – Trigonometry (supplementary module) (25 days)			
5.1	The right triangle			
5.2	Angles and sides			
5.3	The Pythagorean theorem (more in 7e text p 1059, 8e tx p 1087)			
5.4	The tangent ratio			
5.5	Using the tangent ratio			
5.6	The sine and cosine ratios			
5.7	Solving triangles			
	Practice test			
	Unit 5 final test			
	MATH 052 review			
	MATH 052 final exam day 105			

5. Basis of Student Assessment (Weighting)

The course grade is either COM (complete) or IP (in progress) or NC (not complete), and is based on the student's score on the Final Test, which covers all of the required units (passing score 75%).

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

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Standard Grading System (GPA)



Competency Based Grading System

7. 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, Student Services or the College web site at http://www.camosun.bc.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.

http://www.camosun.bc.ca/policies/policies.html

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

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

Temporary Grade	Description		
I	<i>Incomplete</i> : 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	<i>In progress</i> : 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	<i>Compulsory Withdrawal</i> : 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.		