

SAMPLE COURSE OUTLINE

Course Code, Number, and Title:

MATH 2310: Quantitative Methods in Business

Course Format:

[Course format may vary by instructor. The typical course format would be:]

Lecture 4.0 h + Seminar 0.0 h + Lab. 0.0 h

Credits: 3.0

Transfer Credit: For information, visit bctransferguide.ca

Course Description, Prerequisites, Corequisites:

Applications of basic mathematics, calculus, and linear algebra to business administration. Includes linear programming, sensitivity analysis, transportation problems, decision analysis, simulation, network applications. Required of all students in the first year UBC Commerce program.

Prerequisite(s): A minimum "C-" grade in one of the following: MATH 1153, 1171, 1173, 1174, or 1175. Prerequisites are valid for only three years.

Learning Outcomes:

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

- Solve theory of the firm problems: maximize profit and revenue, minimize costs.
- Apply methods of inventory management and control to solve three deterministic inventory control models presented to solve inventory cost minimization methods with stochastic models, both single- and multi-period scenarios.
- Model real world situations as linear programs.
- Interpret and apply sensitivity report output to special instances, explaining why dual variable values can be interpreted as shadow prices.
- Solve two-variable linear programming problems graphically and complete the results in the sensitivity report.
- Model extensions of linear programming: transportation, transshipment, shortest path and assignment problems and model any of these problems as a general transshipment problem.
- Explain the relative price interpretation of the dual quantities in a transportation problem.

Instructor(s): TBA

Office: TBA

Office Hours: TBA

Phone: (604) 323-XXXX

Email: TBA

Textbook and Course Materials:

[Textbook selection may vary by instructor. An example of texts and course materials for this course might be:]

For textbook information, visit https://mycampusstore.langara.bc.ca/buy_courselisting.asp?selTerm=3|8

Note: This course may use an electronic (online) instructional resource that is located outside of Canada for mandatory graded class work. You may be required to enter personal information, such as your name and email address, to log in to this resource. This means that your personal information could be stored on servers located outside of Canada and may be accessed by U.S. authorities, subject to federal laws. Where possible, you may log in with an email pseudonym as long as you provide the pseudonym to me so I can identify you when reviewing your class work.

Assessments and Weighting:

Final Exam 40%

Other Assessments 60%

[An example of other assessments might be:]

Special Evaluation (SE) 5%

Quizzes 15%

Two Midterm Examinations 40%

Grading System:

Specific grading schemes will be detailed in each course section outline.

Grades	F	D	C-	C	C+	B-	B	B+	A-	A	A+
% Range	0-47	48-52	53-57	58-62	63-67	68-72	73-76	77-79	80-84	85-95	≥ 96

Topics Covered:

[Topics covered may vary by instructor. An example of topics covered might be:]

- Introduction to Quantitative Models
- Introduction to Linear Programming
- Linear Programming: Sensitivity Analysis and Interpretation of Solution
- Linear Programming Applications
- Distribution and Network Models
- Integer Linear Programming
- Project Scheduling: PERT/CPM
- Inventory Models
- Decision Analysis

As a student at Langara, you are responsible for familiarizing yourself and complying with the following policies:

College Policies:

[E1003 - Student Code of Conduct](#)

[F1004 - Code of Academic Conduct](#)

[E2008 - Academic Standing - Academic Probation and Academic Suspension](#)

[E2006 - Appeal of Final Grade](#)

[F1002 - Concerns about Instruction](#)

[E2011 - Withdrawal from Courses](#)

Departmental/Course Policies:

Information unavailable, please consult Department for details.

SAMPLE