MANAGEMENT SCIENCE METHODS
MSIS 3233
FALL 2007

Instructor: **Dr. T. Ireland**
Office: **Business 425**
Telephone: **744-8642**
Office Hours: **1:30-4:30 MW and by appointment**
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Description: This course will involve an examination of various quantitative approaches to decision making. Deterministic problem-solving techniques of the operations research (OR) area will be highlighted and integrated with computer exercises.

Guidelines:

1. The prerequisites are Operations Management (MSIS 3223) and Calculus (Math 2103 or 2144).

2. There are 4 semester exams, including the final. Each exam is worth 80 points.

3. Graded homework problems and various computer projects will be assigned during the semester. These activities will be worth 80 points. The total number of points that can be earned in the course is 400.

4. Final grades are assigned as described below: The final criteria, including homework requirements (60%, 70%, etc.), may be slightly lower if the distribution of grade scores shows that this is advisable.

Grade	Meaning	Requirements
A	Superior	Minimum of 360 points (90%) .
B	Good	Between 320 and 359.5 points (80%-90%)
C	Adequate	Between 280 and 319.5 points (70%-80%)
D	Minimum	Between 240 and 279.5 points (60%-70%)
F	Failing	Below 240 points (60%)

5. Nongraded homework may be assigned daily, or as needed, to help you practice the techniques presented. Answers are available, and problems discussed from time to time in class. You are invited to visit your professor during office hours to discuss homework problems.

6. Since so much material is covered in a short time, it is important to attend all classes. If you should have to miss a lecture, determine what you have missed and take appropriate measures. If you cannot be in class on a test day, please contact your professor in advance of the test to arrange for a makeup. A makeup is harder than the scheduled test.

7. By attending class regularly, you are helping your chances for a good grade by participating in class discussions, getting handouts and announcements, opportunities to earn bonus points, and practice and review to help you do well in the exams.

8. All papers submitted for grading, including tests, should be legible and neat with the final answers circled or underlined.
9. **Academic Integrity Policy----**Oklahoma State University is committed to the maintenance of the highest standards of integrity and ethical conduct of its members. This level of ethical behavior and integrity will be maintained in this course. Participating in a behavior that violates academic integrity will result in your being sanctioned. For more information refer to:

<http://osu.okstate.edu/acadaffr/aa/academicintegrity.htm>.

10. The OSU **drop** policy is as follows:

August 20 - August 27	No transcript entry
August 28 - November 9	Grade of "W" recorded
After November 9	Drop by petition only

11. Textbook: *Management Science* (11th Ed.) by Anderson, Sweeney, and Williams.

Assignment	Topics
Ch. 1	Introduction
Ch. 2, Ch. 3.1-3.2	Linear Programming: The Graphical Method
Ch. 5	Linear Programming: The Simplex Method
EXAM I	
Ch. 6	Linear Programming: Sensitivity Analysis and Duality Ch. 15.1-15.2 Goal Programming
Ch. 3.3-3.5, Ch. 4	Linear Programming: Applications/Computer Solution
EXAM II	
Ch. 7	Transportation, Assignment, and Transshipment Problems
Ch. 8.1-8.2, and 8.5	Integer Linear Programming Solutions
EXAM III	
Ch. 8.3-8.4	Integer Linear Programming Formulations
Ch. 9	Network Models
Ch. 16	Forecasting
Ch. 19	Calculus-Based Solution Procedures
FINAL EXAM	

12. **Exams: (Tentative Dates)**

Exam 1: September 20, Thursday evening, 5:30 - 7:00 p.m. (AGH 107)

Exam 2: October 18, Thursday evening, 5:30 - 7:00 p.m. (AGH 107)

Exam 3: November 12, Monday evening, 5:30 - 7:00 p.m. (AGH 107)

FINAL: December 14, Friday morning, 10:00-11:50 a.m. (BUS 009)

If any member of the class thinks that s/he has a physical, emotional, or psychological disability and needs special accommodations of any nature, the instructor will work with you and the university Office of Student Disability Services (SU 315, 744-7116 v/t) to provide reasonable accommodations to ensure that you have a fair opportunity to perform in this class.. Please advise the instructor of such disability and the accommodations as soon as possible. You will need to also contact the Student Disability Services office in order to receive accommodations. No accommodations will be made without prior notification.