Tamkang University Academic Year 112, 1st Semester Course Syllabus

Course Title	APPLIED STATISTICS	Instructor	CHIEH-YU HSIAO
Course Class	TLBAB2A DEPARTMENT OF BANKING AND FINANCE DIVISION OF GLOBAL FINANCIAL MANAGEMENT (ENGLISH-TAUGHT PROGRAM), 2A	Details	◆ General Course ◆ Selective ◆ One Semester
Relevance to SDGs	SDG3 Good health and well-being for people SDG8 Decent work and economic growth		

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.

Subject Departmental core competences

A. The student to have a basic knowledge of international financial management theory and practice.(ratio:30.00)

B. To have a good grounding of relevant financial laws.(ratio:5.00)

C. To understand the basic moral principles within the international financial industry. (ratio:15.00)

D. To have a global perspective of the subject and a basic command of foreign language abilities.(ratio:20.00)

E. To obtain international professional qualifications that will aid their future career. (ratio:15.00)

F. To obtain a basic ability to examine domestic and global financial situations.(ratio:15.00)

Subject Schoolwide essential virtues

1. A global perspective. (ratio:25.00)

2. Information literacy. (ratio:15.00)

3. A vision for the future. (ratio:30.00)

4. Moral integrity. (ratio:5.00)

5. Independent thinking. (ratio:5.00)

6. A cheerful attitude and healthy lifestyle. (ratio:5.00)

7. A spirit of teamwork and dedication. (ratio:10.00)

8. A sense of aesthetic appreciation. (ratio:5.00)

Course Introduction	This course provides students with statistical models (mainly focus on linear models), as well as techniques for empirical analyses and usage of statistical software. After finishing this course, students are expected to clearly understand the statistical models and be able apply these models to empirical analyses of real world problems.

The correspondences between the course's instructional objectives and the cognitive, affective, and psychomotor objectives.

Differentiate the various objective methods among the cognitive, affective and psychomotor domains of the course's instructional objectives.

I. Cognitive : Emphasis upon the study of various kinds of knowledge in the cognition of the course's veracity, conception, procedures, outcomes, etc.

II.Affective : Emphasis upon the study of various kinds of knowledge in the course's appeal, morals, attitude, conviction, values, etc.

III.Psychomotor: Emphasis upon the study of the course's physical activity and technical manipulation.

No.	Teaching Objectives	objective methods
1	To learn how to obtain meaning information via statistical data analysis and proper statistical methods.	Cognitive
2	To learn the applications of statistical software for data processing and statistical data analysis.	Cognitive
3	To learn the applications of statistical methods to real world problems and to enhance the abilities of communications and expressions via team work.	Psychomotor

The correspondences of teaching objectives : core competences, essential virtues, teaching methods, and assessment

No.	Core Competences	Essential Virtues	Teaching Methods	Assessment

1	DEF	245	Lecture, Discussion, Practicum	Study Assignments, Discussion(including classroom and online), Practicum, Report(including oral and written), Activity Participation
2	AEF	168	Lecture, Discussion, Practicum	Study Assignments, Discussion(including classroom and online), Practicum, Activity Participation
3	BC	2378	Lecture, Discussion, Practicum	Study Assignments, Discussion(including classroom and online), Practicum, Report(including oral and written), Activity Participation

Course Schedule

Week	Date	Course Contents	Note
1	112/09/11 ~ 112/09/17	Course Introduction & Empirical Analysis	
2	112/09/18 ~ 112/09/24	Problem Definition and Data Collection; Review on Math Tools: Probability and Statistics	
3	112/09/25 ~ 112/10/01	Review on Math Tools: Probability and Statistics	
4	112/10/02 ~ 112/10/08	Simple Regression Model: Model and the Ordinary Least Squares	
5	112/10/09 ~ 112/10/15	Simple Regression Model: Model and the Ordinary Least Squares	
6	112/10/16 ~ 112/10/22	Multiple Regression Analysis: Estimation	
7	112/10/23 ~ 112/10/29	Multiple Regression Analysis: Inference and OLS Asymptotics	
8	112/10/30 ~ 112/11/05	Multiple Regression Analysis: Further Issues	
9	112/11/06 ~ 112/11/12	Midterm Exam Week (Final Project Proposal Presentation; No Exam)	
10	112/11/13 ~ 112/11/19	Assumptions of the Regression Model: Specification and Data Problems	
11	112/11/20 ~ 112/11/26	Introduction to the Statistical Software	
12	112/11/27 ~ 112/12/03	Introduction to the Statistical Software	
13	112/12/04 ~ 112/12/10	Introduction to the Statistical Software	

14	112/12/11 ~ 112/12/17	Empirical Analysis	
15	112/12/18 ~ 112/12/24	Empirical Analysis	
16	112/12/25 ~ 112/12/31	Final Project Presentation	
17	113/01/01 ~ 113/01/07	Final Exam Week	
18	113/01/08 ~ 113/01/14	Final Project Discussion and Modification	

Key capabilities	self-directed learning Information Technology Problem solving Interdisciplinary
Interdisciplinary	STEAM course (S:Science, T:Technology, E:Engineering, M:Math, A field:Integration of Art and Humanist) Competency-based education 'competency exploration' sustained competency or global issues STEEP (Society, Technology, Economy, Environment, and Politics) In addition to teaching content of the teacher's professional field, integrate other subjects or invite experts and scholars in other fields to share knowledge or teaching
Distinctive teaching	Project implementation course Special/Problem-Based(PBL) Courses
Course Content	Computer programming or Computer language (students have hands-on experience in related projects)
Requirement	
Textbooks and Teaching Materials	Self-made teaching materials:Presentations, Handouts Using teaching materials from other writers:Textbooks Name of teaching materials: Wooldridge, Jeffrey. 2019. Introductory econometrics: A modern approach, 7th edition. Cengage Learning.
References	
Grading Policy	◆ Attendance： 20.0 % ◆ Mark of Usual： % ◆ Midterm Exam： % ◆ Final Exam： % ◆ Other〈Assignments &Project〉：80.0 %
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.**