



MATH-020 – Math – Fundamental Level 2

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 020 is Fundamental Level 2 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 rounding, addition, subtraction, simple multiplication, money and time.

Program Information:

Math 020 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 2 – 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...

Sub-outcomes/skills

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

1. Evaluate multi-digit expressions using addition, subtraction with carrying or borrowing/trading	- Show the relationship between multiplication and repeated addition
2. Identify place value to 1,000,000	- Recall multiplication facts up to 12 x 12
3. Round whole numbers up to 1,000,000 place value	- Write numbers in expanded notation to 10,000
4. Read, write and compare whole numbers to 1,000,000 in digits and words	- Estimate sums and differences
5. Represent mathematical ideas in concrete, pictorial and symbolic forms	- Multiply two whole numbers that are less than or equal to 10
6. Use mathematical vocabulary and language to communicate concepts	- Multiply one-digit numbers by 10, 100, 1000
7. Add and subtract currency up to \$2	- Use key words: multiplier, multiple, multiplication, multiply, product, double/twice, triple, quadruple, by, of, carrying, borrowing, times, expanded notation, perimeter
8. Translate 1-step addition, subtraction and multiplication word problems into a mathematical expression	
9. Convert, add and subtract time units	
10. Convert to and from 12-hour notation to 24-hour notation	

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.