

#### MATH-111 - Business Mathematics

## **University Arts and Science**

Effective Term & Year: Fall 2022 Course Outline Review Date: 2026-04-01

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					
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:
  - MATH080 Mathematics Advanced Level
  - 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
  - MATH100 Pre-Calculus (3)

#### 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 Columba 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, 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 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:

- 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.

#### **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.

### **Evaluation and Assessments**

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

Assessment Type	% of Total Grade
Assignments	20%
Quizzes	10%
Midterm Exams	30%
Final Exam – Comprehensive	40%
Total	100%

## **Grade Scheme**

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

Pass requirements: None

**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 2.4.3 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.