



課 綱 Course Outline
生命科學系學士班

中文課程名稱 Course Name in Chinese	植物生理學				
英文課程名稱 Course Name in English	Plant Physiology				
科目代碼 Course Code	LF_20200	班 別 Degree	學士班 Bachelor's		
修別 Type	學程 Program	學分數 Credit(s)	3.0	時 數 Hour(s)	3.0
先修課程 Prerequisite	無				
課程目標 Course Objectives					
了解植物組織結構及其生理功能。					
系教育目標 Dept.'s Education Objectives					
1	培養從事生命科學相關領域之人才 Cultivating talents engaged in life science				
2	培育學生具有自我學習、獨立思考與創新之能力 Fostering students to acquire the capabilities of self-learning, independent thinking, and innovation.				
系專業能力 Basic Learning Outcomes				課程目標與系專業能力相關性 Correlation between Course Objectives and Dept.'s Education Objectives	
A	具備生命科學相關學科之基礎知識 Having the basic knowledge of life science.			●	
B	具備邏輯分析與解決問題的能力 Having the capabilities of logical analysis and problem solving.			○	
C	具備資料整合、數據分析與書面及口頭報告之能力 Having the capabilities of data integration and analysis, and the skills of written and poster presentation.			○	
D	具備終生學習的能力 Having the capability of lifelong learning.				
圖示說明Illustration : ● 高度相關 Highly correlated ○ 中度相關 Moderately correlated					
課程大綱 Course Outline					

- (1) Plant Cells
- (2) Diffusion, Thermodynamics and water potential
- (3) Osmosis
- (4) Photosynthesis
- (5) Absorption of Mineral Salts
- (6) Transport in the Phloem
- (7) Enzymes, Proteins, and amino acids
- (8) Carbon Dioxide Fixation and Carbohydrate Synthesis
- (9) Respiration
- (10) Growth and Development
- (11) Hormones and Growth Regulators
- (12) The Movement in Plants
- (13) The Biological Clock of Plants
- (14) Stress Physiology

資源需求評估 (師資專長之聘任、儀器設備的配合 . . . 等)

Resources Required (e.g. qualifications and expertise, instrument and equipment, etc.)

現有合宜專任師資；購置訂閱植物生理學相關圖書及期刊，提供幻燈機，
投影機等教學用具。

課程要求和教學方式之建議

Course Requirements and Suggested Teaching Methods

由淺入深，介紹植物組織及生理功能，佐以投影片圖文介紹加深學習效果

其他

Miscellaneous