

# 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（二） Mathematical Economics (II)		學分數 Credit(s)	3			
課號 Course Code			全英文授課 English Taught (EMI)	否(No)			
學年/學期 academic year/Semester	114/ 2 2026/ Spring		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 (週四) 13:10-16:00 (Thu.)			
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: ecdywc@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 knowledge and techniques in learning related economics courses, e.g. microeconomics, macroeconomics, and econometrics.						
課程概述 Course Descriptions	This course covers the topics of mathematical theorems and methods that are related to economics.						
<b>對應 AOL 職能素養(AOL Competency)</b>							
<b>職能素養 3(Competency 3): 問題解決能力 Problem Solving Skills</b>		<b>職能素養 1(Competency 1): 成本效益分析 Cost-Benefit Analysis</b>					
課程類別 Course Attributes	<input type="checkbox"/> 人文關懷課程(Humanities Caring) <input type="checkbox"/> 競賽專題課程(Competition) <input type="checkbox"/> 問題導向課程(Problem-solving) <input checked="" type="checkbox"/> 專題導向課程(Project-based) <input type="checkbox"/> 實作課程(Practice-based) <input type="checkbox"/> 總整課程(Capstone)						
教材編選 Teaching materials	<input checked="" type="checkbox"/> 自製簡報(self-made PPTs) <input type="checkbox"/> 課程講義(Teaching Notes) <input type="checkbox"/> 自編教科書(self-made textbooks) <input type="checkbox"/> 教學程式(programming) <input type="checkbox"/> 自製教學影片(self-made video) <input type="checkbox"/> 其他(Others)						
教學資源	<input type="checkbox"/> 課程網站(Website) <input type="checkbox"/> 實習網站(Intern Web)						

Teaching Resources	■ 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) <b>(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)</b>			
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%): <ul style="list-style-type: none"> <li>There will be four homework assignments.</li> <li>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.</li> <li>You can discuss the questions with classmates. But the final answers on your submission should be derived on your own.</li> </ul> Quizzes (10%): <ul style="list-style-type: none"> <li>There will be pop quizzes in classes.</li> </ul> Midterm Exam (40%): <ul style="list-style-type: none"> <li>There are two midterm exams.</li> <li>There will be no early or make-up midterm exam for any reason.</li> <li>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.</li> </ul> Final Exam (20%): <ul style="list-style-type: none"> <li>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.</li> </ul>			

# 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.	2/26	Exponential and Logarithmic Functions	CH10	
2.	3/5	Exponential and Logarithmic Functions	CH10	
3.	3/12	The Case of More than One Choice Variable	CH11	
4.	3/19	The Case of More than One Choice Variable	CH11	HW1
5.	3/26	Midterm Exam 1		
6.	4/2	Optimization with Equality Constraints	CH12	
7.	4/9	(Holiday)		
8.	4/16	Optimization with Equality Constraints	CH12	
9.	4/23	Further Topics in Optimization	CH13	
10.	4/30	Further Topics in Optimization	CH13	HW2
11.	5/7	Midterm Exam 2		
12.	5/14	Economic Dynamics and Integral Calculus	CH14	
13.	5/21	Economic Dynamics and Integral Calculus	CH14	
14.	5/28	Continuous Time: First-Order Differential Equations	CH15	
15.	6/4	Continuous Time: First-Order Differential Equations	CH15	HW3
16.	6/11	Final Exam		
17.	6/18			
18.	6/25	The due date to hand in HW4.		HW4