

生命科學系碩士班課程地圖
115學年度入學新生適用

Course Curriculum for Master Students in Life Science (for Students Starting Fall 2026)

共同必修課程 Required Courses(4 Credits)

專題討論 (碩) (2+2 Credits) Seminar

領域核心必修課程 Core Required Courses

生態學與演化領域 Ecology and Evolution	細胞生物暨分子醫學領域 Cellular and Molecular	生理學領域 Physiology
演化生物學 3 (碩博) Evolutionary Biology 進階生態學 3-英(碩博) Advanced Ecology -E	細胞及分子生物學 3(碩博) Cellular and Molecular Biology 實驗生物學研究方法 2 (碩博) Research Methods of Experimental Biology 專題討論 (碩) (0+0 Credits) Seminar	現代生理學 3(碩) Modern Physiology 實驗生理學 2(碩博) Experimental Physiology

領域進階課程(至少選2科) Core Elective Courses (Select at Least Two)

生態學與演化領域 Ecology and Evolution		細胞生物暨分子醫學領域 Cellular and Molecular	生理學領域 Physiology
生物地理學3 (大碩) Biological Geography	森林生態學3-英(大碩) Forest Ecology-E	發育生物學3 (大碩) Developmental Biology	神經生物學3 (大碩) Neurobiology
島嶼生物地理學3 (大碩) Island Biogeography	入侵生物學3 (大碩) Biological Invasions	幹細胞生物學3 (大碩) Stem Cell Biology	內分泌學3 (大碩) Endocrinology
海洋生物學2 (大碩) Marine Biology	地景生態學3-英(大碩) Landscape Ecology-E	蛋白質與酵素化學3 (碩博) Protein and Enzyme Chemistry	比較動物生理學3 (大碩博) Comparative Animal Physiology
海洋生態系統2(大碩) Marine Ecosystem	系統生物學3(大碩) Principles of Systematic Biology	神經生物學3 (大碩) Neurobiology	學習與記憶3 (碩博) Learning and memory
生態演化研究方法2 (碩博) Research Methods in Ecology and Evolution	線性與邏輯迴歸3-英(碩博) Linear and Logistic Regression Models-E	生物技術3 (大碩) Biotechnology	氧化壓力生理學3 (碩博) Oxidative Stress Physiology
實驗設計與資料分析3(碩博) Experimental Design and Data Analysis	野生動物學3-英(大碩) Wildlife Biology-E	訊息傳遞3 (大碩) Signal Transduction	動物生理學特論(一) 2 (碩博) Topics on Animal Physiology (I)
行為生態學3-英 (碩博) Behavioral Ecology-E	統計分析概論3-英 (碩博) Introduction to statistical analysis-E	分子生物學特論2 (碩博) Topics in Molecular Biology	魚類生理學特論3 (碩博) Topics in Fish Physiology
迴歸分析3(碩博) Regression Analysis	植物分類原理與方法3-英 (碩博) Principles and Methods of Plant Taxonomy-E	植物病理3 (大碩) Plant Pathology	
適應與天擇3 (碩博) Adaptation and Natural Selection		癌生物學2 (大碩) Cancer Biology	
族群遺傳與演化3(大碩博) Population Genetics and Evolution	自然碳匯驗證機制與法規研析3 (碩博) Regulatory and Verification Mechanism Analysis for Nature-Based Carbon Sinks	植物細胞組織培養3-英 (大碩) Plant Cell and Tissue Culture-E	
自然碳匯分析3 (大碩) Natural Carbon Sink Analysis	生物統計學概論3-英 (大碩) Introduction to biostatistics-E	生物醫學工程概論3 (大碩) Introduction to Biomedical Engineering	
		生醫材料概論3-英 (大碩) Introduction to Biomaterials -E	

選修課程 Elective Courses

鳥類學 3 (大碩) Ornithology 兩棲爬蟲動物學 2 (大碩) Herpetology 哺乳動物學 2 (大碩) Mammalogy 適應與天擇研討 2 (碩博) Studies in Adaptation and Natural Selection 兩棲爬蟲動物生態與演化 2 (碩博) Ecology and Evolution of Amphibians and Reptiles 昆蟲演化學 3 (大碩) Evolution of Insects 生態演化專題討論 2-英 (碩博) Seminar on Ecology & Evolution-E 植物工廠的概念與體驗學習 2 (大碩) Concept and Experimental Learning of Plant Factory 蕨類植物學 3 (大碩) Pteridology 生態聲學概論與應用 2-英 (碩) Ecoacoustics : Principle and Application-E 野外生態學 3 (大碩) Field Ecology	田野生態調查技術 3 (大碩) Field ecology survey techniques 癌症生物學研究方法 3 (大碩) Biometiology of Cancer Research 基因轉殖 2 (大碩) Transgenic 免疫化學 3 (大碩博) Immunochemistry 神經行為學 3 (大碩博) Neuroethology 分子遺傳學特論 3 (碩博) Topics in Molecular Genetics 藥物開發與轉譯醫學 2 (大碩博)-英 Drug Development and Translational Medicine-E 癌症生物學期刊論述 2-英 (大碩) Oncology Journal reading and discussion-E 病毒學 2 (大碩) Virology 病毒學概論 2-英 (大碩) Introduction in Virology-E 病毒學特論 2-英 (碩博) Topics in Virology-E 森林生理生態學 3 (大碩) Forest Ecophysiology 野生動物經營管理 3-英(大碩) Wildlife Management-E 植被生態學遙測技術 2-英(大碩) Remote Sensing in Vegetation Ecology-E	植物分子生物學特論 2-英(碩博) Topics in Plant Molecular Biology-E 植物分子生物學 2-英(大碩) Plant Molecular Biology-E 全方位生物技術之實作-由微觀分子生物學到巨觀生理學 3-英(碩博) Comprehensive Biotech practice-From Micro Molecular Biology to Macro Physiology-E 神經藥理學 3 (碩博) Neuropharmacology 動物生理學特論(二) 2 (碩博) Topics on Animal Physiology (II) 腦結構學 3 (碩博) Architecture of Brain 骨生物學：基礎及應用 2 (大碩) Basic and Applied Bone Biology 組織學 2-英(大碩) Histology-E 生物顯微技術含實驗 3 (大碩) Biological Microtechnique (including Lab.) 生物資訊相關演算法 3 (大碩) Algorithms in Bioinformatics 生物資訊應用程式語言 3 (大碩) Programming Language in Bioinformatics 生態產業實習 3 (大碩) Internship in Ecological Industry 植物基因工程 3-英 (大碩) Plant Genetic Engineering-E	蛋白質工程 3 (碩博) Protein Engineering 科學論文英文寫作 3 (碩博) Writing Scientific Papers in English 生物醫學研究新知與技術 2 (大碩) The Latest Issues in Biomedical Research and Technology 應用科學引領生物技術產業 2-英 (碩博) Apply Sciences Lead to Biotechnology Industry-E 產業實習 3 (大碩博) Industrial Practice 新藥與中草藥轉譯醫學 2 (大碩博) Translational Medicine — Novel Compounds and Chinese Herbal Medicines 生命科學知識轉化與分享 2-英 (碩) Knowledge Transformation and Dissemination for Life Science-E 生醫晶片製程技術 3 (碩博) Bio-Chips Manufacturing Technology 腦神經行為學特論 3 (碩博) Special Topics in Brain Neurobehavioral Studies
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具備畢業基本資格 (至少24學分)

Graduation (24Credits)

生命科學系博士班課程地圖
115學年度入學新生適用

Course Curriculum for Ph.D. Students in Life Science (for Students Starting Fall 2026)

共同必修課程 Required Courses (8 credits)
專題討論 (博) (2x4 credits) Seminar

領域核心必修課程Core Required Courses				
生態學與演化領域 Ecology and Evolution		細胞生物暨分子醫學領域 Cellular and Molecular	生理學領域 Physiology	
演化生物學 3 (碩博) Evolutionary Biology 進階生態學 3-英 (碩博) Advanced Ecology –E		細胞及分子生物學 3 (碩博) Cellular and Molecular Biology 實驗生物學研究方法 2(碩博) Research Methods of Experimental Biology	動物生理學特論(一)2 (碩博) Topics on Animal Physiology (I) 實驗生理學 2(碩博) Experimental Physiology	
領域進階課程(至少選2科) Core Elective Courses (Select at Least Two)				
生態學與演化領域 Ecology and Evolution		細胞生物暨分子醫學領域 Cellular and Molecular	生理學領域 Physiology	
生態演化研究方法 2 (碩博) Research Methods in Ecology and Evolution 實驗設計與資料分析 3(碩博) Experimental Design and Data Analysis 行為生態學 3-英 (碩博) Behavioral Ecology-E 迴歸分析 3 (碩博) Regression Analysis 適應與天擇 3 (碩博) Adaptation and Natural Selection 族群遺傳與演化 3 (大碩博) Population Genetics and Evolution		統計分析概論 3-英 (碩博) Introduction to statistical analysis-E 線性與邏輯迴歸 3-英 (碩博) Linear and Logistic Regression Models-E 植物分類原理與方法 3-英 (碩博) Principles and Methods of Plant Taxonomy-E 自然碳匯驗證機制與法規研析3 (碩博) Regulatory and Verification Mechanism Analysis for Nature-Based Carbon Sinks	蛋白質與酵素化學 3 (碩博) Protein and Enzyme Chemistry Signal Transduction 分子生物學特論 2 (碩博) Topics in Molecular Biology 科學論文英文寫作 3(碩博) Writing Scientific Papers in English 蛋白質工程 3(碩博) Protein Engineering 訊息傳遞特論3(博) Special Topic on Signal Transduction 全方位生物技術之實作-由微觀分子生物學到巨觀生理學3-英(碩博) Comprehensive Biotech practice-From Micro Molecular Biology to Macro Physiology -E	比較動物生理學3 (大碩博) Comparative Animal Physiology 學習與記憶3 (碩博) Learning and memory 氧化壓力生理學3 (碩博) Oxidative Stress Physiology 魚類生理學特論3 (碩博) Topics in Fish Physiology 動物生理學特論(二) 2 (碩博) Topics on Animal Physiology (II) 神經藥理學 3(碩博) Neuropharmacology 感覺生理學特論 3 (博) Topics in Sensory Physiology 腦生理學特論 3 (博) Topics in Brain Physiology 內分泌學特論3(博) Special Topic on Endocrinology
選修課程 Elective Courses				
適應與天擇研討 2 (碩博) Studies in Adaptation and Natural Selection 兩棲爬蟲動物生態與演化 2 (碩博) Ecology and Evolution of Amphibians and Reptiles 系統演化學特論 3 (博) Topics in principle of phylogenetics 植物生長與發育特論 2 (博) Topics in Plant Growth and Development 石珊瑚分類專論(一) 3 (博) Special Topics on Scleractinian Coral Taxonomy (I) 石珊瑚分類專論(二) 3 (博) Special Topics on Scleractinian Coral Taxonomy (II) 神經行為學 3 (大碩博) Signal Transduction 分子遺傳學特論 3 (碩博) Topics in Molecular Genetics 藥物開發與轉譯醫學 2-英(大碩博) Drug Development and Translational Medicine-E 植物分子生物學特論 2-英(碩博) Topics in Plant Molecular Biology-E		病毒學特論 2-英(碩博) Topics in Virology-E 腦結構學 3(碩博) Architecture of Brain 產業實習 3(大碩博) Industrial Practice 應用科學引領生物技術產業 2-英(碩博) Apply Sciences Lead to Biotechnology Industry -E 新藥與中草藥轉譯醫學 2 (大碩博) Translational Medicine — Novel Compounds and Chinese Herbal Medicines 腦神經行為學特論 3 (碩博) Special Topics in Brain Neurobehavioral Studies 免疫化學 3(大碩博) Immunochemistry 珊瑚礁暨邊緣珊瑚群聚生態系專論3 (博) Special Topics on Coral Diversity and Communities in Marginal Reefs		
具備畢業基本資格 (至少24學分) Graduation (24Credits)				