



MATH-006 – Math Preparatory for Industry

College Preparation and Upgrading

Effective Term & Year: Fall 2023

Course Outline Review Date: 2028-03-01

Program Area: Upgrading for Academic and Career Entry

Description:

This course is designed to strengthen arithmetic and introductory algebra skills to prepare students for academic math and the workforce. Topics will be tailored to the individual to address their current skill level, needs, and goals. This course is intended for students who wish to refresh their math skills for assessment, future math courses, or employment.

Program Information:

This course is a non-credit course designed to prepare students for formal math courses and assessments for employment.

Delivery Methods: Directed/Guided Studies

Credit Type: ABE Credits

Credits: 0

Instructional Activity and Hours:

Activity	Hours
Classroom, Directed Studies or Online Instruction	
Seminar/Tutorials	
Laboratory/Studio	
Practicum/Field Experience	
Co-op/Work Experience	

Other	7.5 hours per week for a maximum of 4 weeks
Total	30

Course Requisites:

None

Flexible Assessment: No

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 Enrollment Service 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:

Textbooks, worksheets and/or handouts will be supplied.

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:

Depending on the student's learning plan (course topics required), students will:

- perform operations with whole numbers, fractions, decimals, ratios, proportions, and percent;
- estimate answers to problems and check that answers are reasonable;

- manipulate formulas and evaluate expressions;
 - solve linear equations;
 - graph linear equations;
 - demonstrate an understanding of statistics by tabulating and graphing data; interpreting graphs; and finding meaning in numerical facts or data;
 - evaluate algebraic expressions using signed rational numbers, absolute value, and the order of operations;
 - solve algebraic equations, formulas, and word problems;
 - perform operations using polynomials;
 - solve equations using powers, roots, and scientific notation, and with the use of a scientific calculator; and
 - solve for missing parts of a triangle and right triangle problems by using the Pythagorean Theorem.
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Course Topics:

May include:

- Arithmetic and Estimation
 - Perimeter, Area, and Volume
 - Ratio and Proportion
 - Percent
 - Statistics
 - Signed (Rational) Numbers
 - Algebra: Equations
 - Algebra: Polynomials
 - Powers, Roots, and Scientific Notation
 - Graphing
 - Intro to Trigonometry
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Evaluation and Assessments

Pass requirements: None

Evaluation Notes Comments:

Course grades will be assigned as follows:

Math Preparatory for Industry is a Non-credit Course. NCC will appear on student transcripts. Exercises assigned in class will be marked in class for student information only.

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.