Quantitative Analysis

Course Syllabus

Course No:	BA 241	**Instructor:**	Prof. Leonid Romanyuk
Semester:	Summer 2010	**Phone:**	(510) 628-8024
Units:	3	**E-mail:**	lromanyuk@lincolnuca.edu
Class hours:	TTH 9:00 – 11:45 am	**Office Hours:**	MW 11:50-12:25
Class Room:	TBA	**Office Room:**	402

COURSE DESCRIPTION:

This course covers quantitative techniques for solving business problems and making management decisions. Techniques include production or output planning, capital investment and project analysis, linear and non-linear programming, probability theory, inventory control, scheduling, and waiting line models, as well as mathematical decision techniques. (3 units)
Prerequisite: MATH 15 or MATH 40

LEARNING OBJECTIVES:

To provide a modern treatment of quantitative analysis techniques in 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 to solve application problems. The emphasis will be on learning by doing. Every student must participate in an intensive classroom activity. Reading, writing, "business case study", and project assignments will be made throughout the course

REQUIRED MATERIALS:

TEXTBOOK:	Quantitative Analysis for Management, 10th Edition, by Barry Render, Ralph Stair, Michael E. Hanna, Prentice Hall, 2008, ISBN-10: 0136036252 or 0137129904
REQUIRED TOOLS:	A scientific or graphical calculator and Excel spreadsheets
OPTIONAL:	Publisher's Web site student resources at http://www.prenhall.com/render/

REQUIREMENTS:

All students are required to attend the class. Continuous assessment is emphasized. Written or oral quizzes will be given every week. Students must complete all assignments and take all quizzes, mid-term exam and final exam ON THE DATES DUE. Talking in class, using cell phones, coming late, leaving the room at times other than at break time is not allowed. Plagiarism/cheating will result in the grade "F" and a report to the administration.

TESTING:

Classroom activities	every week	10%
Quizzes	every week	10%
Assignments and Projects	every week	30%
Mid-term exam	4th week	20%
Final exam	as scheduled	30%

There will be no make-up for a missed quiz or participation in a classroom activity. No make-up exams will be given unless you have the instructor's **prior** approval obtained in person **before** the exam date, with the exception of an extreme emergency. Late assignments will get no credit or reduced credit. ***Students will not be allowed to use computers or cellular phones during tests.***

GRADING:

Less than 60% total is an "F"; 75% total is "C+". Other grades will be calculated "on the curve" from the scores above.

COURSE SCHEDULE:

Weekly schedule of topics is attached. Students should read every chapter of the textbook on the topic to be discussed in class before they come to class. Be ready to answer in writing all review and discussion questions at the end of the chapter.

ASSIGNMENTS AND PROJECTS:

Case studies, mini projects and other assignments will be given every week. Take a folder and create a Project Notebook. You will put in this folder printouts of the results of all your assignments and projects and storage media (floppy disk / CD disc / DVD disc / USB flash drive) with your work stored on it. The instructor can ask you to turn in this folder and grade your work at any time during the semester.

MODIFICATION OF THE SYLLABUS:

This syllabus was updated on May 24, 2010. The instructor reserves the right to modify this syllabus at any time during the semester. An announcement of any changes will be made in a classroom.

SUMMER 2010 SCHEDULE OF TOPICS AND REQUIRED READING

Read every chapter on the topic to be discussed in class before you come to class.
Be ready to answer in writing all review and discussion questions at the end of the chapter.

Date	Topics	Chapter
6/08/10	Introduction to Quantitative Analysis	1
6/10/10	Probability Concepts and Applications	2.1 – 2.7
6/15/10	Random Variables and Probability Distributions Basic Statistics Using Excel	2.8 -2.13 Appendix 2.2
6/17/10	Decision Analysis	3
6/22/10	Decision Theory and the Normal Distribution	n/a
6/24/10	Regression Models	4
6/29/10	Forecasting	5
	Important: submit the printouts of all your assignments and projects and a copy of it on a CD disc in class at 9:00 am	
7/01/10	**Review**	1 - 5
	MIDTERM EXAM	
7/06/10	Inventory Control Models	6
7/08/10	Linear Programming Models: Graphical and Computer Methods	7
7/13/10	Linear Programming Modeling Applications with Computer Analyses in Excel and QM for Windows	8
7/15/10	Transportation and Assignment Models	10
7/20/10	**Review**	1 – 8, 10
	Important: submit the printouts of all your assignments and projects and a copy of it on a CD disc in class at 9:00 am	
7/22/10	**COMPREHENSIVE FINAL EXAM**	