

Module Specification

Module Title	Reproductive and Developmental Biology			Module Code	BIO337	
Credit Value	15	Level	6	Mode of Delivery	On Campus	Semester B

Pre-requisite modules	Co-requisite modules	Overlapping modules
SBS009 Human Molecular Biology SBS641 Transmission Genetics	None	None

1) Content Description

Provide a description of the module, as it will appear in the Module Directory and on the Student Information System (approx. 70-80 words).

This module reviews all aspects of reproductive and developmental biology (from molecular and cellular mechanisms to physiology, ecology and evolution). Topics to be addressed will include molecular gametogenesis, fertilization, embryo development, placentation, pregnancy, parturition, lactation, reproductive and parental strategies, reproductive suppression, courtship and sexual selection, and the evolution of reproductive-isolating mechanisms. The module will take a comparative approach to compare and contrast reproductive and developmental mechanisms across a range of vertebrate and invertebrate species.

2) Module Aims

Specify the aims of the module, i.e. the broad educational purposes for offering this module.

The aims of this module are to introduce and then elaborate the current understanding of specific aspects of reproductive and developmental biology. In addition to enhancing the student understanding of the variety and complexity of reproductive and developmental mechanisms, the module aims to provide examples of experimental research that has advanced our knowledge of these fields of biology. At the end of this module, students should understand key processes relating to the study of reproduction and development.

3) Learning Outcomes

Identify the learning outcomes for this module, i.e. knowledge, skills and attributes to be developed through completion of this module. Outcomes should be referenced to the relevant [QAA benchmark statements](#) and the [Framework for Higher Education Qualifications in England, Wales and Northern Ireland \(2008\)](#). The [SEEC Credit Level Descriptors for Further and Higher Education 2003](#) and [Queen Mary Statement of Graduate Attributes](#) should also be used as a guiding framework for curriculum design.

Academic Content:	
A1	
A2	
A3	
A4	

A5	
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Disciplinary skills - able to:	
B1	
B2	
B3	

Attributes:	
C1	

C2	
C3	
C4	
C5	

4) Reading List

Provide an indicative reading list for the module. This should include key texts and/or journals but should not be an exhaustive list of materials.

Johnson M (2013) Essential Reproduction (7th edition). Wiley.
 Gilbert SF (2013) Developmental Biology (10th edition). Sinauer.
 Lodish et al (2012) Molecular Cell Biology (7th edition). WH Freeman.
 Carroll SB, Greenier JK & Weatherbee SD (2005) From DNA to Diversity. Blackwells.
 Freeman S, Herron JC (2004) Evolutionary Analysis. Prentice Hall.
 Martinez Arias A & Stewart A (2002) Molecular Principles of Animal Development. Oxford University Press.
 Biology of Reproduction ISSN 0006-3363
 Reproduction ISSN 1420-1726
 Developmental Biology ISSN 0012-1606

Teaching and Learning Profile		
Provide details of the method of delivery (lectures, seminars, fieldwork, practical classes, etc.) used to enable the achievement of learning outcomes and an indicative number of hours for each activity to give an overall picture of the workload a student taking the module would be expected to undertake. This information will form the Key Information Set for each undergraduate programme and will be used to populate the KIS widget found on the QMUL programme information pages. More information can be found online about KIS. You may also wish to refer to the QAA guidance on contact hours when completing this section.		
Activity Type	KIS Category	Time Spent (in hours)
Lecture	Scheduled	22

Tutorial	Scheduled	8
Guided Independent Study	Independent	120
Total		150

Specify the total module notional study hours. This should be a total of the hours given for each activity. The notional study hours for each academic credit point is 10. A 15 credit point module therefore represents 150 notional study hours.

Activity Type	Total Time Spent (in hours)	Percentage of Time Spent
Scheduled learning and teaching	30	20
Placement	0	0
Independent Study	120	80
Total	150	100

Use the information provided in the box above to specify the total time spent and the percentage time spent in each category of teaching and learning activity.

Assessment Profile

Provide details of the assessment methods used to assess the achievement of learning outcomes.

Description of Assessment	Assessment Type	KIS Category	Duration / Length	Percentage Weighting	Final element of assessment?	Qualifying Mark
Exam	Written Exam	Written	3 h	80	Yes	N/A
Coursework	Written assignment, including Essay	Coursework	10 h	20	Yes	N/A

Qualifying mark: A specified minimum mark that must be obtained in one or more elements of assessment in order to pass a module. **This is in addition to, and distinct from, the requirement to achieve a pass in the module mark to pass the module.**

Reassessment

Provide details of the reassessment methods used, specifying whether reassessment is either standard reassessment or synoptic reassessment.

- Standard Reassessment
 Synoptic Reassessment

Synoptic reassessment details (if you have indicated synoptic reassessment above, please give details)		
Brief Description of Assessment	Assessment Type	Duration / Length of Examination / Coursework

Resit Exam	Written Exam	3 h
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