

# COURSE OUTLINE

**Course Name:** Mathematics Level 5

**Department Head/Coordinator:** Jan Weiten

**Effective Date:** April 2011

<b>School or Centre:</b>		<b>Department:</b>	
Click arrow for options		Basic Education	
<b>Course History:</b>		<b>Year of Study:</b>	
Replacement Course		Click arrow for options	
<b>Name of Replacing Course (if applicable):</b>	Component of Math 031	<b>Course Number:</b>	MATH 0315
		<b>Number of Credits:</b>	

### Course Pre-requisites (if applicable):

Mathematics Level 4 OR - interview w/the Basic Education assessment person/department head & participate in the Fundamental/Intermediate Math assessment co-devl'd by Basic Education/CCA/College Foundations.  
 - show an ability to understand & speak or use English by meeting the Basic Education Oral English Fluency Criteria as determined in the initial interview. -read at a minimum of English Level 3 (ENGL 0313) or equivalent

### Course Co-requisites (if applicable):

### PLAR (Prior Learning Assessment & Recognition)

No  Yes (details below):

Each student is placed according to existing skill level. The interview will provide information on existing skill level to determine initial placement.

### Course Description:

MATH 0315 is approximately equivalent to a Grade 6-7.5 level in the BC Ministry of Education curriculum. MATH 0315 is the fifth 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.

### Instructional Strategies:

This course will be taught in a self-paced, individualized format along with group instruction and small group activities.

### Course Learning Outcomes:

- Explain or use examples of keywords: Fraction, numerator, denominator, of (multiplication), proper fraction, improper fraction, mixed number, equivalent fractions, LCD, LCM, reciprocal, prime, composite, GCF, simplify
- Identify common fraction as part of a whole • Relate common fractions to decimals
- Use a graphic to show a proper fraction and a mixed number (ex: a drawing)
- Reduce proper fractions • Convert improper fractions to mixed numbers and mixed numbers to improper fractions • Write equivalent fractions • Write mixed numbers as improper fractions
- Multiply, divide, add and subtract: proper fractions, improper fractions and mixed numbers
- Solve addition, division, addition, subtraction word problems using fractions
- Find lowest common multiple and greatest common factors • Express a number as a product of prime factors
- Convert fractions to decimals and decimals to fractions • Compare fractions to decimals, decimals to fractions (<, >, =, ≠) • Compare fractions (<, >, =, ≠) • Compare fractions and mixed numbers (<, >, =, ≠)
- Calculate perimeter and area of squares and rectangles with correct formula
- Real-Life Applications: Divide a whole into parts (pizza, cake), apply operations with fractions to recipes (double, half), determine whether it is more appropriate to express a number as a decimal or common fraction in a given situation (ex: \$2.50 rather than 2 ½ dollars)

#### Skills and Strategies for Learning:

- Use critical thinking skills • Independently set goals and track progress • Apply logical thinking to fractional operations • Build math confidence • Move onto other tasks while waiting for help • Write tests in a variety of formats • Locate and correct errors • Manage frustrations of learning

### Program Learning Outcomes:

n/a

## Evaluation/Grading System

Grading System	Specify if 'Other':	Specify Passing Grade:
Satisfactory/Unsatisfactory		S

## Components and Weighting of the Assessment/Evaluation Plan:

Type	Percentage	Evaluation Plan (provide a brief explanation for each component especially if value exceeds 35%):
Other	100	A mastery model of on-going evaluation will be used. A student will have completed the course when he/she has demonstrated
-		through satisfactory completion of assignments that the learning outcomes have been achieved.
-		Progress will be monitored on a regular basis by the instructor in consultation with each student.
-		
-		
	<b>Total</b>	<b>100</b>

## Learning Environment/Type

Instruction Type	Hours Per Instruction Type	Comments
-	10/week	
	2/week	
<b>Enter Total Hours</b>	<b>12</b>	

## Resource Material(s):

Resources are items in addition to tuition that the student is responsible for purchasing. Course resource information will be supplied by the department/instructor.

**Course Topics and Sequence Covered:**

Place value, rounding, adding, subtracting, multiplying, and dividing decimals, metric/imperial measurement

**VCC Education and Education Support Policies**

There are a number of **Education** and **Education Support** policies that govern your educational experience at VCC, please familiarize yourself with them.

The policies are located on the VCC web site at:

**<http://www.vcc.ca/about-vcc/policies/index.cfm>**

To find out how this course transfers, visit the BC Transfer Guide at [www.bctransferguide.ca](http://www.bctransferguide.ca).

**FOR COMMITTEE USE ONLY**

Date Approved by Education Council:		Date Approved by VCC Board (if applicable):	
-------------------------------------	--	--	--