



ACCT-369 – Quantitative Methods in Business

Business

Effective Term & Year: Fall 2025
Course Outline Review Date: 2030-03-01

Program Area: Business Management

Description:

This course is designed to help students learn to express organizational problems in mathematical terms. Topics include linear programming, network models (transportation, transshipment, and shortest route), project scheduling (PERT/CPM), decision analysis, queueing theory, simulation, forecasting, and inventory management. Microsoft Excel (including its Solver Add-In) will be used extensively for solving various business problems.

Program Information:

This is a required course for the Accounting Diploma. It may also be used as an elective for other business programs.

Delivery Methods: On-campus (Face-to-Face), Online

Credit Type: College of the Rockies Credits

Credits: 3

Course type/s: Business Management

Instructional Activity and Hours:

Activity	Hours
Classroom, Directed Studies or Online Instruction	45
Seminar/Tutorials	

Laboratory/Studio	
Practicum/Field Experience	
Co-op/Work Experience	
Other	
Total	45

Course Requisites:

- Complete all of the following
 - Earned a minimum grade of C- (55%) in each of the following:
 - [STAT106](#) – Statistics (3)
 - Earned a minimum grade of C- (55%) in at least 1 of the following:
 - [COMP153](#) – Introduction to Data Processing (3)
 - [COMP154](#) – Computer Applications in Business (3)

Prior Learning and Recognition: Yes

Students are able to request formal recognition of their prior learning or experience outside the classroom. Challenge examination, portfolio-assisted assessment, work-based assessment or a combination of assessments that is appropriate to identify, assess, and recognize prior skills, competencies, and knowledge to achieve course credit. Tuition fees apply, refer to [Policy 2.5.5 Prior Learning Assessment and Recognition \(PLAR\)](#) or contact an education advisor for more information.

Course Transfer Credit:

For information about receiving transfer credit for courses taken at either British Columbia or Alberta institutions, please see <https://www.bctransferguide.ca/> or <https://transferalberta.alberta.ca> . For more transfer credit information, please visit <https://www.cotr.bc.ca/Transfer>

All requests for course transfer credit from institutions in British Columbia or elsewhere should go to the College of the Rockies Enrolment Services office.

Textbook 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 <https://textbook.cotr.bc.ca/> 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 and understand its applicability to decision makers in business;
 - design and solve linear programming problems;
 - examine project scheduling;
 - examine various decision-making criterion;
 - examine and differentiate various queuing models;
 - solve forecasting problems;
 - solve simulation problems; and
 - examine and differentiate various inventory models.
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Course Topics:

- Introduction to Quantitative Methods
- Linear Programming
- Network Models

- Project Scheduling
- Decision Analysis
- Queuing Theory
- Simulation
- Forecasting
- Inventory Management

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

Evaluation and Assessments

Assessment Type: On-Campus (face-to-face) and Online, or Hybrid

Assessment Type	% of Total Grade
Assignments	20% – 40%
Term Test(s)	20% – 40%
Final Exam	30% – 50%
Total	100%

Grade Scheme

A+	A	A-	B+	B	B-	C+	C	C-	D	F
>=90	89-85	84-80	79-76	75-72	71-68	67-64	63-60	59-55	54-50	<50

Evaluation Notes Comments:

Please check your certificate, diploma and degree program outlines regarding minimum course grades and program average grades that are required.

Please see instructor's syllabus for assessment values.

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 Attendance:

Students must attend all scheduled exams at the appointed time and place. Instructors may

approve an alternate exam to accommodate an illness or personal crisis. Department heads will consider other written requests. Any student who misses a scheduled exam without prior approval will receive a "0" on the exam.

Academic Policies:

College of the Rockies policies related to courses can be found at <https://cotr.bc.ca/about-us/college-policies/> and include the following:

- Policy 2.1.4 Course Audit
 - Policy 2.4.1 Credential Framework
 - Policy 2.4.3 Students with Documented Disabilities
 - Policy 2.4.4 Student Rights, Responsibilities and Conduct
 - Policy 2.4.8 Academic Performance
 - Policy 2.4.9 Student Feedback and Concerns
 - Policy 2.4.11 Storage of Academic Works
 - Policy 2.5.3 Student Appeal
 - Policy 2.5.5 Prior Learning Assessment and Recognition (PLAR)
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Equivalent Course(s) and Course Code Changes

Prior Course Code: BUAD 220 >> ACCT 369

Date changed: June 2010

Course Changes:

The College of the Rockies updates course outlines regularly to meet changing educational, employment and marketing needs. The instructor will notify students in writing of any updates to this outline during the semester. The instructor reserves the right to revise, add or delete material while meeting the learning outcomes of this course outline.