

Tamkang University Academic Year 112, 1st Semester Course Syllabus

Course Title	INTRODUCTION TO ECONOMETRICS	Instructor	LIU, CHIA-HUA
Course Class	TLEXB3A DEPARTMENT OF INDUSTRIAL ECONOMICS, 3A	Details	<ul style="list-style-type: none"> ◆ General Course ◆ Required ◆ One Semester
Relevance to SDGs	SDG3 Good health and well-being for people SDG5 Gender equality SDG10 Reducing inequalities		
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. 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:35.00) C. With the ability of continuously learning diversified knowledge in cross field.(ratio:5.00) D. With the potential in academic researches.(ratio:20.00) 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 ii. Apply econometric theory to the analysis of economic data. iii. Provide a basic training for empirical researches for students' theses	Cognitive

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

Week	Date	Course Contents	Note
1	112/09/11~ 112/09/17	Introduction to the Course; The nature of Econometrics and Economic Data	

2	112/09/18 ~ 112/09/24	Simple linear regression model	
3	112/09/25 ~ 112/10/01	Statistical properties of OLS estimators (Derivation)	
4	112/10/02 ~ 112/10/08	Statistical properties of OLS estimators (Derivation)	
5	112/10/09 ~ 112/10/15	Multiple regression models-estimation	
6	112/10/16 ~ 112/10/22	Multiple regression models- inference (hypothesis)	
7	112/10/23 ~ 112/10/29	Multiple regression models- inference (hypothesis)	
8	112/10/30 ~ 112/11/05	Multiple regression models- inference (hypothesis)	
9	112/11/06 ~ 112/11/12	Midterm Exam Week	
10	112/11/13 ~ 112/11/19	Discuss the midterm result	
11	112/11/20 ~ 112/11/26	Multiple regression models-with binary explanatory variables	
12	112/11/27 ~ 112/12/03	Multiple regression models-with binary explanatory variables	
13	112/12/04 ~ 112/12/10	Multiple regression models-with binary explanatory variables	
14	112/12/11 ~ 112/12/17	Heteroskedasticity	
15	112/12/18 ~ 112/12/24	Heteroskedasticity	
16	112/12/25 ~ 112/12/31	Multiple regression models-with binary dependent variable	
17	113/01/01 ~ 113/01/07	Final Exam Week	
18	113/01/08 ~ 113/01/14	Flex week: will assign reading an academic paper.	
Key capabilities			
Interdisciplinary			
Distinctive teaching			

Course Content	Computer programming or Computer language (students have hands-on experience in related projects) Gender Equality Education 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	◆ Attendance : 15.0 % ◆ Mark of Usual : 20.0 % ◆ Midterm Exam : 30.0 % ◆ 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.