

Liverpool John Moores University

Title: RESEARCH METHODS
Status: Definitive
Code: **7101PHASCI** (123663)
Version Start Date: 01-08-2021

Owning School/Faculty: Pharmacy & Biomolecular Sciences
Teaching School/Faculty: Pharmacy & Biomolecular Sciences

Team	Leader
Iain Dykes	Y
Jose Prieto Garcia	
Femi Olorunniji	
Darren Sexton	
Francesca Giuntini	
Imran Saleem	
Steve Enoch	
Mark Wainwright	
Judith Madden	

Academic Level: FHEQ7 **Credit Value:** 20 **Total Delivered Hours:** 31

Total Learning Hours: 200 **Private Study:** 169

Delivery Options

Course typically offered: Semester 1

Component	Contact Hours
Lecture	10
Workshop	21

Grading Basis: 50 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	ResPro	Research Proposal and research pitch. Typical word count: 2500	60	
Portfolio	DataAppr	Data appraisal portfolio. Exercise in concise writing with typical word count of 1500.	40	

Aims

To equip students with the necessary core skills to effectively design, plan, perform and report scientific research.

Learning Outcomes

After completing the module the student should be able to:

- 1 Demonstrate skills in planning research with relevant experimental methodology
- 2 Locate, critically evaluate and reference appropriate scientific literature
- 3 Safely generate, accurately store and appraise the quality of experimental data
- 4 Communicate scientific information in a contextual manner

Learning Outcomes of Assessments

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

Research Proposal and pitch	1	4	2
Data appraisal portfolio	3		

Outline Syllabus

Overview of the scientific method
Designing a research project
Literature searching and referencing
Literature reviewing
Project planning and methodology design
Good laboratory practice
Data analysis, data appraisal and results presentation
Reporting scientific funding
Publishing Research and Protecting Intellectual Property

Learning Activities

Lectures (flipped or traditional) introducing/covering the various topics of the module
Workshops –various contents aligned with topics delivered in the lectures
Directed study and guided study activities on VLE

Notes

Assessment

1. Students will be allocated a specific topic to write a research proposal, which will

assess ability to locate, critically review and reference literature sources as well as their scientific writing skills (LO1, LO2, LO4). This will need to be allocated at the start of the module and will therefore be different to the research project allocation. In parallel, students will produce a 3-minute podcast pitch of their research proposal, which will assess their ability to efficiently convey scientific information.

2. Students will be requested to critically appraise a set of data relevant to their scientific field and report on that in a 2-pages essay.