

課程流水號 Serial Number	24009
課號 Course Number	LS2020
班次 Class	*
科目名稱(中文) Course Title(in Chinese)	細胞學
科目名稱(外文) Course Title(In English or other languages)	Cell Biology
授課老師(中文) Instructor(in Chinese)	陳世勳,吳沛翊
授課老師(外文) Instructor(In English or other languages)	
辦公時間(中文) Office Hour(in Chinese)	0800-1800
辦公時間(外文) Office Hour(In English or other languages)	0800-1800
課程目標(中文) Course Objective(in Chinese)	This subject is a required course designed for undergraduate students with Life Sciences as their major. This subject is a one year course with two credits for each semester. Interested students should have basic knowledge in General Biology, and general Chemistry before they take this subject. The scope of this subject includes the basic nature of biological molecules, the construction of a cell, DNA replication and cell division, cell-cell communication, and the expression of genes and its regulation.
課程目標(外文) Course Objective(In English or other languages)	This subject is a required course designed for undergraduate students with Life Sciences as their major. This subject is a one year course with two credits for each semester. Interested students should have basic knowledge in General Biology, and general Chemistry before they take this subject. The scope of this subject includes the basic nature of biological molecules, the construction of a cell, DNA replication and cell division, cell-cell communication, and the expression of genes and its regulation.
授課內容(中文) Course Description(in Chinese)	Week Date Topics Instructors 1 2/21 Chapter 11 Microtubules SL Chen 2 2/28 Holiday 3 3/6 Chapter 11 Microtubules SL Chen 4 3/13 Chapter 12 Actin PY Wu 5 3/20 Chapter 12 Actin PY Wu 6 3/27 Chapter 13 Intermediate filaments SL Chen 7 4/3 Spring Break 8 4/10 Chapter 19 The extracellular matrix and cell adhesion SL Chen

	9 4/17 Mid-term exam 10 4/24 Chapter 19 The extracellular matrix and cell adhesion SL Chen 11 5/1 Chapter 14 mitosis PY Wu 12 5/08 Chapter 14 mitosis PY Wu 13 5/15 Chapter 15 Cell cycle regulation PY Wu 14 5/22 Chapter 15 Cell cycle regulation PY Wu 15 5/29 Chapter 16 Apoptosis SH Chen 16 6/5 Chapter 16 Apoptosis SH Chen 17 6/12 Chapter 17 Cancer-principles and over-view SH Chen 18 6/19 Final examination PY Wu
授課內容(外文) Course Description(In English or other languages)	Week Date Topics Instructors 1 2/21 Chapter 11 Microtubules SL Chen 2 2/28 Holiday 3 3/6 Chapter 11 Microtubules SL Chen 4 3/13 Chapter 12 Actin PY Wu 5 3/20 Chapter 12 Actin PY Wu 6 3/27 Chapter 13 Intermediate filaments SL Chen 7 4/3 Spring Break 8 4/10 Chapter 19 The extracellular matrix and cell adhesion SL Chen 9 4/17 Mid-term exam 10 4/24 Chapter 19 The extracellular matrix and cell adhesion SL Chen 11 5/1 Chapter 14 mitosis PY Wu 12 5/08 Chapter 14 mitosis PY Wu 13 5/15 Chapter 15 Cell cycle regulation PY Wu 14 5/22 Chapter 15 Cell cycle regulation PY Wu 15 5/29 Chapter 16 Apoptosis SH Chen 16 6/5 Chapter 16 Apoptosis SH Chen 17 6/12 Chapter 17 Cancer-principles and over-view SH Chen 18 6/19 Final examination PY Wu
教科書/參考書(中文) Textbook/References(in Chinese)	Lewin's Cells, 4th edition.
教科書/參考書(外文) Textbook/References(In English or other languages)	Lewin's Cells, 4th edition.
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)	Midterm exam (50%)+Final exam (50%)
評量配分比重(外文) Grading(In English or other languages)	Midterm exam (50%)+Final exam (50%)
課程所屬學制 Educational System	學士班(Undergraduate Programme)
課程領域 Course Domain	基礎學科 進階學科

醫藥

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 checked="" type="checkbox"/> 紙筆測驗/會考 (Test/Exam) <input checked="" 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 checked="" 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)

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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="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/> 紙筆測驗/會考 (Test/Exam) <input checked="" 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 checked="" 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)
邏輯分析 Logical thinking and analysis	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/> 紙筆測驗/會考 (Test/Exam) <input checked="" 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 checked="" 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)

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電腦應用 Computer application	<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)
溝通技巧 Communication skills	<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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獨立思考與自我學習 Independent thinking and self-learning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/> 紙筆測驗/會考 (Test/Exam) <input checked="" 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 checked="" 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)
團隊合作 Team work	<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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博雅通識 General knowledge	●	●	●	●	●	●	<input checked="" type="checkbox"/> 紙筆測驗/會考 (Test/Exam) <input checked="" 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 checked="" 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)