

# School of Applied Science and Management

#### **MATH 141**

# **Mathematics for Business**

Term: Fall 2021
Number of Credits: 3

# **Course Outline**

**INSTRUCTOR:** Jennifer Smith **OFFICE HOURS:** Wednesday 11am – 12noon (on ZOOM)

**OFFICE LOCATION:** N/A **CLASSROOM:** On ZOOM

**E-MAIL:** jsmith@yukonu.ca **TIME:** 1 – 2:20pm Tuesday/Thursday

**TELEPHONE:** n/a **DATES:** September 7 – December 9, 2021

## **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 (YC) or Pre-Calculus 11

# **EQUIVALENCY OR TRANSFERABILITY**

Receiving institutions determine course transferability. Find further information at: <a href="https://www.yukonu.ca/admissions/transfer-credit">https://www.yukonu.ca/admissions/transfer-credit</a>

#### 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 be delivered using the Zoom platform and will include a mix of lectures, independent work, group work & discussions. Some of the 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. It is important to note that the time required will vary by individual.

# **Delivery format**

This course will be delivered online. Students will be required to attend class on Zoom and complete an assortment of synchronous online activities during this time.

## **EVALUATION**

Assignments	30 %
<ul> <li>Written assignments (best 5 of 6, 4% each) – 20%</li> </ul>	
• Fishbowl discussions/work – (2 x 5%) – 10%	
Tests	55 %
• Quizzes (5 out of 6) – 15%	
Midterm Exam – 20%	
• Final Exam – 20%	
Project	15 %
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%). On weeks where students are selected to showcase work cameras will ideally be on and students must be able to show and share work over Zoom.

#### **Tests**

There will be a set of 6 quizzes (credit given for best 5 out of 6 quizzes), midterm examination and final examination.

## **Project**

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

### **Attendance & Participation**

Students are expected to attend regularly, complete all assignments, attend online 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.

## **ACADEMIC ACCOMMODATION**

Reasonable accommodations are available for students requiring an academic accommodation to fully participate in this class. These accommodations are available for students with a documented disability, chronic condition or any other grounds specified in section 8.0 of the Yukon University Academic Regulations (available on the Yukon University website). It is the student's responsibility to seek these accommodations by contacting the Learning Assistance Centre (LAC): <a href="LearningAssistanceCentre@yukonu.ca">LearningAssistanceCentre@yukonu.ca</a>.

# **TOPIC OUTLINE**

Week	Material Covered	Assessment
Sept 7 - 9	Course Introduction /Chapter 2: Back to the Basics	
Sept 14-16	Chapter 3: General Business Management Applications	A1 due
Sept 21-23	Chapter 6: Marketing Applications	Quiz 1
Sept 28-30	Chapter 8: Simple Interest: Working with Single Payments/Applications September 30 - National Day for Truth and Reconciliation	
Oct 5 - 7	Chapter 8: Simple Interest: Working with Single	A2 due
	Payments/Applications Intro to Compound Interest	Quiz 2
Oct 12 - 14	Chapter 9: Compound Interest: Single Payments Test Review	
Oct 19-21	Oct. 19: Midterm: Chapters 2, 3, 6, 8, 9 Case Study Research	
Oct 26 - 28	Chapter 11: Compound Interest: Annuities	Quiz 3
		A3 due
Nov 2-4	Chapter 12: Compound Interest: Special Applications of Annuities	
Nov 9 - 11	Case Study Research November 11 - Remembrance Day – No Class	
Nov 16-18	Chapter 13: Understanding Amortization & Applications	Quiz 4
Nov 23-25	Annuities Review	A4 due
Nov 30 –	Chapter 14: Bonds and Sinking Funds	Quiz 5
Dec 2	Principle of Counting	Report due
Dec 7 - 9	Case Study Presentations Review	A5 due & A6 due
Dec 17	Final Exam 1 – 4pm  **tentative date/time**	