

課程流水號 Serial Number	24017
課號 Course Number	LS4005
班次 Class	*
科目名稱(中文) Course Title(in Chinese)	專題研究B
科目名稱(外文) Course Title(In English or other languages)	Thesis Research B
授課老師(中文) Instructor(in Chinese)	劉阜果,陳師慶,吳少傑,黃佳瑜,葉靖輝,陳盛良,王健家,陳青諭,粘仲毅,高永旭,葉淑丹,陸重安,金秀蓮,羅月霞
授課老師(外文) Instructor(In English or other languages)	Fu-Guo Robert Liu, Ssu-Ching Chen, Shaw-Jye Wu, Chia-Yu Huang, Ching-Hui Yeh, Shen-Liang Chen, Chien-Chia Wang, Chin-Yu Chen, Chung-Yi Nien, Yung-Hsi Kao, Shu-Dan Yeh, Chung-An Lu, Shiow-Lian Catherine Jin, Yueh-Hsia Luo
辦公時間(中文) Office Hour(in Chinese)	8:30-17:00
辦公時間(外文) Office Hour(In English or other languages)	8:30-17:00
課程目標(中文) Course Objective(in Chinese)	學習研究操作及研讀論文
課程目標(外文) Course Objective(In English or other languages)	Learn how to research and read papers
授課內容(中文) Course Description(in Chinese)	1. Study journal papers 2. Join group meeting 3. Hand-on experiments 4. Discussion
授課內容(外文) Course Description(In English or other languages)	1. Study journal papers 2. Join group meeting 3. Hand-on experiments 4. Discussion
教科書/參考書(中文) Textbook/References(in Chinese)	Journals
教科書/參考書(外文) Textbook/References(In English or other languages)	Journals
自編教材比例 Self-compiled Textbook/References Proportion	
授課方式 Requirements	研討Seminar 實習/實驗Internship/Experiment 個別指導Individual Discussion

評量配分比重(中文) Grading(in Chinese)	Attitude (50%) + attendance rate (50%)
評量配分比重(外文) Grading(In English or other languages)	Attitude (50%) + attendance rate (50%)
課程所屬學制 Educational System	學士班(Undergraduate Programme)
課程領域 Course Domain	進階學科 實驗操作
跨系課程領域 Cross Department Course Domain	

系所核心能力 Core Competencies of Department	強度指數 Overall Rating						評量方式 Corresponding Assessments
	0 不具備 Zero	1 非常低 Very Low	2 低 Low	3 普通 Medium	4 高 High	5 非常高 Very High	
基礎生物專業知識 Basic Biological Sciences	●	●	●	●	●	●	<input type="checkbox"/> 紙筆測驗/會考 (Test/Exam) <input type="checkbox"/> 作業練習(Assignments) <input checked="" type="checkbox"/> 口頭報告/口試 (Presentation/Oral Exam) <input checked="" type="checkbox"/> 專題研究報告(書面) (Research Report(printed on paper)) <input checked="" type="checkbox"/> 實作/實驗 (Practices/Experiments) <input checked="" type="checkbox"/> 出席/課堂表現 (Attendance/Performance) <input checked="" type="checkbox"/> 學習檔案評量(Portfolios Assessment) <input type="checkbox"/> 自我評量/同儕互評(Self Assessment/ Peer Assessment) <input type="checkbox"/> 作品/創作展演 (Products/Creative Performance) <input type="checkbox"/> 其他(Others) <input type="checkbox"/> 無(No assessment)

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	0 不具 備 Zero	1 非常 低 Very Low	2 低 Low	3 普通 Medium	4 高 High	5 非常 高 Very High	
發掘問題及實驗能力 Question approaching and experimental skills	●	●	●	●	●	●	<input type="checkbox"/> 紙筆測驗/會考 (Test/Exam) <input type="checkbox"/> 作業練習(Assignments) <input checked="" type="checkbox"/> 口頭報告/口試 (Presentation/Oral Exam) <input checked="" type="checkbox"/> 專題研究報告(書面) (Research Report(printed on paper)) <input checked="" type="checkbox"/> 實作/實驗 (Practices/Experiments) <input checked="" type="checkbox"/> 出席/課堂表現 (Attendance/Performance) <input checked="" type="checkbox"/> 學習檔案評量(Portfolios Assessment) <input type="checkbox"/> 自我評量/同儕互評(Self Assessment/ Peer Assessment) <input type="checkbox"/> 作品/創作展演 (Products/Creative Performance) <input type="checkbox"/> 其他(Others) <input type="checkbox"/> 無(No assessment)
邏輯分析 Logical thinking and analysis	●	●	●	●	●	●	<input type="checkbox"/> 紙筆測驗/會考 (Test/Exam) <input type="checkbox"/> 作業練習(Assignments) <input checked="" type="checkbox"/> 口頭報告/口試 (Presentation/Oral Exam) <input checked="" type="checkbox"/> 專題研究報告(書面) (Research Report(printed on paper)) <input checked="" type="checkbox"/> 實作/實驗 (Practices/Experiments) <input checked="" type="checkbox"/> 出席/課堂表現 (Attendance/Performance) <input checked="" type="checkbox"/> 學習檔案評量(Portfolios Assessment) <input type="checkbox"/> 自我評量/同儕互評(Self Assessment/ Peer Assessment) <input type="checkbox"/> 作品/創作展演 (Products/Creative Performance) <input type="checkbox"/> 其他(Others) <input type="checkbox"/> 無(No assessment)

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電腦應用 Computer application	●	●	●	●	●	●	<input type="checkbox"/> 紙筆測驗/會考 (Test/Exam) <input type="checkbox"/> 作業練習(Assignments) <input checked="" type="checkbox"/> 口頭報告/口試 (Presentation/Oral Exam) <input checked="" type="checkbox"/> 專題研究報告(書面) (Research Report(printed on paper)) <input checked="" type="checkbox"/> 實作/實驗 (Practices/Experiments) <input checked="" type="checkbox"/> 出席/課堂表現 (Attendance/Performance) <input checked="" type="checkbox"/> 學習檔案評量(Portfolios Assessment) <input type="checkbox"/> 自我評量/同儕互評(Self Assessment/ Peer Assessment) <input type="checkbox"/> 作品/創作展演 (Products/Creative Performance) <input type="checkbox"/> 其他(Others) <input type="checkbox"/> 無(No assessment)
溝通技巧 Communication skills	●	●	●	●	●	●	<input type="checkbox"/> 紙筆測驗/會考 (Test/Exam) <input type="checkbox"/> 作業練習(Assignments) <input checked="" type="checkbox"/> 口頭報告/口試 (Presentation/Oral Exam) <input checked="" type="checkbox"/> 專題研究報告(書面) (Research Report(printed on paper)) <input checked="" type="checkbox"/> 實作/實驗 (Practices/Experiments) <input checked="" type="checkbox"/> 出席/課堂表現 (Attendance/Performance) <input checked="" type="checkbox"/> 學習檔案評量(Portfolios Assessment) <input type="checkbox"/> 自我評量/同儕互評(Self Assessment/ Peer Assessment) <input type="checkbox"/> 作品/創作展演 (Products/Creative Performance) <input type="checkbox"/> 其他(Others) <input type="checkbox"/> 無(No assessment)

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獨立思考與自我學習 Independent thinking and self-learning	●	●	●	●	●	●	<input type="checkbox"/> 紙筆測驗/會考 (Test/Exam) <input type="checkbox"/> 作業練習(Assignments) <input checked="" type="checkbox"/> 口頭報告/口試 (Presentation/Oral Exam) <input checked="" type="checkbox"/> 專題研究報告(書面) (Research Report(printed on paper)) <input checked="" type="checkbox"/> 實作/實驗 (Practices/Experiments) <input checked="" type="checkbox"/> 出席/課堂表現 (Attendance/Performance) <input checked="" type="checkbox"/> 學習檔案評量(Portfolios Assessment) <input type="checkbox"/> 自我評量/同儕互評(Self Assessment/ Peer Assessment) <input type="checkbox"/> 作品/創作展演 (Products/Creative Performance) <input type="checkbox"/> 其他(Others) <input type="checkbox"/> 無(No assessment)
團隊合作 Team work	●	●	●	●	●	●	<input type="checkbox"/> 紙筆測驗/會考 (Test/Exam) <input type="checkbox"/> 作業練習(Assignments) <input checked="" type="checkbox"/> 口頭報告/口試 (Presentation/Oral Exam) <input checked="" type="checkbox"/> 專題研究報告(書面) (Research Report(printed on paper)) <input checked="" type="checkbox"/> 實作/實驗 (Practices/Experiments) <input checked="" type="checkbox"/> 出席/課堂表現 (Attendance/Performance) <input checked="" type="checkbox"/> 學習檔案評量(Portfolios Assessment) <input type="checkbox"/> 自我評量/同儕互評(Self Assessment/ Peer Assessment) <input type="checkbox"/> 作品/創作展演 (Products/Creative Performance) <input type="checkbox"/> 其他(Others) <input type="checkbox"/> 無(No assessment)

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博雅通識 General knowledge	●	●	●	●	●	●	<input type="checkbox"/> 紙筆測驗/會考 (Test/Exam) <input type="checkbox"/> 作業練習(Assignments) <input checked="" type="checkbox"/> 口頭報告/口試 (Presentation/Oral Exam) <input checked="" type="checkbox"/> 專題研究報告(書面) (Research Report(printed on paper)) <input checked="" type="checkbox"/> 實作/實驗 (Practices/Experiments) <input checked="" type="checkbox"/> 出席/課堂表現 (Attendance/Performance) <input checked="" type="checkbox"/> 學習檔案評量(Portfolios Assessment) <input type="checkbox"/> 自我評量/同儕互評(Self Assessment/ Peer Assessment) <input type="checkbox"/> 作品/創作展演 (Products/Creative Performance) <input type="checkbox"/> 其他(Others) <input type="checkbox"/> 無(No assessment)