

BUS 110E, Business Mathematics*3 credits, 3 hours*

Students will cover (a) a review of basic algebra, ratio and proportion, and linear systems; (b) the mathematics of Business Management including the calculation of depreciation, discounts, simple interest and mark-ups; and (c) the mathematics of finance which includes compound interest, future value, present value, annuities, amortization, bond valuation, sinking funds, and discounted cash flows. It is expected that two-thirds of the course will focus on item (c). 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: Math 30-1/Math 30 Pure or Math 30-2/Math 30 Applied

Instructor

Coert Erasmus
S111A
780.791.8919
Coert.erasmus@keyano.ca

Office Hours

Tuesday: 1:00 pm – 3:00 pm
Wednesday: 3:00 pm – 4:00 pm
Thursday: 1:00 pm – 3:00 pm

Hours of Instruction

Wednesday: 6:30 pm – 9:30 pm, CC-215

Required Resources

Business Mathematics in Canada, F. Ernest Jerome, Tracy Worsick, ninth edition, (Incl. Connect)

ISBN: 978-1-259-85616-7.

URL: <https://www.mheducation.ca/business-mathematics-in-canada-9781259265822-can-group#tab-label-product-description-title>

Other supplies

- McGraw-Hill Connect (Please confirm that your textbook includes this access code)
- Non-programmable financial calculator (Texas BA II Plus – Without this calculator you'll have a difficult time doing any time value of money calculations)

Course Outcomes

Upon successful completion of the course, the student shall be able to:

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

Evaluation

Quizzes, presentations & in-class activities*	15%
Assignments & Homework	30%
Midterm Exam	25%
Final Exam	<u>30%</u>
Total	100%

A grade of C- is required for progression or transfer.

*In this assessment category, only students who fulfil the following criteria can obtain full or partial credit. Students must be:

- present in the class during the time of the quiz or activity;
- contribute in an active and significant way to ongoing class discussions; and
- prepared, demonstrating that they can relate concepts to book chapters, readings and cases.

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	60 – 63.9
Poor	D+	1.3	57 – 59.9
Minimum Pass	D	1.0	50 – 56.9
Failure	F	0.0	< 50

Proposed Schedule of Topics

BUS 110E – Business Mathematics	
Tentative Schedule	
Date	Wednesday
Week 1 Jan 6 – Jan 10	Chapter 1: Review and Applications of Basic Mathematics Chapter 2: Review and Applications of Algebra
Week 2 Jan 13 – Jan 17	Chapter 3: Ratios and Proportions Chapter 4: Mathematics of Merchandising
Week 3 Jan 20 – Jan 24	Chapter 5: Applications of Linear Equations Chapter 6: Simple Interest
Week 4 Jan 27 – Jan 31	Chapter 7: Applications of Simple Interest
Week 5 Feb 3 – Feb 7	Chapter 8: Compound Interest: Future Value and Present Value
Week 6 Feb 10 – Feb 14	Chapter 9: Compound Interest: Further Topics and Applications
Week 7 Feb 17 – Feb 21	READING WEEK
Week 8 Feb 24 – Feb 28	Midterm (Chapters 1 – 9)
Week 9 Mar 2 – Mar 6	Chapter 10: Ordinary Annuities: Future Value and Present Value
Week 10 Mar 9 – Mar 13	Chapter 11: Ordinary Annuities: Periodic payment, Number of Payments and Interest Rate
Week 11 Mar 16 – Mar 20	Chapter 12: Annuities Due
Week 12 Mar 23 – Mar 27	Chapter 13: Annuities: Special Situations
Week 13 Mar 30 – Apr 3	Chapter 14: Loan Amortization: Mortgages
Week 14 Apr 6 – Apr 9	Chapter 15: Bonds and Sinking Funds Chapter 16: Business Investment Decisions
	Final Exams

Please Note:

Date and time allotted to each topic is subject to change.

Performance Requirements

Student Responsibilities

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.

More specific details are found in the Student Rights and Student Code of Conduct section of the Keyano College 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.

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 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.

In order to ensure your understanding of the concept of plagiarism, you must successfully complete the online tutorial found on ilearn.keyano.ca. Then print the certificate, sign it, and show it to each of your instructors. Your course work will not be graded until you show this signed certificate.

Specialized Supports

The Student Academic Support Services (SASS) department: Accessibility Services, Skill Centre, Wellness Services and Student Life Department work together to support student success at Keyano College.

Accessibility Services (CC167) supports student success through group and individualized instruction of learning, study and test taking strategies, and adaptive technologies. Students with documented disabilities, or who suspect a disability, can meet with the Learning Strategists to discuss accommodation of the learning barriers that they may be experiencing. Students who have accessed accommodations in the past are encouraged to visit our office at their earliest opportunity to discuss the availability of accommodations in their current courses. Individual appointments can be made by calling 780-791-8934.

Skill Centre (CC119) provides a learning space where students can gather to share ideas, collaborate on projects and get new perspectives on learning from our tutorial staff. Students visiting the centre have access to one-to-one or group tutoring, facilitated study groups, and assistance in academic writing. The Skill Centre's Peer Tutor program provides paid employment opportunities for students who have demonstrated academic success and want to share what they have learned. Tutoring is available free to any students registered at Keyano College on a drop in basis, from 8:30 am to 5:00 pm Monday through Friday. Additional evening hours are subject to tutor availability and are posted in the Skill Centre.

Wellness Services (CC260) offers a caring, inclusive, and respectful environment where students can access free group and individual support to meet academic and life challenges. Mental Health Coordinators offer a safe and confidential environment to seek help with personal concerns. The Mindfulness Room in CC260 is available as a quiet space for students to relax during regular office hours. Wellness Service welcomes students to participate in any of the group sessions offered throughout the academic year addressing such topics as Mindfulness and Test Anxiety. Individual appointments can be made by calling 780-791-8934.

Student Life Department (CC210) is a place for students to go when they don't know who else can answer their questions. The staff will help students navigate barriers to success and if they don't know the answer, they will find it out. Student success is directly affected by how connected a student feels to their college. The student life department is there to help students get connected.

Please watch your Keyano email for workshop announcements from our Student Academic Support Services team.