

Liverpool John Moores University

Title: BIOMEDICAL SKILLS
Status: Definitive
Code: **4101BMBMOL** (122372)
Version Start Date: 01-08-2021

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

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Academic Level: FHEQ4 **Credit Value:** 20 **Total Delivered Hours:** 70
Total Learning Hours: 200 **Private Study:** 130

Delivery Options

Course typically offered: Semester 1 and Summer

Component	Contact Hours
Lecture	25
Practical	21
Tutorial	7
Workshop	16

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Future Focus e-learning task	Self aware	Students will be expected to attempt the self awareness assessment	10	

Category	Short Description	Description	Weighting (%)	Exam Duration
Presentation	Presentn	Within tutorials students will prepare and deliver an oral presentation on a subject relevant to the programme agreed with the tutor	40	
Exam	Prac Test	Students will undertake a laboratory based assessment related to the practical work and statistics workshop	40	1
Reflection	Reflection	Students should reflect on the feedback from any academic feedback to demonstrate self awareness	10	

Aims

This module aims to facilitate effective study of Biomedical Science by providing a foundation in basic methodology, data handling, IT, laboratory techniques and study and transferable skills, including teamwork. This module will provide an opportunity for the self-awareness statement to be completed and for reflection on this.

Learning Outcomes

After completing the module the student should be able to:

- 1 Identify and reflect upon the following aspects of self-awareness in respect of personal development and career planning: strengths and weaknesses, motivations and values, ability to work with others.
- 2 Research a topic and present it to a group of peers using appropriate audiovisual aids.
- 3 Demonstrate skills in performing appropriate laboratory tasks and relevant data analysis

Learning Outcomes of Assessments

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

Self awareness statement	1
Tutorial presentation	2
lab skills test	3
Reflection on feedback	1

Outline Syllabus

Study and Communication Skills: The learning process, types of learner, strategies for study & revision, time management, working in groups, organisation and

leadership. The presentation of written material including essays, graphical & tabular presentation of data. Oral presentation.

Numeracy: Algebra, powers, orders of magnitude and logarithmic scales. Expression of results, significant figures, linear equations. Basic statistics and introduction to the use of computer based data analysis.

Introduction to Health and Safety in the laboratory. Good laboratory practice. Theory and practice of a range of techniques important in Biomedical Science, for example spectroscopy, electrophoresis, chromatography, microscopy,

Concepts linked to basic laboratory calculations on concentration, amount, dilution, pH and buffers. Difference between manual and automated techniques. Record-keeping and the laboratory notebook.

Information Technology: Introduction to the University PC network and University webpages. Word processing and spreadsheets, graphical representation of data, email & the world wide web.

Tutorials will include pastoral care and PDP and focus on written and oral communication, including oral presentations and group work (poster preparation), and may cover numeracy, chemistry, biochemistry, cell biology as necessary. In addition workshops will introduce the work of the careers centre and students will be encouraged to reflect on their careers self awareness statement as part of personal development and career planning.

Learning Activities

Lectures, practicals, workshops and tutorials

Notes

A module which includes regular pastoral support to students through tutorials as well as developing study skills, providing an introduction to the theory and practice of laboratory work and to using the University computer system, and allowing for reflection and self awareness.

No specific benchmarks are available for this module, but the learning outcomes at least meet, if not exceed, those stipulated in the relevant qualification descriptors for a higher education qualification at level 4 as defined by QAA, Sept 2015. The module has also been informed by the benchmark statement for Biomedical Science June 2015.

Intake is every September.

The criteria for admission to the module require that candidates meet the criteria for admission to the BSc Biomedical Science programme (32805).

The final award is Certificate of Professional Development in Biomedical Skills, 20 credits at Level 4.

The students have access to a module Blackboard site and the University's other range of electronic support such as access to the electronic library facilities. The module content is regularly updated on the Blackboard site including contemporary reading lists and links to journal articles. Students have access to the community site for Biomedical Science. All students have access to the module leader through phone contact and email. Module and CPD guides are also provided, which provide

a range of information.

The programme is assessed and run in line with the Academic Framework
<http://www.ljmu.ac.uk/eaqs/121984.htm>

The module is accredited by The Institute for Biomedical Science (Sept 2016- Aug 2021). The module forms part of the BSc Biomedical Science programme (32805) which was reviewed in April 2016.

The methods for improving the quality and standards of learning are as follows:

- Annual monitoring Review;
- Liaison and feedback from the students;
- Reports from External Examiner;
- Programme team ensuring the module reflects the values of the current teaching and learning strategy;
- Module leader updating knowledge and skills to ensure these remain current and relevant.

The module is included in the programme specification for the BSc Biomedical Science programme (32805). The module is aligned with the same BSc Biomedical Science module for annual monitoring and external examining purposes.

There is an optional summer presentation of this module available for degree apprentices.