

## SCHOOL OF BUSINESS

### Course Outline

<b>COURSE NAME:</b> QUANTITATIVE METHODS	<b>COURSE NO.:</b> BADM 102
<b>TERM:</b> Fall 2015	<b>COURSE CREDITS:</b> 3
<b>INSTRUCTOR:</b>	<b>E-MAIL:</b>
<b>OFFICE:</b>	<b>PHONE (LOCAL):</b>

**COURSE PREREQUISITES:**

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 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-).

**REQUIRED TEXT:**

Jerome, F.E. (2011). *Business Mathematics in Canada (7<sup>th</sup> Edition)*. Toronto: McGraw-Hill Ryerson.  
 E book version is available on the publisher's website.

**OTHER RESOURCES:**

Student Solutions Manual: Available in I Connect with purchase of new text  
 Instructor Lecture Notes and supplementary materials for each of the chapters are available on Moodle.  
 Course Website: <http://moodle.capilanou.ca> Enrolment key:  
 Financial Calculator: Texas Instruments BAII Plus (recommended)  
 Graphing Calculators (eg: TI 89) **cannot be used** in all exams/quizzes in this course.

**COURSE FORMAT:**

Instructional hours: Two – 1.5 hour lectures per week x 15 weeks  
 Fourth-hour activities: Available online evenings and weekends to answer student questions  
 Students should be completing one to two hours of practise questions after each class.

**COURSE OUTCOMES:**

**General Outcomes:**

Students will develop an understanding of business mathematics and its professional and personal applications.

**Specific Student Outcomes:**

Upon successful completion of this course, students will be able to demonstrate competence in the following abilities and skills:

Ability	Learning Outcomes	Levels*
Communications	C1. Use correct terminology to discuss mathematical concepts.	3
	C2. Explain mathematical concepts to other students to aid in their understanding.	2
Analysis and Decision Making	A1. Understand the importance of quantitative analysis in the decision-making process.	2
	A2. Understand how to apply mathematical concepts to personal and business investment and borrowing decisions.	2
	A3. Select and apply correct mathematical concepts to business problems.	2
	A4. Use ratios and proportions to solve allocation problems.	2
	A5. Understand merchandising mathematics and operations in wholesale and retailing business.	2

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	A6. Apply simple interest and compound interest calculations to different financial instruments such as treasury bills and promissory notes.	2
	A7. Solve present value and future value problems involving simple interest or compound interest calculations.	2
	A8. Develop loan amortization schedules.	3
	A9. Solve comprehensive annuity and loan amortization problems.	3
	A10. Apply, calculate and interpret financial and business concepts in order to make informed business decisions.	2
Social Interaction	S1. Use a collaborative approach in class to solve assigned problems.	2
Citizenship, Sustainability, and Global Perspectives	G1. Awareness of the use of ethics in business: for example, in calculating the GST refunds and rebates.	2
	G2. Obtain and use current currency exchange rates to calculate value in different countries.	2

\* See Faculty of Business – Our Commitment to Assessment and Constructive Feedback for description of the six “Levels” of Comprehension.

**EVALUATION PROFILE:**

Assessment	% of Final Grade	Individual/Group	CAPabilities Assessed			
			Communications	Analysis & Decision Making	Social Interaction	Citizenship, Sustainability and Global Perspective
Assignment 1	5%	I	✓	✓		✓
Quiz 1	10	I	✓	✓		
Midterm Exam	30	I	✓	✓		✓
Assignment 2	5	I	✓	✓		
Quiz 2	10	I	✓	✓		
Assignment 3	5	I	✓	✓		
Final Exam	35	I	✓	✓		
<b>Total</b>	<b>100%</b>					

<b>NOTE:</b> The final examination <b>MUST BE PASSED</b> in order to receive credit for the assignment grades.
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**COURSE CONTENT:**

<b>Wk</b>	<b>Week of:</b>	<b>Topic</b>	<b>Readings</b>	<b>Assessment</b>
1		Course Introduction / Review	1	
2		Ratios and Proportions	3	Assignment 1
3		Ratios and Proportions cont'd Mathematics of Merchandising	3 4	Quiz 1
4		Mathematics of Merchandising cont'd Simple Interest	4 6	
5		Simple Interest cont'd	6	
6		Simple Interest Applications Midterm Exam	7	Midterm Exam Ch. 2,3,4,6,7
7		Compound Interest	8	
8		Compound Interest	8	Assignment 2
9		Compound Interest Applications	9	Quiz 2
10		Annuities	10, 11.1	
11		Loan Amortization	14	Assignment 3
12		Ordinary Annuities - Further Topics	11.2/11.3	
13		Annuities Due	12	
<b>14/15</b>	<b>TBA</b>	<b>Final Exam (Ch. 1,2,3,4,6,7,8,9,10,11,12,14)</b>		

*\*Schedules/Dates: Schedules shown here may change and the exact dates and times for the exams and the quizzes will be announced in class and/or on Moodle.*

**UNIVERSITY POLICIES:**

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

<b>Grading Profile:</b>	A+	90-100	B+	77-79	C+	67-69	D	50-59
	A	85-89	B	73-76	C	63-66	F	49 and below
	A-	80-84	B-	70-72	C-	60-62		

**Emergency procedures:** In the event of an emergency, students must follow the emergency procedures posted in the classrooms.

In addition to the policies of the university, the School of Business has the following policies governing the management of our classes and curriculum.

**SCHOOL OF BUSINESS POLICIES:**

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

**Professional Behaviour:** Students must demonstrate a professional attitude and behaviour toward work, fellow students and their instructors. Each student should demonstrate reliability, respect for and co-operation with colleagues. A willingness to work calmly and courteously under difficult conditions as well as a determination to achieve first-class work while meeting deadlines is necessary in the Business Faculty. Students should have respect for equipment and systems. Students should display a constructive response to criticism.

**English Usage:** All assignments are marked for correct English usage, proofreading and formatting.

**Missed Exams and Quizzes:** 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. For further information, refer the "Examination & Pivotal Presentation Exemption Policy".

**Examination and Pivotal Presentation Exemption Policy** All students are required to appear and write their scheduled mid-term and final examinations, and to produce, by the assigned date, all pivotal presentations, individual and/or group, unless they meet one of the following criteria:

**"Medical Exemption"** will be considered, if:  
Within the ten calendar days prior to a mid-term or final examination, or within ten days of a pivotal presentation, a student falls ill or is injured.

**"Falling ill"** is defined as being formally advised by a physician of the need to isolate oneself for the purpose of preventing communication of disease or infection to others; being advised by a physician of compromised immunity that requires isolating oneself from contact with others to prevent communication of disease or infection to themselves, or; being in a physical state of health which so compromises a student's ability to function, physically or cognitively, during the ten days prior to the examination or presentation date.

**"Injury"**, for the purpose of Exemption, is defined as sudden, unanticipated physical harm that renders the applicant physically incapable of attending campus or, in such physical distress that the student is specifically advised by their physician to abstain from appearing at their examination or presentation. Students who are prescribed medication(s) to treat their injury and who believe that the medication(s) may be impairing their ability to successfully prepare for or write their examination or presentation may provide written evidence of their concerns as verified by their physician.

**"Catastrophic Personal Loss Exemption"** will be considered, if:  
Events occur in the student's life that are of such scope as to sufficiently distract a student from the examination or presentation preparation period, or from appearing at or adequately focusing on, the scheduled examination or presentation itself. This could include; loss of housing due to eviction, flood or fire; or death of an immediate family member (defined as a

sibling, parent or grandparent, child, partner or spouse, parent or step-parent, aunt, uncle, niece, or nephew and first cousins.) Immediate family member does not include general acquaintances. Circumstances that may qualify as a personal loss could also include an immediate family member being diagnosed with a significantly life-altering or life-threatening illness or injury.

In all of the above scenarios, a physician's letter or other specifically requested documentation must be provided to satisfy the Instructor as to the validity of the claim, and must be provided within ten calendar days prior to the date of the exam or presentation. If an instructor agrees with the request for Exemption, the request for must be presented by the instructor to their Unit Convenor for consideration and his/her approval. No request for Exemption will be considered approved by virtue of submission, and will remain as merely "under consideration" until approved or rejected by the Unit Convenor. A student applying for an exemption for a specific section which is instructed by the Unit Convenor will have their application reviewed by the Vice-Chair or Chair of the School of Business.

Any student who applies for and receives an Exemption will be assigned a Future Examination or Presentation Date: this date is non-negotiable. Failure to appear on/at the single date and time assigned by the instructor will result in an automatic "0" grade for that exam or assignment. This "0" grade may not be appealed or contested, and will not be changed.

***Copyright Policy:***

Students are expected to familiarize themselves with and abide by the University's Copyright Policy. The University's Copyright Policy is published in the University website.

***Cheating and Plagiarism:***

Cheating is an act of deceit, fraud, distortion of the truth, or improper use of another person's effort to obtain an academic advantage. Cheating includes permitting another person to use one's work as their own. Plagiarism is the presentation of another person's work or ideas as if they were one's own. Plagiarism is both dishonest and a rejection of the principles of scholarship. Information about how to avoid plagiarism by proper documentation of sources is available in the Writing Centre and is published on the University website in the University Policies page.

***Penalties for Cheating and Plagiarism:***

A grade of '0' for an examination, quiz or assignment or 'F' for the course may be assigned if cheating or plagiarism has taken place. First incidents deemed by the instructor to be particularly serious or second or subsequent incidents of cheating and plagiarism will be dealt with under the provisions of the University Policy on Cheating and Plagiarism (see the University website). All students should familiarize themselves with the University Policy on Cheating and Plagiarism as such behaviour can result in suspension from the University.

***Incomplete Grades:***

Incomplete grades will not be given unless special arrangements have been made with the instructor prior to the date set by University Administration.

**COURSE LEVEL POLICIES:**

In addition to Capilano University and the School of Business policies, the following policies govern the management of this course and its curriculum.

***Assignments:***

Homework assignments are due at the **start of class** on the due date unless otherwise advised by your instructor. Late assignments will not be accepted.

***Programmable Tools:***

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.