Section 2 - Module Specification

Module Title	Species: Dinosaurs to DNA					Module Code	BIO397
Credit Value	15	Level	6	Mode of Delivery	On Campus	Semester	Semester A

Pre-requisite modules	Co-requisite modules	Overlapping modules

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).

Understanding the nature of the species and how they are defined is a crucial part of modern biology, especially in the context of biodiversity and conservation. This module will cover all aspects of the correct identification and naming of species and higher groups of organisms (taxonomy) and how these data are used in modern biological research. The work will be both theoretical and practical, with formal lectures and a fieldtrip. and will address both extinct and extant taxa. The content will cover challenges in describing biodiversity and advances in the field

2) Module Aims

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

The aim of this module is to give students a grounding in the methods employed in identifying species and defining evolutionary relationships between them - such information is critical to many fields in biology. The module will include morphological and molecular data, and the use of such data in macroevolutionary analysis, ecology and conservation.

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	Understand the fundamental principles of taxonomy.
A2	Understand the importance of taxonomy to biological studies..
A3	Know how to create and assess taxonomic assignments.
A4	Know the importance of research collections and museums for research.
A5	Understand the importance of data collection and repository, both physical and digital.
A6	Understand the challenges of these disciplines (e.g. defining species limits).
Disciplinary Skills - able to:	
B1	Be able to understand the roles of taxonomy in modern biology.
B2	Be able to critically assess taxonomic identifications.
B3	Be able to deposit, curate and access taxonomic data.
Attributes:	
C1	Engage critically with knowledge – acquire and apply it appropriately.
C2	Connect information from different areas to apply to problems.
C3	Assess changing ideas in science with improved methods and ideas.
C4	Produce scientifically rigorous analyses to be presented in an appropriate manner.
C5	Work individually and in groups

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.

Kitching et al. 1998, Cladistics. Oxford University Press.

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	10
Fieldwork	Scheduled	48
	Total	58

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	58	35
Placement		
Independent Study	92	65
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	Assessment Type	KIS Category	Duration / Length	% Weighting	Final element of assessment?	Qualifying Mark
Practical	Practical Skills Assessment	Practical		30		
Essays	Essays	Coursework		70		

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 Exam	Written Exam	3 hours

Section 3 - Alternative Assessment Arrangements for Associate Students

This section must only be completed if the module will be made available to associate students in Semester A and where the credit value of the "associate" version is the same as for the main version, and the main version is assessed by exam in May which is not available to the associate students. All other aspects of the module specification remain the same as indicated in Section 2 above. To add alternative assessment arrangements please click 'Add Alternative Assessment'.

Section 4a - Half Module for Associate Students (for a half module to be taught in Semester A)

This section must be completed if the proposed module will take place over 2 semesters but will be made available to single-semester associate students in a half-credit format in Semester A. Modules worth less than 30 credits taken over 2 semesters may not be made available in a half-credit format. To add details for the half module please click 'Add Half Module (Semester A)'.

Section 4b - Half Module for Associate Students (for a half module to be taught in Semester B)

This section must be completed if the proposed module will take place over 2 semesters but will be made available to single-semester associate students in a half-credit format in Semester B. Modules worth less than 30 credits taken over 2 semesters may not be made available in a half-credit format. To add details for the half module please click 'Add Half Module (Semester B)'.