



*School of Access  
Academic and Career Foundations Department*

**MATH 037 Math for Professional Cook**

**COURSE OUTLINE**

---

*The Approved Course Description is available on the College website*

[http://camosun.ca/learn/programs/academic-upgrading/what-youll-learn/upgrading.html#tabs-fundamental\\_a](http://camosun.ca/learn/programs/academic-upgrading/what-youll-learn/upgrading.html#tabs-fundamental_a)

---

## 1. Instructor Information

**Instructor:** Pam Johnson  
**Office:** CBA 148

**Phone:** 370-3850  
**e-mail:** [johnsonp@camosun.bc.ca](mailto:johnsonp@camosun.bc.ca)

## 2. Intended Learning Outcomes

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

- *Unit R Arithmetic Review* booklet
- *Applied Math Problems for the Professional Cook Program* booklet
- Scientific calculator
- Optional supplementary materials from MATH 023-026
- Optional textbook - *Line B, Solve Mathematical Problems, Trades Common Core*

## 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.

Before starting the *Applied Math Problems for the Professional Cook Program* booklet, students must pass a competency test to demonstrate that they can add, subtract, multiply, and divide whole numbers, fractions, and decimals *without the use of a calculator* - if necessary, use the *Arithmetic Review* booklet (Unit R) to review these operations before writing the competency test

The table below lists the eight competencies or sections in the Professional Cook Applied Problems booklet that are required for the Professional Cook Foundations Program. Follow these steps to complete each competency:

1. Answer and check all questions in the Professional Cook Applied Problems booklet in the order listed in the table below
2. Study the worked solutions sections of the booklet
3. 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		
<b>Unit R - Arithmetic Review (no calculator)</b> <i>[This is a Separate Booklet]</i>		
Place value	R.1	
Comparing numbers	R.2	
Rounding numbers	R.3	
Adding and subtracting whole numbers and decimals	R.4	
Multiplying whole numbers and decimals	R.5	
Powers - repeated multiplication	R.6	
Dividing whole numbers and decimals	R.7	
Order of operations	R.8	
Operations with fractions	R.9	
Equivalent fractions	R.10	
Adding and subtracting fractions	R.11	
Multiplying fractions	R.12	
Dividing fractions	R.13	
Converting fractions and decimals	R.14	
Estimation	R.15	
Practice Test		
Unit R final test (no calculator)		

MATH 037 course content	Section	Page
Professional Cook Applied Problems Booklet <i>[This is a Separate Booklet]</i> Calculator permitted.		
<b>Applied Problems Topic 1– Whole Numbers</b>		
Problems	1	1-3
Solutions	1	4-6
<b>Applied Problems Topic 2– Fractions</b>		
Problems	2	7-8
Solutions	2	9-11
<b>Applied Problems Topic 3– Decimals</b>		
Problems	32	12-14
Solutions	33	15-17
<b>Applied Problems Topic 4 Metric and Imperial Measurements</b>		
Problems	4	18-20
Solutions	4	21-24
<b>Applied Problems Topic 5 – Ratio and Proportion</b>		
Problems	5	25-27
Solutions	5	28-30
<b>Applied Problems Topic 6 – Percent</b>		
Problems	6	31-33
Solutions	6	34-36
<b>Applied Problems Topic 7 Food Cost Percentage and Yield</b>		
Problems	7	37-40
Solutions	7	41-45
<b>Applied Problems Topic 8 – EP &amp; AP</b>		
Problems	8	46-47
Solutions	8	48-49
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 or Ewing 342)**

<http://camosun.ca/services/help-centres/math.html>

Help with coursework, reference & learning materials library,  
computers & printers, quiet testing & 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-and-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-and-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-and-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 percent
- 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