



MATH 034 S23 - Fundamental Mathematics 3

COURSE OUTLINE

Winter 2012

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

Please note: This outline will not be kept indefinitely. It is recommended students keep this outline for their records.

1. Instructor Information

- (a) Instructor: **Marc Bissley** _____
- (b) Office hours: **By Appointment (depending upon location)**
- (c) Help Centre hours: _____
- (d) Location: **Literacy Victoria: Monday and Wednesday, 1:00 to 3:50 p.m.**
- (e) Phone: **Literacy Victoria: 250-3813755**
VNFC: 250-384-3211 loc 308
College Voice Message: 250-370-3945
- (f) E-mail: **bissley@camosun.bc.ca** _____

2. Intended Learning Outcomes

(The complete ABE Fundamental Level III Mathematics Skills learning outcomes can be found in the ABE Articulation Handbook's 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 Fundamental level with competence
2. demonstrate knowledge and skills in using the principles and operations of basic arithmetic, measurement, and data analysis
3. apply a variety of strategies in solving math-related problems
4. apply knowledge and skills in basic arithmetic, data analysis, measurement, and geometry to solve problems related to employment, consumerism, personal finance, and other aspects of daily life
5. use knowledge and skills in arithmetic, data analysis, measurement, and geometry as a basis for further study in algebra, geometry, trades math, and other programs

3. Required Materials

- (a) textbook: *Developmental Mathematics*, 7th (or 6th) edition, Marvin Bittinger & Judith Beecher
- (b) basic calculator (scientific calculator recommended)

Supplementary Materials

- (c) *Student's Solutions Manual*, Judith Penna
- (d) *Instructor's Solutions Manual*, Judith Penna (for reference in the classroom)
- (e) DVD's or videotapes (covering each section of the text, for viewing at the college or at home)
- (f) website www.mymathlab.com (online text, tutorials, videos, and testing)
- (g) Math Tutor Centre (see www.mymathlab.com for tutoring via toll-free telephone or fax)

4. Course Content and Schedule

Self-paced Instructions

The course completion time will vary for each student, depending on a number of factors to be discussed with the instructor when the **individual learning plan** is developed. Factors include the students' beginning level of math skills, motivation, learning rate, and how much time they can actually study and attend class (average 10 – 15 hours per week to complete in 4 months).

- (a) work through all sections of the text listed for each unit in the table below (read the explanations, study the Examples, do the Margin Exercises when directed, and then answer some of the more difficult odd-numbered problems in the Exercise Set)
- (b) 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
- (c) 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)
- (d) calculators may not be used on the final tests for units 1 – 3

034 text	MATH 034 course content	video	date
	Unit 1 – Whole Numbers (for 4-month completion: 15 days)		
1.1	Standard notation; order	1	
1.2	Addition and subtraction	1	
1.3	Multiplication and division; rounding and estimating	1,2	
1.4	Solving equations	2	
1.5	Applications and problem solving	3	
1.6	Exponential notation and order of operations	3	
1.7	Factorizations	4	
1.8	Divisibility	4	
1.9	Least common multiples	7	
	Summary and review		
	Chapter test		
	Unit 1 final test (no calculator)		
	Unit 2 – Fraction Notation (20 days)		
2.1	Fraction notation and simplifying	4,5	
2.2	Multiplication and division	5,6	
2.3	Addition and subtraction; order	7,8	
2.4	Mixed numerals	8,9	
2.5	Applications and problem solving	7,8,9	
2.6	Order of operations; estimation	9	
	Summary and review		
	Chapter test		
	Unit 2 final test (no calculator)		

034 text	MATH 034 course content	video	date
	Unit 3 – Decimal Notation (15 days)		
3.1	Decimal notation, order, and rounding	10	
3.2	Addition and subtraction	10	
3.3	Multiplication	11	
3.4	Division	11	
3.5	Converting from fraction notation to decimal notation	11	
3.6	Estimating	12	
3.7	Applications and problem solving	12	
	Summary and review		
	Chapter test		
	Unit 3 final test (no calculator)		
	Unit 4 – Percent Notation (20 days)		
4.1	Ratio and proportion	13,14	
4.2	Percent notation	15	
4.3	Percent and fraction notation	15	
4.4	Solving percent problems using percent equations	15	
4.5	Solving percent problems using proportions	16	
4.6	Applications of percent	16	
4.7	Sales tax, commission, discount, and interest	17	
4.8	Interest rates on credit cards and loans	17	
	Summary and review		
	Chapter test		
	Unit 4 final test		
	Unit 5 – Data, Graphs, and Statistics (15 days)		
5.1	Averages, medians, and modes	18,19	
5.2	Tables and pictographs	18	
5.3	Bar graphs and line graphs	19	
5.4	Circle graphs	19	
	Summary and review		
	Chapter test		
	Unit 5 final test		
	Unit 6 – Measurement and Geometry (15 days)		
A*	Linear measures: American and metric units (*Appendixes)	20	
B*	Weight and mass; medical applications	23	
C*	Capacity; medical applications	23	
D*	Time and temperature	23,24	
6.2	Perimeter	21	
6.3	Area	21	
6.4	Circles	22	
6.5a	Volume and surface area	21	
	Summary and review		
	Unit 6 final test		day 100

5. Basis of Student Assessment (Weighting)

(Should be directly linked to learning outcomes.)

- (a) Assignments
- (b) **Tests** 100% of the course grade is based on the average of **all** unit final test scores (including both passing and failing test scores)
- (c) Exams
- (d) Other (e.g. Project, Attendance, Group Work)

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, Registrar's Office or the College web site at <http://www.camosun.ca/services>

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.

<http://camosun.bc.ca/policies/Education-Academic/E-1-Programming-&-Instruction/E-1.1.pdf>

ACADEMIC CONDUCT POLICY

There is an Academic 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.

www.camosun.bc.ca/divisions/pres/policy/2-education/2-5.html