



MATH-111 – Business Mathematics

University Arts and Science

Effective Term & Year: Fall 2026
Course Outline Review Date: 2031-04-01

Program Area: Math and Sciences

Description:

This course emphasizes the mathematics required in general business processes. It begins with a brief review of arithmetic and algebra. These skills are then applied to business situations requiring the use of percentages, markup, simple interest and compound interest. The emphasis is on applied business mathematics and the use of a hand-held business calculator. This course is designed to prepare students for the mathematical and analytical applications required in subsequent business and economics courses.

Program Information:

This course is recommended for business students who have limited recent practice in mathematics. Other students may wish to take either Finite Mathematics 1 (MATH 101) or Calculus 1 (MATH 103) as the required mathematics course for a Business Management Certificate or Diploma. Students successful in one of these alternate math courses usually master the mathematics of finance quickly when it is applied in other business courses.

Delivery Methods: On-campus (Face-to-Face), Online

Credit Type: College of the Rockies Credits

Credits: 3

Course type/s: Business Management

Instructional Activity and Hours:

Activity

Hours

Classroom, Directed Studies or Online Instruction	45
Seminar/Tutorials	
Laboratory/Studio	
Practicum/Field Experience	
Co-op/Work Experience	
Other	
Total	45

Course Requisites:

- Earned a minimum grade of C (60%) in at least 1 of the following:
 - **PREC 11** – Pre-Calculus 11
 - **FOM 11** – Foundations of Mathematics 11
 - **CS 11** – Computer Science 11
 - **CS 12** – Computer Science 12
 - **FOM 12** – Foundations of Mathematics 12
 - **PREC 12** – Pre-Calculus 12
 - **GEO 12** – Geometry 12
 - **STAT 12** – Statistics 12
 - **CALC 12** – Calculus 12
 - **MATH080** – Mathematics – Advanced Level

Prior Learning and Recognition: Yes

Students are able to request formal recognition of their prior learning or experience outside the classroom. Challenge examination, portfolio-assisted assessment, work-based assessment or a combination of assessments that is appropriate to identify, assess, and recognize prior skills, competencies, and knowledge to achieve course credit. Tuition fees apply, refer to Policy [2.5.5 Prior Learning Assessment and Recognition \(PLAR\)](#) or 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:

Jerome, F.E. and Worswick, T., (2023). *Business Mathematics in Canada (with Connect)*. (11th ed). Toronto: McGraw-Hill Ryerson.

Texas Instruments BAII Plus, Business Calculator or other Financial Calculator.

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

- solve sustainable business problems that involve simple algebra;
 - use ratio, proportion, and percent concepts in the solution of business problems;
 - construct and interpret systems of linear equations derived from word problems;
 - apply break-even and merchandising concepts to integrated word problems;
 - apply appropriate formulae or business calculator functions to solve problems involving simple or compound interest;
 - review the financial implications on various forms of credit or investments by applying simple and compound interest calculations to business scenarios; and
 - create and use amortization tables for various debt instruments.
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Course Topics:

- Arithmetic and Algebra Review
- Ratio, Proportion, and Percent
- Merchandising
- Cost-Volume Profit Analysis
- Simple Interest
- Compound Interest
- Annuities
- Loan Amortization

See instructor syllabus for the detailed outline of weekly readings, activities and assignments.

Evaluation and Assessments

Assessment Type: On-Campus (face-to-face) and Online, or Hybrid

Assessment Type	% of Total Grade
Assignments / Quizzes	30 – 40%
Midterm Exam(s)	20 – 30%
Final Exam	30 – 40%
Total	100%

Grade Scheme

A+	A	A-	B+	B	B-	C+	C	C-	D	F
>=90	89-85	84-80	79-76	75-72	71-68	67-64	63-60	59-55	54-50	<50

No pass requirements available.

Evaluation Notes: Certificate and diploma students are required to maintain a minimum course grade of C- (55%) in all program courses. BBA students are required to maintain a minimum course grade of C (60%) and an average course grade of C+ in all program courses that contribute to the BBA.

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 2.1.4 Course Audit
- Policy 2.4.1 Credential Framework
- Policy 2.4.3 Students with Documented Disabilities
- Policy 2.4.4 Student Rights, Responsibilities and Conduct
- Policy 2.4.8 Academic Performance
- Policy 2.4.9 Student Feedback and Concerns
- Policy 2.4.11 Storage of Academic Works
- Policy 2.5.3 Student Appeal

- Policy 2.5.5 Prior Learning Assessment and Recognition (PLAR)
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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.