Liverpool John Moores University

Title:	RESEARCH METHODS IN BIOTECHNOLOGY
Status:	Definitive
Code:	**5110BCBMOL** (126537)
Version Start Date:	01-08-2021
Owning School/Faculty:	Pharmacy & Biomolecular Sciences
Teaching School/Faculty:	Pharmacy & Biomolecular Sciences

Team	Leader
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Academic Level:	FHEQ5	**Credit Value:**	20	**Total Delivered Hours:**	55
Total Learning Hours:	200	**Private Study:**	145		

Delivery Options
Course typically offered: Semester 1

Component	Contact Hours
Lecture	21
Tutorial	12
Workshop	22

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Practice	Practice	Data analysis	40	
Report	Report	Research proposal	60	

Aims

The aim of this module is to equip biotechnology students with essential skills to effectively design, plan and report biotechnology research.

Learning Outcomes

After completing the module the student should be able to:

1	Develop and demonstrate skills in planning research with relevant biotechnology methodology.
2	Identify and evaluate appropriate scientific literature.
3	Develop and apply scientific writing skills.
4	Demonstrate engagement with interpretation and analysis of scientific results/data including the use of appropriate statistical analysis.

Learning Outcomes of Assessments

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

Data analysis	2	4	
Research proposal	1	2	3

Outline Syllabus

Overview of research methods in biotechnology
Literature searching and referencing
Biotechnology project design and planning
Research data analysis
Research data reporting
Publishing research findings
Opportunity to complete the next stage of LJMU's employability programme.

Learning Activities

Material will be delivered through lectures, workshops and tutorials. The lectures will be designed to introduce the various topics of the module listed in the syllabus. Workshops will be delivered to enable the students to develop their analytical/data handling/statistical skills. Tutorials will be linked to assessment tasks and are designed to facilitate student development and learning.

Notes

Through a range of teaching and learning activities this module will provide opportunities for the students to learn, develop and demonstrate a range of key

biotechnology research skills and knowledge.