

Effective Semester: Spring 2024

**COURSE INFORMATION**

**Course Title:** Mathematics of Finance

**Course Number:** BUSI 110

**Credits:** 3

**Total Weeks:** 14 (Fall, Spring)  
12 (Summer)

**Total Hours:** 39

**Course Level:**  First Year  Second Year  
 New  Revised Course  
 Replacement Course

**Department:** Business

**Department Head:** Chuck Konrad

**Former Course Code(s) and Number(s) (if applicable):** N/A

**Pre-requisites (If there are no prerequisites, type NONE):** Pre-Calculus or Foundations of Math or an approved substitute are strongly recommended.

**Co-requisite Statement (List if applicable or type NONE):** NONE

**Precluded Courses:** N/A

**COURSE DESCRIPTION**

This course will familiarize students with methods, procedures and applications of business mathematics, including the mathematics of merchandising, simple interest, and compound interest. Applications include discounts and markups, cost-volume-profit, short-term and long-term loans, credit card debt, savings and payment plan annuities, mortgages, bonds and investment decisions.

**LEARNING OUTCOMES**

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

- Perform simple algebraic operations.
- Solve equations algebraically and graphically.
- Analyze business problems involving trade discounts, cash discounts and retail pricing.
- Solve applied problems involving simple interest, compound interest, ordinary annuities and
- Certain general annuities.

**INSTRUCTION AND GRADING**

Instructional (Contact) Hours:

Type	Duration
Lecture	39
Seminars/Tutorials	
Laboratory	
Field Experience	
Other ( <i>specify</i> ):	
Total	39

**Grading System:** Letter Grades  Percentage  Pass/Fail  Satisfactory/Unsatisfactory  Other

**Specify passing grade:** 50%

**Evaluation Activities and Weighting** (total must equal 100%)

Assignments: 15% <i>Specify number of, variety, and nature of assignments:</i> Online Assignment via MyCC	Attendance: 5%	Participation: 5% <i>Specify nature of participation:</i> Q&A and Group Work in Class	Project: % <i>Specify nature of project:</i>
Quizzes/Test: 15%	Midterm Exams: 30%	Final Exam: 30%	Other: %

### TEXT(S) AND RESOURCE MATERIALS

Provide a full reference for each text and/or resource material and include whether required/not required.

Hummelbrunner, S. A., Halliday, K., Hassanlou A.R., Coombs, K.S. (2021). Contemporary Business Mathematics with Canadian Applications (12th edition). Toronto, Ontario, Pearson Canada

MyMathLab: <http://www.pearsoned.ca/hummelbrunner>

### COURSE TOPICS

List topics and sequence covered.

<b>Week</b>	<b>Topic</b>
Week 1	Introduction / Mathematics Fundamentals
Week 2	Mathematics Fundamentals
Week 3	Break-Even and CVP Analysis
Week 4	Mathematics of Merchandising: Trade and Cash Discount - Markup and Markdown
Week 5	Simple Interest and Applications
Week 6	Compound Interest and Applications
Week 7	Ordinary Simply Annuities and Applications and <b>MIDTERM EXAM</b>
Week 8	Ordinary General Annuities and Applications – Annuities Due, Deferred Annuities, and Perpetuities – Case Study
Week 9	Ordinary General Annuities and Applications – Annuities Due, Deferred Annuities, and Perpetuities – Case Study
Week 10	Loan Amortization
Week 11	Bond Valuation
Week 12	Investment Decision
Week 13	Review of the Course Material
Week 14	<b>FINAL EXAM</b>

**NOTES**

1. Students are required to follow all College policies. Policies are available on the website at: [Coquitlam College Policies](#)
2. To find out how this course transfers, visit the BC Transfer Guide at: [bctransferguide.ca](http://bctransferguide.ca)

**Last Reviewed:** January 2024

**Last Revised:** January 2024