

## Tamkang University Academic Year 110, 2nd Semester Course Syllabus

Course Title	ECONOMETRICS	Instructor	LIU, CHIA-HUA
Course Class	TLEXB3A DEPARTMENT OF INDUSTRIAL ECONOMICS, 3A	Details	<ul style="list-style-type: none"> <li>◆ General Course</li> <li>◆ Required</li> <li>◆ One Semester</li> </ul>
Relevance to SDGs	SDG3 Good health and well-being for people SDG4 Quality education SDG5 Gender equality SDG8 Decent work and economic growth		
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			
B. With the ability of tracking the trend of industrial development.(ratio:60.00) E. With the ability of combining economic theories and applications to improve his/her job competence.(ratio:40.00)			
Subject Schoolwide essential virtues			
2. Information literacy. (ratio:50.00) 3. A vision for the future. (ratio:50.00)			

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.
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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	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	BE	23	Lecture, Discussion, Practicum, Imitation	Testing, Study Assignments, Discussion(including classroom and online), Practicum

**Course Schedule**

Week	Date	Course Contents	Note
1	111/02/21 ~ 111/02/25	Introduction to the Course; Review for regression inference (Using Stata)	
2	111/02/28 ~ 111/03/04	Review for regression inference (Using Stata)	
3	111/03/07 ~ 111/03/11	Heteroskedasticity and types of estimation bias	

4	111/03/14 ~ 111/03/18	Heteroskedasticity and types of estimation bias	
5	111/03/21 ~ 111/03/25	Multiple regression models-with binary explanatory variables	
6	111/03/28 ~ 111/04/01	Multiple regression models-with binary explanatory variables	
7	111/04/04 ~ 111/04/08	No class	
8	111/04/11 ~ 111/04/15	Multiple regression models-with binary explanatory variables	
9	111/04/18 ~ 111/04/22	Review for the midterm exam	
10	111/04/25 ~ 111/04/29	Midterm Exam Week	
11	111/05/02 ~ 111/05/06	Return the graded exam, and discuss the answers and the weakness.	
12	111/05/09 ~ 111/05/13	Difference-in-differences	
13	111/05/16 ~ 111/05/20	Panel Data: Random effects model and fixed effects model	
14	111/05/23 ~ 111/05/27	Panel Data: Random effects model and fixed effects model	
15	111/05/30 ~ 111/06/03	Instrumental variables models	
16	111/06/06 ~ 111/06/10	Instrumental variables models	
17	111/06/13 ~ 111/06/17	Review for the final exam	
18	111/06/20 ~ 111/06/24	Final Exam Week	
Requirement			
Teaching Facility		Computer, Projector, Other (blackboard)	
Textbooks and 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	

Number of Assignment(s)	(Filled in by assignment instructor only)
Grading Policy	<p>◆ Attendance : 15.0 %    ◆ Mark of Usual : 15.0 %    ◆ Midterm Exam : 30.0 %</p> <p>◆ Final Exam : 40.0 %</p> <p>◆ Other ( ) : %</p>
Note	<p>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>.</p> <p><b>※ Unauthorized photocopying is illegal. Using original textbooks is advised. It is a crime to improperly photocopy others' publications.</b></p>