**CAMOSUN COLLEGE**
*School of Access*
*Academic and Career Foundations Department*

*MATH 038    Fundamental Math for Trades*
**Winter 2014**

# 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        Voicemail:  370-4911        Text only: 250.881.0264
Office:  CBA 150        e-mail:  bowe@camosun.bc.ca

**January-April 2014**
**Office Hours by Appointment**

| Time | Monday | Tuesday | Wednesday | Thursday | Friday |
|---|---|---|---|---|---|
| **8:30 – 10:30** | | | | Chairs Meeting | |
| **10:30 – 11:30** | Help Centre CBA 109 | | Help Centre CBA 109 | Chairs Meeting | |
| **Noon – 12:30** | | Off Campus Office Hours | | | |
| **12:30- 3:30** | In Class S05 CBA 117 | In Class S20 Off Campus | In Class S05 CBA 117 | In Class S20 Off Campus | Interurban Office Hours |
| **3:30 – 5:00** | | Off Campus Office Hours | | Off Campus Office Hours | |

## 2.      Intended Learning Outcomes
 (complete ABE Fundamental 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. demonstrate knowledge and skills in using the principles and operations of various math topics such as arithmetic, measurement, graphs, formulas, and geometry
2. apply a variety of strategies in solving math-related problems
3. apply knowledge and skills in various math topics to solve problems related to particular Entry Level Trades and Pre-Employment Programs (except Culinary Arts and Electrical)
4. use knowledge of various math topics as a basis for further study in Entry Level Trades and Pre-Employment Programs

## 3. Required Materials

(a) textbook: *Line B, Solve Mathematical Problems, Trades Common Core*
(b) scientific calculator
(c) optional supplementary materials from MATH 032/033/034

## 4. Course Content and Schedule

**2014W Semester classes run from January 6 - April 11, 2014**
Our class meets on **Monday** and **Wednesday** afternoons.

| Other important dates: | February 10 | Holiday, College Closed |
|---|---|---|
| | February 13-14 | Reading Break |
| | March 10 | Withdrawal Deadline |
| | April 18 & 21 | Holiday, College Closed |
| | April 11 | Last day of classes |

**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 work on this course. Students generally need to spend 5−15 hours of study time per week, either at the college or at home, to complete a math course within 4 months.

The table below lists the eleven competencies or chapters in the Line B text that are required for each Entry Level Trades or Pre-Employment Program (except Culinary Arts and Electrical). Follow these steps to complete each competency:

1. skip the Pre-Test
2. study the explanations and examples
3. answer and check **all** questions in the order listed in the table below
4. ask the instructor for help whenever you need it

To prepare for the Final Test, write the Practice Test and review your results with the instructor.

| MATH 038 course content | Line B page # | question # | | |
|---|---|---|---|---|
| ***Competency B-1 – Whole Numbers*** | | | | |
| | 5 | 1−4 | | |
| | 3 | 1−5 | | |
| | 7 | 1−5 | | |
| | | | | |
| ***Competency B-2 – Fractions*** | | | | |
| | 15 | 1−4 | | |
| | 17 | 1−4 | | |
| | 20 | 1−4 | | |
| | 21 | 1−5 | | |
| | 11 | 1−20 | | |
| | 23 | 1−15 | | |
| | | | | |
| ***Competency B-3 – Decimals*** | | | | |
| | 32 | 1−2 | | |
| | 33 | 1−2 | | |
| | 37 | 1−5 | | |
| | 29 | 1−10 | | |
| | 38 | 1−15 | | |
| | | | | |

| MATH 038 course content | Line B page # | question # | | |
|---|---|---|---|---|
| *Competency B-4 – Metric and Imperial Measurements* | | | | |
| | 46 | 1−2 | | |
| | 49 | 1−6 | | |
| | 43 | 1−2 | | |
| | 50 | 1−2 | | |
| | | | | |
| *Competency B-5 – Ratio and Proportion* | | | | |
| | 59 | 1−12 | | |
| | 55 | 1−10 | | |
| | 62 | 1−10 | | |
| | | | | |
| *Competency B-6 – Percent* | | | | |
| | 69 | 1−4 | | |
| | 73 | 1−4 | | |
| | 67 | 1−5 | | |
| | 74 | 1−5 | | |
| | | | | |
| *Competency B-7 – Powers and Roots* | | | | |
| | 82 | 1 | | |
| | 84 | 1 | | |
| | 79 | 1−3 | | |
| | 85 | 1−3 | | |
| | | | | |
| *Competency B-8 – Graphs* | | | | |
| | 93 | 1−5 | | |
| | 96 | 1−2 | | |
| | 89 | 1−5 | | |
| | 98 | A−E | | |
| | | | | |
| *Competency B-9 – Formulas* | | | | |
| | 111 | 1−5 | | |
| | 105 | 1−7 | | |
| | 115 | 1−5 | | |
| | | | | |
| *Competency B-10 – Perimeters, Areas, and Volumes* | | | | |
| | 125 | 1−8 | | |
| | 121 | 1−8 | | |
| | 129 | 1−8 | | |
| | | | | |
| *Competency B-11 – Angles and Triangles* | | | | |
| | 142 | 1−4 | | |
| | 135 | 1−6 | | |
| | 151 | 1−6 | | |
| | | | | |
| MATH 038 Practice Test | | | | |
| MATH 038 Final Test | | | | |

## 5. Basis of Student Assessment (Weighting)

The course grade is either COM (complete) 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

COM        complete                    NC        not complete

## 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://www.camosun.bc.ca*

### STUDENT CONDUCT POLICY

It is the student's responsibility to become familiar with the content of the Student 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*