LIVERPOOL JOHN MOORES UNIVERSITY

Forensic Research Methods

Module Information

2022.01, Approved

Summary Information

Module Code	7114NATSCI
Formal Module Title	Forensic Research Methods
Owning School	Biological and Environmental Sciences
Career	Postgraduate Taught
Credits	20
Academic level	FHEQ Level 7
Grading Schema	50

Teaching Responsibility

LJMU Schools involved in Delivery
Biological and Environmental Sciences

Learning Methods

Learning Method Type	Hours
Lecture	6
Workshop	34

Module Offering(s)

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

Aims and Outcomes

Aims	The aim of this module is to provide extensive training in generic research skills and statistical techniques to prepare students for the MSc dissertation and to provide subject specific reporting skills for Forensic Experts.

After completing the module the student should be able to:

Learning Outcomes

Code	Number	Description
MLO1	1	Attain proficiency in professional tasks required of a forensic expert, including writing of standardised reports and statements acceptable for use within the UK Criminal Justice System
MLO2	2	Write a successful research grant proposal which outlines and evaluates the research process to investigate a research question and includes logistics, funding, timetabling, ethics, background.
MLO3	3	Critically evaluate and identify the academic and non-academic impact of an independent piece of academic research and critical analysis of advanced scholarship and published research.
MLO4	4	Learn, criticise and evaluate statistical methods according to the legal requirements to make them robust enough for a court of law and the ethical implications of their use.
MLO5	5	Present ideas in written format suitable for scientific communications by placing the research project into the broader context of the field, including logistics, dissemination and budget.

Module Content

Outline Syllabus	- Library Databases research, plagiarism, Citations.- Forensic report writing- The scientific method: Inquiry, parsimony. Observation, problem, hypothesis, methods, results, conclusion, communication. - Project logistics. Sample, funding, remaining flexible, timeline, ethics,- Presenting posters and presentations – the good and the bad. Publishing – where? Impact factor, quartiles, citation index, R index. Where should I present and why? Authorship order and acknowledgements. How to prepare a manuscript.- Communicating your work outside academia: Creating website, blog, podcast.Use of social media. Use of media. - Developing a research question. Developing ideas. Open and close ended questions. Bias. Read articles and narrow it down. Brainstorming. Feasibility. - Grant applications (assessment). Includes: measuring impact.- CV writing, applying for jobs. Making yourself employable.- The module is designed to develop knowledge of the value of statistical data in forensic science and how this data can be used to draw valid conclusions that can provide with the right interpretation of a set of data to fulfil the legal requirements needed in court.
Module Overview	This module covers grant application, critical appraisal of leading research and data interpretation and evaluation - leading naturally into the dissertation.
Additional Information	The aim of this module is to provide extensive training in forensic specific research skills and statistical techniques to prepare students for the MSc dissertation and to teach them reporting skills for Forensic Experts. It will provide the student with a broad appreciation of research methods and methodology including an understanding of the uses and limitations of different research methods. It will teach the students how to design and execute a research project keeping in mind feasibility, ethics, data protection, and project logistics and funding. In addition, attention will be given to dissemination to both academic and non-academic audiences. Univariate and multivariate statistics will be taught through lectures and online exercises specifically focussed on Forensic Sciences and their applications.

Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Report	Forensic Report	50	0	MLO1, MLO4

Report	Research Grant Application	50	0	MLO2, MLO3, MLO4, MLO5

Module Contacts

Module Leader

Contact Name	Applies to all offerings	Offerings
Satu Valoriani	Yes	N/A

Partner Module Team

Contact Name	Applies to all offerings	Offerings