

## Liverpool John Moores University

Title: PRACTICAL SKILLS IN BIOTECHNOLOGY  
Status: Definitive  
Code: **4111BCBMOL** (126536)  
Version Start Date: 01-08-2021

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

Team	Leader
Baoxiu Qi	Y
Katie Evans	

**Academic Level:** FHEQ4      **Credit Value:** 20      **Total Delivered Hours:** 60  
**Total Learning Hours:** 200      **Private Study:** 140

### Delivery Options

Course typically offered: Semester 1

Component	Contact Hours
Lecture	16
Practical	16
Tutorial	6
Workshop	22

**Grading Basis:** 40 %

### Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Future Focus e-learning task	SAS	Self awareness statement	10	
Test	test	Lab test	60	
Presentation	oral	5 minute oral presentation in tutorial	30	

### Aims

*To facilitate effective study of Biotechnology by providing a foundation in*

*communication and research skills, data handling and IT, laboratory techniques and underpinning theory. The module will be delivered by a mixture of lectures, tutorials, workshops and practicals*

## **Learning Outcomes**

After completing the module the student should be able to:

- 1 Demonstrate laboratory skills competently
- 2 Locate and analyse scientific information from a wide range of sources and communicate this effectively
- 3 Identify and reflect upon the following aspects of personal development: strengths and weaknesses, motivations and values

## **Learning Outcomes of Assessments**

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

Self awareness statement	3	
Practical test	1	
Oral presentation	2	3

## **Outline Syllabus**

*Study skills: The presentation of written material including essays, practical reports and graphs and tabulated data. Oral presentation.*

*Numeracy: Expression of results, significant figures, concepts linked to basic laboratory calculations on concentration, amount, dilution, pH and buffers*

*Information technology: Introduction to LJMU PC network and webpages.*

*Spreadsheets, graphical representation of data, literature searching and use of databases. Word and Excel.*

*General laboratory skills: Health and safety, use of equipment including spectrophotometer, microscope and pipetting, aseptic technique, making up solutions*

## **Learning Activities**

Lectures, workshops, practicals, tutorials

## **Notes**

To facilitate effective study of Biotechnology by providing a foundation in basic methodology, data handling, IT, laboratory techniques and skills and study skills via lectures, practicals, workshops (including IT) and tutorials which are a mixture of academic material and transferable skills. This module will provide an opportunity for

personal development planning.