

Plant Physiology

Module Information

2022.01, Approved

Summary Information

Module Code	4503YAUBIO
Formal Module Title	Plant Physiology
Owning School	Pharmacy & Biomolecular Sciences
Career	Undergraduate
Credits	20
Academic level	FHEQ Level 4
Grading Schema	40

Teaching Responsibility

LJMU Schools involved in Delivery
LJMU Partner Taught

Partner Teaching Institution

Institution Name
Yunnan Agricultural University

Learning Methods

Learning Method Type	Hours
Lecture	56
Practical	32

Module Offering(s)

Display Name	Location	Start Month	Duration Number Duration Unit
JAN-PAR	PAR	January	12 Weeks

Aims and Outcomes

Aims	Plant physiology is a science that studies the law of plant life activity. Plant life activity is a comprehensive process of substance metabolism, energy transformation, morphogenesis, information transmission and type variation. The module aims to provide students with an understanding of the basic theories and concepts of plant physiology and explores new progress of modern plant physiology and agricultural production. Through practical experiments, students will have the opportunity to master the basic theory and experimental technology of plant physiology.
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After completing the module the student should be able to:

Learning Outcomes

Code	Number	Description
MLO1	1	Explain the basic theory and concept of plant physiology.
MLO2	2	Describe the application of plant physiology to plant research and agricultural production by contact with the actual agricultural production.
MLO3	3	Demonstrate the basic experimental principles and techniques of plant physiology.
MLO4	4	Analyse and solve problems and develop preliminary scientific research ability.

Module Content

Outline Syllabus	The module covers plant physiology including the structure and function of plant cells, water metabolism, mineral nutrition, photosynthesis, respiration, transportation and distribution of organic matter in plants, active substance of plants, vegetative growth of plants, reproductive physiology of plants, physiology of maturation and ageing of plants, and physiology of adversity of plants. Practicals include basic experiments in water, mineral, photosynthesis, respiration, growth, senescence, resistance, growth determination, stress resistance identification and other scientific research simulation training.
Module Overview	
Additional Information	The module is for students to develop an understanding of the biotechnology developments, principles and application in physiology. Students will also develop basic practical skills in plant physiology.

Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Exam	Exam 1	25	2	MLO1, MLO2, MLO3, MLO4
Test	Test	5	0	MLO1, MLO2, MLO3, MLO4
Exam	Exam 2	20	0	MLO1, MLO2, MLO3, MLO4
Exam	Exam 3	15	2	MLO1, MLO2, MLO3, MLO4
Report	Report	25	0	MLO1, MLO2, MLO3, MLO4

Practice	Practice	10	0	MLO1, MLO2, MLO3, MLO4
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Module Contacts

Module Leader

Contact Name	Applies to all offerings	Offerings
Katie Evans	Yes	N/A

Partner Module Team

Contact Name	Applies to all offerings	Offerings
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