

## Liverpool John Moores University

Title: Plant Tissue Culture  
Status: Definitive  
Code: **6504YAUBIO** (127892)  
Version Start Date: 01-08-2021

Owning School/Faculty: Pharmacy & Biomolecular Sciences  
Teaching School/Faculty: Yunnan Agricultural University

Team	Leader
Katie Evans	Y

**Academic Level:** FHEQ6  
**Credit Value:** 10  
**Total Delivered Hours:** 42  
**Total Learning Hours:** 100  
**Private Study:** 58

### Delivery Options

Course typically offered: Semester 1

Component	Contact Hours
Lecture	24
Practical	16

**Grading Basis:** 40 %

### Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Exam	AS1	Exam	70	2
Practice	AS2	Practical experiment	20	
Test	AS3	Experimental conclusion analysis	10	

### Aims

*Plant tissue culture is one of the modern biotechnology courses with high technical content and good application prospects. Through the lectures and experiments of this module, students can realise the position and role of tissue culture technology in the development of modern biotechnology, master the application of this technology in practice, and cultivate innovative and applied talents.*

## Learning Outcomes

After completing the module the student should be able to:

- 1 Discuss the history of tissue culture, and the concept, type and theoretical basis of plant tissue culture.
- 2 Demonstrate basic operation techniques of tissue culture, and good aseptic technique.
- 3 Recognise the status of organisational training in professional learning, build up the confidence to learn and master the application of organisational training in practice.

## Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

EXAM	1	2	3
Practical experiment	1	2	3
Test	1	2	3

## Outline Syllabus

*The module provides an overview of plant tissue culture, composition and preparation of culture media, disinfection and inoculation of explants, basic conditions of plant tissue culture, rapid propagation of plants in vitro and cultivation of virus-free seedlings.*

## Learning Activities

The module content will be delivered through lectures and practical experiments. Theoretical lectures will provide appropriate subject knowledge to support practical application.

## Notes

This module is for students to develop an understanding of the biotechnology developments, principles and application in plant tissue culture. Students will also develop basic practical skills in plant tissue culture.