## Business Mathematics – MATH 111
Business Management Program

## Course Outline

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|---|---|
| **COURSE IMPLEMENTATION DATE:** | **Pre 1998** |
| **OUTLINE EFFECTIVE DATE:** | **September 2021** |
| **COURSE OUTLINE REVIEW DATE:** | **April 2026** |

**GENERAL COURSE 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:** This course is delivered face-to-face and online.

**COTR Credits:** 3

**Hours for this course:** 45 hours

Typical Structure of Instructional Hours:

| Instructional Activity | Duration |
|---|---|
| Lecture Hours | 45 |
| Seminars / Tutorials | |
| Laboratory / Studio Hours | |
| Practicum / Field Experience Hours | |
| Other Contact Hours | |
| **Total** | 45 |

Practicum Hours (if applicable):

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

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**Course Outline Author or Contact:**

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**APPROVAL SIGNATURES:**

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Department Head Signature

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Dean Signature

EDCO

Valid from:  September 2021 – April 2026

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Education Council Approval Date

**COURSE PREREQUISITES AND TRANSFER CREDIT:**

**Prerequisites:**   Minimum of 60% in either MATH 080, Pre-Calculus 11, Foundations of Math 11, Applications of Math 11, Principles of Math 11, Computer Science 11, Computer Science 12, Foundations of Math 12, Pre-Calculus 12, Geometry 12, Statistics 12, Calculus 12, MATH 100, or equivalent.

**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:

> Jerome, Ernest F. and Worswick, T, (2020). *Business Mathematics in Canada. 10th* 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 http://go.cotr.bc.ca/tuition/tCalc.asp for a complete list of the currently required textbooks.*

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**LEARNING OUTCOMES:**

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

- solve business problems that involve simple algebra stated in words;
- identify, graph and interpret linear relationships;
- solve budget problems using break-even and merchandising concepts;
- select and use appropriate formulae or business calculator functions to solve problems involving simple or compound interest;
- calculate and compare interest on various forms of credit or investments; and
- create and use amortization tables for various debt instruments.

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**COURSE TOPICS:**

- Arithmetic and Algebra Review
- Merchandising
- Cost-Volume Profit Analysis
- Simple Interest
- Compound Interest
- Annuities

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

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**EVALUATION AND ASSESSMENT (Face-to-Face and Online Delivery):**

| Assignments | % Of Total Grade |
|---|---|
| Assignments | 20% |
| Quizzes | 10% |
| Midterm Exams | 30% |
| Final Exam - Comprehensive | 40% |
| Total | 100% |

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

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**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.

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**COURSE GRADE:**

Course grades are assigned as follows:

| Grade | A+ | A | A- | B+ | B | B- | C+ | C | C- | D | F |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Mark** (Percent) | ≥ 90 | 89-85 | 84-80 | 79-76 | 75-72 | 71-68 | 67-64 | 63-60 | 59-55 | 54-50 | < 50 |

Certificate and diploma students are required to maintain a minimum course grade of C- (55%) in all program courses. BBA and Post Degree 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 their program.

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**ACADEMIC POLICIES:**

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

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**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.