

## Module Information

2022.01, Approved

### Summary Information

Module Code	7501CATSCI
Formal Module Title	Sustainability and Adaptation: Concepts and Planning
Owning School	Biological and Environmental Sciences
Career	Postgraduate Taught
Credits	30
Academic level	FHEQ Level 7
Grading Schema	50

### 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	30
Practical	5
Seminar	30

### Module Offering(s)

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

## Aims and Outcomes

Aims	a) Contextualize sustainability and transformational adaptation in view of current environmental changes.b) Appreciate the interconnectedness of the factors involved.c) Make informed decisions during the adaptation transformation planning process, despite uncertainties.d) Discern the wider implications of transformational adaptation on social structures, ecology, land use, trade, resource management, energy provision, governance, health and economic systems through a critical exploration of the primary considerations related to sustainability and environmental change.e) Form a thorough understanding of adaptation transformation planning through facilitated self-reflective practical team exercises.
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**After completing the module the student should be able to:**

### Learning Outcomes

Code	Number	Description
MLO1	1	Form a synthesis of knowledge related to the current discourse around transformational adaptation and mitigation strategies, vulnerability, adaptive capacity, ecosystem services and resilience building in relation to current environmental change;
MLO2	2	Conceive the nature of the interconnectedness of the numerous interactions related to transformation adaptation, sustainability and environmental change;
MLO3	3	Critically analyse the implications of transformational adaptation to environmental change in the wider context of sustainability, equity and well-being provision;
MLO4	4	Evaluate the ethical dilemmas when problem-solving and decision-making, in a general context and in relation to current environmental change;
MLO5	5	Effectively communicate (in written and oral forms) to both peers and a wider audience;
MLO6	6	Reflect critically on team working experience in order to inform self-development and confidence.

## Module Content

Outline Syllabus	Environmental change, Energy provision, Built environment adaptation possibilities (new build & renovation), Ecosystem services and biodiversity enhancement, Atmospheric carbon reduction, Mechanisms of environmental change, Geo-engineering, Transformational adaptation (vulnerability, risk, resilience and adaptive capacity), Health and well-being implications of environmental change, Water security and waste, Food security, Materials, Economic fundamentals and non-growth economic systems, Transportation, Land use, Adaptations needed for climatic changes and weather extremes, Population growth and migration implications for transformational adaptation and sustainability.
Module Overview	
Additional Information	This module is available onsite or at a distance.

## Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Report	Adaptation Report	50	0	MLO1, MLO2, MLO3, MLO4, MLO5, MLO6

Report	Critique Review	50	0	MLO1, MLO3, MLO5
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## Module Contacts

### Module Leader

Contact Name	Applies to all offerings	Offerings
Colm Bowe	Yes	N/A

### Partner Module Team

Contact Name	Applies to all offerings	Offerings
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