



教學計劃表 Syllabus

課程名稱(中文) Course Name in Chinese	病毒學特論			學年/學期 Academic Year/Semester	115/1
課程名稱(英文) Course Name in English	Special Topics in Virology				
科目代碼 Course Code	BMM_M0130	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	選修 Elective	學分數/時間 Credit(s)/Hour(s)		3.0/3.0	
授課教師 Instructor	/張瑞宜				
先修課程 Prerequisite					
課程描述 Course Description					
本課程著重培養研究生的科學研究與學術表達能力，內容涵蓋病毒學研究方法、病毒與宿主交互作用、研究計畫撰寫、科學論文寫作、口頭報告及論文投稿流程。學生並須閱讀與選擇研究論文進行報告與討論，藉由文獻分析、批判思考與課堂互動，提升研究設計、科學溝通及獨立思考能力。					
This course aims to develop graduate students' scientific research and academic communication skills. Topics include virological research methods, virus-host interactions, research proposal preparation, scientific writing, oral presentation, and the manuscript submission process. Students will also select, read, present, and discuss research articles. Through literature analysis, critical thinking, and class discussion, students will strengthen their abilities in research design, scientific communication, and independent thinking.					
課程目標 Course Objectives					
了解當代病毒學研究方法以及重要研究主題，增加學生獨立研究所需的相關知識。 The aims of this course are for students to understand modern virological research methods and hot topics and increase capabilities for independent study.					
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	具備生物技術相關學科之基礎知識。Having a fundamental understanding of subjects related to biotechnological techniques.				●
B	具備邏輯分析與解決問題的能力。Having the capabilities of logical analysis and problem solving.				●
C	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.				●
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	Course Introduction and Overview				
2	The Virologist' s Toolkit I: Essential Methods in Virology				
3	The Virologist' s Toolkit II: Experimental Approaches in Virology				

4	Virus-Host Interactions: Viral Offense and Host Defense	
5	Experimental Design, Academic Ethics, and Research Integrity	
6	How to Develop a Strong Research Proposal	
7	Scientific Writing: Principles and Practical Skills	
8	Effective Scientific Oral Presentation	
9	Midterm Examination Week (No Class)	
10	University Sports Day (No Class)	
11	Manuscript Submission and the Publication Process	
12	Research Paper Discussion I	
13	Research Paper Discussion II	
14	Research Paper Discussion III	
15	Research Paper Discussion IV	
16	Research Paper Discussion V	
17	期末考試週 Final Exam	

彈性 教學 規劃 Flexible Teaching Plan	請勾選(至少需勾選1 個項目): Please tick the box(es). (At least one item is required.): ☒ 問題討論 Problem-based Discussion ☐ 翻轉教學 Flipped Classroom ☐ 展演實作 Performance / Practical Presentation ☐ 校外參訪 Off-campus Visit ☐ 講座活動 Lecture / Seminar ☒ 線上作業 Online Assignments ☒ 自主學習 Self-directed Learning ☒ 課業輔導 Academic Support ☐ 實驗操作 Experiment Operation ☐ 遠距教學(同步) Distance Learning (Synchronous) ☐ 遠距教學(非同步) Distance Learning (Asynchronous) ☐ 其他(請填寫) Others (Please specify.): 備註: 本校學期週數自115 學年度起調整為17 週, 為符合1學分18 小時之原則, 請教師規劃安排彈性教學。 Note: From the 115th academic year, the semester will be 17 weeks. Please include flexible teaching activities to meet the required 18 hours per credit.
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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(含出缺席) General Performance (Attendance Record)	10%								
期中考成績 Midterm Exam	0%								
期末考成績 Final Exam	50%								
作業成績 Homework and/or Assignments	0%								
其他 Miscellaneous (_____)	40%								
評量方式補充說明 Grading & Assessments Supplemental instructions • Research Paper Discussion: 50% • Reading Assignments: 15% • Research Proposal: 15% • Scientific Writing Assignment: 10% • Attendance and Class Participation: 10%									
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)									