

School of Applied Science and Management

MATH 141

Mathematics for Business

Term: Winter 2023 Number of Credits: 3

Course Outline

INSTRUCTOR: Stephen Biggin-Pound E-MAIL: sbigginpound@yukonu.ca

OFFICE: A2105

OFFICE HOURS: after class or by appointment

COURSE DESCRIPTION

This course will provide foundational material that is used throughout the Bachelor of Business Administration program. Students will learn and practice basic operations in arithmetic and apply financial math formulas to real world northern examples. Various strategies for solving business math problems will be explored such as mathematical skills, use of calculators, and estimation skills.

COURSE REQUIREMENTS

Prerequisite(s): MATH 050 (YukonU) or Pre-Calculus 11 or equivalent

EQUIVALENCY OR TRANSFERABILITY

Receiving institutions determine course transferability. Find further information at: https://www.yukonu.ca/admissions/transfer-credit

LEARNING OUTCOMES

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

- Demonstrate proficiency in calculating basic operations in arithmetic involving fractions, decimals, and/or percentages.
- Manipulate formulas for different variables using basic algebra skills.
- Apply appropriate financial formulas to problems involving the time value of money.
- Apply simple interest and compound interest formulas to real world examples.
- Solve basic finance word problems using calculators.
- Apply appropriate strategies and formulas to solve basic problems in counting methods.

COURSE FORMAT

Weekly breakdown of instructional hours

This course will be a total of 45 hours, including a final exam. Classes will include a mix of lectures, independent work, group work & discussions. Some online activities will take place on Moodle (quizzes and tests).

It is expected that this course will require three to five hours per week of homework and additional reading. Time outside of class practicing with homework and studying is particularly important in math courses to ensure fluency and retention. It is important to note that the time required will vary by individual.

Delivery format

The course will be delivered in-person at Ayamdigut campus. Occasionally, lectures may be delivered synchronously by Zoom as needed, or asynchronously via posted recordings on Moodle. Some online, asynchronous activities will be required.

EVALUATION

Assignments (best 5 of 6, 4% each)	20 %
Fishbowl discussions/work (2 x 5%)	10%
Quizzes (5 x 3%)	15 %
Midterm Exam	20%
Project	15%
Final Exam	20%
Total	100%

Assignments

Written Assignments (20%):

 There will be 6 assignments based on material learned. Credit will be given for the best 5 out of 6 assignments.

Fishbowl discussions/work (10%):

• Most weeks class time will be dedicated to reviewing practice questions. Each week a small group of students will showcase their practice questions. Over the course of the semester each student will take two turns participating in this way (2 x 5%).

Tests

There will be a set of 5 quizzes, a midterm examination, and a final examination.

Project

There will be one case study to allow students to study a particular area in business mathematics more in-depth.

Attendance & Participation

Students are expected to attend regularly, complete all assignments, attend lectures ready and prepared to learn, and participate actively in class activities.

A minimum of 50% is required to pass this course.

Late assignments will incur a 10% per day penalty for each of the first three days. The due date is considered Day 1. No assignment will be marked after the three-day penalty period.

COURSE WITHDRAWAL INFORMATION

Refer to the YukonU website for important dates.

TEXTBOOKS & LEARNING MATERIALS

Olivier, Jean-Paul. (2017). BUSINESS MATH: A Step-By-Step Handbook.

https://lila1.lyryx.com/textbooks/OLIVIER 1/marketing/Olivier-BusinessMath-2018B.pdf

You will also need a Texas Instruments BAII+ Calculator.

ACADEMIC INTEGRITY

Students are expected to contribute toward a positive and supportive environment and are required to conduct themselves in a responsible manner. Academic misconduct includes all forms of academic dishonesty such as cheating, plagiarism, fabrication, fraud, deceit, using the work of others without their permission, aiding other students in committing academic offences, misrepresenting academic assignments prepared by others as one's own, or any other forms of academic dishonesty including falsification of any information on any Yukon University document.

Please refer to Academic Regulations & Procedures for further details about academic standing and student rights and responsibilities.

ACCESSIBILITY AND ACADEMIC ACCOMMODATION

Yukon University is committed to providing a positive, supportive, and barrier-free academic environment for all its students. Students experiencing barriers to full participation due to a visible or hidden disability (including hearing, vision, mobility, learning disability, mental health, chronic or temporary medical condition), should contact <u>Accessibility Services</u> for resources or to arrange academic accommodations: access@yukonu.ca.

TOPIC OUTLINE

The proposed syllabus and schedule is subject to change. Updated schedules will be posted on Moodle and communicated in class. Always check with the instructor if you have questions.

Week	Material covered	Assessment
1	Course Introduction	
	Chapter 2: Back to the Basics	
2	Chapter 3: General Business Management Applications	Assign. 1 due
3	Chapter 6: Marketing Applications	Quiz 1
4	Chapter 8: Simple Interest – Working with single payments	
5	Intro to Compound Interest	Assign. 2 due
3	Chapter 9: Compound Interest – Single payments	Quiz 2
6	Case Study Research / establishing groups	Midterm exam
7	Review and Midterm Exam: Ch. 2, 3, 6, 8, 9	
RW	Reading Week	
8	Chapter 11: Compound Interest - Annuities	
9	Chapter 12: Compound Interest – Special application of annuities	Assign. 3 due
		Quiz 3
10	Chapter 13: Understanding Amortization and Its Applications	
11	Annuities Review	Assign. 4 due
		Quiz 4
12	Case Study research	
	Chapter 14: Bonds and Sinking Funds	
13	Principles of Counting	Assign. 5 due
	Case Study Presentations	Quiz 5
14	Case Study Presentations	Assig. 6 due
	Final Review	Project Report due