# Environmental Biotechnology

# Module Information

**2022.01, Approved**

## Summary Information

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|---|---|
| Module Code | 6506YAUBIO |
| Formal Module Title | Environmental Biotechnology |
| Owning School | Pharmacy & Biomolecular Sciences |
| Career | Undergraduate |
| Credits | 10 |
| Academic level | FHEQ Level 6 |
| 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 | 48 |

## Module Offering(s)

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

## Aims and Outcomes

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|---|---|
| Aims | Environmental Biotechnology module focuses on the basic theories and concepts of biotechnology in the environment. The module aims to provide students with a comprehensive understanding of the basic composition of environmental biotechnology, the application methods and techniques of biotechnology in the environment, and an understanding of the significance of these methods for environmental governance and remediation. |

**After completing the module the student should be able to:**

**Learning Outcomes**

| Code | Number | Description |
|---|---|---|
| MLO1 | 1 | Explain the concept of environmental biotechnology. |
| MLO2 | 2 | Demonstrate knowledge of the basic theory of biochemical reaction metrology and biochemical reaction kinetics. |
| MLO3 | 3 | Demonstrate knowledge of the basic theory of biochemical reaction thermodynamics. |

## Module Content

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|---|---|
| Outline Syllabus | The module covers the biological theoretical basis of modern biotechnology, genetic engineering technology, enzyme technology, fermentation engineering and other technical means in environmental pollution, treatment, remediation of new methods, new technologies and the latest developments. Students will learn to make comprehensive use of the basic knowledge and technology to solve some practical problems. |
| Module Overview | |
| Additional Information | The module is designed to cultivate scientific thinking and innovation ability, and to improve theoretical literacy and application skills. The curriculum is designed to summarise the concept and research category of environmental biotechnology, with emphasis on the basic theory and basic knowledge of environmental biotechnology. The module will enable students to understand the basic concepts of environmental biotechnology, increase their awareness of environmental protection, and promote the concepts of protecting and cleaning the environment in the process of environmental governance and restoration in the future. |

## Assessments

| Assignment Category | Assessment Name | Weight | Exam/Test Length (hours) | Module Learning Outcome Mapping |
|---|---|---|---|---|
| Exam | Exam | 50 | 2 | MLO1, MLO2, MLO3 |
| Exam | Test | 10 | 0 | MLO1, MLO2, MLO3 |
| Exam | Exam | 40 | 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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