SYLLABUS

Name of Institution: Mahidol University International College
Division: Business Administration Division

GENERAL INFORMATION

1. Course Code and Course Title

Thai	ICBE 448 เศรษฐมิติ
English	ICBE 448 Econometrics

2. Number of Credits: 4 credits

3. Credit Hours/Semester

Lecture or Other In-class Activity Hours	Laboratory/ Field Trip/ Internship Hours	Self-Study Hours
48	0	48

4. Degree: Bachelor of Business Administration

5. Instructor:

Name: Saruta Benjanuvatra, PhD
Email: saruta.ben@mahidol.ac.th
Telephone: 02-700-5000 ext. 4426
Office:
Office Hours: Thursday 8.00-12.00 (by appointment)

6. Pre-requisites: ICMB 203 Microeconomics, ICMB 204 Macroeconomics

DESCRIPTION AND OBJECTIVES

1. Course Description

English	This course gives an introduction to the field of econometrics and covers topics such as simple regression analysis, multiple regression analysis, dummy variables, proxy variables, and panel data, as well as applications of econometric methods using econometric software packages.

2. Course Objectives

Course Learning Objective (CLO)	Program Learning Objectives (PLO)
CLO1 To understand mathematical and statistical foundations of econometrics, and to acquire basic knowledge about main concepts, models, estimation methods and techniques used in econometrics.	PLO4.1 Students can select appropriate quantitative methods to analyze business-related issues.
CLO2 To learn how to apply appropriate econometric methods/models to real economic data and solve economic/business problems using econometric software packages.	PLO4.2 Students can solve business-related issues using quantitative methods.
CLO3 To learn how to analyze and interpret results for economic/business problems.	PLO4.3 Students can analyze the results of their findings.

TEACHING AND EVALUATION PLANS

1. Teaching Plan

Week	Topic	Hours	CLO	Teaching Methods	Assessment	Book Chapter
1	Course outline and Introduction to econometrics	4	CLO1	Interactive lectures	Questions in midterm exam	1
2	Simple regression analysis	4	CLO1 CLO2 CLO3	Interactive lectures Problem based-learning	Questions in midterm exam Group assignment	2
3	Programing: RStudio Multiple regression analysis • Models with k independent variables	4	CLO1 CLO2 CLO3	Interactive lectures Problem based-learning Discussion	Questions in midterm exam Group assignment	3
4	Multiple regression analysis • OLS estimates • Misspecification	4	CLO1 CLO2 CLO3	Interactive lectures Problem based-learning	Questions in midterm exam Group assignment	3
5	Multiple regression analysis • Hypothesis testing: t Test • Confidence intervals	4	CLO1 CLO2 CLO3	Interactive lectures Problem based-learning	Questions in midterm exam Group assignment	4
6	Multiple regression analysis • Hypothesis testing: F Test • Data scaling	4	CLO1 CLO2 CLO3	Interactive lectures Problem based-learning	Questions in midterm/final exam Group assignment	4, 6

Week	Topic	Hours	CLO	Teaching Methods	Assessment	Book Chapter
7	Multiple regression analysis • Models with quadratics Wrap-up	4	CLO1 CLO2 CLO3	Interactive lectures Problem based-learning	Questions in final exam Group assignment	6
8	**Midterm exam** Multiple regression analysis • Models with interaction terms	4	CLO1 CLO2 CLO3	Interactive lectures Problem based-learning	Questions in final exam Group assignment	6
9	Multiple regression analysis • Dummy variables • Linear probability model	4	CLO1 CLO2 CLO3	Interactive lectures Problem based-learning	Questions in final exam Group assignment	7
10	Multiple regression analysis • Proxy variables Panel data	4	CLO1 CLO2 CLO3	Interactive lectures Problem based-learning	Questions in final exam Group assignment	9, 13
11	Panel data Wrap-up	4	CLO1 CLO2 CLO3	Interactive lectures Problem based-learning	Questions in final exam Group assignment	13, 14
12	Group presentation	4	CLO1 CLO2 CLO3	Group assignment Discussion	Questions in final exam Group assignment Group presentation	
13	**Final exam**					

2. Evaluation Plan

Methods/ Activities	Week	Percentage
Midterm exam	8	35%
Final exam	13	40%
Group assignment and group presentation	12	15%
Attendance and participation	1-12	10%

3. Course Assessment

Raw Score	Grade
90 – 100	A
85 – 89	B+
80 – 84	B
75 – 79	C+
70 – 74	C
65 – 69	D+
60 – 64	D
< 60	F

TEACHING MATERIAL AND RESOURCE

Required Reference List

Wooldridge, J.M. (2016). Introductory Econometrics: A Modern Approach (6th edition), Cengage Learning.

COURSE POLICY

Exam Format

The closed book exams will focus on analytical and problem-solving skills acquired throughout the trimester from class lectures, exercises and group assignment. The exam format will feature open questions. Books, notes and dictionary are not allowed during the exams.

Class Attendance/ Participation

Attendance is mandatory and will be checked. Full class participation requires that you attend all classes on time and that you come well prepared to discuss assigned readings and engage thoughtfully with course content.

Lack of preparation and unprofessional conduct (e.g. non-participation, tardiness and distracting behavior, etc.) will lower your participation score. Please note that students arriving **10 minutes late** to class will be marked as **L – Late.** *Two **Ls** will be counted as one **A - Absent.***

According to MUIC's policy, students are expected to attend at least 80% of the class (maximum 4As). If you miss the class more than 4 times, 1% will be taken off from your final grade for each additional absent.

Uniform Policy

A proper dress code is part of the written policy for student conduct, including exchange and visiting students. MUIC is a high profile institution and it is an honor to be wearing its uniform. Students are expected to strictly follow the university dress code norms. No cut-off jeans, shorts, mini or short skirts, tank tops or low cut blouses, flip-flops, rubber or plastic sandals, or house slippers are permitted. If the students neglect to wear the proper uniform, he/she will not be allowed to enter the classroom and will be marked as absent on that day.

Calculators

Scientific calculator is required in most of the classes. It is the students' responsibility to bring the calculator to every class. ***Students are not allowed to use smart phones during the examinations*** and if use, will be considered as violating the examination according to Mahidol University International College policy.