

### Summary Information

Module Code	4115BCBMOL
Formal Module Title	Introduction to Molecular Biology
Owning School	Pharmacy & Biomolecular Sciences
Career	Undergraduate
Credits	20
Academic level	FHEQ Level 4
Grading Schema	40

### Teaching Responsibility

LJMU Schools involved in Delivery
Pharmacy & Biomolecular Sciences

### Learning Methods

Learning Method Type	Hours
Lecture	30
Practical	15
Tutorial	5
Workshop	7

### Module Offering(s)

Display Name	Location	Start Month	Duration Number Duration Unit
JAN-CTY	CTY	January	12 Weeks

### Aims and Outcomes

Aims	To enable students to understand the importance of the molecular mechanisms underpinning molecular biology. This will then allow for the introduction of omics and model organisms which will be further developed at level 5.
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**After completing the module the student should be able to:**

### Learning Outcomes

Code	Number	Description
MLO1	1	Acquire a knowledge and understanding of the molecular mechanisms of DNA replication, transcription and translation processes and mechanisms of DNA damage and repair.
MLO2	2	Describe the basis of genetics and heredity
MLO3	3	Demonstrate familiarity with and a basic understanding of the techniques used in recombinant DNA technology
MLO4	4	Develop the skills required to communicate scientific ideas in writing to a non-scientific audience

### Module Content

Outline Syllabus	Basic molecular biology: DNA structure/function, histones, prokaryotic and eukaryotic DNA replication, prokaryotic and eukaryotic transcription, translation, operons, post translational modification, DNA repair. Basic genetics and introduction to omics and model organisms. Recombinant DNA technology.
Module Overview	This module enables you to understand the importance of the molecular mechanisms underpinning molecular biology. This will then introduce you to omics and model organisms which will be further developed at Level 5. Tutorials linked to subject material as well as personal development planning are embedded in this module.
Additional Information	To enable students to understand the importance of the molecular mechanisms underpinning molecular biology. This will then allow for the introduction of omics and model organisms which will be further developed at level 5. Tutorials linked to subject material as well as personal development planning are embedded in this module.

### Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Centralised Exam	Exam	60	2	MLO1, MLO2
Report	Individual Newsletter	40	0	MLO3, MLO4

### Module Contacts

#### Module Leader

Contact Name	Applies to all offerings	Offerings
Iain Dykes	Yes	N/A

#### Partner Module Team

Contact Name	Applies to all offerings	Offerings
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