Section 2 - Module Specification

Module Title	Ecological Interactions	Module Code BIO293	
Credit Value	15 Level 5 Mode of Delivery On Campus Se	emester Semester B	

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).

In this module you will obtain knowledge of basic ecological principles and learn to integrate theory with empirical observations. You will develop understanding of (i) distribution, growth and regulation of single species populations; (ii) interacting species pairs such as competition, predation, herbivory, parasitism; and (iii) structure and dynamics of multitrophic systems such as food webs, ecological communities and ecosystems. The topics will also cover spatial aspect of ecological systems in the metapopulation and metacommunity context, highlighting relationships between biodiversity, stability and ecosystem function. The module includes lectures and a residential field course.

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 make students familiar with the natural diversity of organisms, the ecological and evolutionary relationships among them and defining how these can be affected by environmental conditions. The module will also explore the consequences of ecological interactions for conservation and resource management. In addition to elemental understanding of ecological data, students will gain practical experience during their independent work and the fieldtrip.

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 <u>QAA benchmark statements</u> and the <u>Framework for Higher Education Qualifications in England</u>, Wales and Northern Ireland (2008). The <u>SEEC</u> <u>Credit</u> <u>Level Descriptors for Further and Higher Education 2003</u> and <u>Queen Mary Statement of Graduate Attributes</u> should also be used as a guiding framework for curriculum design.

Academic Content:		
A 1	understand the drivers of ecological systems from single species to complex communities	
A 2	solid grasp of community assembly rules from mechanistic perspective	
A 3	be familiar with implications for conservation and resource management	

Disciplinary Skills - able to:			
B 1	compare advantages and limitations of basic ecological approaches		
B 2	understand the link between mathematical models and empirical data		

Attributes:		
C 1	acquire and apply knowledge in a rigorous way	
C 2	connect information and ideas within their field of study	
C 3	use quantitative data confidently and competently	
C 4	work individually and in collaboration with others	
C 5	produce analyses which are grounded in evidence	

4) Reading List

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

Krebs, C.J. 2009. Ecology: The Experimental Analysis of Distribution and Abundance. 6th ed. Benjamin Cummings, San Francisco. 655 pp.

Begon, M., Townsend, C. and Harper, J. 2005. Ecology, from individuals to ecosystems, 4th edition. Blackwells.

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 <u>online</u> about KIS. You may also wish to refer to the <u>QAA guidance on contact hours</u> when completing this section.

Activity Type	KIS Category	Time Spent (in hours)
Lecture	Scheduled	22
Fieldwork	Scheduled	32
	Total	54

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	54	36
Placement		
Independent Study	96	64
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
Exam	Written Exam	Written	2.5 hours	75	Yes	
Field course assignment	Field notebook and presentation	Coursework	5 days	25	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 exam	Written Exam	2.5 hours			

Section 3 - Alternative Assessment Arrangements for Associate Students

This section <u>must only</u> 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 <u>Semester A</u>. 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 <u>Semester B.</u> 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)'.