

Liverpool John Moores University

Title: Applied Research Design
Status: In creation
Code: **7521CATSCI** (130993)
Version Start Date: 01-08-2023

Owning School/Faculty: Biological and Environmental Sciences
Teaching School/Faculty: Centre for Alternative Technology

Team	Leader
Sarah Dalrymple	

Academic Level: FHEQ7
Credit Value: 15
Total Delivered Hours: 30
Total Learning Hours: 150
Private Study: 120

Delivery Options

Course typically offered: Year Long & NS Year Long

Component	Contact Hours
Lecture	6
Practical	6
Seminar	6
Tutorial	6
Workshop	6

Grading Basis: 50 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Presentation	Poster	Poster and supporting paper (300 words)	40	
Report	Proposal	Research Design Proposal (1,800 words)	60	

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:

- 1 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.
- 2 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.
- 3 Critically analyse the strengths and weaknesses of the approach of different studies that have engaged a variety of research strategies and methods.
- 4 Effectively formulate a research study proposal.
- 5 Evaluate the ethical dilemmas and risks when problem solving and designing interventions, projects and research.
- 6 Effectively communicate ideas, proposals and findings to a wider audience.

Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

Poster presentation and paper	2	4					
Research Design Proposal	1	2	3	4	5	6	

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

Learning Activities

Lectures, inquiry, and problem-based group workshops, seminars, tutorials, practical classes.

Notes

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