



School of Access
Community Learning Partnerships
MATH 022 S17
Fundamental Mathematics 2
Course Outline – Fall 2012



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Class Hours: Mo & Fr 10:00-11:50; We 1:00-2:50

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Calendar Description

Offered in an individualized, small-class format, MATH 022 is the second of six levels of Adult Literacy Fundamental Mathematics, which will give students a strong foundation of basic math skills, concepts, vocabulary, and problem-solving strategies. Topics: place value, rounding, adding, and subtracting whole numbers to 1,000,000; multiplication facts.

Prerequisite(s): MATH 021

<http://camosun.ca/learn/calendar/current/web/math.html>

Required Materials

- (a) textbook: *Adult Literacy Fundamental Mathematics Book Two*

Supplementary Materials

- (b) three-ring binder, lined paper, graph paper
- (c) pencils, eraser, ruler, highlighter, file cards

Course Content and Schedule

Self-paced Instructions

- (a) for each topic of the book listed below, study the explanations and examples, then work through and check your answers to as many exercise problems as you need to fully understand
- (b) ask for help when you have difficulties, or when you don't understand something
- (c) complete the Self-Tests for each topic and check your answers, then to prepare for the unit Final Test, complete the Review problems at the end of each unit
- (d) after clearing up any problems and correcting your errors, ask your instructor for authorization to write the unit Final Test
- (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%
- (f) calculators may not be used on the Final Tests, unless approved by the instructor

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 a reasonable amount of time.



Intended Learning Outcomes

(complete ABE Fundamental Mathematics learning outcomes at ABE Articulation Handbook website <http://www.aved.gov.bc.ca/abe/handbook.pdf>)

At completion of the course students will be able to...

1. Use math vocabulary related to the multiplication facts, and to place value, estimating, ordering, adding, and subtracting whole numbers to 1,000,000.
2. Identify place value and compare the magnitude of whole numbers.
3. Round whole numbers to a given place.
4. Add whole numbers with and without carrying.
5. Subtract whole numbers with and without borrowing.
6. Estimate sums and differences.
7. Memorize the multiplication facts to 10 x 10.
8. Write numbers as multiplication or repeated addition.
9. Use addition or subtraction to solve multi-step application problems.
10. Use multiplication to solve one-step application problems.
11. Add and subtract time measurements, and convert between 12 and 24 hour notation.
12. Work independently on the materials provided, and ask for help when needed.
13. Use strategies to organize work and notes, and to manage time and math anxiety.

| unit | topic | MATH 022 course content – Book Two | date |
|----------|-------|------------------------------------|------|
| 1 | | Number Sense | |
| | A | Emotions and Learning | |
| | B | Expanded Form | |
| | C | Place Value | |
| | D | Ordering Numerals | |
| | E | Rounding Numbers | |
| | | Unit 1 Review | |
| | | Unit 1 Final Test | |
| 2 | | Addition | |
| | A | Addition | |
| | B | Addition with Carrying | |
| | C | Estimating Answers in Addition | |
| | | Unit 2 Review | |
| | | Unit 2 Final Test | |
| 3 | | Subtraction | |
| | A | Subtraction | |
| | B | Subtraction of Larger Numbers | |
| | C | Renaming | |
| | D | Subtraction with Borrowing | |
| | E | Estimating Answers in Subtraction | |
| | F | Problem Solving | |
| | | Unit 3 Review | |
| | | Unit 3 Final Test | |
| 4 | | Making Change and Time | |



| | | | |
|--|---|-------------------------|--|
| | A | Counting to Make Change | |
| | B | Making Change | |
| | C | Telling Time | |
| | D | Adding Units of Time | |
| | | Unit 4 Review | |
| | | Unit 4 Final Test | |

Basis of Student Assessment (Weighting)

The MATH 022 course grade is based on the average of all unit Final Test passing scores.

Grading System

| Percentage | Grade | 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 |
| <50% | F | 0 |
| In Progress | IP | N/A |

For information on Camosun College’s grading policy, see the webpage <http://camosun.ca/about/policies/education-academic/e-1-programming-&-instruction/e-1.5.pdf>

Academic Progress

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.ca/about/policies/education-academic/e-1-programming-&-instruction/e-1.1.pdf>



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>

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, or the College web site at:

<http://camosun.ca/about/policies/education-academic/e-2-student-services-&-support/e-2.5.pdf>

STUDENT GRADING POLICY

A new student grading policy is in effect for students in the School of Access. This information is available in the College Calendar, Registrar's Office or the College web site at:

<http://camosun.ca/about/policies/education-academic/e-1-programming-&-instruction/e-1.5.pdf>

ACADEMIC PROGRESS POLICY

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<http://camosun.ca/about/policies/education-academic/e-1-programming-&-instruction/e-1.1.pdf>