



Math – Fundamental Level 2 - MATH 020
Access Education/Upgrading for Academic and Career Entry

Course Outline

COURSE IMPLEMENTATION DATE: **January 2011**
OUTLINE EFFECTIVE DATE: **September 2021**
COURSE OUTLINE REVIEW DATE: **March 2026**

GENERAL COURSE 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: This course is delivered in a directed studies format.

Hours for this course: 30 hours

Typical Structure of Instructional Hours:

Instructional Activity	Duration
Lecture Hours	
Seminars / Tutorials	
Laboratory / Studio Hours	
Practicum / Field Experience Hours	
Other Contact Hours – Directed Studies	30
Total	30

Practicum Hours (if applicable):

Type of Practicum	Duration
On-the-job Experience	N/A
Formal Work Experience	N/A
Other	N/A
Total	N/A

Course Outline Author or Contact:

Leanne Caillier-Smith, MEd

Signature

APPROVAL SIGNATURES:

Department Head

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Department Head Signature

Dean Signature

EDCO

Valid from: September 2021 – March 2026

Education Council Approval Date

COURSE PREREQUISITES AND TRANSFER CREDIT:

Prerequisites: None

Corequisites: None

Flexible Assessment (FA):

Credit can be awarded for this course through FA

Yes

No

Learners may request formal recognition for flexible assessment at the College of the Rockies through one or more of the following processes: External Evaluation, Worksite Assessment, Demonstration, Standardized Test, Self-assessment, Interview, Products/Portfolio, Challenge Exam. Contact an Education Advisor for more information.

Transfer Credit: For transfer information within British Columbia, Alberta and other institutions, please visit <http://www.cotr.bc.ca/Transfer>.

Students should also contact an academic advisor at the institution where they want transfer credit.

Prior Course Number: N/A

Textbooks and Required 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
<http://go.cotr.bc.ca/tuition/tCalc.asp> for a complete list of the currently required textbooks.

LEARNING OUTCOMES & COURSE TOPICS:

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

Learning Outcome <i>Students will be able to...</i>	Sub-outcomes/skills <i>By achieving this broader outcome, student will demonstrate that they can also...</i>
<ol style="list-style-type: none">1. Evaluate multi-digit expressions using addition, subtraction with carrying or borrowing/trading2. Identify place value to 1,000,0003. Round whole numbers up to 1,000,000 place value4. Read, write and compare whole numbers to 1,000,000 in digits and words5. Represent mathematical ideas in concrete, pictorial and symbolic forms6. Use mathematical vocabulary and language to communicate concepts7. Add and subtract currency up to \$28. Translate 1-step addition, subtraction and multiplication word problems into a mathematical expression9. Convert, add and subtract time units10. Convert to and from 12-hour notation to 24-hour notation	<ul style="list-style-type: none">• Show the relationship between multiplication and repeated addition• Recall multiplication facts up to 12 x 12• Write numbers in expanded notation to 10,000• Estimate sums and differences• Multiply two whole numbers that are less than or equal to 10• Multiply one-digit numbers by 10, 100, 1000• Use key words: multiplier, multiple, multiplication, multiply, product, double/twice, triple, quadruple, by, of, carrying, borrowing, times, expanded notation, perimeter

For a complete list of the articulation learning outcomes of this course, please refer to the Adult Basic Education in British Columbia's Public Post-Secondary institutions: A Guide to Upgrading in BC's post secondary institutions : [An Articulation Handbook 2020/2021](http://bctransferguide.ca) (bctransferguide.ca).

EVALUATION AND ASSESSMENT:

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

Please see the instructor’s syllabus for specific classroom policies related to this course, such as details of evaluation, penalties for late assignments, and use of electronic aids.

EXAM POLICY:

Students must attend all required scheduled exams that make up a final grade at the appointed time and place.

Individual instructors may accommodate for illness or personal crisis. Additional accommodation will not be made unless a written request is sent to and approved by the appropriate Department Head prior to the scheduled exam.

Any student who misses a scheduled exam without approval will be given a grade of “0” for the exam.

COURSE GRADE:

Course grades are assigned as follows:

COM	Completed to defined standard
NCG	No Credit Granted

ACADEMIC POLICIES:

See www.cotr.bc.ca/policies for general college policies related to course activities, including grade appeals, cheating and plagiarism.

COURSE CHANGES:

Information contained in course outlines is correct at the time of publication. Content of the courses is revised on an ongoing basis to ensure relevance to changing educational, employment and marketing needs. The instructor will endeavour to provide notice of changes to students as soon as possible. The instructor reserves the right to add or delete material from courses.