

課程流水號 Serial Number	24023
課號 Course Number	LS5038
班次 Class	*
科目名稱(中文) Course Title(in Chinese)	癌症生物學
科目名稱(外文) Course Title(In English or other languages)	Cancer Biology
授課老師(中文) Instructor(in Chinese)	李岳倫
授課老師(外文) Instructor(In English or other languages)	Yueh Luen LI
辦公時間(中文) Office Hour(in Chinese)	每周四13:00~14:00
辦公時間(外文) Office Hour(In English or other languages)	每周四13:00~14:00
課程目標(中文) Course Objective(in Chinese)	介紹癌症發生的機制與治療及國人好發的癌症
課程目標(外文) Course Objective(In English or other languages)	Introduction of the mechanism and treatment of cancer and the prevalent cancers in Taiwan
授課內容(中文) Course Description(in Chinese)	週次 Topic 1 Introduction: the nature of cancer 2 Tumor viruses 3 Oncogenes and proto-oncogenes 4 Growth factors and signal transduction 5 Tumor suppressor genes 6 Genomic instability and cell cycle control in cancer 7 校際活動周(全校停班停課) 8 Cell immortalization and cell death control 9 Midterm Exam (期中考) 10 Epigenetic regulation in cancer

	11 RNA-regulated expression in cancer 12 Cancer stem cell and cell plasticity 13 Tumor microenvironment 14 Angiogenesis and cancer 15 Invasion and metastasis 16 Rational treatment of cancer 17 Tumor immunology and immunotherapy 18 Final Exam (期末考)
授課內容(外文) Course Description(In English or other languages)	週次 Topic 1 Introduction: the nature of cancer 2 Tumor viruses 3 Oncogenes and proto-oncogenes 4 Growth factors and signal transduction 5 Tumor suppressor genes 6 Genomic instability and cell cycle control in cancer 7 校際活動周(全校停班停課) 8 Cell immortalization and cell death control 9 Midterm Exam (期中考) 10 Epigenetic regulation in cancer 11 RNA-regulated expression in cancer 12 Cancer stem cell and cell plasticity 13 Tumor microenvironment 14 Angiogenesis and cancer 15 Invasion and metastasis 16 Rational treatment of cancer 17 Tumor immunology and immunotherapy 18 Final Exam (期末考)
教科書/參考書(中文) Textbook/References(in Chinese)	無
教科書/參考書(外文) Textbook/References(In English or other languages)	NO
自編教材比例 Self-compiled Textbook/References Proportion	
授課方式 Requirements	講授Lecture
評量配分比重(中文) Grading(in Chinese)	期中考及期末考各50%
評量配分比重(外文)	期中考及期末考各50%

Grading(In English or other languages)	
課程所屬學制 Educational System	博士班(Doctoral Programme)
課程領域 Course Domain	進階學科 生物科技 醫藥
跨系課程領域 Cross Department Course Domain	

系所核心能力 Core Competencies of Department	0	1	2	3	4	5	評量方式 Corresponding Assessments
	不具備 Zero	非常低 Very Low	低 Low	普通 Medium	高 High	非常高 Very High	
強度指數 Overall Rating							

系所核心能力 Core Competencies of Department	0	1	2	3	4	5	評量方式 Corresponding Assessments
	不具備 Zero	非常低 Very Low	低 Low	普通 Medium	高 High	非常高 Very High	
強度指數 Overall Rating 高等生物專業知識 Advanced Biological Sciences	●	●	●	●	●	●	<input checked="" type="checkbox"/> 紙筆測驗/會考 (Test/Exam) <input type="checkbox"/> 作業練習 (Assignments) <input type="checkbox"/> 口頭報告/口試 (Presentation/Oral Exam) <input type="checkbox"/> 專題研究報告(書面) (Research Report(printed on paper)) <input type="checkbox"/> 實作/實驗 (Practices/Experiments) <input type="checkbox"/> 出席/課堂表現 (Attendance/Performance) <input 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)

<div>強度指數</div> <div>Overall Rating</div> <div>系所核心能力</div> <div>Core Competencies of Department</div>	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	<div>評量方式</div> <div>Corresponding Assessments</div>
<div>創新及整合研究</div> <div>Innovative and integrative research</div>	●	●	●	●	●	●	<div> <input checked="" type="checkbox"/> 紙筆測驗/會考 (Test/Exam) <input type="checkbox"/> 作業練習 (Assignments) <input type="checkbox"/> 口頭報告/口試 (Presentation/Oral Exam) <input type="checkbox"/> 專題研究報告(書面) (Research Report(printed on paper)) <input type="checkbox"/> 實作/實驗 (Practices/Experiments) <input type="checkbox"/> 出席/課堂表現 (Attendance/Performance) <input 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) </div>

強度指數 Overall Rating 系所核心能力 Core Competencies of Department	0	1	2	3	4	5	評量方式 Corresponding Assessments
	不具備 Zero	非常低 Very Low	低 Low	普通 Medium	高 High	非常高 Very High	
專業寫作與表達 Professional writing and presentation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/> 紙筆測驗/會考 (Test/Exam) <input type="checkbox"/> 作業練習 (Assignments) <input type="checkbox"/> 口頭報告/口試 (Presentation/Oral Exam) <input type="checkbox"/> 專題研究報告(書面) (Research Report(printed on paper)) <input type="checkbox"/> 實作/實驗 (Practices/Experiments) <input type="checkbox"/> 出席/課堂表現 (Attendance/Performance) <input 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 checked="" type="checkbox"/> 無(No assessment)

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	不具備 Zero	非常低 Very Low	低 Low	普通 Medium	高 High	非常高 Very High	
國際觀 International vision	●	●	●	●	●	●	<input checked="" type="checkbox"/> 紙筆測驗/會考 (Test/Exam) <input type="checkbox"/> 作業練習 (Assignments) <input type="checkbox"/> 口頭報告/口試 (Presentation/Oral Exam) <input type="checkbox"/> 專題研究報告(書面) (Research Report(printed on paper)) <input type="checkbox"/> 實作/實驗 (Practices/Experiments) <input type="checkbox"/> 出席/課堂表現 (Attendance/Performance) <input 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)