

# 國立臺灣師範大學生命科學系學士班課程地圖

## Life Science Undergraduate Course Map

111學年度入學新生適用 For the Students Enrolled in 2022

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

大學入門

Introduction to University

Studies

3.自主學習(0-4學分)

Self-Directed Learning

專題探究

Inquiry Study

MOOCs

MOOCs

初階服務學習

Basic Service

Learning

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

書報討論-英/專題研究(2)  
Seminar-E/Research on Special Topics

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(2)  
Introduction to Conservation  
Biology

比較解剖學/實驗(2/1)  
Comparative Anatomy/  
Laboratory

動物分類學(2)  
Principles of Animal Taxonomy

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

野外生態學(3)  
Field Ecology

生物技術實驗(1)  
Biotechnology Laboratory

進階專題研究(3)  
Advance Research on Special  
Topics

無脊椎動物學-英/實驗(3/1)  
Invertebrate Zoology-  
E/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

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

保育生物學(3)  
Conservation Biology

鳥類學(3)  
Ornithology

海洋生態學(2)  
Marine Ecology

哺乳動物學(2)  
Mammalogy

疾病生態學(3)  
Disease Ecology

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

生理暨細胞分子生物學領域 Physiology, Cellular, and Molecular Biology Field

組織學-英(3)  
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

藥理學導論(2)  
Introduction of Pharmacology

神經生物學(3)  
Neurobiology

免疫化學(3)  
Immunochemistry

植物細胞組織培養(3)  
Plant Cell and Tissue Culture

比較動物生理學(3)  
Comparative Animal Physiology

生態生理學(3)  
Ecophysiology

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)  
Biomechanology of Cancer Research

病毒學概論-英(2)  
Introduction in Virology-E

訊息傳遞(3)  
Signal Transduction

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

生物資訊相關演算法(3)  
Algorithms in Bioinformatics

產業實習(3)  
Industrial Practice

癌症生物學期刊論述-英(2)  
Oncology Journal reading and  
discussion-E

自然科學探究與實作課程設計(2)  
Curriculum Design for Scientific Inquiry and Practices

生物探究與實作(2)  
Inquiry and Practice in Biology

藥物開發與轉譯醫學-英(2)  
Drug Development and Translational Medicine-E

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)