School of Access
Academic and Career Foundations Department

# MATH 037 Fundamental Math for Trades <br> Fall'15 (Sept 8 - Dec 11) Section S04 

## COURSE OUTLINE

## The Approved Course Description is available on the College website http://www.camosun.ca/learn/calendar/current/

## 1. Instructor Information

(a) Instructors: Richard Zajchowski
(b) Office : CBA 157
(c) Office hours: 11:30-12:30 Mon/Tues or; by appointment or drop-in: other times available
(d) Help Centre hours: 12:30-2:30 Mon CBA 109
(e) Phone: (250) 370-4048
(f) E-mail: zackr@camosun.bc.ca

## 2. Intended Learning Outcomes

(complete ABE Intermediate Mathematics learning outcomes at ABE Articulation Handbook website http://www.aved.gov.bc.ca/abe/docs/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 arithmetic and measurement
2. apply a variety of strategies in solving math-related problems
3. apply knowledge and skills in arithmetic and measurement to solve problems related to the Professional Cook Foundations Program
4. use knowledge of arithmetic, measurement, and applied problems as a basis for further study in the Professional Cook Foundations Program

## 3. Required Materials

- textbook: Line B, Solve Mathematical Problems, Trades Common Core
- course outline: including Applied Math Problems for the Professional Cook Program
- scientific calculator
- optional supplementary materials from MATH 023-034


## 4. Course Instructions and Content

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 six competencies or chapters in the Line B text that are required for the Professional Cook Foundations Program. 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. complete all of the Professional Cook Applied Problems for that competency
5. 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 037 course content | Line B <br> page \# |  |
| :--- | :---: | :---: |
| question <br> $\#$ |  |  |
| Competency B-1 - Whole <br> Numbers |  |  |
|  | 5 | $1-4$ |
|  | 3 | $1-5$ |
|  | 7 | $1-5$ |
|  |  | $1-10$ |
| B-1 Professional Cook Applied <br> Problems |  |  |
|  | 15 | $1-4$ |
| Competency B-2 - Fractions |  | $1-4$ |
|  | 17 | $1-4$ |
|  | 20 | $1-5$ |
|  | 11 | $1-20$ |
|  | 23 | $1-15$ |
|  |  | $1-10$ |
|  | 32 | $1-2$ |
| B-2 Professional Cook Applied |  |  |
|  | 33 | $1-2$ |
| Problems |  | $1-5$ |
| Competency B-3 - Decimals |  | $1-10$ |
|  | 29 | $1-15$ |
|  | 38 | $1-10$ |
|  |  |  |
|  |  |  |
| B-3 Professional Cook Applied |  |  |
| Problems |  |  |


| MATH 037 course content | Line B page \# | $\begin{gathered} \hline \text { question } \\ \# \end{gathered}$ |
| :---: | :---: | :---: |
| Competency B-4 - Metric and Imperial Measurements |  |  |
|  | 46 | 1-2 |
|  | 49 | 1-6 |
|  | 43 | 1-2 |
|  | 50 | 1-2 |
| B-4 Professional Cook Applied Problems |  | 1-10 |
| Competency B-5 - Ratio and Proportion |  |  |
|  | 59 | 1-12 |
|  | 55 | 1-10 |
|  | 62 | 1-10 |
| B-5 Professional Cook Applied Problems |  | 1-10 |
| Competency B-6 - Percent |  |  |
|  | 69 | 1-4 |
|  | 73 | 1-4 |
|  | 67 | 1-5 |
|  | 74 | 1-5 |
| B-6 Professional Cook Applied |  | 1-10 |
|  |  |  |
| MATH 037 Practice Test |  |  |
| MATH 037 Final Test |  |  |

## 5. Basis of Student Assessment (Weighting)

The course grade is either COM (complete) or IP (in progress) 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 IP in progress NC not complete

## 7. Learning Support and Services for Students

## ACADEMIC UPGRADING HELP CENTRE (CBA 109)

Help with coursework, reference and learning materials library, computers and printer, quiet testing and study areas

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 Policies

## ACADEMIC PROGRESS

The purpose of this policy is to enhance a learner's likelihood of success, and to encourage the learner to use College resources effectively.
http://camosun.ca/about/policies/education-academic/e-1-programming-\&-instruction/e-1.1.pdf
GRADING
The purpose of this policy is to ensure that grading and promotion are consistent and fair. http://camosun.ca/about/policies/education-academic/e-1-programming-\&-instruction/e-1.5.pdf

## STUDENT CONDUCT

The purpose of this policy is to provide clear expectations of appropriate academic and non-academic student conduct, and to establish processes for resolution of conduct issues or the imposition of sanctions for inappropriate conduct.
http://camosun.ca/about/policies/education-academic/e-2-student-services-\&-support/e-2.5.pdf

## 9. MATH 037 Essential Skills (based on learning outcomes, coursework and classroom interaction)

Numeracy: numerical calculation and measurement (whole numbers, fractions, decimals, metric and imperial measurements, ratio and proportion, percent)

- Convert between fractions, decimals, and percents
- Add, subtract, multiply and divide rational numbers
- Solve application problems involving addition, subtraction, multiplication, and division of rational numbers
- Use order of operations
- Use the common metric and imperial units for temperature, length, volume and mass
- Convert between and within metric and imperial units using tables and/or calculators
- Read, write, interpret, compare and identify proportions and use them to solve problems involving percent, part and whole, edible portion/as purchased (EP/AP) proportions and other ratios


## Reading

- Scan for key information
- Read and correctly follow written directions
- Read a full text to understand, learn or evaluate
- Integrate and synthesize information from multiple sources
- Refer to appropriate written (hardcopy or online) resources when experiencing difficulty


## Document Use

- Interpret information in graphs or charts
- Use information from recipes and menus
- Interpret invoices, price lists, menu pricing calculations
- Use a table of contents or index to find specific information


## Writing

- Organize, record and document
- Write notes in point form


## Oral Communication

- Follow oral instructions and explanations
- Seek or obtain information from peers and instructor


## Working with Others

- work independently alongside others
- appropriate and respectful communication with peers and others
- receive and apply relevant feedback


## Thinking Skills

- Apply prior learning to facilitate effective study and to integrate information from a text with background knowledge from outside the text
- Identify learning strengths
- Identify and set short and long term goals
- Maintain a personalized learning plan within an individualized educational setting
- Identify key facts and issues related to a problem
- Check that answers and solutions to problems are reasonable
- Build strategies for successfully writing math tests
- Prioritize tasks
- Use tools (calendars, agendas, checklists) to help organize tasks and for time management
- Identify, compare, contrast \& critically evaluate multiple pieces of information while reading/listening/viewing


## Digital Technology

- Use a scientific calculator
- May use online tools to communicate and to learn and practice mathematical skills


## Continuous Learning

- Deepen understanding of skill strengths and areas in need of improvement
- Recognize preferred learning style (learning by seeing, hearing or doing)
- Try new ways of doing things
- Apply newly learned skills and knowledge

