Douglas College

EFFECTIVE: SEPTEMBER 2002

CURRICULUM GUIDELINES

A: Division: **Instruction**

B: Department/ Program Area: **Commerce & Business Admin. Business Management**

Date: **November 2001**

New Course [ ] Revision [X]

If Revision, Section(s) Revised: **H**

Date Last Revised: **June 2000: P**
November 1999

C: **BUSN 330** **D:** **Business Mathematics** **E:** **3**

Subject & Course No. | Descriptive Title | Semester Credits

F: Calendar Description: This course will cover the mathematical interpretation of fundamental business economic concepts with applications to managerial decision-making. Topics covered will include linear and non-linear equations, time value of money, marginal and break-even analysis, and introduction to statistics.

G: Allocation of Contact Hours to Types of Instruction/Learning Settings

Primary Methods of Instructional Delivery and/or Learning Settings:

Lectures and Seminars

Number of Contact Hours: (per week / semester for each descriptor)

Lecture: 3 Hrs.
Seminar: 1 Hr.
Total: 4 Hrs.

Number of Weeks per Semester:

15 Weeks X 4 Hrs per week = 60 Hrs.

H: Course Prerequisites:
B.C. Principles of Math 11 or DVST 410 or equivalent and effective September 2002, English 12 with a grade of "C" or better or equivalent.

I. Course Corequisites:

Nil

J. Course for which this Course is a Prerequisite:

FINC 210 and FINC 340 and BUSN 254 and BUSN 429 and OADM 450

K. Maximum Class Size:

35

L: PLEASE INDICATE:

[ ] Non-Credit

[ ] College Credit Non-Transfer

[X] College Credit Transfer: Requested [ ] Granted [X]

SEE BC TRANSFER GUIDE FOR TRANSFER DETAILS (www.bccat.bc.ca)

BUSN 330 Business Mathematics

M: Course Objectives/Learning Outcomes:

The student will be able to:

1. Demonstrate the ability to algebraically derive and solve equations in functional and general form for problems in business.
2. Demonstrate the ability to solve financial problems involving calculation of present and future value, payments, interest rate and compounding periods.
3. Demonstrate the ability to determine break-even and equilibrium positions for problems (linear and non-linear) in business.
4. Demonstrate the ability to organize and present data, and calculate descriptive statistics for single and grouped data.

N: Course Content

[*approximate time allocation in weeks*]

1.	[*2*]	Algebra Review: ratio, proportion and percent, linear equations and inequalities, factoring, exponents and radicals, polynomials, quadratic equations, problem-solving logic (and, or, else, also, etc.).
2.	[*1*]	Graphing of Linear Functions: including use of slope and intercept.
3.	[*1*]	Graphing of Quadratic Functions: including vertex, maximum/minimum, intercepts.
4.	[*1*]	Deriving and Graphing Exponential and Log Functions: exponential growth, logs to base 2, 10, e, change of base formula.
5.	[*4*]	Time Value of Money: simple and compound interest, ordinary simple annuities (PV, FV, PMT, i, n), nominal, effective, equivalent rates, amortization, sinking funds, financial calculator applications, timelines.
6.	[*1*]	Systems of Linear Equations: intersections of lines (in 2 and 3 variables).
7.	[*2*]	Cost-Volume-Profit Analysis: break-even by volume, percent capacity, and $ value, linear and quadratic (parabolic functions).
8.	[*1*]	Statistics: mean (single and grouped data), median, mode, range, standard deviation (sample and pop), Coefficient of Variation, Normal distribution, Empirical Rule.
9.	[*1*]	Graphing Data: bar, pie, and line graphs, setting scale.

O: Methods of Instruction

Lecture/Seminar

DATE: November 2001

BUSN 330 Business Mathematics

P: Textbooks and Materials to be Purchased by Students:

Harshbarger, R.J. and Reynolds, J.J. Mathematical Applications for the Management, Life and Social Sciences, Latest Edition, Houghton Mifflin.

Business Calculator: One of: Texas Instruments BAII+
Texas Instruments BA35
Hewlett Packard 10B
or Sharp EL-733a

Q: Means of Assessment

Term Exams (3-4)	50%-60%
Final Exam	30%
Assignments	05%-15%
Participation	00%-15%
	100%

R: Prior Learning Assessment and Recognition: specify whether course is open for PLAR

Challenge exams only.

Course Designer: Dave Waddington

Education Council/Curriculum Committee Representative

Dean: Jim Sator

Registrar: Trish Angus

DATE: November 2001