

Liverpool John Moores University

Title: FORENSIC RESEARCH METHODS
Status: Definitive
Code: **7114NATSCI** (125056)
Version Start Date: 01-08-2021

Owning School/Faculty: Biological and Environmental Sciences
Teaching School/Faculty: Biological and Environmental Sciences

Team	Leader
Julie Roberts	Y
Carlo Meloro	
Helen Burrell	
Carolyne Berry	
James Ohman	
Suzanne McColl	

Academic Level: FHEQ7 **Credit Value:** 20 **Total Delivered Hours:** 40
Total Learning Hours: 200 **Private Study:** 160

Delivery Options

Course typically offered: Semester 1

Component	Contact Hours
Lecture	6
Workshop	34

Grading Basis: 50 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	Forensic	Forensic Practitioner report	50	
Report	Grant	Research Grant Proposal	50	

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.

Learning Outcomes

After completing the module the student should be able to:

- 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
- 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.
- 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.
- 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.
- 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.

Learning Outcomes of Assessments

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

Forensic Report	1	4		
Research Grant Application	2	3	4	5

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.

Learning Activities

This module will consist of lectures and workshops

Notes

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.