

Tamkang University Academic Year 102, 2nd Semester Course Syllabus

Course Title	SEMINAR IN FINANCIAL MANAGEMENT	Instructor	LIN JYH-JIUAN
Course Class	TLSXM1A MASTER'S PROGRAM, DEPARTMENT OF STATISTICS, 1A	Details	♦ Selective ♦ One Semester ♦ 3 Credits
D e p a r t m e n t a l A i m o f E d u c a t i o n			
I . Cultivate students with ability to conduct research on statistical theory. II. Cultivate students with ability for statistical programming. III. Cultivate students to become statistical professionals with management capabilities. IV. Cultivate students with international perspectives.			
D e p a r t m e n t a l c o r e c o m p e t e n c e s			
A. Ability to conduct research of statistical theory. B. Data analysis skills. C. Ability to acquire interdisciplinary knowledge. D. Logical thinking ability. E. Statistical consulting ability.			
Course Introduction	This course focuses on the statistical methods in financial applications. Topics include return and return distributions, Markowitz portfolio theory, VaR estimation methods, mean variance efficient portfolio optimization, simulation methods, missing data and imputation, and etc.		

The Relevance among Teaching Objectives, Objective Levels and Departmental core competences

I.Objective Levels (select applicable ones) :

- (i) Cognitive Domain : C1-Remembering, C2-Understanding, C3-Applying,
C4-Analyzing, C5-Evaluating, C6-Creating
- (ii) Psychomotor Domain : P1-Imitation, P2-Mechanism, P3-Independent Operation,
P4-Linked Operation, P5-Automation, P6-Origination
- (iii) Affective Domain : A1-Receiving, A2-Responding, A3-Valuing,
A4-Organizing, A5-Characterizing, A6-Implementing

II.The Relevance among Teaching Objectives, Objective Levels and Departmental core competences :

- (i) Determine the objective level(s) in any one of the three learning domains (cognitive, psychomotor, and affective) corresponding to the teaching objective. Each objective should correspond to the objective level(s) of **ONLY ONE** of the three domains.
- (ii) If more than one objective levels are applicable for each learning domain, select the highest one only. (For example, if the objective levels for Cognitive Domain include C3,C5,and C6, select C6 only and fill it in the boxes below. The same rule applies to Psychomotor Domain and Affective Domain.)
- (iii) Determine the Departmental core competences that correspond to each teaching objective. Each objective may correspond to one or more Departmental core competences at a time. (For example, if one objective corresponds to three Departmental core competences: A,AD, and BEF, list all of the three in the box.)

No.	Teaching Objectives	Relevance	
		Objective Levels	Departmental core competences
1	Cultivate students with ability for statistical analysis and programming.	C3	BCD

Teaching Objectives, Teaching Methods and Assessment

No.	Teaching Objectives	Teaching Methods	Assessment
1	Cultivate students with ability for statistical analysis and programming.	Lecture, Discussion, Problem solving	Report, Participation

This course has been designed to cultivate the following essential qualities in TKU students			
Essential Qualities of TKU Students		Description	
◇ A global perspective		Helping students develop a broader perspective from which to understand international affairs and global development.	
◆ Information literacy		Becoming adept at using information technology and learning the proper way to process information.	
◇ A vision for the future		Understanding self-growth, social change, and technological development so as to gain the skills necessary to bring about one's future vision.	
◇ Moral integrity		Learning how to interact with others, practicing empathy and caring for others, and constructing moral principles with which to solve ethical problems.	
◆ Independent thinking		Encouraging students to keenly observe and seek out the source of their problems, and to think logically and critically.	
◇ A cheerful attitude and healthy lifestyle		Raising an awareness of the fine balance between one's body and soul and the environment; helping students live a meaningful life.	
◇ A spirit of teamwork and dedication		Improving one's ability to communicate and cooperate so as to integrate resources, collaborate with others, and solve problems.	
◇ A sense of aesthetic appreciation		Equipping students with the ability to sense and appreciate aesthetic beauty, to express themselves clearly, and to enjoy the creative process.	
Course Schedule			
Week	Date	Subject/Topics	Note
1	103/02/17 ~ 103/02/23	Overview of Statistical Methods in Financial Application and Course Introduction	
2	103/02/24 ~ 103/03/02	Defining Returns and Properties of the Return Distribution	
3	103/03/03 ~ 103/03/09	Portfolio Investment Theory-1	
4	103/03/10 ~ 103/03/16	Portfolio Investment Theory-2	
5	103/03/17 ~ 103/03/23	Simulation Methods in Finance-1	
6	103/03/24 ~ 103/03/30	Simulation Methods in Finance-2	
7	103/03/31 ~ 103/04/06	Simulation Methods in Finance-3	
8	103/04/07 ~ 103/04/13	Mean Variance Portfolio and Efficient Frontier	
9	103/04/14 ~ 103/04/20	Investment Portfolio Optimization-1	
10	103/04/21 ~ 103/04/27	midterm week	
11	103/04/28 ~ 103/05/04	Investment Portfolio Optimization-2	
12	103/05/05 ~ 103/05/11	Investment Portfolio Optimization-3	

13	103/05/12 ~ 103/05/18	Defining and Measuring VaR	
14	103/05/19 ~ 103/05/25	Portfolio VaR	
15	103/05/26 ~ 103/06/01	Forecasting Volatility and Correlations-1	
16	103/06/02 ~ 103/06/08	Forecasting Volatility and Correlations-2	
17	103/06/09 ~ 103/06/15	Forecasting Volatility and Correlations-3	
18	103/06/16 ~ 103/06/22	Final week	
Requirement	English proficiency.		
Teaching Facility	Computer		
Textbook(s)	1. Philippe Jorion (2009). Financial Risk Manager Handbook.5th edition, GARP, John Wiley & Sons, Inc. Portfolio Optimization with R/Rmetrics,2009,Diethelm Würtz,ohan Chalabi,William Chen&Andrew Ellis		
Reference(s)			
Number of Assignment(s)	(Filled in by assignment instructor only)		
Grading Policy	◆ Attendance : 10.0 % ◆ Mark of Usual : 20.0 % ◆ Midterm Exam : 35.0 % ◆ Final Exam : 35.0 % ◆ Other < > : %		
Note	This syllabus may be uploaded at the website of Course Syllabus Management System at http://info.ais.tku.edu.tw/csp or through the link of Course Syllabus Upload posted on the home page of TKU Office of Academic Affairs at http://www.acad.tku.edu.tw/CS/main.php . ※ Unauthorized photocopying is illegal. Using original textbooks is advised. It is a crime to improperly photocopy others' publications.		