Tamkang University Academic Year 107, 1st Semester Course Syllabus

Course Title	APPLIED STATISTICS	Instructor	DENG WEN-SHUENN
Course Class	TLWXB2A BACHELOR'S PROGRAM IN GLOBAL FINANCIAL MANAGEMENT (ENGLISH-TAUGHT PROGRAM), 2A	Details	◆ Selective ◆ One Semester ◆ 2 Credits

Departmental Aim of Education

Ⅰ. Learning and instanding international financial theory.

Ⅱ. Learn to plan the future.

Ⅲ. Enhance the ability of practical analysis.

Ⅳ. Increase the team research ability.

Ⅴ. Master the international financial pulsation.

Ⅵ. Cultivate morality and global civilization.

Departmental core competences

A. The student to have a basic knowledge of international financial management theory and practice.

B. To have a good grounding of relevant financial laws.

C. To understand the basic moral principles within the international financial industry.

D. To have a global perspective of the subject and a basic command of foreign language abilities.

E. To obtain international professional qualifications that will aid their future career.

F. To obtain a basic ability to examine domestic and global financial situations.

Course Introduction

The course provides advanced statistical concepts and techniques with application in business and finance with simple introduction to the Statistical software R. Topics include hypothesis testing, goodness of fits test, analysis of variance and Regression analysis.

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-Charaterizing,   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	Acquisition of professional knowledge	C3	ADE
2	Learning effective self-planning.	C3	ADE
3	Theoretical application of practical matters.	C3	ADE
4	Interpersonal communication and teamwork.	C3	ADE
5	Analysis of problems and recommendations.	C3	ADE
6	Awareness of Ethics as a global citizen.	C3	ADE

Teaching Objectives, Teaching Methods and Assessment

No.	Teaching Objectives	Teaching Methods	Assessment
1	Acquisition of professional knowledge	Lecture, Simulation	Written test, Participation
2	Learning effective self-planning.	Lecture, Simulation, Problem solving	Written test, Participation
3	Theoretical application of practical matters.	Lecture, Simulation, Problem solving	Written test, Participation
4	Interpersonal communication and teamwork.	Lecture, Simulation, Problem solving	Written test, Participation
5	Analysis of problems and recommendations.	Lecture, Simulation, Problem solving	Written test, Participation

| 6 | Awareness of Ethics as a global citizen. | Lecture, Simulation, Problem solving | Written test, 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	107/09/10 ~ 107/09/16	Review of Elementary Probability and Statistics	
2	107/09/17 ~ 107/09/23	Review of Elementary Probability and Statistics	
3	107/09/24 ~ 107/09/30	Introduction to the Statistical Software R	
4	107/10/01 ~ 107/10/07	Introduction to the Statistical Software R	
5	107/10/08 ~ 107/10/14	Multiple Linear Regression	
6	107/10/15 ~ 107/10/21	Multiple Linear Regression	
7	107/10/22 ~ 107/10/28	Multiple Linear Regression	
8	107/10/29 ~ 107/11/04	Nonparametric Statistics	
9	107/11/05 ~ 107/11/11	Nonparametric Statistics	
10	107/11/12 ~ 107/11/18	Midterm Exam Week	
11	107/11/19 ~ 107/11/25	Analysis of Variance	

12	107/11/26 ~ 107/12/02	Analysis of Variance	
13	107/12/03 ~ 107/12/09	Analysis of Variance	
14	107/12/10 ~ 107/12/16	Time Series Analysis and Forecasting	
15	107/12/17 ~ 107/12/23	Time Series Analysis and Forecasting	
16	107/12/24 ~ 107/12/30	Statistics Applications of R language	
17	107/12/31 ~ 108/01/06	Statistics Applications of R language	
18	108/01/07 ~ 108/01/13	Final Exam Week	

Requirement	Students are required to attend the regular classes and both the mid-term and final exams. Absences from regular classes will result in a deduction in final scores.
Teaching Facility	Computer
Textbook(s)	Managerial Statistics, Gerald Keller, Cengage Learning滄海書局代理
Reference(s)	Applied Statistics with R, David Dalpiaz. Free Material available online at http://daviddalpiaz.github.io/appliedstats/applied_statistics.pdf
Number of Assignment(s)	**4** (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.**