Please consult Intellectual Property Rights before making a photocopy. Please use the textbook of copyrighted edition.

②國玄東華大學

教學計劃表 Syllabus

課程名稱(中文) Course Name in Chinese	催化材料			學年/學期 Academic Year/Se	113/2			
課程名稱(英文) Course Name in English	Catalysis Material							
科目代碼 Course Code	MS55400	系級 Department 碩士 & Year		開課單位 Course-Offering Department	材料科學與工程學系			
修別 Type	選修 Elective	學分數/時間 Credit(s)/Hour(s)		3.0/3.0				
授課教師 Instructor	/傅彦培							
先修課程 Prerequisite								

課程描述 Course Description

- 1. Introduction and fundamental concepts of catalysts
- 2. Kinetics of catalysed reactions
- 3. Preparations of Catalysts
- 4. Evaluation of physical and chemical properties of catalysts
- 5. Evaluation of catalytic properties of catalysts
- 6. Transport phenomena in catalytic
- 7. Dynamic phenomena in catalytic systems
- 8. Possibilities of intensification of catalytic processes
- 9. Catalytic processes in protection of environment

課程目標 Course Objectives

- 1. Concepts of Modern Catalysis and Kinetics
- 2. Recognize, understand, the technical terminology used in surface science

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	Introduction and fundamental concepts of catalysts	
2	Introduction and fundamental concepts of catalysts	
3	Kinetics of catalysed reactions	
4	Kinetics of catalysed reactions	
5	Preparations of Catalysts	
6	Preparations of Catalysts	
7	Evaluation of physical and chemical properties of catalysts	
8	Evaluation of physical and chemical properties of catalysts	
9	期中考試週 Midterm Exam	
10	Evaluation of catalytic properties of catalysts	
11	Evaluation of catalytic properties of catalysts	
12	Transport phenomena in catalytic	

13	Transport phenomena in catalytic					
14	Dynamic phenomena in catalytic systems					
15	Dynamic phenomena in catalytic systems					
16	Possibilities of intensification of catalytic processes					
17	Catalytic processes in protection of environment					
18	期末考試週 Final Exam					
教學策略 Teaching Strategies						
✓ 課堂講授 Lecture						
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						
社會責任(Social Responsibility)						
在地實踐Community Practice						
一 跨域合作(Transdisciplinary Projects)						
一 跨界教學Transdisciplinary 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	配分比例 Percentage	多元評量方式 Assessments							
Items		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(含出鉄席) General Performance (Attendance Record)	20%		~						
期中考成績 Midterm Exam	30%	>							
期末考成績 Final Exam									
作業成績 Homework and/or Assignments	10%		~						
其他 Miscellaneous (口頭報告)	40%			~					

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.)

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)