Mathematics (MATH) 244

Business Mathematics (Revision 8)

Status:	Replaced with new revision, see the course listing C [*] for the current revision S [*]
Delivery mode:	Individualized study online 🕑 with eText 🕑
Credits:	3
Area of study:	Science
Prerequisite:	None
Precluded:	None
Challenge:	MATH 244 has a challenge for credit option.
Faculty:	Faculty of Science and Technology 🗹

Mathematics Diagnostic Assessment C^{*}. This online test contains 70 questions that will help you assess your mathematical skills. Based on your score we will recommend which Athabasca University mathematics course you are likely ready to take successfully.

Overview

MATH 244 is designed to introduce the basic mathematical skills needed to understand, analyse, and solve mathematical problems encountered in business and finance, and in investment decision making. There are no prerequisites for MATH 244; however, students are expected to be able to perform the basic arithmetic operations addition, subtraction, multiplication and division—with ease, and to have some familiarity with fractions, with algebraic operations, and with some basic mathematical principles.

Outline

The course covers the following twelve topics.

- Unit 1: Mathematical Operations
- Unit 2: Basic Algebra
- Unit 3: Ratios, Proportions, and Percentages
- Unit 4: Marketing Mathematics
- Unit 5: Applications of Linear Equations
- Unit 6: Data Analysis and Statistics
- Unit 7: Principles of Simple Interest

- Unit 8: Principles of Compound Interest
- Unit 9: Annuities
- Unit 10: Loans and Mortgages
- Unit 11: Bonds and Sinking Funds
- Unit 12: Investment Decisions

Learning outcomes

Upon successful completion of this course, you will be able to

- demonstrate mastery of mathematical concepts that are foundational in business mathematics, including functions and their mappings, linear systems and their solutions, and descriptive statistics and their applications.
- demonstrate an understanding of basic marketing mathematics by solving relevant problems, including trade discounts, cash discounting, and markup and markdown calculations.
- apply the principles of simple interest to solve relevant problems in financial applications such as simple-interest-based loans.
- use the principles of compound interest to solve relevant problems in financial applications, for example, those involving annuities, loans and mortgages, bonds and sinking funds, and investment decisions.

Evaluation

To **receive credit** I for MATH 244, you must achieve a course composite grade of at least **D** (50 percent) And a grade of at least 50 percent on each of the examinations.

The weighting of the composite grade is as follows:

Activity	Weight
Assignment 1	5%
Assignment 2	5%
Assignment 3	5%
Assignment 4	5%
Midterm Exam	35%
Final Exam	45%
Total	100%

The **midterm and final examinations** for this course must be taken online with an AU-approved exam invigilator at an approved invigilation centre. It is your responsibility to ensure your chosen invigilation centre can accommodate online exams. For a list of invigilators who can accommodate online exams, visit the **Exam Invigilation Network C**.

To learn more about assignments and examinations, please refer to Athabasca University's **online Calendar C**.

Materials

Jerome, F. Ernest, and Tracy Worswick. *Business Mathematics in Canada*, 9th Edition. Toronto, ON: McGraw-Hill Ryerson, 2017. Q(eText)

eText

Registration in this course includes an electronic textbook. For more information on **electronic textbooks** C[•], please refer to our **eText Initiative site** C[•].

Other Resources

All other learning resources will be available online.

Challenge for credit

Overview

The challenge for credit process allows you to demonstrate that you have acquired a command of the general subject matter, knowledge, intellectual and/or other skills that would normally be found in a university-level course.

Full information about **challenge for credit** 🗗 can be found in the Undergraduate Calendar.

Evaluation

To **receive credit** I for the MATH 244 challenge registration, you must pass the two parts of the challenge exam and achieve a minimum grade of at least **C- (60 percent)** I on both parts. The two parts of the exam must be written on the same day, or on two consecutive days.

Activity	Weight
Part 1: Exam	50%
Part 2: Exam	50%
Total	100%

Challenge for credit course registration form

Important links

> Academic advising $extsf{C}$

- > Program planning 🖸
- > Request assistance \square
- > Support services \square

Athabasca University reserves the right to amend course outlines occasionally and without notice. Courses offered by other delivery methods may vary from their individualized study counterparts.

Opened in Revision 8, September 11, 2018

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View previous revision 🗗