

Liverpool John Moores University

Title: Biology 1
Status: Definitive
Code: **3514IFESG** (124186)
Version Start Date: 01-08-2021

Owning School/Faculty: Engineering
Teaching School/Faculty: Study Group

Team	Leader
Jack Mullett	Y

Academic Level: FHEQ3
Credit Value: 20
Total Delivered Hours: 52.5
Total Learning Hours: 200
Private Study: 147.5

Delivery Options

Course typically offered: Runs Twice - S1 & S2

Component	Contact Hours
Lecture	33
Tutorial	6
Workshop	12

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Exam	AS1	Examination	50	1.5
Report	AS2	Critical review of a research paper. 1000 words	50	

Aims

To provide foundation students with an introduction to biochemistry, cell biology, genetics and ecology in preparation for undergraduate degrees in biological or biochemical sciences. Students will also have an opportunity to critically engage with research and develop their use of scientific writing and analytical thinking

Learning Outcomes

After completing the module the student should be able to:

- 1 Demonstrate an understanding of the key concepts outlined in the syllabus, most notably molecules, cells and genetics.
- 2 Describe and explain biological situations using concise and appropriate language.
- 3 Interpret experimental data from research papers and use a critical and scientific approach to evaluate the hypotheses and conclusions presented in research against evidence

Learning Outcomes of Assessments

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

Examination	1	2
Critical review	2	3

Outline Syllabus

Biologically important molecules- proteins (including enzymes), carbohydrates, lipids, nucleic acids.

Cell Biology - the cell, membrane transport, metabolism (especially respiration), cell division, mitosis, and meiosis.

Inheritance, Variation and ecology - genetics, natural selection, ecosystems.

The scientific method and evaluating scientific research.

Learning Activities

Lectures and seminars will be used to consolidate knowledge of biological concepts. Workshops will allow students to demonstrate application of knowledge. The presentation of facts and data will be a theme throughout learning and teaching. Students will be introduced to scientific literature and the scientific method in preparation for the critical review. They will be asked to read and evaluated both text and data.

Notes

-