Department of Economics
Course Outline

		Term:	Winter 2006
Course:	Economics 307 [Computational Optimization & Economic Applications II]	**Section:**	01
Time:	MWF 12:00-12:50	**Place:**	ST 125 (subject to change)
Instructor:	Dr. J.G. Rowse		
Office:	SS 452	**Telephone:**	220-6109 (Office) 220-5857 (Department)
Office Hours:	MW 09:30 ? 10:30 F 10:30 ? 11:30	**E-Mail:**	rowse@ucalgary.ca

Textbook(s):

Winston, Wayne, and Munirpallam Venkataramanan, Introduction to Mathematical Programming 4th edition, Thomson, 2003 (This text is bundled with WINDOWS software for LINDO and LINGO). [**Required**]

Book(s) on Reserve:

Anderson, D., Sweeney, D., & Williams, T., An Introduction to Management Science: Quantitative Approaches to Decision Making, West Publishing Co., 7th ed. 1994.

Baumol, W.J., Economic Theory and Operations Analysis, Prentice-Hall, 4th ed.,1977.

Boulding, Kenneth E., Linear Programming and the Theory of the Firm, MacMillan, 1960.

Dorfman, Robert, Samuelson, Paul & Solow, Robert, Linear Programming and Economic Analysis, McGraw-Hill, 1958.

Hillier, Frederick & Lieberman, Gerald, Introduction to Mathematical Programming, McGraw-Hill,2nd ed., 1995.

Loomis, John, and Gloria Helford, Environmental Policy Analysis for Decision Making, Kluwer Academic Publishers,

2001.

Mills, Gordon, Optimization in Economic Analysis, Allen & Unwin, 1st ed.,1985.

Nordhaus, William D., Managing the Global Commons: The Economics of Climate Change, MIT Press, Cambridge, Mass. 1994.

Nordhaus, William D. and Boyer, Joseph, Warming the World: Economic Models of Global Warming, The MIT Press, Cambridge, Mass, 2000.

Paris, Quirino, An Economic Interpretation of Linear Programming, Iowa State University Press, 1st ed.,1991.

Vandermeulen, Daniel, Linear Economic Theory, Prentice-Hall, 1971.

Wagner, Harvey M., Principles of Management Science, Prentice-Hall, 2nd ed.,1975.

Winston, Wayne, and Munirpallam Venkataramanan, Introduction to Mathematical Programming 4th edition, Thomson, 2003 (This text is bundled with WINDOWS software for LINDO and LINGO)

Zeuthen, Frederik, Economic Theory and Method, Kelley & Millman, Inc., 1955.

Zionts, Stanley, Linear and Integer Programming, Prentice-Hall, 1974.

Zoutendijk, G., Methods of Feasible Directions, Elsevier Publishing Co., 1960.

Dantzig, George B., Linear Programming and Extensions, Princeton University Press, 1963.

Gass, Saul I., Linear Programming, McGraw-Hill, 1981.

Course Outline:

This course is a continuation of Economics 305. Topics covered will be:

1. Further Economic Applications of Linear Programming
2. Nonlinear Programming and Economic Applications

Grade Determination and Final Examination Details:

A final grade will be determined based upon the following weighting schemes:

Evaluation Process	Option I	Option II
Assignments	20%	20%
Exam I (March 1, 2006)	20%	10%
Exam II (March 29, 2006)	20%	10%
Final Exam	40%	30%
Research Project	0%	30%
	100%	100%

The total numerical grade for the course will be computed using each option, and the higher of the two grades will be the numerical grade for the course. A course letter grade will then be assigned based on this conversion chart:

A+	90 - 100	B+	77 ? 79	C+	67 ? 69	D+	57 ? 59

A	83 - 89	B	73 ? 76	C	63 ? 66	D	50 ? 56
A-	80 - 82	B-	70 - 72	C-	60 ? 62	F	0 - 49

Students will be allowed the use of a calculator during all examinations, subject to the following restrictions: acceptable calculators are those which are battery or solar-operated and hand-held, and which are capable of performing arithmetic operations on user-entered numerical data. Calculators which can pre-store data, formulas or text are not allowed and a student who violates this restriction is guilty of academic dishonesty. If in doubt, please check with the instructor first.

The final examination will be scheduled by the Registrar in the classroom and will last two hours. It will be a comprehensive examination of all material covered in the course.

Note that: all examinations will be open-book; a research project is not required to complete the course; and a passing grade on any particular item of work is not essential to pass the course as a whole.

If you choose to work on a research project, NOTE THE FOLLOWING DEADLINES:

Feb. 13	Submission of an outline of work for the research project
March 15	Submission of a progress report on work for the research project
April 10	Submission of the completed research project

Students? Union Vice President Academic:
Paige Forsyth
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Society of Undergraduates in Economics (S.U.E.)
www.fp.ucalgary.ca/econ

Finally, special attention should be directed toward the sections concerning attendance, tape recording of lectures, and student misconduct on page 43 and pages 52 - 56 of the 2005/06 Calendar.

Notes

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- Students seeking reappraisal of a piece of graded term work (term paper, essay, etc.) should discuss their work with the Instructor within fifteen days of the work being returned to the class.
- Make-up or deferred examinations will not be given. Any student who finds it necessary to miss an examination or assignment must notify the instructor in advance and produce a valid medical certificate or other required documentation in order to have the weighting transferred to the final exam. **Late assignments will receive a grade of zero.**

Also, examinations will not be given *before* the indicated dates.

- E-mail policy: The Instructor strongly prefers to interact with students in person. If necessary, use e-mail only to arrange a time to see the Instructor.
- **CAUTION**

  : Lectures and readings from the text are complements, not substitutes, and students are responsible for material presented in both lectures and readings. Students are also responsible for dates for assignments and tutorials that are discussed in class. Regular class attendance is ***VERY STRONGLY ADVISED***.

Safewalk / Campus Security: 220-5333

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JGR/mi
2003-11-04