

Last Revised: September 2018

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 □ New □ Replacement | Second Year Revised Course 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:

| Duration |
|----------|
| 39 |
| |
| |
| |
| |
| |
| otal 39 |
| |

| Grading System: | Letter Grades 🛛 | Percentage 🗌 | Pass/Fail 🗌 |
|-----------------|-----------------|--------------|-------------|
|-----------------|-----------------|--------------|-------------|

| Satisfactory/Unsatisfactory | Other 🗌 |
|-----------------------------|---------|
| | |

Specify passing grade: 50%

Evaluation Activities and Weighting (total must equal 100%)



COURSE OUTLINE

| Assignments: Specify number of, variety, and nature of assignments: | % of | Lab Work: % | Participation: 10% Specify nature of participation: | Project: % Specify nature of project: |
|--|---------|--------------------|---|--|
| Quizzes/Test: | 20% | Midterm Exams: 30% | Final Exam: 40% | 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. (2017). Contemporary Business Mathematics with Canadian Applications (11th edition). Toronto, Ontario, Pearson Canada.

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

COURSE TOPICS

List topics and sequence covered.

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



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: <u>bctransferguide.ca</u>