College of Management Mahidol University Course Syllabus: MGMG 597 – Mathematics for Finance

Credit Hours: No credits

Pre-requisite: None
Trimester: Prior to Trimester 3/2013

Instructor #1: Charn Soranakom, Ph.D. E-mail: nycharn@gmail.com

(ดร. ชาญ สรณาคมน์)

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Instructor #2: Siraprapa Watakit E-mail: tumifta@gmail.com

(ศิรประภา วาทกิจ)

Phone: 089–124–9949

Class Meets: Sunday 9:00 AM – 4:30 PM, Room 301

Course Description:

This course provides MMF students with mathematics and statistics foundations. Topics covered in this course include basic statistics, algebra, matrix, and calculus. Students will also learn how to use *Excel* (plus *VBA*), and *wxMaxima*.

Course Objectives:

- 1. To learn basic statistics.
- 2. To learn basic algebra, matrix, and calculus.
- 3. To learn how to use *Excel*, *VBA*, and *wxMaxima* freeware to do various kinds of statistical analysis and mathematical problem-solving.

Recommended Textbooks:

- 1. Lind, D. A., Marchal, W. G., & Wathen, S. A. (2005). *Statistical Techniques in Business and Economics* (12th ed.). New York: McGraw-Hill.
- 2. Gujarati, D. N., & Porter, D. C. (2009). *Basic Econometrics* (5th ed.). New York: McGraw-Hill.
- 3. Ott, R. L. (1993). An introduction to statistical methods and data analysis (4th ed.). California: Duxbury.

Course Evaluation and Grades:

There will be many in-class quizzes throughout the course, totaling 100 points. Final course grade will either be "S = Satisfactory" or "U for Unsatisfactory". Grading scheme is, 65-100 = "S".

Class Policy:

* 80% attendance is required.

Cheating and Plagiarism:

Cheating and plagiarism will not be tolerated and will be prosecuted. If found guilty, an " \mathbf{F} " for the course will be given.

Tentative Class Schedule (Subject to change)

Session #	Topic(s)	Assignment(s)
Sessions #1&2	Excel and VBA Workshop	Quiz
Sunday		
Oct 13, 2013		
9.00-12.00 &		
13.30-16.30		
Sessions #3&4	Excel and VBA Workshop (cont'd)	Quiz
Sunday		
Oct 20, 2013		
9.00-12.00 &		
13.30-16.30		
Sessions #5&6	Excel and VBA Workshop (cont'd)	Quiz
Sunday		
Oct 27, 2013		
9.00-12.00 &		
13.30-16.30		
Sessions #7&8	Excel and VBA Workshop (cont'd)	Quiz
Sunday		
Nov 3, 2013		
9.00-12.00 &		
13.30-16.30		
Sessions	Introduction to Statistics,	Read LMW Ch. 1
#9&10	Descriptive Statistics,	Read LMW Ch. 3 and pp. 105-
Sunday	-	122 of Ch. 4
Nov 10, 2013	Probability Distributions,	Read LMW Ch. 5 and 7
9.00-12.00 &	Central Limit Theorem, and	Read LMW pp. 263-270 of Ch. 8
13.30-16.30	Excel Workshop	
	Parametric Hypothesis Testing, and	Quiz (15 points)
	Excel Workshop	
Sessions	Correlation Analysis, Regression Analysis,	Read LMW Ch. 13 and 14
#11&12	and Excel Workshop	Quiz (20 points)
Sunday		
Nov 17, 2013		
9.00-12.00 &		
13.30-16.30		
Sessions	Algebra, Matrix, Calculus, and wxMaxima	Quiz (15 points)
#13&14	Workshop	
Sunday		
Nov 24, 2013		
9.00-12.00 &		
13.30-16.30		