

Liverpool John Moores University

Title: PRACTICAL AND EMPLOYABILITY SKILLS IN BIOCHEMISTRY
Status: Definitive
Code: **4113BCBMOL** (126730)
Version Start Date: 01-08-2021
Owning School/Faculty: Pharmacy & Biomolecular Sciences
Teaching School/Faculty: Pharmacy & Biomolecular Sciences

| Team | Leader |
|---------------|--------|
| Amanda Reid | Y |
| Kehinde Ross | |
| Andrew Powell | |
| Helen Burrell | |
| Katie Evans | |
| Helen Smalley | |
| Glyn Hobbs | |

Academic Level: FHEQ4 **Credit Value:** 20 **Total Delivered Hours:** 61
Total Learning Hours: 200 **Private Study:** 139

Delivery Options

Course typically offered: Semester 1

| Component | Contact Hours |
|-----------|---------------|
| Lecture | 22 |
| Practical | 10 |
| Tutorial | 5 |
| Workshop | 22 |

Grading Basis: 40 %

Assessment Details

| Category | Short Description | Description | Weighting (%) | Exam Duration |
|------------------------------|-------------------|---|---------------|---------------|
| Exam | Exam | The format of the exam will be given in the module handbook | 60 | 2 |
| Future Focus e-learning task | SA Reflect | Self awareness statement | 10 | |

| Category | Short Description | Description | Weighting (%) | Exam Duration |
|-----------|-------------------|--------------------|---------------|---------------|
| Portfolio | Portfolio | Tutorial portfolio | 30 | |

Aims

To facilitate effective study of Biochemistry by providing a foundation in employability, communication and research skills, data handling, statistics, IT, laboratory techniques and underpinning theory.

Students will have the opportunity to identify and reflect upon aspects of personal development and employability will a strong thread embedded throughout the module. The module will be delivered via a mixture of lectures, practicals, workshops and tutorials.

Learning Outcomes

After completing the module the student should be able to:

- 1 Apply numerical and statistical methods to the presentation and interpretation of scientific data
- 2 Locate and analyse scientific information from a wide range of sources and communicate this effectively
- 3 Demonstrate an understanding of practical methodology
- 4 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.

Learning Outcomes of Assessments

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

| | | | |
|--------------------------|---|---|---|
| Exam | 1 | | |
| Self Awareness Statement | 4 | | |
| Portfolio | 3 | 2 | 4 |

Outline Syllabus

Employability: Careers, PDP, reflection, self awareness in respect of self development, career researching, graduate opportunities for biochemistry graduates.

Study skills: The presentation of written material including essays, practical reports and graphical and tabular presentation of data. Oral presentation.

Numeracy: Algebra, powers, orders of magnitude and logarithmic scales.

Expression of results, significant figures, linear equations. Basic statistics.

Concepts linked to basic laboratory calculations on concentration, amount, dilution, pH and buffers.

Information technology: Introduction to the LJMU PC network and webpages. Word

processing and spreadsheets, graphical representation of data, email and the world wide web.

General laboratory skills: Introduction to health and safety. The laboratory notebook. Laboratory skills such as use of equipment, preparation of solutions and dilutions and measurement of concentration.

Lecture material may include study skills, health and safety, basic laboratory techniques, basic numeracy, basic statistics, spectroscopy, pH and buffers, chromatography and electrophoresis.

Tutorials will include PDP, SWOT, career planning, employability material, literature searching, formative and summative essay writing and oral presentation. Tutorials and workshops will reinforce material delivered in lectures.

Learning Activities

Lectures
Practicals
Workshops
IT workshops
Tutorials

Notes

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