Module Proforma

Approved, 2022.04

Summary Information

Module Code	7106BRAIN
Formal Module Title	Research Methods and Statistics
Owning School	Psychology
Career	Postgraduate Taught
Credits	20
Academic level	FHEQ Level 7
Grading Schema	50

Module Contacts

Module Leader

Contact Name	Applies to all offerings	Offerings
Magdalena Sliwinska	Yes	N/A

Module Team Member

Contact Name	Applies to all offerings	Offerings
Caroline Brett	Yes	N/A
Samuel Roberts	Yes	N/A
Samantha Brooks	Yes	N/A
Davide Bruno	Yes	N/A
Michael Richter	Yes	N/A

Partner Module Team

Contact Name	Applies to all offerings	Offerings

Teaching Responsibility

LJMU Schools involved in Delivery
Psychology

Learning Methods

Learning Method Type	Hours
Lecture	4
Workshop	36

Module Offering(s)

Offering Code	Location	Start Month	Duration
SEP-CTY	CTY	September	12 Weeks

Aims and Outcomes

Aims	To present students with key statistical methods relevant to the study of brain and behaviour, and to enable them to further develop research skills in order to become independent researchers.

Learning Outcomes

After completing the module the student should be able to:

Code	Description
MLO1	Identify and apply the appropriate statistical test to analyse a dataset
MLO2	Effectively write a research proposal, considering ethical aspects, costs and pathways to impact

Module Content

Outline Syllabus
Descriptive stats, hypothesis testing, false positives and negatives, multiple testing and power calculations,Plus, systematic reviews, meta-analysis, computational skills, experimental design, task management, ethics, and pathways to impact.

Module Overview
On this primarily practical module, you will develop your knowledge and understanding of key research and statistical methods relevant to the study of brain and behaviour which are needed to become independent researchers.

Additional Information
This module builds on the students' previous knowledge on basic statistics and experimental planning acquired during their degrees, in order to help them develop as independent researchers. They will learn to conduct more advanced descriptive statistics, power calculations, and systematic reviews and meta-analyses; different statistical software options (focusing primarily upon R) will be taught. They will also learn to design and plan a research project, considering different types of study, ethical aspects, estimation of costs, time management and task planning, and impact assessment.

Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Learning Outcome Mapping
Centralised Exam	Exam	40	2	MLO1
Report	Research grant proposal	60	0	MLO2