Spring 2-1-2004

MBA 650.01: Quantitative Analysis

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MBA 650: Quantitative Analysis
Syllabus
Spring 2004

Instructor: Dr. Belva Jones
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Text: *Spreadsheet Modeling & Decision Analysis*, 4th edition, by Cliff T. Ragsdale
Your book should have two CDs: (1) Crystal Ball 2000.2, Premium Solver, TreePlan, and data files; and (2) Microsoft Project, evaluation copy. You should also have access to a computer loaded with a recent version of Excel. Demonstrations in class will use the Office 2003 version of Excel.

Course Objectives: MBA 650 provides the background necessary for students to use quantitative tools to make data-driven decisions. Based on empirical studies of the tools actually used by MBAs in practice, the course will cover:

1. Spreadsheet design / best practices
2. Multiple regression
3. Experimental design
4. Decision Analysis
5. Simulation
6. Project Management
7. Linear programming
8. Integer programming
9. Non-linear programming

Evaluation: Because your classroom may not be equipped with computers for each student, the examinations will be take-home tests. You will be asked to sign a pledge that the work you present as answers to the test questions and your homework is your own individual work and that you did not receive help on the exam from anyone else.

Exam 1	25%	A	90 – 100
Exam 2	25%	B	80 – 89
Project	20%	C	70 – 79
Homework	30%	D	60 – 69

Tentative Schedule
MWF 10:10-11:00

Week 1: March 1-5	Ch. 1: Introduction (Data, Modeling, Spreadsheets)
Week 2: March 8-12	Ch. 9: Regression Analysis
Week 3: March 15-19	Experimental Design
Week 4: March 22-26	Ch. 15: Decision Analysis
Week 5: March 29-April 2	Spring Break
Week 6: April 5-9	Ch. 12: Simulation Using Crystal Ball
Week 7: April 12-16	Ch. 14: Project Management Using Microsoft Project
Week 8: April 19-23	Ch. 2, 3: Linear Programming Using Solver
Week 9: April 26-30	Ch. 4, 5: Sensitivity Analysis and Network Modeling
Week 10: May 3-7	Ch. 6, 8: Integer Programming; Non-linear Prog.
Week 11: May 12, 10:10-12:00	Group Presentations

Mid-Term: Take home exam, due April 5.
Final: Take home exam, due May 14 @ noon.