

Summary Information

Module Code	7510CATSCI
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
Sarah Dalrymple	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
LJMU Partner Taught

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

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

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

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

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	MLO3, MLO4, MLO1
Report	Agricultural Technology Brief	40	0	MLO4, MLO2