

#### **MODULE DESCRIPTOR**

# **Module Title**

Ecology <i>i</i>	٩nd	Ecosystems
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Reference	PL1103	Version	1
Created	May 2022	SCQF Level	SCQF 7
Approved	July 2023	SCQF Points	30
Amended	January 2023	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:

- 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.
- 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.

Module Ref: PL1103 v1

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: 100% Outcomes Assessed: 1, 2, 3, 4

Description: Portfolio to include infographic and evidence of group working.

# **MODULE PERFORMANCE DESCRIPTOR**

### **Explanatory Text**

Component 1 (CW1) comprises 100% of the module grade. A minimum of a Grade D is required to pass the module. Non-submission of either component will result in an NS grade.

Module Grade	Minimum Requirements to achieve Module Grade:
Α	A
В	В
С	С
D	D
E	E
F	F
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**

1 REECE J.B., et al. Campbell Biology. 2019. 10th Edition. Pearson