CAMOSUN COLLEGE
School of Access
Academic and Career Foundations Department

MATH 052-S03   Intermediate Mathematics 1
Spring 2012

COURSE OUTLINE

The Approved Course Description is available on the College website
http://www.camosun.bc.ca/learn/calendar/index.html

1. Instructor Information

Instructor: Alison Bowe   Phone: 370-4911
Office: CBA 150   e-mail: bowe@camosun.bc.ca

OFFICE HOURS BY APPOINTMENT

May - June 2012 Schedule

Time	Monday	Tuesday	Wednesday	Thursday	Friday
10:00 – 11:30		Office Hours		Office Hours	
12:00 – 12:30	Help Centre CBA 109	Help Centre CBA 109	Help Centre CBA 109	Help Centre CBA 109	
12:30 – 3:20	**Math S01 CBA 117**	**Math S03 CBA 117**	**Math S01 CBA 117**	**Math S03 CBA 117**	Office Hours
3:30 – 4:00	Office Hours	Office Hours	Office Hours	Office Hours	
4:30 – 5:00	Office Hours		Office Hours		
5:00 – 7:50	**Math S04 CBA 117**		**Math S04 CBA 117**		

2. Intended Learning Outcomes
 (complete ABE Intermediate Mathematics learning outcomes at ABE Articulation Handbook website http://www.aved.gov.bc.ca/abe/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 consumer math (arithmetic, statistics, measurement), geometry, and trigonometry
3. apply a variety of strategies in solving math-related problems
4. apply knowledge and skills in consumer math, geometry, and trigonometry to solve problems
5. 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*, 8th or 7th edition, Marvin Bittinger & Judith Beecher
(b) module: *Trigonometry* (ABE Intermediate Mathematics module 14), British Columbia
(c) scientific calculator (Sharp EL531W for MATH 072)

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

4. Course Content and Schedule

Classes run from May 7, 2011 to June 22, 2011.

The College will be closed on Monday, May 21, for Victoria Day.

Self-paced 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.
Note: The first three units of MATH 052 cover essentially the same content as the last three units of MATH 034. At the discretion of the instructor, students who have recently completed MATH 034 may either transfer their 034 units 4−6 test scores to 052 units 1−3, or write the 052 tests for these units to improve their scores and understanding.
(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)

8th ed'n	7th ed'n	MATH 052 course content	video CD
		Unit R − Arithmetic Review (no calculator)	
R.2	R.2	Fraction Notation	
R.3	R.3	Decimal Notation	
		Arithmetic Review test (no calculator)	
		Unit 1 − Percent Notation (for 4-month completion: 25 days)	
4.1	4.1	Ratio and proportion	4.1
4.2	4.2	Percent notation	4.2
4.3	4.3	Percent and fraction notation	4.3
4.4	4.4	Solving percent problems using percent equations	4.4
4.5	4.5	Solving percent problems using proportions	4.5
4.6	4.6	Applications of percent	4.6
4.7	4.7	Sales tax, commission, discount, and interest	4.7
	4.8	Interest rates on credit cards and loans	4.8
4.8		Simple interest and compound interest; credit cards	4.7/8
		Summary and review	
		Chapter test	
		Unit 1 final test	

8th ed'n	7th ed'n	MATH 052 course content		video CD
		Unit 2 – Data, Graphs, and Statistics (15 days)		
5.1	5.1	Averages, medians, and modes		5.1
5.2	5.2	Tables and pictographs		5.2
5.3	5.3	Bar graphs and line graphs		5.3
5.4	5.4	Circle graphs		5.4
		Summary and review		
		Chapter test		
		Unit 2 final test		
		Unit 3 – Measurement (15 days)		
A*	A*	Linear measures: American units and metric units (*Appendixes)		
B*	B*	Weight and mass; medical applications		
C*	C*	Capacity; medical applications		
D*	D*	Time and temperature		
		Summary and review		
		Unit 3 final test		
		Unit 4 – Geometry (20 days)		
6.1	6.1	Basic geometric figures		6.1
6.2	6.2	Perimeter		6.2
6.3	6.3	Area		6.3
6.4	6.4	Circles		6.4
6.5	6.5	Volume and surface area		6.5
6.6	6.6	Relationships between angle measures		6.6
6.7	6.7	Congruent triangles and properties of parallelograms		6.7
6.8	6.8	Similar triangles		6.8
		Summary and review		
		Chapter test		
		Unit 4 final test		
		Unit 5 – Trigonometry (supplementary module) (25 days)		
5.1	5.1	The right triangle		
5.2	5.2	Angles and sides		
5.3	5.3	The Pythagorean theorem (more in 6e text p 1087, 7e text p 1059)		
5.4	5.4	The tangent ratio		
5.5	5.5	Using the tangent ratio		
5.6	5.6	The sine and cosine ratios		
5.7	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)

(a) **Tests**   75% of the course grade is based on the average of **all** unit final test scores for units 1−5 (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. 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, Registration, or on the College website *http://camosun.ca/services/*

ACADEMIC CONDUCT POLICY

It is the student's responsibility to become familiar with the content of the Academic Conduct Policy. The policy is available in each School Administration Office, Registration, and on the College website *http://camosun.ca/about/policies/education-academic/e-2-student-services-&-support/e-2.5.pdf*

ACADEMIC PROGRESS POLICY

The 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 website *http://camosun.ca/about/policies/education-academic/e-1-programming-&-instruction/e-1.1.pdf*