Module Definition Form (MDF)

Module code: MOD004894	**Version:** 7 **Date Amended:** 27/Apr/2022

1. Module Title
Core Biology 1

2a. Module Leader
Julia Mantaj

2b. School
School of Life Sciences

2c. Faculty
Faculty of Science and Engineering

3a. Level
4

3b. Module Type
Standard (fine graded)

4a. Credits
15

4b. Study Hours
150

5. Restrictions

Type	Module Code	Module Name	Condition
Pre-requisites:	None		
Co-requisites:	None		
Exclusions:	None		
Courses to which this module is restricted:	Biomedical Science, Bioscience, Bioinformatics degree courses, Life Sciences framework		

LEARNING, TEACHING AND ASSESSMENT INFORMATION

6a. Module Description

The ‘Core Biology 1’ and ‘Core Biology 2’ modules cover the fundamental principles that underpin the study of biology. The content is wide-ranging, introducing the history and philosophy of science as well as key biological theories, knowledge and techniques. ‘Core Biology 1’ covers a range of topics including the scientific method, experimental design and ethics, basic chemistry for the biosciences, and an introduction to genetics, and evolution and biodiversity. Students will also be inducted into the correct methods of working in a laboratory, including use of risk assessments and health and safety best practice.

The module delivery is closely integrated with the personal tutorial sessions, which students have with their personal tutor. Students will thus develop key scientific skills, such as the ability to: write scientifically; find, use and critically evaluate sources of information; and apply correct referencing guidelines with avoidance of plagiarism. Students will also be introduced to the concepts of scientific integrity and intellectual property. Emphasis is also placed on the application of good basic numeracy, IT and communication skills, and the ability to work independently and as part of a team.

6b. Outline Content

- The scientific method, philosophy and ethics
- Scientific integrity, intellectual property and the limits of knowledge
- Basic laboratory techniques and safety in the laboratory
- Experimental design
- Basic chemistry for the biosciences
- Introduction to genetics, evolution and biodiversity
- The application of biological numeracy
- Scientific writing and referencing

6c. Key Texts/Literature

The reading list to support this module is available at: https://readinglists.aru.ac.uk/

6d. Specialist Learning Resources

Suitable Laboratory Space and Equipment

7. Learning Outcomes (threshold standards)		
No.	**Type**	**On successful completion of this module the student will be expected to be able to:**
1	Knowledge and Understanding	Demonstrate an outline knowledge of the scientific method, ethics, experimental design, the history and philosophy of science, and the theories and principles of genetics, evolution and biodiversity.
2	Knowledge and Understanding	Demonstrate an understanding of the chemical principles that underpin biology.
3	Intellectual, practical, affective and transferrable skills	Develop a good scientific writing style, with the ability to find, use and critically evaluate sources of information, apply correct referencing guidelines, with an understanding of intellectual property and scientific integrity including avoidance of plagiarism.
4	Intellectual, practical, affective and transferrable skills	Develop core technical, reflective, and problem-solving skills, with a good understanding of the ethics, risks, and health and safety aspects of working in a laboratory.

8a. Module Occurrence to which this MDF Refers				
Year	**Occurrence**	**Period**	**Location**	**Mode of Delivery**
2026/7	ZZF	Template For Face To Face Learning Delivery		Face to Face

8b. Learning Activities for the above Module Occurrence			
Learning Activities	**Hours**	**Learning Outcomes**	**Details of Duration, frequency and other comments**
Lectures	22	1-4	11 x 2hrs lectures/active learning
Other teacher managed learning	14	1-2,4	5 x 2 hr practicals + 1 x 1 hr introduction + 1 x 1hr revision + 2 x 1 hr test
Student managed learning	114	1-4	Background reading, online activities, preparation for lectures and practicals, and completion of assessments
TOTAL:	150		

9. Assessment for the above Module Occurrence

The assessment for some modules includes a presentation (see below for details on how this particular module is assessed). We recognise that presenting, especially to a large group, can cause significant anxiety or distress for some students. If this may affect you, please contact your Module Leader or the Disability and Neurodiversity Service as early as possible. We will work with you to consider appropriate reasonable adjustments. Depending on your individual needs, these might include, for example, presenting to a smaller group or presenting only to a member of academic staff.

Assessment No.	Assessment Method	Learning Outcomes	Weighting (%)	Fine Grade or Pass/Fail	Qualifying Mark (%)
010	Coursework	1-4	60 (%)	Fine Grade	30 (%)

Coursework: 1500 words

Assessment components for Element 010

Component No.	Assessment Title	Submission Method	Weighting (%)	Components needed for Mark Calculation?
010/1	Essay (1000 words)	Canvas	67 (%)	All
010/2	In-class test (500 words equivalent)	Scheduled Activity: Timetabled assessment task	33 (%)	

Assessment No.	Assessment Method	Learning Outcomes	Weighting (%)	Fine Grade or Pass/Fail	Qualifying Mark (%)
011	Coursework	1-2 4	40 (%)	Fine Grade	30 (%)

In-class test: 1500 words equivalent

In order to pass this module, students are required to achieve an overall mark of 40% (for modules at levels 3, 4, 5 and 6) or 50% (for modules at level 7*).

In addition, students are required to:
(a) achieve the qualifying mark for each element of fine graded assessment as specified above
(b) pass any pass/fail elements

[* the pass mark of 50% applies for all module occurrences from the academic year 2024/25 – see Section 3a of this MDF to check the level of the module and Section 8a of this MDF to check the academic year]