

MGT 512.72 & 73/Quantitative Analysis for Business Decision Making

Fall – 2009

| | |
|--|--|
| Instructor: Jeffrey Teich Email: jteich@nmsu.edu Blackboard and youtube videos will be used | Office: GU 311 Office Hours: by appointment. Virtual online office hours at other times (Skype jeteich). I will typically reply to email within one hour. |
|--|--|

Text: "Spreadsheet Modeling & Decision Analysis, 5th edition" by Cliff T. Ragsdale (2007)

Course Description: Identification, collection & analysis of an organization's data both internal & external, & use of the resultant information in managerial decision making. Prerequisite: graduate students only

Course Learning Objectives:

- To develop an understanding of the tools and techniques used in support of managerial decisions.
- To strengthen skills in the use of Decision Support Systems, Spreadsheets, and Web Applications.
- To provide a foundation for specialization in areas that emphasize quantitative applications.

| Grading | Points |
|--|------------|
| 1 Midterm Exam | 100 |
| 1 Final Exam | 100 |
| Cases and Turn-in Assignments | 100 |
| Daily Homework Checks (submitted but not graded) | 45 |
| Total | 345 |

- **Academic Integrity:** Cheating will not be tolerated. When taking exams, eyes must remain on your own exam, with your work covered. If there is a suspicion of copying, you, or someone around you will be asked to move, as a first warning. After the second incident, you will be asked to leave. Any evidence of cheating on the exams themselves will lead to an automatic F in the class with possible follow-up discipline. Please refer to the student code of conduct for information regarding appeals processes etc.
- **Incompletes ("I" grades):** Given for passable work that could not be completed due to circumstances beyond the student's control (e.g., severe illness, death in the immediate family). These circumstances must have developed after the last day to withdraw from the course. Requests for "I" grades should be made to the instructor, but must be approved by the Management Department Head.
- **Withdrawals:** It is the responsibility of the student to know important dates such as University drop dates; last day to withdraw with a W is Oct 14. Moreover, it is the responsibility of the student to officially withdraw from any class that he or she intends to drop.
- **Disabilities/Employee Relations:** Call the Director of Institutional Equity at 575.646.3635 with any questions you may have about NMSU's Non-Discrimination Policy & complaints of discrimination, including sexual harassment. Call the Coordinator of Services for Students with Disabilities at 575.646.6840 regarding student issues related to the Americans with Disabilities Act (ADA) and/or Section 504 of the Rehabilitation Act of 1973. All medical information will be treated confidentially.

| MGT 512.02 & 03 Tentative Class Schedule | | | | |
|---|--|---|----------------|--|
| DATE | | SUBJECT | CHAPTER | Daily Homework & Cases |
| Aug | | Intro to Optimization and LP | 1,2 | Ch 2: 1,5,6,7,15,16,17 |
| Sep | | Intro to Optimization and LP and Solving LP in Spreadsheets | 2,3 | Ch 3: 18,19,20,21,24,25 batch 1 |
| | | Modeling and Solving LP in Spreadsheets | 3 | Ch 3: 26,30,33,34 batch 2 |
| | | Modeling and Solving LP in Spreadsheets and Sensitivity | 3,4 | Ch 3: 46; Ch 4: 5 batch 3 |
| | | Sensitivity Analysis (only up to page 160) and Network Modeling | 4,5 | Case 4.2 (turn-in) |
| Oct | | Network Modeling | 5 | Beer Case (turn-in) |
| | | Mid-term Exam | | |
| | | Decision Analysis | 15 | |
| | | Decision Analysis and Utility | 15 | Ch 15: 9,10,14,15 batch 1 |
| | | Decision Analysis and Regression Analysis | 15 | Ch 15: 11,12,21,23 and Hipre Problem # 30 batch 2; Wine Case (turn-in) |
| Nov | | | | |
| | | Regression Analysis | 9 | Ch 9: 8, 9; Turn-in #19 |
| | | Simulation | 12 | Ch 12: 1, 14; Turn-in #9 |
| | | Simulation and Queuing Theory | 12,13 | Ch 13: 6,7,8 |
| Dec | | Electronic Markets, Auctions, Negotiations, Game Theory | | |
| | | Final Exam | | |

Note: Due dates and exam dates will be posted on blackboard.