# Module Proforma

**Approved, 2024.02**

## Summary Information

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|---|---|
| **Module Code** | 7590CATSCI |
| **Formal Module Title** | Sustainable Food Production: Techniques and Practices |
| **Owning School** | Biological and Environmental Sciences |
| **Career** | Postgraduate Taught |
| **Credits** | 15 |
| **Academic level** | FHEQ Level 7 |
| **Grading Schema** | 50 |

## Module Contacts

### Module Leader

| Contact Name | Applies to all offerings | Offerings |
|---|---|---|
| Lucia Galvez Bravo | Yes | N/A |

### Module Team Member

| Contact Name | Applies to all offerings | Offerings |
|---|---|---|

### Partner Module Team

| Contact Name | Applies to all offerings | Offerings |
|---|---|---|
| Rebecca Kent | Yes | N/A |

## Teaching Responsibility

| LJMU Schools involved in Delivery |
|---|
| Biological and Environmental Sciences |

## Partner Teaching Institution

| Institution Name |
|---|
| Centre for Alternative Technology |

## Learning Methods

| Learning Method Type | Hours |
|---|---|
| Lecture | 18 |
| Practical | 9 |
| Seminar | 3 |

## Module Offering(s)

| Offering Code | Location | Start Month | Duration |
|---|---|---|---|
| APR-PAR | PAR | April | 12 Weeks |

## Aims and Outcomes

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|---|---|
| **Aims** | a) Study the actual and potential use, and science, of plant breeding and agricultural technologies to support a sustainable agriculture.<br><br>b) Analyse the impacts of different food production methods on greenhouse gas emissions, carbon sequestration, soil health, biodiversity and ecosystem services.<br><br>c) Appreciate the key scientific advances, debates and uncertainties in the science of sustainable food production. |

## Learning Outcomes

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

| Code | Description |
|---|---|
| MLO1 | Demonstrate a critical understanding of the impacts of different agricultural practices on soil health, biodiversity and yields. |
| MLO2 | Demonstrate a critical understanding of the role of technology in climate change adaptation and mitigation in agriculture. |

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|---|---|
| MLO3 | Critically analyse the performance of an agricultural technology or intervention through data analysis. |
| MLO4 | Present a paper in a scientific format. |

## Module Content

| Outline Syllabus |
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| Impact of crop production on green-house gas emissions, carbon sequestration, soil conservation and ecology, and wider ecosystem services. Science of crop breeding, agroecology and other food production methods and technologies. |

**Module Overview**

| Additional Information |
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| This module can be studied onsite or at distance. |

## Assessments

| Assignment Category | Assessment Name | Weight | Exam/Test Length (hours) | Learning Outcome Mapping |
|---|---|---|---|---|
| Report | Scientific Paper Report | 60 | 0 | MLO1, MLO3, MLO4 |
| Report | Agricultural Technology Brief | 40 | 0 | MLO2, MLO4 |