BRITISH COLUMBIA INSTITUTE OF TECHNOLOGY
School of Business
Program: Management Systems and H.R. Management
Option: All Options
Taught to: BUSA2A and 2B

Course Outline for:
BUSA3515

Date: January 2001

Hours/Week:	3	**Total Hours:**	60	**Term/Level:**	1 ·	
Lecture:	1	**Total Weeks:**	Winter Term	**Credits:**	3	
Lab:	2					
Other:						

Instructor

Gary Sagar		Office No:	SE6-358	Phone:	Local 6748
				Home	261-0067

Office Hours Tentatively:	Monday	Tuesday	Wednesday	Thursday	Friday
		9:30, 12:30	10:30		12:30

Prerequisites:

It is assumed students are enrolled in the BUSA Program..

It is assumed students are familiar with EXCEL (BUSA2605 or BUSA3700).

Course Description and Goals

The course has four main objectives. First, it will help you **identify** business situations that can be tackled using "quantitative analysis". Secondly, it will help you to **frame solutions** to these situations using standard methods for applying these techniques. Thirdly, you will **implement** solutions using standard business software (spreadsheets and or calculators). Finally, the solutions will be **interpreted** and subjected to "what if" or **sensitivity** analysis whenever appropriate.

In addition, this course is part of a program. You may be called upon to use your spreadsheet skills to prepare material for other courses or assignments.

Prior Learning Assessment Method

Not Available

Evaluation

Policy: **See also Page 4**

Final Examination	40	%
Midterm Tests	30	%
Assignments and quizzes	30	%

Course Learning Outcomes

At the end of this course:

- The student will be capable of applying descriptive statistics and basic probability theory to the management science models used in the course.

- the student will have been introduced to standard techniques including: Decision Analysis, Forecasting Methods including Simple Regression, Time Series, Linear Programming, and basic Inventory models;

- the student will have created information from fields in a Database imported it into a spreadsheet and carried out a basic statistical analysis of the data;

- the student will be able to use a sensible methodology to build a spreadsheet model;

- the student will understand some of the basic spreadsheet functions (formulas, charts, logic operators etc.) and the use of tools like Solver, Pivot Tables and Goal Seek;

- the student will understand that the spreadsheet is just a tool to help with standard business problems but that a printout of a spreadsheet is just part of analyzing problems and implementing solutions.

Course Record

Developed by: Chris Clark   Date: August 1997
                 Instructor

Revised by: Gary Sagar   Date: January 2000
                 Instructor

Approved by: Date: January 2000
                 Associate Dean

Text(s) and Equipment

Required:

C. T. Ragsdale, Spreadsheet Modeling and Decision Analysis, Course Technology, **3rd Edition**, 2001.

Suitable calculator (Sharp EL733-A required, but students may be given an exemption if they have an equivalent calculator. They must be able to operate the calculator.

Reference or Recommended:

Anderson, Sweeney, Williams Statistics For Business and Economics, West Publishing

This text was used in OPMT1130 (Statistics).

Students will require several 3.5" HD Disks with Labels and a couple of folders with disk pouches.

Course Notes (Policies and Procedures)

- *Assignments*: Late assignments or projects will not be accepted for marking. Assignments must be done on an individual basis unless otherwise specified by the instructor.
- *Attendance*: **The attendance policy as outlined in the current BCIT Calendar will be enforced.**
- *Course Outline Changes*: The material specified in this course outline may be changed by the instructor. If changes are required, they will be announced in class.
- *Ethics*: BCIT assumes that all students attending the Institute will follow a high standard of ethics. Incidents of cheating or plagiarism may, therefore, result in a grade of zero for the assignment, quiz, test, exam, or project for all parties involved and/or expulsion from the course.
- *Illness*: A doctor's note is required for any illness causing you to miss assignments, quizzes, tests, projects or exam. At the discretion of the instructor, you may complete the work missed or have the work prorated (i.e. an average is given according to your performance throughout the course).
- *Makeup Tests, Exams or Quizzes*: There will be no makeup tests, exams or quizzes. If you miss a test, exam or quiz, you will receive zero marks. Exceptions <u>may</u> be made for documented medical reasons or extenuating circumstances.
- *Labs*: **Lab attendance is mandatory.**

Assignment Details

- Assignment details will be made available in lectures and labs;

- Assignments are graded primarily on "input" soliciting help from the Instructor is encouraged. The material is very "hands on". Examinations, on the other hand, will be graded on "output".

* This schedule is subject to change at the discretion of the instructor

BRITISH COLUMBIA INSTITUTE OF TECHNOLOGY
School of Business   **Schedule for:**
Program: Operations Management Technology
Option:

.Week	Topic	Reference
1,2 .	Intro to descriptive statistics	Handouts
3	Intro to probability, tree diagrams and Expected value , excel for stats.	Handouts
4	Intro to modelling, excel for stats	Ragsdale CH1
5,6	Decision Analysis	Ragsdale CH 15
7,8,9	Forecasting- time series methods, simple regression	Rags CH 11
10	Midterm during exam week	

Midterm break   March

11,12	Linear programming- formulation and graphical solution	Rags Ch 2
13,14,15	Linear programming- computer solution and interpretation of comp. Output	Rags Ch 3, 4
16, 17	Project Management – critical path	Handout
18,19	Inventory models EOQ, Production lot size, quantity discount	Handout

Times and topics are approximate and may be adjusted to meet changing requirements