

## Biomedical Skills

### Module Information

2022.01, Approved

#### Summary Information

Module Code	4101BMBMOL
Formal Module Title	Biomedical Skills
Owning School	Pharmacy & Biomolecular Sciences
Career	Undergraduate
Credits	20
Academic level	FHEQ Level 4
Grading Schema	40

#### Teaching Responsibility

LJMU Schools involved in Delivery
Pharmacy & Biomolecular Sciences

#### Learning Methods

Learning Method Type	Hours
Lecture	25
Practical	21
Tutorial	7
Workshop	16

#### Module Offering(s)

Display Name	Location	Start Month	Duration Number Duration Unit
APR-CTY	CTY	April	12 Weeks
SEP-CTY	CTY	September	12 Weeks

#### Aims and Outcomes

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.
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**After completing the module the student should be able to:**

### Learning Outcomes

Code	Number	Description
MLO1	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.
MLO2	2	Research a topic and present it to a group of peers using appropriate audiovisual aids.
MLO3	3	Demonstrate skills in performing appropriate laboratory tasks and relevant data analysis

### Module Content

Outline Syllabus	<p>Study and Communication Skills: The learning process, types of learner, strategies for study &amp; revision, time management, working in groups, organisation and leadership. The presentation of written material including essays, graphical &amp; 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 &amp; 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.</p>
Module Overview	<p>This module provides a foundation in basic methodology, data handling, IT, laboratory techniques and study and transferable skills, including teamwork.</p>
Additional Information	<p>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 Canvas 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 Canvas 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 <a href="http://www.ljmu.ac.uk/eaqs/121984.htm">http://www.ljmu.ac.uk/eaqs/121984.htm</a> 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.</p>

## Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Future Focus e-learning task	Self awareness statement	10	0	MLO1
Presentation	Tutorial presentation	40	0	MLO2
Centralised Exam	lab skills test	40	1	MLO3
Reflection	Reflection on feedback	10	0	MLO1

## Module Contacts

**Module Leader**

Contact Name	Applies to all offerings	Offerings
Nicholas Bryan	Yes	N/A

**Partner Module Team**

Contact Name	Applies to all offerings	Offerings
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