**CAMOSUN COLLEGE**
***School of Access***
***Community Learning Partnerships Department***

***Math 052***
***Intermediate Mathematics 1***
***Fall 2018***

# COURSE OUTLINE

**The calendar 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, especially to assist in transfer credit to post-secondary institutions.*

## 1. Instructor Information

| | | |
|---|---|---|
| **(a) Instructor** | Wendy Seward | |
| **(b) Office hours** | 3 – 3:50 MW or by appointment | |
| **(c) Location** | Belmont School Room A117 | |
| **(d) Phone** | **Alternative:** | |
| **(e) E-mail** | sewardw@camosun.ca | |
| **(f) Website** | http://camosun.ca/ | |

## 2. Intended Learning Outcomes

Complete ABE Fundamental Mathematics learning outcomes at ABE Articulation Handbook website *https://www2.gov.bc.ca/assets/gov/education/post-secondary-education/adult-education/abe_guide.pdf*

On completion of the course, students will be able to:

- 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, Custom Edition for Camosun College, Marvin Bittinger/Judith Beecher (Content taken from the 9th Edition of Developmental Mathematics by the same authors)
(b) modules:
1. Arithmetic Review (ABE Intermediate Mathematics module 1), British Columbia
2. Trigonometry (ABE Intermediate Mathematics module 14), British Columbia
(c) Scientific calculator: The Sharp EL 531W model will be the only calculator allowed for this course

## 4. Course Content and Schedule

The course is designed to be completed in one term. However, it can be completed sooner, depending on a number of factors including the students' beginning level of math-skills, motivation, learning rate, and how much time they can actually study (average 15 to 20 hours per week to complete in 4 months).

If you do not understand something, seek help right away. Resources include your instructor, your family and friends, and /or the Math Help Centres.

*Math Help: You can get free face-to-face tutoring from our instructional assistants in the Math Help Centres/Labs in E342 (Lansdowne) or CBA 109 (Interurban). Hours are posted on the doors and on the website http://camosun.ca/services/help-centres/.

| Math 052 course content | | | | |
|---|---|---|---|---|
| Section | Topic | Suggested Time (Days) | Suggested Date | Suggested Week |
| **Unit R** | **Arithmetic Review (no calculator) [This is a Separate Booklet]** | | | |
| | **Pre-test** | | | |
| R.1 | Place value | 1 | Sep 4 | 1 |
| R.2 | Comparing numbers | 1 | Sep 5 | 1 |
| R.3 | Rounding numbers | 1 | Sep 6 | 1 |
| R.4 | Adding and subtracting whole numbers and decimals | 2 | Sep 7, 8 | 1 |
| R.5 | Multiplying whole numbers and decimals | 2 | Sep 9,10 | 1, 2 |
| R.6 | Powers – repeated multiplication | 2 | Sep 11,12 | 2 |
| R.7 | Dividing whole numbers and decimals | 2 | Sep 13, 14 | 2 |
| R.8 | Order of operations | 2 | Sep 15, 16 | 2 |
| R.9 | Operations with fractions | 2 | Sep 17,18 | 3 |
| R.10 | Equivalent fractions | 1 | Sep 19 | 3 |
| R.11 | Adding and subtracting fractions | 2 | Sep 20, 21 | 3 |
| R.12 | Multiplying fractions | 1 | Sep 22 | 3 |
| R.13 | Dividing fractions | 1 | Sep 23 | 3 |
| R.14 | Converting fractions and decimals | 2 | Sep 24, 25 | 4 |
| R.15 | Estimation | 1 | Sep 26 | 4 |
| | **Post-test** | | | |
| | **Unit R test (no calculator)** | | Sep 27 – 28 | 4 |
| | | | | |
| **Unit 1 : Chapter 4** | **Percent Notation** | | | |
| | **Pre-test** | | | |
| 4.1 | Ratio and proportion | 2 | Sep 29, 30 | 4, 5 |
| 4.3 | Percent and fraction notation | 2 | Oct 1,2 | 5 |
| 4.4 | Solving percent problems using percent equations | 2 | Oct 3, 4 | 5 |
| 4.5 | Solving percent problems using proportions | 2 | Oct 5, 6 | 5 |
| 4.6 | Applications of percent | 2 | Oct 7, 8 | 5, 6 |
| 4.7 | Sales tax, commission and discount | 2 | Oct 9, 10 | 6 |
| 4.8 | Simple interest and compound interest; credit cards | 2 | Oct 11, 12 | 6 |
| | **Post-Test (timed 3hrs.)** | | | |
| | **Unit 1 Final Test *(timed 3hrs.)*** | | Oct 13 -16 | 6, 7 |
| | | | | |
| **Unit 2 : Chapter 5** | **Data, Graphs, and Statistics** | | | |
| | **Pre-test** | | | |
| 5.1 | Averages, medians, and modes | 2 | Oct 17, 18 | 7 |
| 5.2 | Tables and pictographs | 2 | Oct 19, 20 | 7 |
| 5.3 | Bar graphs and line graphs | 2 | Oct 21, 22 | 7, 8 |
| 5.4 | Circle graphs | 2 | Oct 23, 24 | 8 |
| | **Post-Test (timed 3hrs.)** | | | |
| | **Unit 2 Final Test *(timed 3hrs.)*** | | Oct 25 – 27 | 8 |
| | | | | |
| **Unit 3: Appendixes** | **Measurement** | | | |
| | **Pre-test** | | | |
| A | Linear measures: American units and metric units | 3 | Oct 28, 29, 30 | 8,9 |
| B | Weight and mass; medical applications | 3 | Oct 31, Nov 1,2 | 9 |
| C | Capacity; medical applications | 3 | Nov 3,4,5 | 9, 10 |
| D | Time and temperature | 2 | Nov 6, 7 | 10 |
| | **Post-Test (timed 3hrs.)** | | | |
| | **Unit 3 Final Test *(timed 3hrs.)*** | | Nov 8 – 10 | 10 |

| Math 052 course content | | | | |
|---|---|---|---|---|
| Section | Topic | Suggested Time (Days) | Suggested Date | Suggested Week |
| **Unit 4: Chapter 6** | **Geometry** | | | |
| | **Pre-test** | | | |
| 6.2 | Perimeter | 2 | Nov 11, 12 | 10, 11 |
| 6.3 | Area | 3 | Nov 13,14,15 | 11 |
| 6.4 | Circles | 2 | Nov 16, 17 | 11 |
| 6.5 | Volume and surface area | 4 | Nov 18 – 21 | 11, 12 |
| 6.8 | Similar triangles | 2 | Nov 22, 23 | 12 |
| | **Post-Test (timed 3hrs.)** | | | |
| | **Unit 4 Final Test *(timed 3hrs.)*** | | Nov 24 – 26 | 12, 13 |
| **Unit 5: Chapter 5** | **Trigonometry** | | | |
| | *No pretest for this unit* | | | |
| 5.1 | The right triangle | 1 | Nov 27 | 13 |
| 5.2 | Angles and sides | 1 | Nov 28 | 13 |
| 5.3 | The Pythagorean theorem | 1 | Nov 29 | 13 |
| 5.4 | The tangent ratio | 1 | Nov 30 | 13 |
| 5.5 | Using the tangent ratio | 1 | Dec 1 | 13 |
| 5.6 | The sine and cosine ratios | 2 | Dec 2, 3 | 13, 14 |
| 5.7 | Solving triangles | 3 | Dec 4,5,6 | 14 |
| | **Post-Test (timed 3hrs.)** | | | |
| | **Unit 5 Final Test *(timed 3hrs.)*** | | Dec 7 | 14 |
| | **MATH 052 Final Pre-test** | | | |
| | **MATH 052 Final Post-test** | | | |
| | **MATH 052 Final Exam *(timed 3hrs.)*** | | Dec 10 – 14 | |
| | | | | |

## 5. Basis of Student Assessment (Weighting)

Six Unit Exams worth 75% | Final Exam worth 25% (You **must** pass final to pass the course)

*Note: Students with a record of poor attendance OR poor progress may be restricted from re-registering in Community Learning Partnerships Department courses.*

## 6. Grading System

*(If any changes are made to this part, then the Approved Course description must also be changed and sent through the approval process.)*
*(Mark with "X" in box below to show appropriate approved grading system – see last page of this template.)*

[X] Standard Grading System (GPA)

[ ] Competency Based Grading System

## 7. Recommended Resources to Assist Students to Succeed Throughout the Course

**Ask your course instructor FIRST and then you could also go to:**
**ACADEMIC UPGRADING HELP CENTRES (CBA 109 and E342)**
http://camosun.ca/services/help-centres/math.html

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. |