



MATH-040 – Math – Fundamental Level 4

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 040 is a Fundamental Level 4 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. Concepts covered include adding, subtracting, multiplying and dividing decimals and measurement.

Program Information:

MATH 040 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
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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 4 – 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. Evaluate decimal expressions using addition subtraction, multiplication and division
2. Identify place value to 10 000ths
3. Round decimal numbers to a given place value
4. Order decimal numbers
5. Evaluate multi-step decimal expressions
6. Solve word problems
7. Convert measurements within the metric system

Sub-outcomes/skills

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

- Read and write decimals
- Apply or use examples of keywords: decimal, decimal place value, per, of, by
- Convert between dollars and cents
- Compare decimal values
- Translate word problems into mathematical expressions and/ or equations
- Convert metric units without a conversion chart
- Apply and use metric examples of length, mass, capacity and temperature
- Calculate perimeter and area of squares and rectangles
- Add and subtract same units and mixed metric units

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
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

Pass requirements: None

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
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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.