

MODULE DESCRIPTOR

Module Title

Ecology And Ecosystems

Reference	AS1103	Version	2
Created	August 2021	SCQF Level	SCQF 7
Approved	July 2018	SCQF Points	30
Amended	August 2021	ECTS Points	15

Aims of Module

To provide students with an introduction to ecology, biodiversity and conservation.

Learning Outcomes for Module

On completion of this module, students are expected to be able to:

- 1 Demonstrate knowledge and understanding of some of the major theories that can explain form, distribution and abundance of organisms as well as animal behaviour.
- 2 Demonstrate knowledge and understanding of selected terrestrial and aquatic ecosystems and the dynamics which exist within them.
- 3 Appreciate the importance of biodiversity, understand the factors affecting diversity and ecosystem stability as well as the role of conservation in maintaining and improving these.
- 4 Demonstrate effective teamwork and communications skills

Indicative Module Content

An overview of ecology; Biomes; Adaptation and evolutionary change; Behavioural ecology; Migration; Animal signals and communication; Learning; Selection for individual survival and reproductive success; Population ecology; Population density, dispersion and demographics; Modeling population growth; Ecosystems; Community ecology; Effect of pathogens and community structure; Energy flow and chemical cycling; Food webs; Biodiversity; Diversity and trophic structure; Calculating a biodiversity index; Factors affecting diversity; Extinction risks; Climate change, Alien species; Conservation; Population conservation; Landscape and regional conservation; Sustainable development; Examples of current research including "Citizen Science" projects. Contribution to a module wiki, glossary and an electronic database of animals and plants observed on the RGU campus.

Module Delivery

Theoretical material is delivered by lectures and web based materials with supporting workshops.

Indicative Student Workload	Full Time	Part Time
Contact Hours	48	N/A
Non-Contact Hours	252	N/A
Placement/Work-Based Learning Experience [Notional] Hours	N/A	N/A
TOTAL	300	N/A
Actual Placement hours for professional, statutory or regulatory body		

ASSESSMENT PLAN

If a major/minor model is used and box is ticked, % weightings below are indicative only.

Component 1

Type:	Coursework	Weighting:	50%	Outcomes Assessed:	1, 2
Description:	Essay on set topic				

Component 2

Type:	Coursework	Weighting:	50%	Outcomes Assessed:	3, 4
Description:	Development of a learning resource on a set topic				

MODULE PERFORMANCE DESCRIPTOR

Explanatory Text

The first grade represents Component 1 (CW1) equally weighted with the second, Component 2 (CW2). A minimum of Module Grade D is required to pass the module, with compensation of grade E in Component 1 or Component 2 permitted. Non-submission of either component will result in an NS grade.

Module Grade	Minimum Requirements to achieve Module Grade:
A	AA, AB, BA
B	AC, AD, BB, BC, CA, CB, DA
C	AE, BD, BE, CC, CD, DB, DC, EA, EB
D	CE, DD, DE, EC, ED
E	AF, BF, CF, DF, EE, EF, FA, FB, FC, FD, FE
F	FF
NS	Non-submission of work by published deadline or non-attendance for examination

Module Requirements

Prerequisites for Module	None, in addition to course entry requirements.
Corequisites for module	None.
Precluded Modules	None.

INDICATIVE BIBLIOGRAPHY

- REECE J.B., et al. Campbell Biology. Current Edition. Pearson