

Management 512
Spring 2007
Quant Methods in Mgt
New Mexico State University
Thursday 6-8.30pm

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BC 340
Office hrs: To be decided

Course description

Identification, collection and analysis of an organization's data both internal & external and use of the resultant information in managerial decision making.

Prerequisite: Graduate students only.

Learning goals

1. To develop an understanding of the tools and techniques used in support of managerial decisions.
2. To strengthen skills in the use of excel based spreadsheet.
3. To provide a foundation for specialization in areas that emphasize quantitative applications.

Policies

Make-up

- a) Students can make-up missed homework assignment. However, they will have to work on their own and not in a group.
- b) If the student misses one or both the mid-term exams, the final exam weight will be increased accordingly. The final exam will be comprehensive and the student will have to do the exam individually and not in a group.
- c) Absence due to emergencies such as medical, family related, your office related work or NMSU work related must be supported by legitimate documentation if a make-up, mid-term exam is to be administered.

Grade/Score changes on homework and tests

- a) A wrong totaling of a score can be changed any time during the semester or later.
- b) If a student claims that his/her work is wrongly graded, he/she must give me reasons within one week from the time of my returning the graded work.
- c) If the reason stems from a comparison with another student, please bring both the answers. Chances are both may get the higher score (due to my error) or both will get the lower score (if the other students' answer was graded wrongly).

Classroom etiquette

- a) Please try not to come late to class.
- b) Class participation must be professional.

- c) Any question pertaining to your individual case must be discussed outside class. (Examples include you don't have access to a computer, you don't have the background to do the homework, etc.)

ADA Statement

If you have, or believe you have, a disability and would benefit from any accommodation(s), you may wish to self-identify by contacting the services for Students with Disabilities (SSD) Office located at Garcia Annex [Phone: 646-6840; TTY: 646-1918] to register. All medical information will be treated confidentially. If you have already registered, please make sure that your instructor receives a copy of the accommodation memorandum from SSD within the first two weeks of classes. It will be your responsibility to inform either your instructor or SSD representative if the services/accommodations provided are not meeting with your needs. If you have a condition that may affect your ability to exit safely from the premises in an emergency or that may cause an emergency during class, you are encouraged to discuss any concerns with the instructor or Ms. Jane Spinti, SSD Coordinator. Feel free to call Ms. Elva G. Telles, EEO/ADA & Employee Relations Director, at 646-3333.

Administrative details

Office : BC 340
 Phone : 646-3226
 Email : sankaran@nmsu.edu
 Website : <http://cbae.nmsu.edu/~sankaran/mgt512>
 Text book : Spreadsheet Modeling and Decision Analysis
 Edition : 5th
 Publishers : Thompson/Southwestern

Grading System

Activities and weights

Assignments	----- <i>Group</i>	25%
Exam 1	----- <i>Individual</i>	25%
Exam 2	----- <i>Individual</i>	25%
Final	----- <i>Group Exam</i>	25%

Grade Distribution

A: 85-100 %
 B: 75 – 84
 C: 65 – 74
 D: 55 – 64 and
 less than 55 is an F.

Sequence of Topics

Ch 2 : Introduction to Optimization and Linear Programming (Graphical approach)
HW-1 : 5, 8, 9, 17, 15

Ch 3 : Modeling and solving LP problems in a spreadsheet.
HW-2 : 12, 15, 19, 20, 26

Ch 4 : Sensitivity analysis and the Simplex Method
HW-3 : 3, 5, 7, 9, 12

EXAM-1

Ch 5 : Network Modeling
HW-4 : 5, 6, 8, 12, 14

Ch 8 : Nonlinear programming & Evolutionary Optimization
HW-5 : 3, 5, 7, 13, 21

Ch 9 : Regression analysis
HW-6 : 6, 8, 9, 10, 19

EXAM-2

Ch 10 : Discriminant analysis
HW-7 : 5, 6, 7, 10, 11

Ch 12 : Introduction to simulation using Crystal Ball
HW-8 : 3, 5, 9, 14, 19

Notes : Introduction to Game theory and applications
HW-9 : To be determined.

FINAL EXAM (May 8, 2007)

I will provide you with dates for homework deadlines and mid-term dates as we progress into the semester. All the homework questions are from the end of the corresponding chapter.