



教學計劃表 Syllabus

課程名稱(中文) Course Name in Chinese	分析導論		學年/學期 Academic Year/Semester	112/1	
課程名稱(英文) Course Name in English	Introduction to Analysis				
科目代碼 Course Code	AM_58000	系級 Department & Year	碩士	開課單位 Course-Offering Department	應用數學系
修別 Type	必修 Required	學分數/時間 Credit(s)/Hour(s)	3.0/3.0		
授課教師 Instructor	/王昆?				
先修課程 Prerequisite					
課程描述 Course Description					
<p>In this course we will cover the following topics:</p> <ol style="list-style-type: none"> 1. review some subjects in set theory; 2. metric spaces; 3. completeness; 4. compactness; 5. connectedness. <p>There are homeworks every week including presenting these in class.</p>					
課程目標 Course Objectives					
<p>本課程主要目標以為高等數學分析課程或是相關課程之基礎。 Provide a smooth transition from college analysis to more advanced courses in analysis.</p>					
系專業能力 Basic Learning Outcomes				課程目標與系專業能力相關性 Correlation between Course Objectives and Dept.'s Education Objectives	
A	具備專業數學知識及邏輯推理能力。Have well-founded expertise in mathematics and be capable of logical reasoning.			●	
B	具備學習其它學科的能力，以期能邁向跨領域研究。Be able to study other fields of science so as to conduct interdisciplinary research in the future				
C	具備獨立思考與解決問題的能力。Be capable of independent thinking and have the problem-solving skills.			○	
圖示說明 Illustration : ● 高度相關 Highly correlated ○ 中度相關 Moderately correlated					
授課進度表 Teaching Schedule & Content					
週次 Week	內容 Subject/Topics				備註 Remarks
1	review set theory				
2	review set theory				
3	review set theory				
4	review set theory				
5	metric spaces				

6	metric spaces	
7	completeness	
8	completeness	
9	期中考試週 Midterm Exam	
10	compactness	
11	compactness	
12	compactness	
13	compactness	
14	connectedness	
15	connectedness	
16	connectedness	
17	connectedness	
18	期末考試週 Final Exam	

教學策略 Teaching Strategies

- 課堂講授 Lecture
 分組討論 Group Discussion
 參觀實習 Field Trip
 其他 Miscellaneous:

教學創新自評 Teaching Self-Evaluation

創新教學(Innovative Teaching)

- 問題導向學習(PBL)
 團體合作學習(TBL)
 解決導向學習(SBL)
 翻轉教室 Flipped Classroom
 磨課師 Moocs

社會責任(Social Responsibility)

- 在地實踐 Community Practice
 產學合作 Industry-Academia Cooperation

跨域合作(Transdisciplinary Projects)

- 跨界教學 Transdisciplinary Teaching
 跨院系教學 Inter-collegiate Teaching

- 業師合授 Courses Co-taught with Industry Practitioners

其它 other:

學期成績計算及多元評量方式 Grading & Assessments

配分項目 Items	配分比例 Percentage	多元評量方式 Assessments							
		測驗 會考	實作 觀察	口頭 發表	專題 研究	創作 展演	卷宗 評量	證照 檢定	其他
平時成績 General Performance									
期中考成績 Midterm Exam	30%	✓							
期末考成績 Final Exam	40%	✓							
作業成績 Homework and/or Assignments	30%		✓						
其他 Miscellaneous (_____)									

評量方式補充說明

Grading & Assessments Supplemental instructions

教科書與參考書目 (書名、作者、書局、代理商、說明)

Textbook & Other References (Title, Author, Publisher, Agents, Remarks, etc.)

lecture notes will be provided (pdf file).

課程教材網址(含線上教學資訊, 教師個人網址請列位於本校內之網址)

Teaching Aids & Teacher's Website(Including online teaching information.

Personal website can be listed here.)

其他補充說明 (Supplemental instructions)