

Summary Information

Module Code	3409FNDSCI
Formal Module Title	Building Blocks of Life
Owning School	Biological and Environmental Sciences
Career	Undergraduate
Credits	20
Academic level	FHEQ Level 3
Grading Schema	40

Module Contacts
Module Leader

Contact Name	Applies to all offerings	Offerings
Alun Hughes	Yes	N/A

Module Team Member

Contact Name	Applies to all offerings	Offerings
Julia Nowack	Yes	N/A
Richard Webster	Yes	N/A
Kostas Kiriakoulakis	Yes	N/A
Gareth Weedall	Yes	N/A
Jon Bielby	Yes	N/A
Jennifer Sneddon	Yes	N/A
Chrysanthi Fergani	Yes	N/A

Partner Module Team

Contact Name	Applies to all offerings	Offerings
--------------	--------------------------	-----------

Teaching Responsibility

LJMU Schools involved in Delivery
Biological and Environmental Sciences

Learning Methods

Learning Method Type	Hours
Lecture	24
Practical	9
Workshop	21

Module Offering(s)

Offering Code	Location	Start Month	Duration
SEP-CTY	CTY	September	12 Weeks

Aims and Outcomes

Aims	To provide students with an overview of key concepts in cell biology, including the chemical basis of the biosciences.
-------------	--

Learning Outcomes

After completing the module the student should be able to:

Code	Description
MLO1	Describe the chemical basis of biology
MLO2	Recall the basic structures and functions of cells and subcellular organelles.
MLO3	Summarise the principle classes of biological macromolecules and their utilities within biology.
MLO4	Define the relationship between nucleic acids, proteins and genetic inheritance.
MLO5	Recall the basic concepts of environmental chemistry

Module Content

Outline Syllabus

The chemical basis of the biosciences. Cell structure, including organelles and their roles. The biological macromolecules; proteins, carbohydrates, lipids and nucleic acids. Cellular functions, including: cell membranes and transport; nucleic acids, protein synthesis and genetic inheritance; energy and cellular respiration; photosynthesis; enzymes and their actions. Introduction to environmental chemistry.

Module Overview

This module provides you with an overview of key concepts in cell biology, including the chemical basis of the biosciences. Throughout the module you will gain an understanding of the basic concepts of cell biology and chemistry for the natural sciences, which you will learn through a series of lectures, workshops and practical laboratory sessions.

Additional Information

A core module for Level 3 students on BSc programmes with a foundation year in the School of Biological and Environmental Sciences. Throughout the module you'll gain an understanding of the basic concepts of cell biology and chemistry for the natural sciences, which you'll learn through a series of lectures, workshops and practical laboratory sessions.

Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Learning Outcome Mapping
Centralised Exam	MCQ Exam	50	1.5	MLO2, MLO5, MLO4, MLO1, MLO3
Test	Phased Test	50	0	MLO2, MLO1, MLO3