Revised Jan. 20, 2009

LINCOLN UNIVERSITY
Spring 2009

COURSE: **BA 241 - Quantitative Analysis –** 3 units

INSTRUCTOR: Dr. Eugene Bozhich

OFFICE HOURS: **e-mail:** ebozhich@lincolnuca.edu

TEXT: *Quantitative Methods for Business, Management, and Finance*, 2/E, by Louise Swift and Sally Piff, Palgrave Macmillan, 2005, ISBN 13: 978-1-4039-3528-1; ISBN 10: 1-4039-3528-9

TOOLS: Students will be required to use a scientific or graphical calculator and Excel spreadsheets.

OPTIONAL: *Essential Quantitative Methods for Business, Management, and Finance*, 3/E, by Les Oakshott, Palgrave Macmillan, 2006, ISBN-13: 978-1-4039-4991-2; ISBN-10: 1-4039-4991-3

CATALOG DESCRIPTION:
While solving a problem, managers must consider both qualitative and quantitative factors. This course covers quantitative methods, which help to solve different business problems. Techniques include: probability theory, estimation, testing hypotheses, regression models, forecasting, linear programming models, planning projects, decision analysis, inventory control, statistical quality control, and others. (3 units) Prerequisite: MATH 15

LEARNING OBJECTIVES:
To provide a modern treatment of basic management science methodology for students with a background in algebra, to survey the variety and power of management science tools, to enable students to recognize on-the-job situations in which management science methodology can be successfully employed. Emphasis is on developing modeling skills for students of varying mathematical backgrounds.

INSTRUCTIONAL METHODS:
Lecture method is used in combination with the practical use of business software and the Internet. The emphasis will be on learning by doing. Every student must participate in an intensive classroom activity. Reading, writing, and computer assignments will be made throughout the course.

TOPICAL OUTLINE OF THE COURSE: weekly schedule of topics is attached

REQUIREMENTS:
All students are required to attend the class. Continuous assessment is emphasized. Written quizzes will be given. Students must complete all assignments and take all quizzes, mid-term exam and final exam ON THE DATES DUE. Plagiarism will result in the grade "F" and a report to the administration.

GRADING:

Quizzes	every week	25%
Assignments	every week	25%
Mid-term exam	ninth week	20%
Final exam	as scheduled	30%

Less than 50% total is an "F"; 70% total is "B-". Other grades will be calculated "on the curve" from the scores above.

SPRING 2009 SCHEDULE OF TOPICS

Week	Topics	*Chapters*
1	Basic Algebra Review. Essential Math.	EM1 – EM4.
2	Pictures of Data	DD1 – DD2
3	Probability. Numerical Outcomes.	P1 – P2
4	Probability. Continuous Numerical Outcomes.	P3
5	Statistics. Estimation. Testing Hypotheses.	S1 –S2.
6	Statistics. Correlation and Regression.	S3.
7	Statistics. Forecasting.	S4.
8	Statistics. Comparing Two Populations. Categorical Data.	S5 – S6
9	**MIDTERM EXAM – March 11, 2009**	DD1-DD2, P1 – P3, S1 – S6.
10	Spring recess	
11	Linear Programming.	BM1
12	Planning Projects, Inventory Control.	BM2 – BM3
13	Time and Money.	BM4
14	Decision Making.	BM5
15	Controlling Quality.	BM6
16	Simulating Reality.	BM7
17	**COMPREHENSIVE FINAL EXAM – May 6, 2009**	