

MODULE SPECIFICATION FORM

Module Title: Conservation Biology	Level: 6	Credit Value: 20
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Module code: SCI602	Cost Centre: GAFS	JACS2 code: F810
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Semester(s) in which to be offered: 6	With effect from: September 2013
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Office use only: To be completed by AQSU:	Date approved: August 2013 Date revised: - Version no: 1
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Existing/New: New	Title of module being replaced (if any):
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Originating Academic area: Chemistry	Module Leader: Joss Bartlett
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Module duration (total hours) 200	Status: core/option/elective Core (identify programme where appropriate):
Scheduled learning & teaching hours 60	
Independent study hours 140	
Placement hours	

Percentage taught by Subjects other than originating Subject (please name other Subjects):	none
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Programme(s) in which to be offered: BSc Geography, Ecology and Environment; Wildlife and Plant Biology.	Pre-requisites per programme (between levels): None
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Module Aims:

examine the science behind the conservation of biodiversity.
allow students to connect concerns with conservation and biodiversity with local and national practice of ecological management.

Expected Learning Outcomes

At the end of this module, students should be able to:

Knowledge and Understanding:

- 1 Analyse the concept of value as applied to ecological resources
- 2 Evaluate the use of criteria for the selection of protected areas
- 3 Critically analyse management issues such as invasions and re-introductions
- 4 Demonstrate their understanding of a variety of types of management or protective designation
- 5 Evaluate the management techniques used for particular examples of ecological resources

Transferable/Key Skills and other attributes:

Use modelling/simulation software
Carry out numerical and graphical analysis of relevant data.

Assessment:

Examples of possible coursework components:

the application of a theme such as reserve designation:
Choose a local example of a Special Area of Conservation (SAC) and explain why the site was designated as part of the UK response to the European Habitats Directive.

Use of a case study such as a population viability analysis using data on an endangered species.

Assessment number	Learning Outcomes to be met	Type of assessment	Weighting	Duration (if exam)	Word count (or equivalent if appropriate)
1	1-5	Coursework	100%		4000

Learning and Teaching Strategies:

The course will be taught through a mixture of lectures, field visits and computer-based simulations. Learning is supported with lecture and other reading material on Moodle.

Syllabus outline:

Introduction: the value and measurement of biodiversity.

Conservation threats:

habitat destruction and fragmentation

invasion by alien species

overexploitation of natural resources

climate change

Measuring and monitoring current status:

rates of extinction

monitoring programmes, particularly the Countryside Surveys

Responses:

Designation of protected areas and networks.

species reintroduction

habitat management

Habitat restoration.

Bibliography

Essential reading:

Hunter ML & Gibbs J (2006) *Fundamentals of conservation biology* Blackwell

Meffe GK, Carroll CR & Groom MJ (2004) *Principles of conservation biology* Sinauer

Alexander M (2012) *Management Planning for Nature Conservation*. Springer

<http://www.ucmp.berkeley.edu/help/taxaform.html> (classification summary)

<https://www.ser.org/> (society for ecological restoration)

<http://www.countrysidesurvey.org.uk>

Other indicative reading:

Primack RB (2002) *Essentials of conservation biology*. Sinauer

Primack RB (2004) *A primer of conservation biology*. Sinauer

Sutherland WJ (2000) *The conservation handbook: techniques in research, management and policy*. Wiley.

Townsend C R (2008) *Ecological Applications: toward a sustainable world*. Blackwell