

**ASSUMPTION UNIVERSITY
MARTIN DE TOURS SCHOOL OF MANAGEMENT
DEPARTMENT OF FINANCE AND BANKING**

COURSE SYLLABUS: 1/2010

MARTIN DE TOURS SCHOOL OF MANAGEMENT'S VISION

To be the leading international business schools in the ASEAN region providing high quality business education to enable graduates to make invaluable contributions to organizations and society.

MARTIN DE TOURS SCHOOL OF MANAGEMENT'S MISSION

To shape our students into independent-minded graduates who are well-versed in business, able to communicate effectively, tech savvy, innovative, and ethical to successfully face global challenges.

Course Title: **FIN4814 Quantitative Methods for Financial Decisions**

Pre-requisite: FIN3711 Investment

Description: The course objective is to acquaint students with modern quantitative techniques such as probability, statistics, linear programming and other mathematical models which may be applied to making financial decisions. Topics include the probability theory, Bayes' theorem, random variables, utility and choices under uncertainty, mathematical programming and decision theory. In particular, emphasis will be placed on the concerned topics as applied to theories of investment decision, costs of capital and capital valuations and working capital management.

Objectives:

- To equip students with the capabilities of applying quantitative ways in analyzing financial issues and making decisions.
- To help students develop the basics of financial analytical ability and skills for more advanced finance courses

Marks Allocation*:

Midterm	30%
Final	40%
Term Paper and Presentation	15%
Group Assignment	10%
Participation	<u>5%</u>
Total:	100%

Note: * See also course requirements and classroom policies

COURSE RESOURCES

Lecturer: A. Nopphon Tangjitprom

Office: CL 1204

Email: yun_na@hotmail.com

Main Textbook:

- Richard A. Defusco, "Quantitative Methods for Investment Analysis," 2nd Ed., CFA Institute, 2004
- Terry J Watsham & Ketih Parramore, "Quantitative Methods in Finance," 2nd Ed., Thompson, 2002

References:

- Damodar Gujarati & Dawn Porter, "Basic Econometrics," 5th Ed., McGraw-Hill, 2009

COURSE CONTENTS AND TENTATIVE SCHEDULE

Week	Topic
1	Introduction
	Statistical Concept
2	Common Probability Distribution
	Sampling and Estimation
3	Hypothesis Testing
4	Correlation and Regression
5-6	Multiple Regression and Issue in Regression Analysis
	<i>Case Study: Application of Regression in Financial Research</i>
7-8	Time Series Analysis
	<i>Case Study: Application of Time series in Financial Research</i>
Midterm: July 28, 2010 (9:00 – 11:00)	
9	Time Value of Money
	Discounted Cash Flow Applications
10-11	Interest Rate Theory and Applications
	Probability Concept
12	Numerical Method in Finance
13	Financial Engineering Concept
14-15	Final Presentation
	Review
Final: September 29, 2010 (13:00 – 16:00)	

COURSE REQUIREMENTS:

TERM PROJECT AND PRESENTATION (15 MARKS)

- 6 members for 1 group
- Search and choose any one research about finance (more preferable if it is related to the topics covered in this course). You can find this research from online academic journal (JSTOR, Emerald, etc.)
- Read and make understand for this research. (you should choose the topic that you can understand and it is possible to replicate)
- Replicate this research by using the real data in Thailand. You will develop your own report by using your selected research as the guideline.
- The presentation will be on **last week** of the semester.

GROUP ASSIGNMENT

- Activity will be announced in class.

CLASSROOM POLICIES:

- **Students need to comply with AU Dress Code, Time Conflict Examination Regulations, Laws on Smoking Cigarette, and Restrictions on Foods and Drinks V10.1, June 2010.**
- **Attendance policies:**
 - [2 times of ten-minute late for class considered as 1 absence.](#)
 - Make-up classes are not allowed.
 - 80% attendance is strictly required regardless of any reason.
 - No checking attendance for other classmates. Violation of the policies will result in being automatically withdrawn from the class.
 - [Attendance is counted since the first day of class regardless of any reason.](#)

- **Manner in class:**
 - Behave in a polite manner
 - Pay respect to instructors and class participants
 - Turn off all communication devices
 - Do not leave and re-enter the classroom
 - Prohibited manners: Eating, drinking, chatting, talking on the phone, text-messaging, sleeping, reading other materials, doing other subjects' assignments/homework, walking in-out, etc.
 - Improper behavior will result in no attendance checked.
- **Dress code:**
 - Follow AU dress code
 - Improper dress code will result in no attendance checked.
- **Class assignments (Homework, reports, project, presentation, paper, etc.):**
 - No Plagiarism.
 - The students copying works from all sources will be penalized – “Zero” marks or “F” grade.
 - Hand in all class assignment on time, both soft copy and hard copy.
 - Late submission will NOT be graded.
- **Class participation:**
 - Be participative and attentive in class
 - The students are also required to comply with all classroom policies.
 - Violation of the classroom policies will result in “zero” or “negative” participation marks and/or no attendance checked.
- **Request for make-up quizzes (if applicable):**
 - The students requesting for the make-up quizzes need to submit their names with valid evidence (ABAC related issues only) to the respective lecturer within the specified dates.
 - Late submission will NOT be allowed to take the make-up quizzes.
- **Grade inquiry:**
 - The students can request for a review for their marks or grades.
 - The students need to submit petition to the respective Chairperson at D6 or MSM2 within 2 weeks after their marks or grades have been officially announced. Petition submitted after the specified period will NOT be considered.
 - **Reevaluation process:** The students' class assignments or exam answer scripts will be reevaluated by the internal committees assigned by the respective department. Please note that the students' marks may or may not be adjusted after the reevaluation process and it is considered as a “final consensus” between the students and the committees.

**August 27, 2010 (Fri.): Last day to withdraw with “W”
(Withdrawing after this date, the students need a chairperson’s approval.)**