

Module code: MOD009485	Version: 2 Date Amended: 14/Apr/2026
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1. Module Title
Introduction to Life Sciences

2a. Module Leader
Denise Dear

2b. School
Faculty of Engineering, Agri-tech and the Environment at ARU Peterborough

2c. Faculty
ARU Peterborough

3a. Level
3

3b. Module Type
Standard (fine graded)

4a. Credits
30

4b. Study Hours
300

5. Restrictions			
Type	Module Code	Module Name	Condition
Pre-requisites:	None		
Co-requisites:	None		
Exclusions:	None		
Courses to which this module is restricted:			

LEARNING, TEACHING AND ASSESSMENT INFORMATION

6a. Module Description

This module will develop the knowledge, skills and competencies that will prepare you for our portfolio of Life Sciences undergraduate programmes. You will be introduced to key ideas across several areas of life sciences and learn to apply your knowledge of Biology, Chemistry, physics, and Mathematics as you perform practical skills in laboratory sessions, problem solve, collect, analyse and report scientific data. We will build on what you already know, working with you to find and upskill any key areas. Ultimately, you will have to begin your journey toward being an independent learner, but here, the emphasis will be on supporting you to understand the key issues and how to solve them.

6b. Outline Content

- Biology
 - o Structure and function of cells
 - o Structure and function of the molecules of life
 - o Metabolism
 - o Cell division, cell respiration and key processes of living organisms
 - o Transport in cells
 - o Major organ systems of the body
 - o Introduction to genetics
- Chemistry
 - o Atoms, isotopes, and the periodic table
 - o Intermolecular forces
 - o How molecules interact including solubility
 - o Moles, molarity, and molecular mass
 - o Chemical reactions

6c. Key Texts/Literature

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

6d. Specialist Learning Resources

None

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 understanding of the main concepts of biology undertaken in the module.
2	Knowledge and Understanding	Demonstrate an understanding of the main concepts of chemistry undertaken in the module.
3	Intellectual, practical, affective and transferrable skills	Demonstrate an understanding of how to safely undertake a scientific experiment in the lab and relevant laboratory skills.
4	Intellectual, practical, affective and transferrable skills	Process, interpret, present and analyse data to make decisions.
5	Intellectual, practical, affective and transferrable skills	Demonstrate an understanding of the mathematics and physics required to be a successful life scientist, both in the laboratory and in writing up works.
6	Intellectual, practical, affective and transferrable skills	Communicate effectively through the written and spoken word to a variety of audiences.

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	12	1-2	12 x 1 hour of theory
Other teacher managed learning	60	1-6	Structured and supervised tutorials, workshops and laboratory work
Student managed learning	228	1-6	Self-study
TOTAL:	300		

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	1-6	50 (%)	Fine Grade	30 (%)

3000 words or equivalent

Assessment components for Element 010

Component No.	Assessment Title	Submission Method	Weighting (%)	Components needed for Mark Calculation?
010/1	Presentation	Canvas	50 (%)	All
010/2	Lab report	Canvas	50 (%)	

Assessment No.	Assessment Method	Learning Outcomes	Weighting (%)	Fine Grade or Pass/Fail	Qualifying Mark (%)
011	Coursework	1 2 4	50 (%)	Fine Grade	30 (%)

Inclass test 2000 word 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]