國立臺灣師範大學生命科學系學士班課程地圖
Course Curriculum for Undergraduate Students in Life Science

114學年度入學新生適用 for Students Starting Fall 2025

必修+選修課程(37學分+59學分)
Required + Elective Courses (37+59 Credits)

校定共同必修課程
Common Required
(32學分)

語文通識(10)
Language
Chinese & English

通識課程(18)
General Education Courses

1.博雅課程(8-14學分)
Liberal Arts Course
人文藝術領域(2)
Humanities and Arts
社會科學領域(2)
Social Sciences
自然科學領域(2)
Natural Sciences
邏輯運算領域(2)
Logic and Computing

2.跨域探索(4-10學分)
Cross-domain Exploration
學院共同課程
College Common Course
跨域專業探索課程
Cross-domain Professional Discovery Course

3.自主學習(0-4學分)
Self-Directed Learning
專題探究
Inquiry Study
MOOCs
MOOCs

體育Ⅰ~Ⅳ(4)
Physical Education I~IV(1)

必修課程 (37學分) Required Courses (37 Credits)

普通生物學甲(一)(二) (3+3)
General Biology A (I)(II)
普通化學實驗(一) (1)
General Chemistry Laboratory(I)
生物化學實驗 (2)
Biochemistry Laboratory
生態學-英/演化論 (3)
Ecology-E/Evolution
植物生理學實驗/動物生理學實驗/細胞及分子生物學實驗 (2)
Plant Physiology Laboratory/Animal Physiology Laboratory/Laboratory Course for Cellular and Molecular Biology

普通生物學實驗甲(一)(二) (1+1)
General Biology Laboratory A (I)(II)
基礎物理/有機化學/基礎微積分(3)
Fundamental Physics/Organic Chemistry/Basic Calculus
遺傳學 (3)
Genetics
分子生物學/細胞生物學 (3)
Molecular Biology/ Cell Biology

普通化學乙 (3)
General Chemistry B
生物化學 (4)
Biochemistry
專題研究(一) (2)
Individual Studies in Biology (I)
植物生理學/動物生理學 (3)
Plant Physiology/Animal Physiology

選修課程 (38~59學分) Elective Courses (38~59 Credits)

初階選修課程 General Elective Courses

基礎物理實驗 (1)
Fundamental Physics Laboratory
脊椎動物學/實驗 (3/1)
Vertebrate Zoology/ Laboratory
人體生理學 (3)
Human Physiology
生理學研究概論 (2)
Introduction to Research on Physiology
魚類學 (3)
Ichthyology
藥理學導論 (2)
Introduction of Pharmacology

有機化學實驗 (1)
Organic Chemistry Laboratory
種子植物分類學/實驗 (3/1)
Taxonomy of Seed-Plants/ Laboratory
保育生物學導論 (3)
Introduction to Conservation Biology
比較解剖學 (2)
Comparative Anatomy/ Laboratory
免疫學 (3)
Immunology

植物形態學/實驗 (3/1)
Plant Morphology/Laboratory
微生物學/實驗 (3/1)
Microbiology/Laboratory
生態與演化研究概論 (2)
Introduction to Research on Ecology and Evolutionary Biology
生物技術實驗 (1)
Biotechnology Laboratory
專題研究(二) (2)
Individual Studies in Biology (II)
進階專題研究 (3)
Advance Research on Special Topics

無脊椎動物學/實驗 (3/1)
Invertebrate Zoology/Laboratory
昆蟲學/實驗 (2/1)
Entomology/ Laboratory
細胞與分子生物學研究概論 (2)
Introduction to Research on Cellular and Molecular Biology
生物資訊學導論 (3)
Introduction to Bioinformatics
生物統計學 (3)
Biometry
書報討論-英 (2)
Seminar-E

進階選修課程 Advanced Elective Courses

生態演化學領域Ecology and Evolution Biology Field

生物地理學 (3)
Biological Geography
兩棲爬蟲動物學 (2)
Herpetology
入侵生物學 (3)
Biological Invasions
系統生物學 (3)
Principles of Systematic Biology
野生動物學-英 (3)
Wildlife Biology-E
鳥類學 (3)
Ornithology
海洋生態系統 (2)
Marine Ecosystem
蕨類植物學 (3)
Pteridology
野外生態學 (3)
Field Ecology
自然碳匯分析(3)
Natural Carbon Sink Analysis
森林生理生態學(3)
Forest Ecophysiology

哺乳動物學(2)
Mammalogy
海洋生物學 (2)
Marine Biology
森林生態學-英 (3)
Forest Ecology-E
族群遺傳與演化 (3)
Population Genetics and Evolution
地景生態學–英(3)
Landscape Ecology-E
島嶼生物地理學 (3)
Island Biogeography
昆蟲演化學 (3)
Evolution of Insects
田野生態調查技術(3)
Field ecology survey techniques
生態產業實習(3)
Internship in Ecological Industry

生理暨細胞分生領域Physiology, Cellular, and Molecular Biology Field

組織學-英 (2)
Histology-E
發育生物學 (3)
Developmental Biology
病毒學 (2)
Virology
癌生物學 (2)
Cancer Biology
幹細胞生物學(3)
Stem Cell Biology
植物工廠的概念與體驗學習 (2)
Concept and Experimental Learning of Plant Factory
神經生物學 (3)
Neurobiology
免疫化學 (3)
Immunochemistry
植物細胞組織培養-英 (3)
Plant Cell and Tissue Culture-E
植物病理 (3)
Plant Pathology

比較動物生理學(3)
Comparative Animal Physiology
骨生物學：基礎及應用 (2)
Basic and Applied Bone Biology
生物技術(3)
Biotechnology
基因轉殖 (2)
Transgenic
神經行為學 (3)
Neuroethology
內分泌學 (3)
Endocrinology
癌症生物學研究法(3)
Biomethology of Cancer Research
病毒學概論-英 (2)
Introduction in Virology-E
訊息傳遞 (3)
Signal Transduction
植物分子生物學-英(2)
Plant Molecular Biology-E
植物基因工程-英(3)
Plant Genetic Engineering-E

跨領域選修課程 Interdisciplinary Courses

生物顯微技術含實驗 (3)
Biological Microtechnique (including Lab.)
生物醫學研究新知與技術 (2)
The Latest Issues in Biomedical Research and Technology
生物資訊應用程式語言 (3)
Programming Language in Bioinformatics
生物醫學工程概論 (3)
Introduction to Biomedical Engineering

生物資訊相關演算法 (3)
Algorithms in Bioinformatics
產業實習 (3)
Industrial Practice
生醫材料概論-英 (3)
Introduction to Biomaterials-E
癌症生物學期刊論述 2-英 (大碩)
Oncology Journal reading and discussion-E

自然科學探究與實作課程設計-教程課 (2)
Curriculum Design for Scientific Inquiry and Practices
生物探究與實作-教程課(2)
Inquiry and Practice in Biology
藥物開發與轉譯醫學-英(2)
Drug Development and Translational Medicine-E
新藥與中草藥轉譯醫學 (2)
Translational Medicine — Novel Compounds and Chinese Herbal Medicines

自由選修學分：非生科系之課程不得多於21學分 Free Elective Credits： ≤21 Credits

畢業 Graduation (128 Credits)