

管院學士班課程大綱

BA/BBA Program Syllabus

2023.09.20 修訂

系所 Department		經濟學系 Economics	必選修 compulsory/elective	選修 Elective
課程名稱 Course title		數理經濟學（一） Mathematical Economics (I)	學分數 Credit(s)	3
課號 Course Code			全英文授課 English Taught (EMI)	是(Yes)
學年/學期 academic year/Semester		115/ 1 2026/ Fall	上課地點 Classroom	管院 320 College of Management 320
講授教師 Instructor		陳怡紋 Chen, Yi-Wun	上課時間 Time	13:10-16:00 (週二) 13:10-16:00 (Tue.)
教師辦公室&諮詢時間 Instructor office & office hour		管院 R313/ by appointment College of Management R313/ by appointment	教師聯絡資訊 Instructor Contact	Phone: 05-2720411 ext. 34111 Email: ecdycw@ccu.edu.tw
助教 Teaching Assistant		TBA	助教 聯絡資訊 TA contact	Email: TBA
先修課程 Pre-requisite courses				
學習目標 Learning Objective		The objective of this course is that students need to know how to apply those mathematical techniques and methods in economic analysis.		
課程概述 Course Descriptions		This course covers the topics of mathematical techniques and methods that are related to economics and is designed to provide students with the required knowledge to learn advanced economics courses, e.g., advanced microeconomics and macroeconomics, and econometrics.		
對應 AOL 職能素養(AOL Competency)				
職能素養 3(Competency 3): 問題解決能力 Problem Solving Skills			職能素養 1(Competency 1): 成本效益分析 Cost-Benefit Analysis	
課程類別 Course Attributes		☐ 人文關懷課程(Humanities Caring) ☐ 競賽專題課程(Competition) ☐ 問題導向課程(Problem-solving) ☒ 專題導向課程(Project-based) ☐ 實作課程(Practice-based) ☐ 總整課程(Capstone)		
教材編選 Teaching materials		☒ 自製簡報(self-made PPTs) ☐ 課程講義(Teaching Notes) ☐ 自編教科書(self-made textbooks) ☐ 教學程式(programming) ☐ 自製教學影片(self-made video) ☐ 其他(Others)		
教學資源 Teaching Resources		☐ 課程網站(Website) ☐ 實習網站(Intern Web)		

	■教材電子檔供下載(Downloadable Files)			
教科書/參考書 Textbooks/References	1. Chiang, A. C., & Wainwright, K. (2005). <i>Fundamental Methods of Mathematical Economics</i> (4th ed.). McGraw-Hill Companies, Inc. (Required) 2. Chiang, A. C., & Wainwright, K. (2013)。數理經濟學-四版 (蔡穎義譯)。華泰文化。(原著出版於 2005 年) (Please follow copyright rules and do not illegally copy textbooks; 請尊重智慧財產權，不得非法影印教師指定之教科書籍)			
評量方式(請填百分比) Assessment	課堂參與 Participation	%	個案討論 Case study	%
	作業 Homework	30%	專題 Project	%
	小考 Quiz	10%	其他 1 other ()	%
	期中考 Midterm	40%	其他 2 other ()	%
	期末考 Final	20%	其他 3 other ()	%
	報告 Presentation	%	其他 4 other ()	%
其他說明 Other description	Homework (30%): - There will be three homework assignments. - The due date of submission will be posted with the homework. I will post homework at an earlier time (at least one week before the due date). Hence, late submission will not be accepted and there will be no make-up for any missed homework. - You can discuss the questions with classmates. But, the final answers on your submission should be derived on your own. Quizzes (10%): - There will be pop quizzes in class. Midterm Exam (40%): - There are two midterm exams. - There will be no early or make-up midterm exam for any reason. - If you need to skip or miss the midterm exam due to a legitimate reason, the weights of assessment of the midterm exam will be added to the final exam, but you need to inform me before the exam and with valid documentation. Otherwise, you will get zero in the midterm exam. Final Exam (20%): - There will be no early or makeup final exam, unless with a legitimate reason and valid documentation. Otherwise, you will get zero in the final exam.			

課程規劃表 Course Schedule

週次 week	日期 Date	內容 Description	教材章節 Textbook	其他說明 Remark
1.	9/8	The Nature of Mathematical Economics/ Economic Models	CH1/ CH2	
2.	9/15	Equilibrium Analysis in Economics	CH3	
3.	9/22	Equilibrium Analysis in Economics	CH3	
4.	9/29	Linear Models and Matrix Algebra	CH4	
5.	10/6	Linear Models and Matrix Algebra	CH4	HW1
6.	10/13	Midterm Exam 1		Midterm 1
7.	10/20	Linear Models and Matrix Algebra (Continued)	CH5	
8.	10/27	Linear Models and Matrix Algebra (Continued)	CH5	
9.	11/3	Comparative Statics and the Concept of Derivative	CH6	
10.	11/10	Comparative Statics and the Concept of Derivative	CH6	HW2
11.	11/17	Midterm Exam 2		Midterm 2
12.	11/24	Rules of Differentiation and Their Use in Comparative Statics	CH7	
13.	12/1	Rules of Differentiation and Their Use in Comparative Statics	CH7	
14.	12/8	Comparative-Static Analysis of General-Function Models	CH8	
15.	12/15	Comparative-Static Analysis of General-Function Models	CH8	HW3
16.	12/22	Final Exam		Final Exam
17.	12/29	Self-Learning		
18.	1/5	Self-Learning		