

BUS 110E Business Mathematics

3 credits, 16 weeks, 3 hours lecture

Students will cover a review of basic algebra, ratio and proportion, and linear systems; the mathematics of Business Management including the calculation of depreciation, discounts, simple interest and mark-ups; and the mathematics of finance which includes compound interest, future value, present value, annuities, amortization, bond valuation, sinking funds, and discounted cash flows. An emphasis on the use of word problems and small case studies will be stressed to bring the real world usefulness of the material to light.

Prerequisites and/or co-requisites: Math 30/33 or Math 30-2

Instructor

Instructor Name: Sandra Efu
Office location: S111D
Phone number: 780-791-8974
E-mail: sandra.efu@keyano.ca

Class Location and Time

Thursday 6:30 pm to 9:30 pm, CC215

Office hours

Monday 5:00 pm to 6:30 pm
Tuesday 12:00 pm to 1:00 pm
Wednesday 4:00 pm to 5:00 pm
Thursday 6:00 pm to 6:30 pm
Friday 1:00 pm to 2:00 pm

Required Resources

Business Mathematics in Canada, F. Ernest Jerome/Worsick, Eighth edition, ISBN 978 125 910 3568. Access to McGraw-Hill Connect is required for assignments and tests.

Textbook with McGraw-Hill Connect access is available at the Keyano library.

TI BA II plus or TI BA II plus Professional Calculator is recommended.

Course Outcomes

The student will be able to:

1. Apply ratios, proportions and percents to solve a variety of business problems
2. Determine trade discounts, cash discounts, mark-up and mark-down
3. Solve problems involving simple interest and partial payments
4. Analyze and solve problems involving the time value of money and compound interest using formulae and financial calculator
5. Analyze and solve annuities and their applications to loans, bonds, investments and mortgages using formulae and financial calculator

Evaluation

Assignment	Percentage	Due Date
7 Group Assignments (lowest dropped)	30%	Take home assignments are due at the beginning of class
5 Quizzes (lowest dropped)	20%	In Class
Midterm 1	10%	In Class
Midterm 2	10%	In Class
Final Examination	30%	TBA
<i>Total:</i>		100%

Note:

1. All assignments are to be completed in groups and must be submitted electronically via McGraw-Hill Connect. One grade will be provided to every group member based on each assignment deliverable. Your lowest assignment mark will be dropped in the calculation of your final grade. If you miss one, it will be considered a zero and qualify as the lowest.

Group projects can help students develop a host of skills that are increasingly important in the professional world (Caruso & Woolley, 2008; Mannix & Neale, 2005). Working in groups will provide each student the opportunity to develop team skills, improve communication skills and leverage personal experiences to contribute to group assignments.

2. All quizzes and mid-terms are in-class and cannot be written late, unless in the case of an illness or emergency.

3. Your lowest quiz mark will be dropped in the calculation of your final grade. If you miss one, it will be considered a zero and qualify as the lowest.

A grade of C- is required for progression. The minimum standard for passing this course is a grade of D (50%).

Grading System

Descriptor	Alpha Grade	4.0 Scale	Percent
Excellent	A+	4.0	> 93.9
	A	4.0	87 – 93.9
	A-	3.7	80 – 86.9
Good	B+	3.3	77 – 79.9
	B	3.0	74 – 76.9
	B-	2.7	70 – 73.9
Satisfactory	C+	2.3	67 – 69.9
	C	2.0	64 – 66.9
	Progression	C-	1.7
Poor	D+	1.3	57 – 59.9
Minimum Pass	D	1.0	50 – 56.9
Failure	F	0.0	< 50

Proposed Schedule of Topics**Note:**

Date and time allotted to each topic is subject to change. It is your responsibility as a student to contact the Office of the Registrar to complete the forms for Withdrawal or Change of Registration, and any other forms. Please refer to the list of important dates as noted in the Academic Schedule in the Keyano College Credit Calendar.

WEEK OF	TOPIC	REQUIRED READING	ASSIGNMENTS & QUIZZES
5 Jan	Introduction to Course Review and Applications of Basic Mathematics & Algebra	Course Outline Chapters 1 & 2	
12 Jan	Review and Applications of Basic Mathematics & Algebra	Chapters 1 & 2	Assignment 1 (Chapters 1 & 2)
19 Jan	Ratios and Proportions	Chapter 3	Quiz 1 (Chapters 1 & 2)
26 Jan	Mathematics of Merchandising	Chapter 4	Assignment 2 (Chapters 3 & 4)
2 Feb	Review Midterm Exam 1	Chapters 1 – 4 Chapters 1 – 4	
9 Feb	Simple Interest	Chapters 6 & 7	Assignment 3 (Chapters 6 & 7)
16 Feb	Compound Interest: Future Value and Present Value	Chapters 8 & 9	Quiz 2 (Chapter 6 & 7)
22 – 26 Feb	Reading week, no classes		Assignment 4 (Chapters 8 & 9)
1 Mar	Ordinary Annuities: Future Value and Present Value	Chapter 10	Quiz 3 (Chapters 8 & 9)
8 Mar	Ordinary Annuities: Periodic Payment, Number of Payments and Interest Rate	Chapter 11	Assignment 5 (Chapters 10 & 11)
15 Mar	Review Midterm Exam 2	Chapters 6 – 11 Chapters 6 – 11	
22 Mar	Annuities Due	Chapters 12&13	Assignment 6 (Chapters 12 & 13)
29 Mar	Loan Amortization: Mortgages	Chapter 14	Quiz 4 (Chapters 12 & 13)
5 April	Bonds and Sinking Funds	Chapter 15	Quiz 5 (Chapter 14) Assignment 7 (Chapter 15)
12 April	Review	All chapters covered during the semester	
18 – 22 April	Final Exam Period	Comprehensive Exam	All chapters covered in the semester

MOODLE: Go to ilearn.keyano.ca

Performance Requirements

Student Attendance

Class attendance is useful for two reasons. First, class attendance maximizes a student's learning experience. Second, attending class is a good way to keep informed of matters relating to the administration of the course (e.g., the timing of assignments and exams). Ultimately, you are responsible for your own learning and performance in this course.

It is the responsibility of each student to be prepared for all classes. Students who miss classes are responsible for the material covered in those classes and for ensuring that they are prepared for the next class, including the completion of any assignments and / or notes that may be due.

Academic Misconduct

Students are considered to be responsible adults and should adhere to principles of intellectual integrity. Intellectual dishonesty may take many forms, such as:

- Plagiarism or the submission of another person's work as one's own
- The use of unauthorized aids in assignments or examinations (cheating)
- Collusion or the unauthorized collaboration with others in preparing work
- The deliberate misrepresentation of qualifications
- The willful distortion of results or data
- Substitution in an examination by another person
- Handing in the same unchanged work as submitted for another assignment
- Breach of confidentiality.

The consequences for academic misconduct range from a verbal reprimand to expulsion from the College. More specific descriptions and details are found in the Student Rights and Student Code of Conduct section of the Keyano College 2015-2016 credit calendar. It is the responsibility of each student to be aware of the guidelines outlined in the Student Rights and Student Code of Conduct Policies.

Specialized Supports

Counselling and Disability Services

It is the College's goal that learning experiences be as accessible as possible. If you anticipate or experience physical or academic barriers based on a disability, please let your instructor know immediately so options can be discussed. You are also welcome to contact Disability Services to establish reasonable accommodations. Please call 780-791-8934 or drop in at CC -167 (across from the Library).

SKILL Centre

The SKILL Centre is a learning space in the Clearwater Campus at Keyano College where students can gather to share ideas, collaborate on projects and get new perspectives on learning from our tutorial staff.

The SKILL Centre, through a variety of delivery methods, provides assistance in skill development to Keyano students. Assistance is provided by instructors, staff and student tutors. Individuals wishing to improve their mathematics, writing, grammar, study, or other skills, can take advantage of this unique service.

Authorization

This course outline has been reviewed and approved by the Program Chair.

Sandra Efu, Instructor

Gina Jackson, Chair

Date Authorized

Guy Harmer, Dean

Date Authorized

Signed copies to be delivered to:

Instructor
Registrar's Office