

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									
物理化學	Physical Chemistry	M	A	S	4	A		生科系 Dept. of Life Sciences	
科學論文寫作	Writing a Scientific Paper	M	A	S	2	C		生科系 Dept. of Life Sciences	
植物荷爾蒙生理	Physiology of Plant Hormone	M	A	S	3	A		生科系 Dept. of Life Sciences	
植物營養學特論	Plant Nutrition	M	A	S	3	A		生科系 Dept. of Life Sciences	
植物比較形態學	Plant Comparative Morphology	M	A	S	3	AB		生科系 Dept. of Life Sciences	
古生菌學	Archaea	M	A	S	3	A		生科系 Dept. of Life Sciences	
植物氮素代謝	Plant Nitrogen Metabolism	M	A	S	3	AB		生科系 Dept. of Life Sciences	
高等寄生植物生態學	Ecology of Parasitic Flowering Plants	M	A	S	3	A		生科系 Dept. of Life Sciences	
微生物遺傳學	Microbial Genetics	M	A	S	3	A		生科系 Dept. of Life Sciences	
分子細胞生物學	Molecular Cell Biology	M	A	S	2	AB		生科系 Dept. of Life Sciences	
環境生理學文獻選讀	Literature Reading in Environmental Physiology	M	A	S	2	AC		生科系 Dept. of Life Sciences	
植物生理學專題研究 (一) e	Independent Study and Research: Plant Physiology (I)e	M	C	S	2	AC		生科系 Dept. of Life Sciences	
植物生理學專題研究 (一) g	Independent Study and Research: Plant Physiology (I)g	M	C	S	2	AC		生科系 Dept. of Life Sciences	
微生物學專題研究 (一)b	Independent Study and Research: Microbiology (I)b	M	C	S	2	AC		生科系 Dept. of Life Sciences	
分子遺傳學專題研究 (一)	Independent Study and Research: Molecular Genetics (I)	M	C	S	2	AC		生科系 Dept. of Life Sciences	
生物光譜學	Biological Spectroscopy	M	A	S	3	A		生科系 Dept. of Life Sciences	
分子生理學	Molecular Physiology	M	A	S	2	A		生科系 Dept. of Life Sciences	
肌肉蛋白專題研究 (一)	Independent Study and Research: Muscle Proteins (I)	M	C	S	2	AC		生科系 Dept. of Life Sciences	
腫瘤細胞學專題研究(一)	Independent Study and Research: Cancer Biology (I)	M	C	S	2	AC		生科系 Dept. of Life Sciences	
分子胚胎專題研究(一)	Independent Study and Research: Molecular Embryology (I)	M	C	S	2	AC		生科系 Dept. of Life Sciences	
生殖內分泌學	Reproductive Physiology	M	A	S	2	A		生科系 Dept. of Life Sciences	
分子發育生物學特論	Special Topics in Molecular Developmental Biology	M	A	S	3	A		生科系 Dept. of Life Sciences	
肌肉蛋白專題研究 (二)	Independent Study and Research: Muscle Proteins (II)	M	C	S	2	AC		生科系 Dept. of Life Sciences	
腫瘤細胞學專題研究(二)	Independent Study and Research: Cancer Biology (II)	M	C	S	2	AC		生科系 Dept. of Life Sciences	
海洋生物學專題研究(二)	Independent Study and Research: Marine Biology (II)	M	C	S	2	AC		生科系 Dept. of Life Sciences	
分子胚胎專題研究(二)	Independent Study and Research: Molecular Embryology (II)	M	C	S	2	AC		生科系 Dept. of Life Sciences	
高等植物水分生理學	Advanced Plant Water Physiology	M	A	S	2	A		生科系 Dept. of Life Sciences	
微生物生理學	Microbial Physiology	M	A	S	3	AB		生科系 Dept. of Life Sciences	
植物次級代謝物	Plant Secondary Metabolism	M	A	S	3	A		生科系 Dept. of Life Sciences	
微生物遺傳學特論	Special Topics in Microbial Genetics	M	A	S	3	A		生科系 Dept. of Life Sciences	
生物能量學	Bioenergetics	M	A	S	2	A		生科系 Dept. of Life Sciences	
植物生理學專題研究 (二) e	Independent Study and Research: Plant Physiology (II)e	M	C	S	2	AC		生科系 Dept. of Life Sciences	
植物生理學專題研究 (二) g	Independent Study and Research: Plant Physiology (II)g	M	C	S	2	AC		生科系 Dept. of Life Sciences	
微生物學專題研究 (二)b	Independent Study and Research: Microbiology (II) b	M	C	S	2	AC		生科系 Dept. of Life Sciences	
分子酶學特論	Special Topics in Molecular Enzymology	M	A ⁺ B	S	2	AB		生科系 Dept. of Life Sciences	
生物物理學特論	Special Topics in Biophysics	M	A	S	3	AB		生科系 Dept. of Life Sciences	
環境生理學專題討論	Special Topics in Environmental Physiology	M	C	S	2	AC		生科系 Dept. of Life Sciences	
肌肉生理生化	Muscle Physiology and Biochemistry	M	A	S	2	A		生科系 Dept. of Life Sciences	
成體幹細胞學導論	Introduction to Adult Stem Cells	M	A	S	3	A		生科系 Dept. of Life Sciences	
細胞生物學特論	Special Topics in Cell Biology	M	A	S	2	AB		生科系 Dept. of Life Sciences	
免疫學概論	Introduction to Immunology	M	A	S	2	A		生科系 Dept. of Life Sciences	
高等魚類生理學	Advanced Fish Physiology	M	A	S	3	AB		生科系 Dept. of Life Sciences	
比較生理學	Comparative Physiology	M	A	S	3	AB		生科系 Dept. of Life Sciences	
比較生理學專題討論	Special Topics in Comparative Physiology	M	C	S	2	AC		生科系 Dept. of Life Sciences	

分子酶學專題研究 (一)	Independent Study and Research: Molecular Enzymology (I)	M	C	S	2	AC		生科系 Dept. of Life Sciences	
藥物與腫瘤特論	Chemicals and Cancers	M	A	S	3	A		生科系 Dept. of Life Sciences	暑期授課 Summer course 進階課程 Advanced course 英文/EMI
內分泌學研究方法	Methods of Endocrinological Research	M	A	S	2	A		生科系 Dept. of Life Sciences	
分子酶學專題研究 (二)	Independent Study and Research: Molecular Enzymology (II)	M	C	S	2	AC		生科系 Dept. of Life Sciences	
細胞超微結構與功能	Ultrastructures and Functions of Cells	M	A	S	3	A		生科系 Dept. of Life Sciences	
功能及演化形態學	Functional and Evolutionary Morphology	M	A	S	2	AB		生科系 Dept. of Life Sciences	
比較生理學文獻選讀	Literature Reading in Comparative Physiology	M	C	S	2	AC		生科系 Dept. of Life Sciences	
環境生理學	Environmental Physiology	M	A	S	3	AB		生科系 Dept. of Life Sciences	
發育生物學專題研究 (一)	Independent Study and Research: Developmental Biology(1)	M	C	S	2	AC		生科系 Dept. of Life Sciences	
發育生物學專題研究 (二)	Independent Study and Research: Developmental Biology (2)	M	C	S	2	AC		生科系 Dept. of Life Sciences	
內分泌及癌症	Endocrinology and Cancer	M	A	S	3	A		生科系 Dept. of Life Sciences	
酵素動力學	Enzyme Kinetics	M	A ⁺ B	S	2	AB		生科系 Dept. of Life Sciences	
發育生物學研究法	Methods in Developmental Biology	M	A	S	3	A		生科系 Dept. of Life Sciences	
分子發育生物學特論	Special Topics in Molecular Developmental Biology	M	A	S	2	A		生科系 Dept. of Life Sciences	
生物資訊學暨實習	Bioinformatics-Lecture and Experiment	M	A ⁺ B	S	2	AB		生科系 Dept. of Life Sciences	
魚類生理學研究方法	Methods for Fish Physiology	M	A	S	2	A		生科系 Dept. of Life Sciences	
魚類生理學專題研究	Independent Study and Research: Fish Physiology	M	C	S	2	AC		生科系 Dept. of Life Sciences	
生技產業暑期校外實習	Summer Laboratory Practice in Biotech Company	M	B	S	1	AB		生科系 Dept. of Life Sciences	
農桿菌生物學	Agrobacterium Biology	M	A	S	3	A		生科系 Dept. of Life Sciences	
植物逆境分子生理學	Plant Stress and Mmolecular Physiology	M	A	S	3	AB		生科系 Dept. of Life Sciences	進階課程 Advanced course
禽鳥胚胎實驗動物	Avian Embryos as Model Animal	M	A	S	2	A		生科系 Dept. of Life Sciences	
高等植物耐鹽機制	Mechanisms of Salt Tolerance in Higher Plants	M	A	S	2	A		生科系 Dept. of Life Sciences	
滲透壓調控	Osmoregulation	M	A	S	2	A		生科系 Dept. of Life Sciences	
神經幹細胞學	Neural Stem Cells	M	A	S	2	A		生科系 Dept. of Life Sciences	
心血管幹細胞學	Cardiovascular Stem Cells	M	A	S	2	A		生科系 Dept. of Life Sciences	
脊椎動物染色體學	Vertebrates Cytogetics	M	A	S	2	A		生科系 Dept. of Life Sciences	
農桿菌之分子致病機制導論	Introductions of Molecular Mechanisms of Agrobacterium-Mediated Plant Transformation	M	A	S	2	AB		生科系 Dept. of Life Sciences	
水產生物基因資源應用與研究	Study and Application of Aquatic Organism Gene Resource	M	A	S	2	AB		生科系 Dept. of Life Sciences	
水產生物分子育種	Aquatic Biology of Molecular Breeding	M	A	S	1	AB		生科系 Dept. of Life Sciences	
水產生物功能性基因體研究法	Research Method in Functional Genomics of Aquatic Organisms	M	A	S	1	AB		生科系 Dept. of Life Sciences	
分子遺傳學專題研究 (二)	Independent Study and Research: Molecular Genetics (II)	M	C	S	2	AC		生科系 Dept. of Life Sciences	
植物細胞代謝	Plant Cell Metabolism	M	A	S	2	AB		生科系 Dept. of Life Sciences	
生物能量專題研究(一)	Independent Study and Research: Bioenergetics (I)	M	C	S	2	ABC		生科系 Dept. of Life Sciences	
生物能量專題研究 (二)	Independent Study and Research: Bioenergetics (II)	M	C	S	2	ABC		生科系 Dept. of Life Sciences	
動物細胞培養	Culture of Animal Cells	M	A	S	1	B		生科系 Dept. of Life Sciences	進階課程 Advanced course
鳥類生殖生理	Avian Reproductive Physiology	M	A	S	2	AB		生科系 Dept. of Life Sciences	
植物分子遺傳學研究方法導論	Introductions to Plant Molecular Genetics Methods	M	A	S	2	AC		生科系 Dept. of Life Sciences	進階課程 Advanced course
高等教育教學實務(一)	Teaching Practice in Higher Education (1)	M	C	S	0	ABC		生科系 Dept. of Life Sciences	
高等教育教學實務(二)	Teaching Practice in Higher Education (2)	M	C	S	0	ABC		生科系 Dept. of Life Sciences	
植物小分子核醣核酸機制	Mechanism of Small RNA in Plants	M	A	S	3	AB		生科系 Dept. of Life Sciences	
植物生物技術	Plant Biotechnology	M	A	S	3	AB		生科系 Dept. of Life Sciences	
閱讀與講演生物醫學期刊論文概論	Introduction of Reading and Presenting Biomedical Journal Paper	M	A	S	1	C		生科系 Dept. of Life Sciences	進階課程 Advanced course 英文/EMI
植物荷爾蒙生理學	Plant Hormone Physiology	M	A	S	3	AB		生科系 Dept. of Life Sciences	進階課程 Advanced course
生物力學專題	Special Topics on Biomechanics	M	A	S	3	AC		物理系 Dept. of Physics	進階課程 Advanced course

自然環境中的生物物理	Biophysics in the Natural Environment	M	A	S	3	AC		物理系 Dept. of Physics	進階課程 Advanced course
植物訊息傳遞	Plant Signal Transduction	M	A	S	2	AC		生科系 Dept. of Life Sciences	進階課程 Advanced course
植物荷爾蒙生理學文獻導讀(一)	Review Literatures on Plant Hormone Physiology (I)	M	A	S	2	AC		生科系 Dept. of Life Sciences	
植物荷爾蒙生理學文獻導讀(二)	Review Literatures on Plant Hormone Physiology (II)	M	A	S	2	AC		生科系 Dept. of Life Sciences	
血管生理學(一)	Vascular Physiology (I)	M	A	S	2	ABC		生科系 Dept. of Life Sciences	
學術口頭報告之指導與培訓	Supervision and training of professional oral presentation	M	A	S	2	C		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)	M	A	S	2	C		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)	M	A	S	2	C		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	M	A	S	2	ABC		生科系 Dept. of Life Sciences	進階課程 Advanced course
系統神經科學	Systemic neuroscience	M	A	S	2	AB		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	M	A	S	3	AB		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	M	A	S	2	AB		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: