



## 教學計劃表 Syllabus

課程名稱(中文) Course Name in Chinese	植物生理學		學年/學期 Academic Year/Semester	112/2	
課程名稱(英文) Course Name in English	Plant Physiology				
科目代碼 Course Code	LF_20200	系級 Department & Year	學二	開課單位 Course-Offering Department	生命科學系
修別 Type	學程 Program	學分數/時間 Credit(s)/Hour(s)	3.0/3.0		
授課教師 Instructor	/林國知				
先修課程 Prerequisite					
課程描述 Course Description					
教導學生瞭解植物生理如何運行及其如何調節以適應環境。					
課程目標 Course Objectives					
了解植物組織結構及其生理功能。					
圖示說明 Illustration : ● 高度相關 Highly correlated ○ 中度相關 Moderately correlated					
授課進度表 Teaching Schedule & Content					
週次 Week	內容 Subject/Topics			備註 Remarks	
1	Course introduction				
2	Chapter 1 Plant cells and water				
3	Chapter 2 Whole plant water relations				
4	Chapter 3 Root, soils, and nutrient uptake				
5	Chapter 4 Plants and inorganic nutrients				
6	Chapter 6 The dual role of sunlight: Energy and information				
7	Chapter 7 Energy conservation in photosynthesis: Harvesting sunlight				
8	民族掃墓節放假				
9	4/10 期中考試 Midterm Exam				
10	Chapter 8 Energy conservation in photosynthesis: CO <sub>2</sub> assimilation				
11	Chapter 8 Energy conservation in photosynthesis: CO <sub>2</sub> assimilation				
12	Chapter 15 Adaptations to the Environment (C <sub>4</sub> and CAM photosynthesis)				
13	Chapter 9 Allocation, translocation, and partitioning of photoassimilates				
14	Chapter 11 Nitrogen assimilation				
15	Chapter 22 Photomorphogenesis				

16	期末考試	
17	端午節放假	
18	學期複習	

教學策略 Teaching Strategies

- 課堂講授 Lecture
  分組討論 Group Discussion
  參觀實習 Field Trip  
 其他 Miscellaneous:

教學創新自評 Teaching Self-Evaluation

創新教學(Innovative Teaching)

- 問題導向學習(PBL)
  團體合作學習(TBL)
  解決導向學習(SBL)  
 翻轉教室 Flipped Classroom
  磨課師 Moocs

社會責任(Social Responsibility)

- 在地實踐 Community Practice
  產學合作 Industry-Academia Cooperation

跨域合作(Transdisciplinary Projects)

- 跨界教學 Transdisciplinary Teaching
  跨院系教學 Inter-collegiate Teaching

- 業師合授 Courses Co-taught with Industry Practitioners

其它 other:

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學期成績計算及多元評量方式 Grading & Assessments

配分項目 Items	配分比例 Percentage	多元評量方式 Assessments							
		測驗 會考	實作 觀察	口頭 發表	專題 研究	創作 展演	卷宗 評量	證照 檢定	其他
平時成績 General Performance									
期中考成績 Midterm Exam	50%	✓							
期末考成績 Final Exam	50%	✓							
作業成績 Homework and/or Assignments									
其他 Miscellaneous (出席率)	5%	✓							
評量方式補充說明 Grading & Assessments Supplemental instructions									
教科書與參考書目 (書名、作者、書局、代理商、說明) Textbook & Other References (Title, Author, Publisher, Agents, Remarks, etc.)									
Textbook : Introduction to Plant Physiology by Hopkins and Hüner (4ed. 2012)									
Reference : Plant Physiology (4ed. 2006) by Taiz and Zeiger									
課程教材網址(含線上教學資訊, 教師個人網址請列位於本校內之網址) Teaching Aids & Teacher's Website(Including online teaching information. Personal website can be listed here.)									
其他補充說明 (Supplemental instructions)									