



## MATH-050 – Math – Fundamental Level 5

### College Preparation and Upgrading

**Effective Term & Year:** Fall 2022

**Course Outline Review Date:** 2026-03-01

**Program Area:** Upgrading for Academic and Career Entry

#### Description:

MATH 050 is a Fundamental Level 5 Adult Basic Education course designed to increase student competence and confidence in mathematics and develop basic math skills to enable students to function more effectively in personal, work, and educational situations. MATH 050 builds on math skills and concepts previously learned. Concepts covered include common fractions, adding, subtracting, multiplying and dividing fractions and common fractions and decimals.

#### Program Information:

MATH 050 is intended for those who struggled with these learning outcomes in the past and require intensive review. It also serves as preparation for higher level math courses for those who have been out of school for several years.

**Delivery Methods:** Directed/Guided Studies

**Credit Type:** ABE Credits

**Credits:** 0

#### Instructional Activity and Hours:

Activity	Hours
Classroom, Directed Studies or Online Instruction	30
Seminar/Tutorials	
Laboratory/Studio	

Practicum/Field Experience

Co-op/Work Experience

Other

Total 30

### Course Requisites:

None

### Flexible Assessment: Yes

In some cases students may be able to apply for recognition of prior learning outside the classroom. This flexible assessment process provides equivalent course credit. It is a rigorous process that may include external evaluation, worksite assessment, demonstration, standardized test, self-assessment, interview, products/portfolio, and challenge exam, or other measures as appropriate. Tuition fees apply. Contact an education advisor for more information.

### Course Transfer Credit:

For information about receiving transfer credit for courses taken at either British Columbia or Alberta institutions, please see <https://www.bctransferguide.ca/> or <https://transferalberta.alberta.ca> . For more transfer credit information, please visit <https://www.cotr.bc.ca/Transfer>

All requests for course transfer credit from institutions in British Columbia or elsewhere should go to the College of the Rockies Enrolment Services office.

### Textbook Resources:

Textbook selection varies by instructor and may change from year to year. At the Course Outline Effective Date the following textbooks were in use:

Directed studies/self-paced format: ABE Adult Literacy Fundamental Mathematics Book 5 – Province of British Columbia Ministry of Advanced Education and Labour Market Development

*Please see the instructor's syllabus or check COTR's online text calculator <https://textbook.cotr.bc.ca/> for a complete list of the currently required textbooks.*

## Learning Outcomes:

Upon the successful completion of this course, students will be able to:

### Learning Outcome

*Students will be able to...*

1. Use mathematical vocabulary and language to communicate concept of fractions
2. Recognize the relationship between fractions and decimals
3. Reduce fractions
4. Convert between improper fractions and mixed numbers
5. Identify equivalent fractions
6. Evaluate fraction expressions using addition, subtraction, multiplication and division
7. Translate a word problem into a mathematical equation and solve

### Sub-outcomes/skills

*By achieving this broader outcome, student will demonstrate that they can also...*

- Define and use keywords like fraction, numerator, denominator, mixed numbers, equivalent fractions, whole numbers, long division, greater than, lesser than, equals, simplify
- Express a number as a product of prime #'s or composite numbers, recognize prime numbers, greatest common factor, simplify
- Comparison of fractions and long division of whole numbers
- Group equivalent fractions
- Calculate perimeter and area of squares and rectangles
- Determine LCD, LCM
- Simplify and write equivalent fractions using addition, subtraction, multiplication division, common denominator
- Use critical thinking in real life math applications

## Course Topics:

The outcomes of this course meet and are consistent with the outcomes prescribed for Computer Studies: Fundamental Level in the Adult Basic Education in British Columbia Colleges – An Articulation Handbook –

<https://www.bctransferguide.ca/wp-content/uploads/2022/08/abeguide2223.pdf>

## Evaluation and Assessments

### Assessment Type: Directed/Guided Studies

Assessment Type	% of Total Grade
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To progress in this course students must demonstrate a mastery level of achievement (80%) on units tests.

## Grade Scheme

COM	NCG
Completed to the minimum defined standard	No credit granted – less than minimum defined standard

### Exam Attendance:

Students must attend all scheduled exams at the appointed time and place. Instructors may approve an alternate exam to accommodate an illness or personal crisis. Department heads will consider other written requests. Any student who misses a scheduled exam without prior approval will receive a “0” on the exam.

### Academic Policies:

College of the Rockies policies related to courses can be found at <https://cotr.bc.ca/about-us/college-policies/> and include the following:

- Policy 2.4.3 Students with Documented Disabilities
- Policy 2.4.4 Student Conduct (plagiarism, other cheating, behavioral misconduct)
- Policy 2.5.8 Academic Performance
- Policy 2.5.3 Grade Appeal
- Policy 2.4.9 Student Concerns Re Faculty

### Course Changes:

The College of the Rockies updates course outlines regularly to meet changing educational, employment and marketing needs. The instructor will notify students in writing of any updates to this outline during the semester. The instructor reserves the right to revise, add or delete material while meeting the learning outcomes of this course outline.