

Approved, 2023.01

# **Summary Information**

Module Code	7521CATSCI
Formal Module Title	Applied Research Design
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
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# 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	6
Practical	6
Seminar	6
Tutorial	6
Workshop	6

### Module Offering(s)

Offering Code	Location	Start Month	Duration
SEP-PAR	PAR	September	28 Weeks

#### Aims and Outcomes

Aims A) To support students in understanding critical thinking skills in relation to projects and research, layering and scaffolding progressive layers of understanding. B) To support students in developing a proposal for following a dissertation and to provide them with work-related project and research skills

### Learning Outcomes

After completing the module the student should be able to:

Code	Description
MLO1	Demonstrate advanced understanding to critically analyse, evaluate and apply a variety of intervention, project and research approaches, philosophies and methodologies, e.g. quantitative, qualitative approaches.
MLO2	Form a synthesis of knowledge through critical review, evaluation and synthesis of literature in a given area, as a basis for designing a research project.
MLO3	Critically analyse the strengths and weaknesses of the approach of different studies that have engaged a variety of research strategies and methods.
MLO4	Effectively formulate a research study proposal.

MLO5	Evaluate the ethical dilemmas and risks when problem solving and designing interventions, projects and research.
MLO6	Effectively communicate ideas, proposals and findings to a wider audience.

# Module Content

### **Outline Syllabus**

Philosophical basis of differing research strategies and methods (quantitative, qualitative and design approaches); Applying knowledge about methodologies to appraisal of interventions, projects and research studies; Critical literature reviewing; Constructing research problems and questions; Intervention, project or research design, e.g. survey; longitudinal studies; experiment; construction and design; Sampling and Data collection methods such as interviews ; focus groups ; participant and non-participant observation ; questionnaires , modelling, case studies; ethnography; experimental testing, monitoring; Research design principles; Data analysis: e.g. quantitative analysis; thematic and content analysis of qualitative data; Data presentation; Ethical considerations and research governance (including research governance procedures); Formulating research proposals and preparing for the dissertation

#### Module Overview

#### Additional Information

This Applied Research Design module must be completed before the formal dissertation period starts.

### Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Learning Outcome Mapping
Report	Poster presentation and paper	40	0	MLO2, MLO4
Report	Research Design Proposal	60	0	MLO6, MLO3, MLO2, MLO4, MLO5, MLO1