



## Quantitative Methods in Business – ACCT 369

### Business Management Program

### Course Outline

COURSE IMPLEMENTATION DATE: Pre 1998  
OUTLINE EFFECTIVE DATE: September 2020  
COURSE OUTLINE REVIEW DATE: March 2025

---

#### GENERAL COURSE DESCRIPTION:

This course is designed to help students learn to express organizational problems in mathematical terms. Topics include linear programming; transportation, assignment and transshipment problems; project scheduling (PERT/CPM); inventory and waiting line models; simulation; decision theory; and forecasting. Microsoft Excel will be used for solving various business problems.

---

**Program Information:** This is a required course for a Business Management Diploma with a major in either Accounting or Aboriginal Financial Management. It may also be used as an elective for other business programs.

---

**Delivery:** This course is delivered in both face-to-face and online formats.

**COTR Credits:** 3

**Hours for this course:** 45 hours

#### Typical Structure of Instructional Hours:

Instructional Activity	Duration
Lecture Hours	45
Seminars / Tutorials	
Laboratory / Studio Hours	
Practicum / Field Experience Hours	
Other Contact Hours	
<b>Total</b>	45

#### Practicum Hours (if applicable):

Type of Practicum	Duration
On-the-job Experience	N/A
Formal Work Experience	N/A
Other	N/A
<b>Total</b>	

**Course Outline Author or Contact:**

James Wishart, BA, MA, PID

\_\_\_\_\_  
Signature

**APPROVAL SIGNATURES:**

Department Head  
Erin Aasland Hall  
E-mail: [aaslandhall@cotr.bc.ca](mailto:aaslandhall@cotr.bc.ca)

Dean of Business and University Studies  
Darrell Bethune  
E-mail: [bethune@cotr.bc.ca](mailto:bethune@cotr.bc.ca)

\_\_\_\_\_  
Department Head Signature

\_\_\_\_\_  
Dean Signature

EDCO

Valid from: September 2020 – March 2025

\_\_\_\_\_  
Education Council Approval Date

**COURSE PREREQUISITES AND TRANSFER CREDIT:**

**Prerequisites:** A minimum grade of C- (55%) in STAT 106 and COMP 153 or COMP 154

**Flexible Assessment (FA):**

Credit can be awarded for this course through FA  Yes  No

Learners may request formal recognition for flexible assessment at the College of the Rockies through one or more of the following processes: External Evaluation, Worksite Assessment, Demonstration, Standardized Test, Self-assessment, Interview, Products/Portfolio, Challenge Exam. Contact an Education Advisor for more information.

**Transfer Credit:** For transfer information within British Columbia, Alberta and other institutions, please visit <http://www.cotr.bc.ca/Transfer>.

Students should also contact an academic advisor at the institution where they want transfer credit.

**Prior Course Number:** BUAD 220 ⇔ ⇔ ACCT 369

**Date changed:** June 2010

## **Textbooks and Required Resources:**

Textbook selection varies by instructor and may change from year to year. At the Course Outline Effective Date, the following textbooks were in use:

Helbaek, Morten and Brock McLellan (2010), *Essentials of Management Science*, Essex: Prentice-Hall.

Requires Access to Microsoft Excel

*Please see the instructor's syllabus or check COTR's online text calculator <http://go.cotr.bc.ca/tuition/tCalc.asp> for a complete list of the currently required textbooks.*

---

## **LEARNING OUTCOMES:**

Upon the successful completion of this course, students will be able to

- define quantitative methods for business;
  - define and use various types of models;
  - set up and analyze linear programming problems;
  - set up, analyze and apply transportation, assignment, and transshipment problems;
  - define and apply project scheduling using PERT and CPM;
  - define and apply inventory models;
  - define and apply waiting line models;
  - explore simulation techniques;
  - apply decision analysis;
  - explore forecasting techniques;
  - use Microsoft Excel to solve specific business problems;
  - use forecasting techniques related to environmental indicators and sustainability;
  - apply decision analysis to environmental decisions; and
  - critique the effectiveness/appropriateness of using forecasting technique related to environmental indicators and sustainability.
- 

## **COURSE TOPICS:**

- Linear Programming – structure, concepts, sensitivity analysis and applications in business
- Distribution and Network Models
- Project Scheduling (PERT/CPM)
- Inventory Models
- Waiting Line Models
- Simulations using Excel
- Forecasting

*See instructor's syllabus for the detailed outline of weekly readings, activities and assignments.*

---

## EVALUATION AND ASSESSMENT - Face-to-Face and Online Delivery:

Assignments	% Of Total Grade
Assignments	30%
Term Test	30%
Final Exam	<u>40%</u>
Total	100%

*Please see the instructor's syllabus for specific classroom policies related to this course, such as details of evaluation, penalties for late assignments and use of electronic aids.*

---

### EXAM POLICY:

Students must attend all required scheduled exams that make up a final grade at the appointed time and place.

Individual instructors may accommodate for illness or personal crisis. Additional accommodation will not be made unless a written request is sent to and approved by the appropriate Department Head prior to the scheduled exam.

Any student who misses a scheduled exam without approval will be given a grade of "0" for the exam.

---

### COURSE GRADE:

Course grades are assigned as follows:

Grade	A+	A	A-	B+	B	B-	C+	C	C-	D	F
Mark (Percent)	≥ 90	89-85	84-80	79-76	75-72	71-68	67-64	63-60	59-55	54-50	< 50

Certificate and diploma students are required to maintain a minimum course grade of C- (55%) in all program courses. BBA students are required to maintain a minimum course grade of C (60%) and an average grade of C+ in all program courses that contribute to the BBA.

---

### ACADEMIC POLICIES:

See [www.cotr.bc.ca/policies](http://www.cotr.bc.ca/policies) for general college policies related to course activities, including grade appeals, cheating and plagiarism.

---

### COURSE CHANGES:

Information contained in course outlines is correct at the time of publication. Content of the courses is revised on an ongoing basis to ensure relevance to changing educational, employment and marketing needs. The instructor will endeavour to provide notice of changes to students as soon as possible. The instructor reserves the right to add or delete material from courses.