

Module Specification

Module Title Module Code
Credit Value Level Mode of Delivery Semester B

Pre-requisite modules	Co-requisite modules	Overlapping modules
SBS005 The Diversity of Life or SBS110 Evolution		

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 pattern and process in the evolution of mammals, including: the fossil record; Continental drift; Origin and evolution of mammal-like reptiles; Evolution and classification of monotremes, marsupials and eutherian (placental) mammals; Morphological and molecular approaches to phylogenetic reconstruction; Adaptation in the main orders of eutherian mammals; Evolution of hominids; Current controversies in mammalian evolution.

2) Module Aims

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

This module aims to provide students with an advanced-level knowledge of mammalian evolution from mammal-like reptiles to the extant taxa of monotremes, marsupials and eutherian mammals. It will provide an understanding of the selective forces considered to have shaped mammalian evolution and the radiations that have produced the great variety of behavioural, social, reproductive and morphological and physiological/biochemical adaptations. Students will gain an appreciation of the role of palaeontology in association with modern molecular techniques in deciphering mammalian evolution, and the controversies associated with this. Mammalian evolution is an exciting and fast moving subject area and the module keeps pace with the current literature, sometimes on a week-to-week basis.

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:	
A 1	Discuss and explain the scientific basis of the various topics in mammalian evolution;
A 2	Understand how data obtained from analysis of macromolecules through to behaviour and environmental factors can be integrated to test evolutionary theory;
A 3	Critically review current literature and have an awareness of recent controversies in mammalian evolution;
A 4	Show evidence of the integration of material from other modules and relevant current literature additional to the reading list provided, and original thought where appropriate;
A 5	Plan and compose a scientific essay on a chosen topic in mammalian evolution.

Disciplinary skills - able to:	
B1	Enhance students' general understanding of evolutionary patterns in the fossil record and DNA, and processes underpinning them
B2	Gain an appreciation of the way in which scientific theories develop and are modified, as many aspects of mammal evolution are highly topical and changing

Attributes:	
C1	Enhance students' general scientific understanding and knowledge of through the lecture material and practical's
C2	The module will improve the students' ability to handle data and to extract information from the scientific literature, and to conduct independent study

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.

Benton, M.J. (1997) Vertebrate Palaeontology. 2nd Edition. Chapman & Hall.

Pough, F.H., Janis, C.M. & Heiser, J.B. (2002) Vertebrate Life. 6th Edition. Prentice Hall. Hardback

5) 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
Practicals	Scheduled	12
Total		34

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	34	23
Placement	0	0
Independent Study	116	77
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.

6) Assessment Profile

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

Description of	Assessment Type	KIS Category	Duration/Length	Percentage Weighting	Final element of	Qualifying Mark
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Assessment					assessment	
Written Examination	Examination	Written Exam	3 Hours	80%	Yes	
Coursework	Written Assessment	Coursework		20%	No	

Final element of assessment: The assessment that takes place last. **There should normally be only one element of assessment marked as final unless two assessment or submission dates occur on the same day.**

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 Examination	Written Exam	3 Hours