

Dawson College
Business Mathematics
201-801-DW
Winter 2008

Instructor: Yann Lamontagne
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Ponderation: 2-1-3

Schedule:

Monday and Wednesday - 13h00 to 16h00

Location: Room 5E.6

Course Description:

To provide the student with the mathematical tools necessary to understand and perform basic financial and commercial calculations.

Text:

Contemporary Business Mathematics with Canadian Applications (8th Edition) by S. A. Hummetbrunner and K. Suzanne Coombs

Reference:

The Theory of Interest (2nd Edition) by Stephen G. Kellison

Calculator:

A scientific or financial calculator, which has no text storage or graphing capabilities, is required for assignments and class tests. Recommended calculators include:

Calculator model	price
Texas Instruments BA 11 Plus	approx. -\$45
Texas Instruments BA-35 Solar	approx. -\$30
Texas Instruments TI-30XII	approx. -\$20

Methodology: Lectures and problem sessions.

Standard of Performance:

The passing grade for this course is a final grade of at least 60%.

Integration:

This course is offered in the first semester of the Accounting Principles and Related Computer Applications Program in order to develop skills to be able to perform calculations required for common business and finance related transactions.

Literacy:

Problem solving is an essential component of this course. Students will be expected to analyze problems stated in words, to present their solution logically and coherently, and display their answers in a form corresponding to the statement of the problem. Marks will be deducted for work that is inadequate in these respects.

Cheating Policy:

Students should inform themselves of Dawson's Policy on Cheating, as stated in the College Calendar. Penalties may range from a grade of zero to expulsion from the College.

Attendance and Tardiness:

Attendance is compulsory for this course. Failure to attend class will be reported. Tardiness will be addressed if a given student is frequently late or disrupts the class excessively when he/she enters. The student is responsible for submitting assignments and attending at tests.

Term Work:

Three Class Tests 75 %

Three Assignments 25 %

Time Line for Tests and Assignments:

February 6th Assignment 1 is due

February 13th Test 1

February 20th Assignment 2 is due

February 27th Test 2

March 5th Assignment 3 is due

March 12th Test 3

Note:

Assignments are to be submitted at the beginning of class on the due date. Late submissions are subject to penalties.

It is strongly recommended to work on assignments individually as they are representative of exam type questions.

Missed tests will require a valid reason (i.e. doctor's note) to be retaken.

COURSE CONTENT: (Number of hours given are approximate)**PART ONE** (15 hours)

Topic	Section	Exercise Page	Exercises
Review of Arithmetic			
Basics of Arithmetic	1.1	3	Part A(<i>all</i>)
Fractions	1.2	7	Part A-B-C-D-E (<i>all</i>)
Percent	1.3	11-12	Part A-B-C (<i>odd</i>)
Applications - Averages	1.4	18-19	Part A-B (<i>all</i>)
Review of Basic Algebra			
Simplification of Algebraic Expressions	2.1	47-48	Part A-B-C (<i>all</i>)
Integral Exponents	2.2	55-56	Part A-B (<i>all</i>)
Fractional Exponents	2.3	60-61	Part A-B (<i>all</i>)
Logarithms (<i>skip</i>)	2.4	66-67	Part A-B-C (<i>all</i>)
Solving Basic Equations	2.5	73	Part A-B (<i>all</i>)
Equation Solving Involving Algebraic Simplification	2.6	79	Part A-B-C-D (<i>all</i>)
Ratio, Proportion, and Percent			
Ratios	3.1	100-101	Part A-B-C (<i>all</i>)
Proportions	3.2	105	Part A-B (<i>all</i>)
The Basic Percentage Problem	3.3	114-115	Part A-B-C-D-E (<i>odd</i>)

PART TWO (15 hours)

Topic	Section	Exercise Page	Exercises
Review of Arithmetic			
Applications - Payroll	1.5	25-26	Part A (<i>all</i>)
Review Exercises		32-33	8-23
Applications - Taxes	1.6	29-30	Part A (<i>all</i>)
Review Exercises		33-34	24-29
Trade Discount, Cash Discount, Markup, and Markdown			
Trade Discount	5.1	186-188	Part A-B(<i>all</i>), C(<i>odd</i>)
Payment Terms and Cash Discounts	5.2	194-197	Part A-B(<i>all</i>), C(<i>odd</i>)
Markup	5.3	203-206	Part A-B(<i>all</i>), C(<i>odd</i>)
Markdown	5.4	210-211	Part A-B(<i>all</i>)
Integrated Problems	5.5	216-218	Part A-B(<i>all</i>)
Simple Interest			
Finding the Amount of Simple Interest	7.1	260	Part A-B-C (<i>all</i>)
Finding the Principal, Rate, or Time	7.2	264-266	Part A-B (<i>all</i>)
Computing Future Value (<i>Maturity Value</i>)	7.3	268-269	Part A-B (<i>all</i>)
Finding the Principal (<i>Present Value</i>)	7.4	271-272	Part A-B (<i>all</i>)
Computing Equivalent Values	7.5	284-286	Part A(<i>all</i>), B(1,4)
Simple Interest Applications			
Promissory Notes - Basic Concepts and Computations	8.1	296-297	Part A-B (<i>all</i>)

PART THREE (15 hours)

Topic	Section	Exercise Page	Exercises
Compound Interest - Future Value and Present Value			
Basic Concepts and Computations	9.1	336	Part A-B-C (<i>all</i>)
Using the Formula for the Future Value of a Compound Amount	9.2	348-350	Part A(<i>all</i>), B(<i>odd</i>), C(<i>odd</i>)
Present Value and Compound Interest	9.3	356-357	Part A-B (<i>all</i>)
Compound Interest - Further Topics			
Effective and Equivalent Interest Rates	10.3	436-437	Part A, B (<i>all</i>)
Ordinary Simple Annuities			
Introduction to Annuities	11.1	425	Part A (<i>all</i>)
Finding Future Value	11.2	436-437	Part A-B (<i>all</i>)
Finding Present Value	11.3	446-448	Part A-B (<i>all</i>)
Finding the Periodic Payment	11.4	453-455	Part A-B (<i>all</i>)
Finding the Term n of an Annuity	11.5	460-461	Part A-B (<i>all</i>)
Bond Valuation and Sinking Funds			
Purchase Price of Bonds	15.1	637-638	Part A-B (<i>all</i>)
Finding the Yield Rate	15.4	657	1-6