

COURSE OUTLINE					
TERM: Fall 2018	COURSE NO: BADM 102				
INSTRUCTOR:	COURSE TITLE: Quantitative Methods				
OFFICE: LOCAL: E-MAIL: @capilanou.ca	SECTION NO(S):	CREDITS: 3.0			
OFFICE HOURS:					
COURSE WEBSITE:					

Capilano University acknowledges with respect the Lil'wat, Musqueam, Squamish, Sechelt, and Tsleil-Waututh people on whose territories our campuses are located.

COURSE PREREQUISITES/CO-REQUISITES

Principles of Math 11 (C) or Pre-calculus 11 or Foundations of Math 11 (C) or BMTH 044 (C) or BMTH 048 (C) or MATH 096 (C) or MATH 097 (C) or MATH 123 (C) or Applications of Math 12 or Apprenticeship & Workplace Mathematics 12 (B) or Foundations of Math 12 or Principles of Math 12 or Pre-calculus 12 or BMTH 054 or BTEC 115 (B-)

COURSE FORMAT

Three hours of class time, plus an additional hour delivered through on-line or other activities for a 15-week semester, which includes two weeks for final exams.

CALENDAR DESCRIPTION

This course provides a strong foundation in the mathematics of finance and business. The student will utilize standard financial models in analysis, problem solving, and decision-making. Computer spreadsheet applications are utilized.

COURSE NOTE

BADM 102 is an approved Quantitative/Analytical course for baccalaureate degrees. BADM 102 is an approved Numeracy course for Cap Core requirements.

REQUIRED TEXTS AND/OR RESOURCES

Jerome, F. E. & Shemko, J. (2017), Fundamentals of Business Mathematics in Canada. (Custom 3rd ed.). McGraw-Hill (ISBN: 1259856151)

Calculator: Texas Instruments BAII Plus (required)

Graphing Calculators (eg: TI 89) cannot be used in exams or quizzes.

COURSE STUDENT LEARNING OUTCOMES

On successful completion of this course, students will be able to do the following:

- 1. Apply mathematical models to determine appropriate solutions
- 2. Select and apply correct mathematical concepts to business problems.
- 3. Explain the importance of quantitative analysis in the decision-making process.
- 4. Explain the role of merchandising mathematics and operations in wholesale and retailing business.
- 5. Apply simple interest and compound interest calculations to different financial instruments such as treasury bills and promissory notes.
- 6. Solve present value and future value problems involving simple interest or compound interest calculations.
- 7. Solve comprehensive annuity and loan amortization problems.
- 8. Obtain and use current currency exchange rates to calculate value in different countries.
- 9. Analyze word problems to extract relevant data from business language and context.
- 10. Express numerical solutions in terms of business situations.
- 11. Use ratios and proportions to solve allocation problems.
- 12. Apply, calculate, and interpret financial and business concepts to make informed business decisions.
- 13. Express answers to business problems using concept based written language
- 14. Use correct terminology to discuss mathematical concepts
- 15. Use proper expression of money, numerical values, and percentages
- 16. Develop timelines to illustrate the concept of Time Value of Money
- 17. Utilize outcomes from numerical models to support context based answers
- 18. Understand how to apply mathematical concepts to personal and business investment and borrowing decisions
- 19. Develop amortization schedules to illustrate the effect of compounding interest

Students who complete this Numeracy course will be able to do the following:

- 1. Apply both analytical and numerical skills to solve problems
- 2. Summarize and analyze data in quantitative forms
- 3. Interpret and draw conclusions from an analysis of quantitative data
- 4. Represent quantitative information in a variety of forms (e.g. symbolically, visually, numerically, and verbally)
- 5. Incorporate quantitative evidence in support of an argument

COURSE CONTENT

Solve comprehensive annuity and loan amortization problems.

Week	Торіс				
1	Course Introduction/Review				
	Ratios and Proportions				
2	Ratios and Proportions				
3	Merchandising Relationships				
4	Merchandising Relationships				
	Simple Interest				
5	Simple Interest				
	Application of Simple Interest				
6	Compound Interest				
7	Compound Interest				
	Compound Interest				
8	Ordinary Annuities				
9	Ordinary Annuities				
10	Ordinary Annuities				
11	Annuities Due				
12	Loan Amortization				
13	Complex problems				
14 & 15	Final Exam Period				

EVALUATION PROFILE

Assessment	% of Final Grade	
Assignments	15%	
Quizzes	20%	
Midterm	30%	
Final Exam	35%	
Total	100%	

ASSIGNMENTS:

- 1. Mathematics of Merchandising
- 2. Compound Interest
- 3. Amortization

QUIZZES & EXAMS:

Quiz 1: Merchandising, ratios, proportions and their applications

Midterm: Merchandising, ratios, proportions, and simple interest with applications

Quiz 2: Compound Interest: PV, FV, N, I/Y, PMT

Final Exam: Comprehensive

GRADING PROFILE

A+	= 90-100	B+ = 77-79	C+ = 67-69	D = 50-59
Α	= 85-89	B = 73-76	C = 63-66	F = 0-49
A-	= 80-84	B- = 70-72	C- = 60-62	

Incomplete Grades

Grades of Incomplete "I" are assigned only in exceptional circumstances when a student requests extra time to complete their coursework. Such agreements are made only at the request of the student, who is responsible to determine from the instructor the outstanding requirements of the course.

Late Assignments

Homework assignments are due at the start of class on the due date unless otherwise advised by your instructor. Late assignments will only be accepted if prior approval for a late submission date has been given by the instructor.

Missed Exams/Quizzes/Labs etc.

Missed exams or quizzes will receive a grade of "0" unless PRIOR arrangements (wherever possible) are made with the instructor. Permission to make up an exam will only be given in extraordinary situations such as illness of the student or the death of a close family member. A doctor's certificate, or other proof supporting the reason for the absence, will be required.

Attendance

Regular attendance and punctuality are both essential and expected due to the nature and format of the course materials.

English Usage

Students are expected to proofread all written work for any grammatical, spelling and stylistic errors. Instructors may deduct marks for incorrect grammar and spelling in written assignments.

Electronic Devices

Students may use electronic devices during class for the enhancement of course work only.

On-line Communication

Outside of the classroom, instructors will (if necessary) communicate with students using either their official Capilano University email or Moodle; please check both regularly. Official communication between Capilano University and students is delivered to students' Capilano University email addresses only.

UNIVERSITY OPERATIONAL DETAILS

Tools for Success

Many services are available to support student success for Capilano University students. A central navigation point for all services can be found at: http://www.capilanou.ca/services/

Capilano University Security: download the CapU Mobile Safety App

Policy Statement (S2009-06)

Capilano University has policies on Academic Appeals (including appeal of final grade), Student Conduct, Academic Integrity, Academic Probation and other educational issues. These and other policies are available on the University website.

Academic Integrity (S2017-05)

Any instance of academic dishonesty or breach of the standards of academic integrity is serious and students will be held accountable for their actions, whether acting alone or in a group. See policy S2017-05 for more information: http://www.capilanou.ca/about/governance/policies/Policies/

Violations of academic integrity, including dishonesty in assignments, examinations, or other academic performances, are prohibited and will be handled in accordance with the Student Academic Integrity Procedures.

Academic dishonesty is any act that breaches one or more of the principles of academic integrity. Acts of academic dishonesty may include but are not limited to the following types:

Cheating: Using or providing unauthorized aids, assistance or materials while preparing or completing assessments, or when completing practical work (in clinical, practicum, or lab settings), including but not limited to the following:

- Copying or attempting to copy the work of another during an assessment;
- Communicating work to another student during an examination;
- Using unauthorized aids, notes, or electronic devices or means during an examination;
- Unauthorized possession of an assessment or answer key; and/or,
- Submitting of a substantially similar assessment by two or more students, except in the case where such submission is specifically authorized by the instructor.

Fraud: Creation or use of falsified documents.

Misuse or misrepresentation of sources: Presenting source material in such a way as to distort its original purpose or implication(s); misattributing words, ideas, etc. to someone other than the original source; misrepresenting or manipulating research findings or data; and/or suppressing aspects of findings or data in order to present conclusions in a light other than the research, taken as a whole, would support.

Plagiarism: Presenting or submitting, as one's own work, the research, words, ideas, artistic imagery, arguments, calculations, illustrations, or diagrams of another person or persons without explicit or accurate citation or credit.

Self-Plagiarism: Submitting one's own work for credit in more than one course without the permission of the instructors, or re-submitting work, in whole or in part, for which credit has already been granted without permission of the instructors.

Prohibited Conduct: The following are examples of other conduct specifically prohibited:

- Taking unauthorized possession of the work of another student (for example, intercepting and removing such work from a photocopier or printer, or collecting the graded work of another student from a stack of papers);
- Falsifying one's own and/or other students' attendance in a course;
- Impersonating or allowing the impersonation of an individual;
- Modifying a graded assessment then submitting it for re-grading; or,
- Assisting or attempting to assist another person to commit any breach of academic integrity.

Sexual Violence and Misconduct

All Members of the University Community have the right to work, teach and study in an environment that is free from all forms of sexual violence and misconduct. Policy B401 defines sexual assault as follows:

Sexual assault is any form of sexual contact that occurs without ongoing and freely given consent, including the threat of sexual contact without consent. Sexual assault can be committed by a stranger, someone known to the survivor or an intimate partner.

Safety and security at the University are a priority and any form of sexual violence and misconduct will not be tolerated or condoned. The University expects all Students and Members of the University Community to abide by all laws and University policies, including <u>B.401 Sexual Violence and Misconduct Procedure</u>.

Emergencies: Students are expected to familiarise themselves with the emergency policies where appropriate and the emergency procedures posted on the wall of the classroom.

DEPARTMENT OR PROGRAM OPERATIONAL DETAILS

Please note the use of programmable items such as calculators, dictionaries etc. is forbidden during tests, quizzes, and exams. Cell phones are not to be brought to any test, quiz, or exam.