## Tamkang University Academic Year 112, 2nd Semester Course Syllabus

Course Title	ECONOMETRICS	Instructor	LIU, CHIA-HUA
Course Class	TLEXB3A  DEPARTMENT OF INDUSTRIAL ECONOMICS, 3A	Details	<ul><li>General Course</li><li>Required</li><li>One Semester</li></ul>
Relevance to SDGs	SDG4 Quality education		

#### Departmental Aim of Education

- I . Training up students to establish the specialized knowledge in industrial economics.
- II. Training up students to strengthen the diversity of knowledge in learning.
- III. Training up students with the ability in researches.
- IV. Training up students with the self-cultivation in moral character.
- V. Training up students with the macroscopic vision in globalization.
- VI. Training up students with the leadership in industrial development.

### Subject Departmental core competences

- A. With the basic knowledge of industrial economics related areas.(ratio:5.00)
- B. With the ability of tracking the trend of industrial development.(ratio:50.00)
- C. With the ability of continuously learning diversified knowledge in cross field.(ratio:5.00)
- D. With the potential in academic researches.(ratio:5.00)
- E. With the ability of combining economic theories and applications to improve his/her job competence.(ratio:35.00)

## Subject Schoolwide essential virtues

- 1. A global perspective. (ratio:7.00)
- 2. Information literacy. (ratio:30.00)
- 3. A vision for the future. (ratio:30.00)
- 4. Moral integrity. (ratio:7.00)
- 5. Independent thinking. (ratio:7.00)
- 6. A cheerful attitude and healthy lifestyle. (ratio:7.00)

- 7. A spirit of teamwork and dedication. (ratio:7.00)
- 8. A sense of aesthetic appreciation. (ratio:5.00)

## Course Introduction

This course introduces linear regression models for the analysis of economic phenomena, statistical properties of the models, and various methods of estimation and statistical inferences. It covers in depth the special features of various econometric models and economic data, and appropriate estimation and inference methods for each model.

# 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	i. Enhance students' understanding of econometrics concepts  Cognitive		
	ii. Apply econometric theory to the analysis of economic data.		
	iii. Provide a basic training for empirical researches for students'		
	theses		

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

No.	Core Competences	Essential Virtues	Teaching Methods	Assessment
1	ABCDE	12345678	Lecture, Discussion, Practicum, Imitation	Testing, Study Assignments, Discussion(including classroom and online), Practicum

#### Course Schedule

We	ek Date	Course Contents	Note
1	113/02/19 ~ 113/02/25	Introduction to the Course; Review for regression inference (Using Stata)	

2	113/02/26 ~ 113/03/03	Review for regression inference (Using Stata)	
3	113/03/04 ~ 113/03/10	Review for regression inference (Using Stata)	
4	113/03/11 ~ 113/03/17	Heteroskedasticity and types of estimation bias	
5	113/03/18 ~ 113/03/24	Multiple regression models-with binary explanatory variables	
6	113/03/25 ~ 113/03/31	Multiple regression models-with binary explanatory variables	
7	113/04/01 ~ 113/04/07	Multiple regression models-with binary explanatory variables (Using Stata)	
8	113/04/08 ~ 113/04/14	no class	
9	113/04/15 ~ 113/04/21	Midterm Exam Week	
10	113/04/22 ~ 113/04/28	Return the graded exam, and discuss the answers and the weakness.	
11	113/04/29 ~ 113/05/05	SRDA: Introduction where you can download microdata	
12	113/05/06 ~ 113/05/12	LPM, Logit, and Probit models	
13	113/05/13 ~ 113/05/19	Differences-in-differences method	
14	113/05/20 ~ 113/05/26	Panel Data: Random effects model and fixed effects model	
15	113/05/27 ~ 113/06/02	Instrumental variables models	
16	113/06/03 ~ 113/06/09	Instrumental variables models	
17	113/06/10 ~ 113/06/16	Final Exam Week (Date:113/6/11-113/6/17)	
18	113/06/17 ~ 113/06/23	Selected an academic paper to discuss	
Key	y capabilities		
Interdisciplinary			
Distinctive teaching			

Course Content	Logical Thinking
Requirement	
Textbooks and Teaching Materials	Self-made teaching materials:Handouts Using teaching materials from other writers:Textbooks Name of teaching materials: Jeffrey M. Wooldridge, Introductory Econometrics: A Modern Approach, 7th edition
References	Statistics for Business and Economics by David R. Anderson, Dennis J. Sweeney and Thomas A. Williams (ASW), South-Western College Publishing. 11th edition or any previous edition
Grading Policy	<ul> <li>◆ Attendance: 15.0 %</li></ul>
Note	This syllabus may be uploaded at the website of Course Syllabus Management System at <a href="http://info.ais.tku.edu.tw/csp">http://info.ais.tku.edu.tw/csp</a> or through the link of Course Syllabus Upload posted on the home page of TKU Office of Academic Affairs at <a href="http://www.acad.tku.edu.tw/CS/main.php">http://www.acad.tku.edu.tw/CS/main.php</a> . <a href="http://www.acad.tku.edu.tw/CS/main.php">W Unauthorized photocopying is illegal. Using original textbooks is advised. It is a crime to improperly photocopy others' publications.</a>

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