

Plant Tissue Culture

Module Information

2022.01, Approved

Summary Information

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|---------------------|----------------------------------|
| Module Code | 6504YAUBIO |
| Formal Module Title | Plant Tissue Culture |
| Owning School | Pharmacy & Biomolecular Sciences |
| Career | Undergraduate |
| Credits | 10 |
| Academic level | FHEQ Level 6 |
| Grading Schema | 40 |

Teaching Responsibility

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| LJMU Schools involved in Delivery |
| LJMU Partner Taught |

Partner Teaching Institution

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| Institution Name |
| Yunnan Agricultural University |

Learning Methods

| Learning Method Type | Hours |
|----------------------|-------|
| Lecture | 24 |
| Practical | 16 |

Module Offering(s)

| Display Name | Location | Start Month | Duration Number Duration Unit |
|--------------|----------|-------------|-------------------------------|
| SEP-PAR | PAR | September | 12 Weeks |

Aims and Outcomes

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| 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. |
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After completing the module the student should be able to:

Learning Outcomes

| Code | Number | Description |
|------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MLO1 | 1 | Discuss the history of tissue culture, and the concept, type and theoretical basis of plant tissue culture. |
| MLO2 | 2 | Demonstrate basic operation techniques of tissue culture, and good aseptic technique. |
| MLO3 | 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. |

Module Content

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| 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. |
| Module Overview | |
| Additional Information | 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. |

Assessments

| Assignment Category | Assessment Name | Weight | Exam/Test Length (hours) | Module Learning Outcome Mapping |
|---------------------|----------------------|--------|--------------------------|---------------------------------|
| Exam | Examination | 70 | 2 | MLO1, MLO2, MLO3 |
| Practice | Practical experiment | 20 | 0 | MLO1, MLO2, MLO3 |
| Test | Test | 10 | 0 | MLO1, MLO2, MLO3 |

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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