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②图玄東華大學

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	教导	學計劃表	Sy	118	abus		
課程名稱(中文) Course Name in Chinese	分子生物科技				學年/學期 Academic Year/Se	114/1	
課程名稱(英文) Course Name in English	Molecular Biotechnology						
科目代碼 Course Code	BMM_M0050	系級 Department & Year	碩士		開課單位 Course-Offering Department	生化暨分子醫學科學系	
修別 Type	必修 Required	學分數/時間 Credit(s)/Hour(s)			3.0/3.0		
授課教師 Instructor	/彭致文/李佳洪						
先修課程 Prerequisite							
課程描述 Course Description							
本課程主要讓學生對於生物科 力	技涵蓋的內容有	基礎的認識,認	果程的重	點之	C一為啟發學生對於	生物科技	之興趣及思考能
課程目標 Course Objectives							
The course aims to guide s scientific rationale, and comprehensive understanding	methodology; is	n addition, s	tudents	cai	n learn the abili		_

	系專業能力 Position Learning Outcomes	課程目標與系專業能 力相關性 Correlation between Course Objectives
	Basic Learning Outcomes	and Dept.'s Education Objectives
A	具備生物技術相關學科之基礎知識。Having a fundamental understanding of subjects related to biotechnological techniques.	•
В	具備邏輯分析與解決問題的能力。Having the capabilities of logical analysis and problem solving.	0
С	具備資料整合、數據分析與書面及口頭報告能力。Having the capabilities of data integration and analysis, and the skills of written and poster presentation.	0
D	具備終生學習的能力。Having the capability of lifelong learning.	•

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	Nanosystem characterization tools in the life sciences	
2	Cellular drug delivery	
3	Nanomaterials for cancer diagnosis	
4	Nanotechnology for targeted cancer therapy	
5	Fluorescence and bioluminescence in vivo imaging system	
6	期中考試週 Midterm Exam	
7	Recombinant DNA	

8	Recombinant virus					
9	Recombinant protein					
10	Fluorescence and luminescence application					
11	Omics biotechnology					
12	Molecular imaging in drug R & D					
13	Gene Editing-Crispr/Cas9 system					
14	Translational medicinal research					
15	Bioinformatic and drug development					
16	Overview and discussion					
17	End-term presentation					
18	期末考試週 Final Exam					
	教學策略 Teaching Strategies					
課堂講	授 Lecture					
其他Mis	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) ■ ■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						
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	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(含出缺席) General Performance (Attendance Record)	20%		~							
期中考成績 Midterm Exam	30%		~	~						
期末考成績 Final Exam	30%		~	~						
作業成績 Homework and/or Assignments	20%						~			
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.)

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)