

CHAMINADE UNIVERSITY

Analytical Skills for Managers, MBA 520

Winter 2011

INSTRUCTOR: Dr. Gholam Khaleghi

OFFICE HOURS: By Appointment

Monday: 05:45PM

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COURSE DESCRIPTION:

This course provides the background in quantitative methods required for advanced coursework in the MBA program. Focus is given to the use of mathematical and statistical reasoning and computation in solving organizational problems. Topics include basic arithmetic principles, application of arithmetic operations to business forms and to analysis and solution of problems of percentage, markup, and markdown, discounts, the time value of money, present value, data organization, descriptive statistics, hypothesis testing, and regression analysis, various types of forecasting, optimization techniques, model building, and inventory control.

COURSE GOALS- STUDENT LEARNER OUTCOMES:

Upon completion of this course, the student should be able to:

1. Organize raw data in frequency tables, understand equations and be able to draw and read their graphs and calculate slope.
2. Understand variables, constants, and their relationships.
3. Find the appropriate value in central location, including mean, median, mode, fractals, and weighted mean.
4. Measure the variation and standard deviation in data.
5. Use the basic concepts of probability theory, to calculate probability including methods of counting, properties of probability such as addition and multiplication principles, and the differences between odds and probability.
6. Apply different forecasting techniques: weighted, smoothing, trending, regression
7. Use various inventory management techniques
8. Have a thorough understanding of optimization techniques and choose the best element from some set of available alternatives.
9. Calculate the minimum/maximum and incremental costs,
10. Describe how to take into account the time value of money using the concepts of compound interest and discounting.
11. Calculate the present value of a future payment.
12. Discount a single investment under the operation of simple (commercial) discount at a constant rate of discount.

13. Describe how a compound interest model can be used to represent the effect of investing a sum of money over a period.
14. Derive the relationship between the rates of interest and discount.
15. Demonstrate a knowledge and understanding of real and nominal interest rates.
16. Calculate the present value and the accumulated value of a stream of equal or unequal payments using specified rates of interest and the net present value.

THE LEARNING SYSTEM

- A. TEXTBOOK: Business Math & Study Guide Package, 8th Edition, by Cleaves & Hobbs, 2009, Published by: <http://www.pearsonhighered.com/educator/academic/product/0,3110,0136054935,00.html>
- B. Handouts. C. Lecture notes.

COURSE OUTLINE*

Week 01 Jan. 10	Intro: Everyday use of Math Chapter 01: Whole Numbers Chapter 02: Fractions Chapter 03: Decimals
Week 02 Jan. 17	Exam I : Chapters.1, 2, & 3 Review of the Exam I Handout : Demand Analysis
Week 03 Jan. 24	Chapter 05: Equations Chapter 06: Percents
Week 04 Jan. 31	Exam II : Chapters 5 & 6 Review of the Exam II Intro to Statistics
Week 05 Feb. 07	Chapter 07: Business Statistics Handout : Simple Regression Handout : Multiple Regression
Week 06 Feb. 14	Handout : Estimating Demand Handout : Various Business Forecasting: Moving Average, Smoothing, Time Series
Week 07 Feb. 21	Exam III : Chapters 7 and Handouts Review of Exam III Intro to Finance

Chapter 11: Simple Interest

Week 08 Feb. 28	Chapter 13: Compound Interest Handout : Time Value of Money Chapter 21: Stocks and Bonds
Week 09 Mar. 07	Handout : Inventory Control Handout : Production Optimization Techniques Handout : Cost Functions and Estimation Review for the Final Exam
Week 10 Mar. 14	Exam IV : Chapters 11, 13, & Handouts Video : Firms' Decision Making

*Subject to change.

GRADING

	Total Possible Points	Your Points	Your Total Points
Class Participation	05	_____	
Homework	15	_____	
Exams			
Exam I	20	1.____	
Exam II	20	2.____	
Exam III	20	3.____	
Exam IV	20	4.____	
Total	100		=====

Final grades will be based on the total points accumulated.
100-90=A; 89-80=B; 79-70=C; 69-60=D; Less than 60=F.

Grades of incomplete will not be given. Makeup exams will be permitted only in case of extenuating circumstances. Each late homework assignment will be subject to a TWO point

penalty. Exams will be problems, multiple choice, and/or short essay. Final exam will be cumulative.

Attendance is a vital part of your learning process in this course. Class activities and participation are mandatory. Students will be asked to outline and summarize selected reading materials. Be prepared to answer questions and discuss issues whenever asked by the instructor. Students absent from class are responsible for all in class work missed.

You must meet the standards for writing established for this course and must complete all writing assignments and required revisions, as well as confer with your instructor about your work if asked to do so.

Final exam will be retained by the instructor, but may be reviewed in my office.