

Tamkang University Academic Year 113, 1st Semester Course Syllabus

Course Title	REGRESSION ANALYSIS	Instructor	LIN JYH-JIUAN
Course Class	TLSXB3C DEPARTMENT OF STATISTICS, 3C	Details	<ul style="list-style-type: none"> ◆ Blended Course ◆ Required ◆ One Semester ◆ 3 Credits
Relevance to SDGs	SDG1 No poverty SDG4 Quality education		
Departmental Aim of Education			
I. Cultivate students with knowledge of basic statistical theory. II. Cultivate students with data analysis skills. III. Cultivate students to become statistical professionals with management capabilities.			
Subject Departmental core competences			
A. Knowledge of basic statistical theory.(ratio:35.00) B. Logical reasoning in mathematics.(ratio:5.00) C. Data analysis skills.(ratio:55.00) D. Application of profession knowledge.(ratio:5.00)			
Subject Schoolwide essential virtues			
1. A global perspective. (ratio:5.00) 2. Information literacy. (ratio:20.00) 3. A vision for the future. (ratio:5.00) 4. Moral integrity. (ratio:5.00) 5. Independent thinking. (ratio:30.00) 6. A cheerful attitude and healthy lifestyle. (ratio:5.00) 7. A spirit of teamwork and dedication. (ratio:25.00) 8. A sense of aesthetic appreciation. (ratio:5.00)			

Course Introduction	This course not only introduces the basic theories needed for regression analysis but also demonstrates how to use statistical softwear SAS to build forecasting models. One real life case is studied thoroughly.
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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	This course not only introduces the basic theories needed for regression analysis but also demonstrates how to use SAS to build forecasting models. Students should be able to build a forecasting model independently after taking this course.	Cognitive

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

No.	Core Competences	Essential Virtues	Teaching Methods	Assessment
1	ABCD	12345678	Lecture	Testing

Course Schedule

Note for Blended Course : When utilizing weekly digital instruction, please fill in "Online Asynchronous Instruction".

Week	Date	Course Contents	Note
1	113/09/09~ 113/09/15	Course Introduction	Classes will be held according to the classroom location announced by the school

2	113/09/16 ~ 113/09/22	Basic concept and terminology introduction	Classes will be held according to the classroom location announced by the school
3	113/09/23 ~ 113/09/29	Correlation Analysis	Classes will be held according to the classroom location announced by the school
4	113/09/30 ~ 113/10/06	Simple Linear Regression-1	Online Asynchronous Instruction-1
5	113/10/07 ~ 113/10/13	Simple Linear Regression-2	Classes will be held according to the classroom location announced by the school
6	113/10/14 ~ 113/10/20	Simple Linear Regression-3	Online Asynchronous Instruction-2
7	113/10/21 ~ 113/10/27	Multiple Linear Regression-1	Classes will be held according to the classroom location announced by the school
8	113/10/28 ~ 113/11/03	Model Selection-1	Classes will be held according to the classroom location announced by the school
9	113/11/04 ~ 113/11/10	Midterm Exam/Midterm Assessment Week (teachers can adjust the week as needed)	Classes will be held according to the classroom location announced by the school
10	113/11/11 ~ 113/11/17	Model Selection-2	Online Asynchronous Instruction-3
11	113/11/18 ~ 113/11/24	Model Diagnostics-1	Classes will be held according to the classroom location announced by the school
12	113/11/25 ~ 113/12/01	Model Diagnostics-2	Online Asynchronous Instruction-4
13	113/12/02 ~ 113/12/08	Model Diagnostics-3	Classes will be held according to the classroom location announced by the school

14	113/12/09~ 113/12/15	Case Studies-1	Classes will be held according to the classroom location announced by the school
15	113/12/16~ 113/12/22	Case Studies 2	Classes will be held according to the classroom location announced by the school
16	113/12/23~ 113/12/29	Final Exam	Classes will be held according to the classroom location announced by the school
17	113/12/30~ 114/01/05	Makeup Exam/Final Assessment Week (teachers can adjust the week as needed)	Classes will be held according to the classroom location announced by the school
18	114/01/06~ 114/01/12	Flexible Teaching Week: Generally, no in-person classes; teachers may arrange teaching activities or final assessments, among other options.	
Key capabilities	self-directed learning Information Technology Problem solving		
Interdisciplinary	STEAM course (S:Science, T:Technology, E:Engineering, M:Math, A field:Integration of Art and Humanist)		
Distinctive teaching	blended learning		
Course Content	Logical Thinking		
Requirement	attendance :10% daily : 30% midterm :30% final: 30% office: Ba840, email : 117604@o365.tku.edu.tw		

Textbooks and Teaching Materials	Self-made teaching materials:Textbooks, Presentations, Handouts, Videos Using teaching materials from other writers:Textbooks Name of teaching materials: Michael H. Kutner, John Neter ,Applied Linear Regression Models,McGraw-Hill/Irwin, 2004
References	(1) 迴歸分析入門・作者:林志娟、林志鴻、張慶暉(東華書局代理) (2) 迴歸分析・作者:陳順宇・華泰書局。 (3) 應用線性迴歸分析・4th版・陳至安、簡郁紘・李振宇・華泰書局。
Grading Policy	◆ Attendance : 10.0 % ◆ Mark of Usual : 30.0 % ◆ Midterm Exam : 30.0 % ◆ Final Exam : 30.0 % ◆ Other < > : %
Note	1. This syllabus may be uploaded at the website of the Course Syllabus Management System at https://info.ais.tku.edu.tw/csp or through the link of the Course Syllabus Upload posted on the home page of the TKU Office of Academic Affairs http://www.acad.tku.edu.tw/CS/main.php 2. According to the Implementation regulations of distance education for junior college and above are prescribed pursuant to Article 2, "The distance learning course referred to in these Measures refers to more than one-half of the teaching hours in each subject." 3. According to the regulations of Tamkang University Enforcement Rules for digital teaching, Paragraph 2 and Article 3, the distance learning course of our school must be "The course of digital teaching with distance learning platform or synchronous video system in our school. Teaching Hours include course lectures, teacher-student interaction discussions, quizzes and other learning activities." 4. If there are any temporary course changes (including time changes and classroom changes of distance learning courses, blended courses), please make out an application according to regulations to the Office of Academic Affairs. ※ Unauthorized photocopying is illegal. Using original textbooks is advised. It is a crime to improperly photocopy others' publications.