

系所課程地圖 Department Curriculum Map

系所概要 Department	
系所名稱 Department Name	生命科學系 Department of Life Sciences
班別 Division	學士班 Bachelor's Program

教育目標 Education Goals	
編號 Number	項目內容 Content
A	認識全方位的生命科學知識 Gaining comprehensive knowledge of life sciences
B	培養專業實驗技能及客觀邏輯思考能力 Developing professional laboratory skills and objective logical thinking abilities
C	培養全球環境變遷之生態保育尖兵 Cultivating experts in ecological conservation for global environmental change
D	造就基礎生命科學之研究教學人才 Nurturing research and teaching talent in fundamental life sciences
E	養成尖端生物科技之產業研發人力 Training industry professionals for advanced biotechnology research and development

學生核心能力 Student Core Competencies		
編號 Number	項目內容 Content	對應教育目標編號 Corresponding Education Goal Number
A	基礎科學與基礎生命科學的理解 The knowledge of basic science and basic life science	AB
B	實驗方法及實驗技術 The methods and techniques of experiments	BCDE
C	訓練表達能力與邏輯思考 The training of the ability of expression and the logics of	BCDE
D	生物多樣性領域的基本知識 The background knowledge of biodiversity	AC
E	生物現象的機制探討 The investigations of organismal mechanisms	AD
F	生物科技的研究內容 The research development of biotechnology	AE

※附註 Note:

1. 各系所所屬之班別，含學士班、碩士班、博士班等，請分別填寫。1. Complete the map separately for each division, including Bachelor's, Master's, and Doctoral program.
 例如：資管學士班需填寫表二及表三；資管碩士班也須填寫表二及表三。For example, Forms 2 and 3 must be completed for Bachelor's program in Management Information Systems, and also for Master's program in for Bachelor's program in Management Information Systems.
2. 教育目標及核心能力之代號皆以英文字母大寫為主。2. Codes for Education Goals and Core Competencies must be in uppercase English alphabet letters.
3. 可依不同班（組）別填寫教育目標及核心能力。3. Education Goals and Core Competencies can be specific to the division in question.

承辦人簽章 Signature of Processing Clerk:

規劃單位主管簽章 Head of Planning Unit:

年 月 日 Date:

課程規畫表 Curriculum Plan

中文課程名稱 Course Title in Chinese	英文課程名稱 Course Title in English	規劃要點 (附註) Plans (Notes)				對應核心能力編號 Corresponding Education Goal Number	建議修課年級 Recommended Year of Study	開課單位 Course Offering Unit	備註 Remarks
		1	2	3	4				
院核心課程(若無免填，請加註必修、選修) College Core Courses (not required if none, otherwise please indicate Required Courses and Elective Courses)									
必修課程 Required Courses									
普通生物學(一)	General Biology (I)	U	A	S	3	AB	1	生科系 Dept. of Life Sciences	
普通生物學(二)	General Biology (II)	U	A	S	3	AB	1	生科系 Dept. of Life Sciences	
普通生物學(三)	General Biology (III)	U	A	S	3	AB	2	生科系 Dept. of Life Sciences	
普通生物學(四)	General Biology (IV)	U	A	S	3	AB	2	生科系 Dept. of Life Sciences	
普通生物學實驗(一)	General Biology Laboratory (I)	U	B	S	1	C	1	生科系 Dept. of Life Sciences	分A、B班 Divide into Class A and Class B.
普通生物學實驗(二)	General Biology Laboratory (II)	U	B	S	1	C	1	生科系 Dept. of Life Sciences	分A、B班 Divide into Class A and Class B.
普通化學	General Chemistry	U	A	S	3	A	1	化學系 Dept. of Chemistry	
普通化學實驗	General Chemistry and Lab	U	B	S	1	AB	1	化學系 Dept. of Chemistry	
有機化學	Organic Chemistry	U	A	S	3	A	1	化學系 Dept. of Chemistry	
有機化學實驗	Organic Chemistry Lab.	U	B	S	1	AB	1	化學系 Dept. of Chemistry	
生物化學	Biochemistry	U	A	Y	6	A	2	生科系 Dept. of Life Sciences	
生物統計學與實習	Biometrics and practice	U	A+B	S	3	AB	2	生科系 Dept. of Life Sciences	114學年度起新增 Added starting from the 2025 academic year
遺傳學	Genetics	U	A	S	3	A	2	生科系 Dept. of Life Sciences	
遺傳學實驗	Lab in Genetics	U	B	S	1	AB	2	生科系 Dept. of Life Sciences	分A、B班 Divide into Class A and Class B.
專題討論	Seminar	U	C	Y	2	C	3	生科系 Dept. of Life Sciences	
生態學	Ecology	U	A	S	3	AD	3	生科系 Dept. of Life Sciences	生態學、演化學 任選一科為必修 Ecology, Evolution: At least one course is required.
演化學	Evolution	U	A	S	3	AD	3	生科系 Dept. of Life Sciences	生態學、演化學 任選一科為必修 Ecology, Evolution: At least one course is required.

細胞生物學	Cell Biology	U	A	S	3	AE	3	生科系 Dept. of Life Sciences	動物生理學、植物生理學、細胞生物學任選一科 Animal Physiology, Plant Physiology, Cell Biology: At least one course is required.
植物生理學	Plant Physiology	U	A	S	3	AE	3	生科系 Dept. of Life Sciences	動物生理學、植物生理學、細胞生物學任選一科 Animal Physiology, Plant Physiology, Cell Biology: At least one course is required.
動物生理學	Animal Physiology	U	A	S	3	AE	3	生科系 Dept. of Life Sciences	動物生理學、植物生理學、細胞生物學任選一科 Animal Physiology, Plant Physiology, Cell Biology: At least one course is required.
分子生物學	Molecular Biology	U	A	S	4	AEF	3	生科系 Dept. of Life Sciences	分子生物學、微生物學、生物技術任選一科 Molecular Biology, Microbiology, Biotechnology: At least one course is required.
微生物學	Microbiology	U	A	S	3	EF	2	生科系 Dept. of Life Sciences	分子生物學、微生物學、生物技術任選一科 Molecular Biology, Microbiology, Biotechnology: At least one course is required.
生物技術	Biotechnology	U	A	S	3	EF	3	生科系 Dept. of Life Sciences	分子生物學、微生物學、生物技術任選一科 Molecular Biology, Microbiology, Biotechnology: At least one course is required.

※附註：規劃要點填表說明：(1 到 4 各欄位請填正確代表字母)

Note: Instructions for completing this form are provided below (please provide the correct English alphabet letters in fields 1 to 4)

1 : U-學士課程、M-碩士課程、D-博士課程。1: U-Bachelor's program, M-Master's program, D-Doctoral program.

2 : A-正課、B-實習課、C-台下指導之科目如學生講述或邀請演講之專題討論、專題研究……等。

2: A-Lecture, B-Internship, C-Subjects with private guidance such as student presentations or invited speeches, topic discussions, topic research, etc.

3 : S-學期課、Y-學年課。3: S-Semester course, Y-Year-long course.

4 : 科目 (全期或全年) 總學分數 (請填阿拉伯數字)。4: Total course (full-semester or full-year) credits (in Arabic numerals).

承辦人簽章 Signature of Processing Clerk:

規劃單位主管簽章 Head of Planning Unit:

年 月 日 Date:

Program

課程規畫表 Curriculum Plan

中文課程名稱 Course Title in Chinese	英文課程名稱 Course Title in English	規劃要點 (附註) Plans (Notes)				對應核心能力編號 Corresponding Education Goal Number	建議修課年級 Recommended Year of Study	開課單位 Course Offering Unit	備註 Remarks
		1	2	3	4				
選修課程 Elective Courses									
微積分(一)	Calculus(I)	U	A	S	2	A	1	應數系 Dept. of Applied Mathematics	
微積分(二)	Calculus(II)	U	A	S	2	A	1	應數系 Dept. of Applied Mathematics	
普通物理學	General Physics	U	A	S	3	A	1	物理系 Dept. of Physics	
普通物理學實驗	General Physics Laboratory	U	B	S	1	AB	1	物理系 Dept. of Physics	
植物標本製作	Plant-Herbarium Methodology	U	A+B	S	2	D	1	生科系 Dept. of Life Sciences	
生物多樣性概論	Introduction to Biodiversity	U	A	S	2	D	1	生科系 Dept. of Life Sciences	
全球變遷生物學導論	Introduction to global change biology	U	A	S	2	ACE	1	生科系 Dept. of Life Sciences	
生態時事評論	Reviews of ecological controversies	U	A	S	2	ACD	1	生科系 Dept. of Life Sciences	
系統分類學	Systematic Taxonomy	U	A	S	3	D	2	生科系 Dept. of Life Sciences	
植物分類學及實驗	Plant Taxonomy and Experiment	U	A+B	S	3	AD	2	生科系 Dept. of Life Sciences	
生物顯微技術	Biological Microtechnique	U	A+B	S	3	AB	2	生科系 Dept. of Life Sciences	限修15人 Limited to 15 students
生物化學實驗	Biochemistry Exercise	U	A+B	S	2	B	2	生科系 Dept. of Life Sciences	
太古生物學概論	Introduction to the Archaea	U	A	S	2	EF	2	生科系 Dept. of Life Sciences	
生物資源概論	Introduction of Bioeconomics	U	A	S	2	D	2	生科系 Dept. of Life Sciences	
植物形態學	Plant Morphology	U	A	S	3	D	2	生科系 Dept. of Life Sciences	
植物解剖學	Plant Anatomy	U	A	S	2	DE	2	生科系 Dept. of Life Sciences	英文/EMI
組織學	Histology	U	A	S	2	DE	2	生科系 Dept. of Life Sciences	
組織學實驗	Laboratory of Histology	U	B	S	1	BDE	2	生科系 Dept. of Life Sciences	
脊椎動物比較解剖	Comparative Anatomy of the Vertebrates	U	A+B	S	4	BDE	2	生科系 Dept. of Life Sciences	
人體內部構造與功能	Human Anatomy and Physiology	U	A	S	2	E	2	生科系 Dept. of Life Sciences	
人體內部構造與功能實驗	Laboratory of Human Anatomy and Physiology	U	B	S	1	BE	2	生科系 Dept. of Life Sciences	
植物組織構造與功能	Plant Tissue Structure and Function	U	A	S	2	E	2	生科系 Dept. of Life Sciences	
孢粉學	Palynology	U	A	S	2	ABD	2	生科系 Dept. of Life Sciences	

水域生態調查	Aquatic Ecological Census Techniques	U	A+B	S	3	BCD	2	生科系 Dept. of Life Sciences	
生物科學產業介紹	Introduction to Biological Sciences Industry	U	A	S	2	ACDEF	2	生科系 Dept. of Life Sciences	
鯨豚生物學概論	An Introduction to Cetacean Biology	U	A	S	2	CD	2	生科系 Dept. of Life Sciences	
基礎細胞生物學	Fundamental Cell Biology	U	A	S	2	AE	2	生科系 Dept. of Life Sciences	英文/EMI
生命科學研究簡介	Introduction of research in life science	U	A	Y	2	AB	2	生科系 Dept. of Life Sciences	
保育生物學	Conservation Biology	U	A	S	3	C	2	生科系 Dept. of Life Sciences	
分子醫學概論	Introduction of Molecular Medicine	U	A	S	2	A	2	生科系 Dept. of Life Sciences	
實驗室安全衛生	Laboratory Safety and Health	U	A	S	1	A	2	生科系 Dept. of Life Sciences	
植物生殖生物學	Plant reproductive biology	U	A	S	2	D	2	生科系 Dept. of Life Sciences	
恐龍的演化與生物學	Evolution and Paleobiology of the Dinosaurs	U	A	S	2	ACD	2	生科系 Dept. of Life Sciences	
EMI普通生物學	EMI General Biology	U	A	S	3	AB	2	生科系 Dept. of Life Sciences	英文/EMI
生命科學家的程式設計入門	An Introduction to Programming for Life Scientists	U	A+B	S	2	AC	2	生科系 Dept. of Life Sciences	
專題研究	Research Methodology	U	C	Y	2	BC	2下3上	生科系 Dept. of Life Sciences	先修科目:實驗室安全衛生 Prerequisites:Laboratory Safety and Health
無脊椎動物學	Invertebrate Zoology1	U	A	S	3	DE	3	生科系 Dept. of Life Sciences	
無脊椎動物學實驗	Invertebrate Zoology Laboratory	U	B	S	1	BD	3	生科系 Dept. of Life Sciences	
魚類多樣性	The Diversity of Fishes	U	A	S	3	DE	3	生科系 Dept. of Life Sciences	
生態環境評估	Ecological Impact Analysis	U	A	S	2	D	3	生科系 Dept. of Life Sciences	
生態環境評估實驗	Ecological Impact Analysis Laboratory	U	B	S	1	BD	3	生科系 Dept. of Life Sciences	
植物生態生理學	Plant Eco-physiology	U	A	S	2	DE	3	生科系 Dept. of Life Sciences	
博物館與生物多樣性	Museum Collections and Biodiversity	U	A+B	S	3	D	3	生科系 Dept. of Life Sciences	限修15人 Limited to 15 students 暑期授課 Summer course
動物行為學	Animal Behaviour	U	A	S	3	D	3	生科系 Dept. of Life Sciences	
畢業論文	Bachelor Thesis	U	C	Y	3	ABC	3	生科系 Dept. of Life Sciences	先修科目:實驗室安全衛生 Prerequisites:Laboratory Safety and Health
植物生理學實驗	Experiments of Plant Physiology	U	B	S	1	BE	3	生科系 Dept. of Life Sciences	
動物生理學實驗	Laboratory of Animal Physiology	U	B	S	1	BE	3	生科系 Dept. of Life Sciences	
植物組織培養及實驗	Plant Tissue Culture & Exercise	U	A+B	S	3	BE	3	生科系 Dept. of Life Sciences	
免疫學	Immunology	U	A	S	3	E	3	生科系 Dept. of Life Sciences	
胚胎幹細胞學	Embryonic Stem Cells	U	A	S	3	E	3	生科系 Dept. of Life Sciences	

幹細胞與醫學特論	Special Topics in Stem Cell and Medicine	U	A	S	3	EF	3	生科系 Dept. of Life Sciences	
植物生物化學	Plant Biochemistry	U	A	S	2	EF	3	生科系 Dept. of Life Sciences	
神經生理學	Neurophysiology	U	A	S	3	E	3	生科系 Dept. of Life Sciences	
發育生物學	Developmental Biology	U	A	S	3	E	3	生科系 Dept. of Life Sciences	
生藥學	Pharmacognosy	U	A	S	3	F	3	生科系 Dept. of Life Sciences	
生物物理化學	Biophysical Chemistry	U	A	S	3	E	3	生科系 Dept. of Life Sciences	
植物荷爾蒙學	Plant Hormones	U	A	S	2	EF	3	生科系 Dept. of Life Sciences	
植物水分生理學	Plant Water Relations	U	A	S	2	E	3	生科系 Dept. of Life Sciences	
運動生物學	Sports Biology	U	A	S	2	E	3	生科系 Dept. of Life Sciences	
生態學實驗	Laboratory of Ecology	U	B	S	2	BD	3	生科系 Dept. of Life Sciences	限修20人 Limited to 20 students 先修課目:生態學(或同 學期修課) Prerequisites:Ecology
海洋生態學	Marine Ecology	U	A+B	S	4	D	3	生科系 Dept. of Life Sciences	
蝦蟹多樣性	Diversity of Shrimps and Crabs	U	A	S	3	D	3	生科系 Dept. of Life Sciences	限修20人 Limited to 20 students
腫瘤細胞學	Cancer Cell Biology	U	A	S	2	E	3	生科系 Dept. of Life Sciences	
行為生態學	Behavioral Ecology	U	A	S	2	D	3	生科系 Dept. of Life Sciences	
植物胚胎學	Plant Embryology	U	A	S	2	E	3	生科系 Dept. of Life Sciences	
濕地生態學	Wetland Ecology	U	A	S	3	D	3	生科系 Dept. of Life Sciences	
植物生態學	Plant Ecology	U	A	S	3	AC	3	生科系 Dept. of Life Sciences	
生物田野調查技術	Technology for Biological Field Study	U	A+B	S	3	ABCD	3	生科系 Dept. of Life Sciences	限修6人 Limited to 6 students
生物物理導論(一)	Introduction to Biophysics (I)	U	A	S	3	ABC	3	生科系 Dept. of Life Sciences	
生物流體力學	Biological Fluid Mechanics	U	A	S	3	ABC	3	生科系 Dept. of Life Sciences	
生物力學簡介	Concepts of Biomechanics	U	A	S	3	ABC	3	生科系 Dept. of Life Sciences	
如何閱讀與講演生命科學期刊論文	How to Read and Present Journal Paper of Life Sciences	U	A	S	1	C	3	生科系 Dept. of Life Sciences	
野生動物經營管理	Wildlife Management	U	A+B	S	3	BCD	3	生科系 Dept. of Life Sciences	
應用微生物學	Applied Microbiology	U	A	S	2	EF	3	生科系 Dept. of Life Sciences	
動物細胞培養技術與應用(一)	Animal Cell Culture Techniques and Application (I)	U	A	S	2	AB	3	生科系 Dept. of Life Sciences	
動物細胞培養技術與應用(二)	Animal Cell Culture Techniques and Application (II)	U	A	S	2	AB	3	生科系 Dept. of Life Sciences	
動物行為學實驗	Practices in Animal Behavior	U	B	S	1	BD	3	生科系 Dept. of Life Sciences	

蛛形綱學	Arachnid Biology	U	A	S	2	DE	3	生科系 Dept. of Life Sciences	
遺傳疾病之基因檢驗	Genetic testing for hereditary diseases	U	A	S	3	BF	3	生科系 Dept. of Life Sciences	
疾病治療診斷工具	Disease Theranostics Methods and Protocols	U	A	S	3	ACE	3	生科系 Dept. of Life Sciences	
植物生態生理學實驗	Plant Eco-Physiology Laboratory	U	B	S	1	BDEF	3	生科系 Dept. of Life Sciences	
新興生物產業之問題與解析	Challenges and Resolution of Emerging Biological Business	U	A	S	3	ACF	3	生科系 Dept. of Life Sciences	英文/EMI
真菌學概論	Introduction to Mycology	U	A	S	2	AC	3	生科系 Dept. of Life Sciences	
分子傳染病學	Molecular Basis of Infectious Disease	U	A	S	2	AC	3	生科系 Dept. of Life Sciences	
微生物誘病機制學	Microbial Pathogenesis	U	A	S	2	AC	3	生科系 Dept. of Life Sciences	
多組體學之應用	Omics Applications	U	A	S	2	AF	3	生科系 Dept. of Life Sciences	先修科目生物化學或分子生物學 Prerequisites: Biochemistry or Molecular
地球生命簡史	A Brief History of Life on Earth	U	A	S	2	ACD	3	生科系 Dept. of Life Sciences	113-2新增 Added in the 2nd semester of the 2024 academic year
蕨類植物學及實驗	Pteridology and Experiment	U	A+B	S	3	BDE	4	生科系 Dept. of Life Sciences	限修25人 Limited to 25 students
脊椎動物學	Vertebrate Biology	U	A	S	3	DE	4	生科系 Dept. of Life Sciences	
兩生爬蟲類學	Herpetology	U	A	S	2	DE	4	生科系 Dept. of Life Sciences	
哺乳動物學	Mammalogy	U	A	S	2	DE	4	生科系 Dept. of Life Sciences	
哺乳動物學實驗	Mammalogy Laboratory	U	B	S	1	BD	4	生科系 Dept. of Life Sciences	
生物地理學	Biogeography	U	A	S	3	D	4	生科系 Dept. of Life Sciences	
電子顯微鏡概論	Introduction to the Electron Microscopy	U	A	S	2	B	4	生科系 Dept. of Life Sciences	
分子演化學	Molecular Evolution	U	A+B	S	3	D	4	生科系 Dept. of Life Sciences	
溪流生態學	Stream ecology	U	A	S	3	D	4	生科系 Dept. of Life Sciences	
酵素學	Enzymology	U	A	S	2	EF	4	生科系 Dept. of Life Sciences	
循環生理學	Cardiovascular Physiology	U	A	S	2	E	4	生科系 Dept. of Life Sciences	
魚類生理學	Fish Physiology	U	A	S	3	E	4	生科系 Dept. of Life Sciences	
魚類生理學實驗	Laboratory of Fish Physiology	U	B	S	1	BE	4	生科系 Dept. of Life Sciences	
神經免疫學	Neuroimmunology	U	A	S	3	E	4	生科系 Dept. of Life Sciences	
植物荷爾蒙生理	Physiology of Plant Hormone	U	A	S	3	E	4	生科系 Dept. of Life Sciences	
內分泌學	Endocrinology	U	A	S	3	E	4	生科系 Dept. of Life Sciences	
成體幹細胞學導論	Introduction to Adult Messenchymal Stem Cells	U	A	S	3	E	4	生科系 Dept. of Life Sciences	

生物科技產程	Process of Biotechnological Industry	U	A	S	2	F	4	生科系 Dept. of Life Sciences	
微生物遺傳學	Microbial Genetics	U	A	S	3	E	4	生科系 Dept. of Life Sciences	
藥用植物學	Pharmaceutical Botany	U	A	S	2	F	4	生科系 Dept. of Life Sciences	
病毒學	Virology	U	A	S	3	EF	4	生科系 Dept. of Life Sciences	
分子生物學技術(一)	Methods in Biotechnology(I)	U	A+B	S	3	BEF	4	生科系 Dept. of Life Sciences	限修15人 Limited to 15 students 進階課程 Advanced course
分子生物學技術(二)	Methods in Biotechnology(II)	U	A+B	S	3	BEF	4	生科系 Dept. of Life Sciences	限修15人 Limited to 15 students 進階課程 Advanced course
水產生物技術研究方法	Research Methodology of Aquatic-biotechnology	U	A	S	2	BEF	4	生科系 Dept. of Life Sciences	
生物多樣性法規	The Regulations on Biological Diversity	U	A	S	2	AB	4	生科系 Dept. of Life Sciences	
植物生物能量學	Plant Bioenergetics	U	A	S	2	ABCDEF	4	生科系 Dept. of Life Sciences	
野生動物經營管理實務	Practices in Wildlife Management	U	A+B	S	3	BCD	4	生科系 Dept. of Life Sciences	
生命科學與醫材應用	Technologies and Applications of Life Science and Biomaterial	U	A	S	3	ACE	4	生科系 Dept. of Life Sciences	
生物力學專題	Special Topics on Biomechanics	U	A	S	3	ABCDEF	4	生科系 Dept. of Life Sciences	
自然環境中的生物物理	Biophysics in the Natural Environment	U	A	S	3	ABCDEF	4	生科系 Dept. of Life Sciences	
動植物交互作用	Animal and plant interaction	U	A	S	2	ACDE	4	生科系 Dept. of Life Sciences	
群落生態學	Community Ecology	U	A	S	2	ADE	4	生科系 Dept. of Life Sciences	先修科目:生態學 Prerequisites:Ecology
從DNA到生物多樣性	From DNA to Diversity	U	A	S	2	D	4	生科系 Dept. of Life Sciences	進階課程 Advanced course
微生物學操作技術	Experiments of Microbiology	U	A+B	S	2	BED	4	生科系 Dept. of Life Sciences	進階課程 Advanced course
分子發育生物學	Molecular Developmental Biology	U	A	S	3	E	4	生科系 Dept. of Life Sciences	進階課程 Advanced course
生物資訊學暨實習	Bioinformatics-lecture and Experiment	U	A+B	S	2	BF	4	生科系 Dept. of Life Sciences	進階課程 Advanced course
植物訊息傳遞	Plant Signal Transduction	U	A	S	2	CE	4	生科系 Dept. of Life Sciences	進階課程 Advanced course
基礎癌症生物學	Fundamentals of Cancer Biology	U	A	S	2	AE	4	生醫所 Institute of Biomedical Sciences	英文/EMI 進階課程 Advanced course
頭足類生物資源	Cephalopod Biology	U	A	S	3	ACD	4	生科系 Dept. of Life Sciences	進階課程 Advanced course
基因與疾病-神經系統疾病特論	Genes and human diseases – special topics in neurological disorders	U	A	S	3	EF	4	生科系 Dept. of Life Sciences	進階課程 Advanced course
植物逆境分子生理學	Plant Stress and Molecular Physiology	U	A	S	3	BE	4	生科系 Dept. of Life Sciences	進階課程 Advanced course
動物細胞培養	Culture of Animal Cells	U	A	S	1	AB	4	生科系 Dept. of Life Sciences	英文/EMI 進階課程 Advanced course
藥物與腫瘤特論	Special Courses of Drug & Cancer	U	A	S	3	AB	4	生科系 Dept. of Life Sciences	英文/EMI 進階課程 Advanced course
植物荷爾蒙生理學	Plant Hormone Physiology	U	A	S	3	AEF	4	生科系 Dept. of Life Sciences	進階課程 Advanced course

產業微生物育種學	Breeding of Industrial Microorganism	U	A	S	2	F	4	生科系 Dept. of Life Sciences	先修科目:微生物學、應用微生物學 Prerequisites:Microbiology,Applied Microbiology 進階課程
植物分子遺傳學研究方法導論	Introductions to Plant Molecular Genetics Methods	U	A	S	2	BCE	4	生科系 Dept. of Life Sciences	進階課程 Advanced course
生技產業暑期校外實習	Summer Laboratory Practice in Biotech Company	U	A	S	2	B	4	生科系 Dept. of Life Sciences	進階課程 Advanced course
桿狀病毒基因工程學與實驗	Genetic Engineering and Experiment of Baculovirus	U	A+B	S	2	BF	4	昆蟲系 Dept. of Entomology	進階課程 Advanced course
閱讀與講演生物醫學期刊論文概論	Introduction of Reading and Presenting Biomedical Journal Paper	U	A	S	1	C	4	生科系 Dept. of Life Sciences	進階課程 Advanced course
組織工程學	Tissue engineering	U	A	S	2	AF	4	生科系 Dept. of Life Sciences	英文/EMI 進階課程 Advanced course
精準醫學之分子篩檢·診斷與治療	Molecular Screening, Diagnosis and Treatment in Precision Medicine	U	A	S	1	F	4	生科系 Dept. of Life Sciences	進階課程 Advanced course 暑期授課 Summer course 計畫課程 Program course
基因體醫學之技術發展與應用	Genomic Medicine-Technical Development and Application	U	A	S	1	F	4	生科系 Dept. of Life Sciences	進階課程 Advanced course 暑期授課 Summer course 計畫課程 Program course
細胞與基因治療之發展與臨床應用	Development and Clinical Application of Cell and Gene Therapy	U	A	S	1	F	4	生科系 Dept. of Life Sciences	進階課程 Advanced course 暑期授課 Summer course 計畫課程 Program course
精準醫學與AI智能實作	Practice in Precision Medicine and Artificial Intelligence	U	B	S	2	F	4	生科系 Dept. of Life Sciences	進階課程 Advanced course 暑期授課 Summer course 計畫課程 Program course
精準醫學產業實習	Internship in Precision Medicine Industry	U	B	S	1	F	4	生科系 Dept. of Life Sciences	進階課程 Advanced course 暑期授課 Summer course 計畫課程 Program course
精準醫學之創新創業	Innovation and Entrepreneurship in Precision Medicine	U	A	S	1	F	4	生科系 Dept. of Life Sciences	進階課程 Advanced course 計畫課程 Program course
精準醫學國際行銷·經營策略與法規	Precision Medicine: International Marketing, Business Strategy and Regulations	U	A	S	1	F	4	生科系 Dept. of Life Sciences	進階課程 Advanced course 暑期授課 Summer course 計畫課程 Program course
健康大數據之智能應用	Intelligent Application of Health Big Data	U	A	S	1	F	4	生科系 Dept. of Life Sciences	進階課程 Advanced course 暑期授課 Summer course 計畫課程 Program course
精準醫學之高齡科技產業應用	Industrial Application in Gerontechnology	U	A	S	1	F	4	生科系 Dept. of Life Sciences	進階課程 Advanced course 暑期授課 Summer course 計畫課程 Program course
本地跨國精準醫學產業實習	Local Multinational Internship in Precision Medicine Industry	U	B	S	1	F	4	生科系 Dept. of Life Sciences	進階課程 Advanced course 暑期授課 Summer course 計畫課程 Program course
國外精準醫學產業實習	Foreign Internship in Precision Medicine Industry	U	B	S	1	F	4	生科系 Dept. of Life Sciences	進階課程 Advanced course 暑期授課 Summer course 計畫課程 Program course
生化儀器分析	Instrumental Analysis in Biochemistry	U	A	S	3	ACF	4	生化所 Graduate Institute Of Biochemistry	英文/EMI 進階課程 Advanced course
醫用生物技術(二)	Medical Biotechnology(2)	U	A	S	2	ACF	4	生醫所 Institute of Biomedical Sciences	英文/EMI 進階課程 Advanced course
醫學論文實作	Exercised on writing medical research papers	U	A	S	2	ACF	4	生醫所 Institute of Biomedical Sciences	英文/EMI 進階課程 Advanced course

功能性生物學	Functional Biology	U	A	S	2	ACF	4	基資所 Institute of Genomics and Bioinformatics	英文/EMI 進階課程 Advanced course
生物資訊程式設計	Bioinformatics Programming	U	A+B	S	2	ACF	4	基資所 Institute of Genomics and Bioinformatics	英文/EMI 進階課程 Advanced course
散彈槍定序原理與實習	Shotgun Sequencing: Principle and Experiment	U	A+B	S	2	AC	4	基資所 Institute of Genomics and Bioinformatics	英文/EMI 進階課程 Advanced course
圖像解析分子結構實務	Practical Approach of Biomolecular Graphics and Structural Analysis	U	A	S	3	BF	4	生化所 Graduate Institute Of Biochemistry	進階課程 Advanced course
生物醫學資訊資源	Bio-Medical Information Resources	U	A	S	2	ACF	4	生醫所 Institute of Biomedical Sciences	進階課程 Advanced course
毒理學	Toxicology	U	A	S	2	ACE	4	生醫所 Institute of Biomedical Sciences	進階課程 Advanced course
基礎幹細胞生物學	Basic stem cell biology	U	A	S	2	ABCDF	4	分生所 Institute of Molecular Biology	進階課程 Advanced course
學術口頭報告之指導與培訓	Supervision and training of professional oral presentation	U	A	S	2	C	4	生科系 Dept. of Life Sciences	進階課程 Advanced course
大腦可塑性與神經元新生特論	Special topics of neuroplasticity and neurogenesis	U	A	S	2	ABCE	4	生科系 Dept. of Life Sciences	進階課程 Advanced course
老化及老化相關疾病特論	Ageing and Ageing-Associated Diseases	U	A	S	2	CF	4	生科系 Dept. of Life Sciences	先修科目生物化學或分子 生物學 Prerequisites: Biochemistry or Molecular Biology 進階課程 Advanced course 英文/EMI
基因體醫學及分子篩檢	Genomic Medicine and Molecular Screening	U	A	S	2	CF	4	生科系 Dept. of Life Sciences	先修科目生物化學或分子 生物學 Prerequisites: Biochemistry or Molecular Biology 進階課程 Advanced course 英文/EMI
分子醫學導讀	Introduction to Molecular Medicine	U	A	S	2	CF	4	生科系 Dept. of Life Sciences	先修科目生物化學或分子 生物學 Prerequisites: Biochemistry or Molecular Biology 進階課程 Advanced course 英文/EMI
生技創業核心	Foundation of Entrepreneurship Management in Biotech Industry	U	A	S	3	F	4	生科系 Dept. of Life Sciences	進階課程 Advanced course
生技創業實務	Practice on Entrepreneurship in Biotech Industry	U	A	S	3	F	4	生科系 Dept. of Life Sciences	進階課程 Advanced course
生科大師講座(一)	Master Lecture in Life Sciences (I)	U	A	S	2	C	4	生科系 Dept. of Life Sciences	進階課程 Advanced course
生科大師講座(二)	Master Lecture in Life Sciences (II)	U	A	S	2	C	4	生科系 Dept. of Life Sciences	進階課程 Advanced course
系統神經科學	Systemic neuroscience	U	A	S	2	CE	4	生科系 Dept. of Life Sciences	113-2新增 Added in the 2nd semester of the 2024 academic year 進階課程 Advanced course
高等生理學	Advanced physiology	U	A	S	3	CE	4	生科系 Dept. of Life Sciences	113-2新增 Added in the 2nd semester of the 2024 academic year 進階課程 Advanced course
動物對氣候變遷的生理適應	Physiological adaptations of animals to climate change	U	A	S	2	E	4	生科系 Dept. of Life Sciences	113-2新增 Added in the 2nd semester of the 2024 academic year 進階課程 Advanced course

※附註：規劃要點填表說明：(1 到 4 各欄位請填正確代表字母)

Note: Instructions for completing this form are provided below (please provide the correct English alphabet letters in fields 1 to 4)

1 : U-學士課程、M-碩士課程、D-博士課程。1: U-Bachelor's program, M-Master's program, D-Doctoral program.

2 : A-正課、B-實習課、C-台下指導之科目如學生講述或邀請演講之專題討論、專題研究……等。

2: A-Lecture, B-Internship, C-Subjects with private guidance such as student presentations or invited speeches, topic discussions, topic research, etc.

3 : S-學期課、Y-學年課。3: S-Semester course, Y-Year-long course.

4 : 科目 (全期或全年) 總學分數 (請填阿拉伯數字)。4: Total course (full-semester or full-year) credits (in Arabic numerals).

承辦人簽章 Signature of Processing Clerk:

規劃單位主管簽章 Head of Planning Unit:

年 月 日 Date: