

Summary Information

Module Code	5214NATSCI
Formal Module Title	Developmental Biology
Owning School	Biological and Environmental Sciences
Career	Undergraduate
Credits	20
Academic level	FHEQ Level 5
Grading Schema	40

Module Contacts

Module Leader

Contact Name	Applies to all offerings	Offerings
Mirko Pegoraro	Yes	N/A

Module Team Member

Contact Name	Applies to all offerings	Offerings
James Ohman	Yes	N/A
Rachael Symonds	Yes	N/A
Andrias O'Reilly	Yes	N/A
William Swaney	Yes	N/A

Partner Module Team

Contact Name	Applies to all offerings	Offerings
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Teaching Responsibility

LJMU Schools involved in Delivery
Biological and Environmental Sciences

Learning Methods

Learning Method Type	Hours
Lecture	24
Practical	16
Workshop	16

Module Offering(s)

Offering Code	Location	Start Month	Duration
JAN-CTY	CTY	January	12 Weeks

Aims and Outcomes

Aims	To explain the molecular mechanisms by which animals and plants grow and develop and how this has been advanced with the use of state-of-the-art methodologies. To discuss how the mechanisms of body plan development is conserved across animals. To explain how the study of developmental biology has generated modern transgenic and stem cell biology for the practical benefit of human health.
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Learning Outcomes

After completing the module the student should be able to:

Code	Description
MLO1	Explain the molecular mechanisms underlying embryonic development
MLO2	Evaluate the experimental methodology that can be used in developmental biology
MLO3	Discuss the conservation of the molecular mechanisms controlling body plan development
MLO4	Discuss how recent advances in embryo manipulation can be used in regenerative medicine and animal and plant biotechnology.

Module Content

Outline Syllabus

Theory underlying, and the techniques used to understand, the molecular mechanisms of growth and development of organisms.

Module Overview

This module enables you to learn how state-of-the-art molecular and genetic tools are used to understand mechanisms that regulate the growth and development of organisms. It covers methodology and practical experiments that illuminate the molecular mechanisms that underpin developmental processes.

Additional Information

We explain how state-of-the-art molecular and genetic tools are used to understand mechanisms that regulate the growth and development of organisms. It covers methodology and practical experiments that illuminate the molecular mechanisms that underpin of developmental processes.

Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Learning Outcome Mapping
Centralised Exam	Essays	50	2	MLO3, MLO2, MLO1, MLO4
Report	Practical Report	50	0	MLO3, MLO2, MLO1