

MODULE DESCRIPTOR

Module Title

Ecophysiology

Reference	PL2174	Version	2
Created	January 2024	SCQF Level	SCQF 8
Approved	April 2023	SCQF Points	15
Amended	August 2024	ECTS Points	7.5

Aims of Module

To give students a comprehensive understanding of the anatomical differences between types of animals and their physiological adaptations to the environment.

Learning Outcomes for Module

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

- 1 Explain the general anatomical and physiological principles of key taxa in the animal kingdom.
- 2 Explain the anatomical and physiological adaptations to different environments, including extreme environments, of key taxa in the animal kingdom.
- 3 Demonstrate an appreciation of the relationship between environmental specialization of taxa in the animal kingdom, climate change and species extinction.

Indicative Module Content

amphibians, birds, fish, reptiles, mammals; invertebrates; evolution and extinction; nerves, hormones, immunity and inflammation, circulation, digestion, reproduction, temperature control and homeostasis, ventilation, water and electrolyte handling, locomotion; adaptations to arid conditions, high altitude, hibernation, hyperbaric conditions and migration; adaptations to extremes of environment, including temperatures, aquatic or dietary conditions; UN sustainable development goals (SDGs).

Module Delivery

Lectures supported by tutorials, online support material, LT, laboratory practicals, and guided reading.

Indicative Student Workload

	Full Time	Part Time
Contact Hours	40	N/A
Non-Contact Hours	110	N/A
Placement/Work-Based Learning Experience [Notional] Hours	N/A	N/A
TOTAL	150	N/A
<i>Actual Placement hours for professional, statutory or regulatory body</i>		

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
Description:	Scientific Essay				

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 will result in an NS grade.

Module Grade	Minimum Requirements to achieve Module Grade:
A	A
B	B
C	C
D	D
E	E
F	F
NS	Non-submission of work by published deadline or non-attendance for examination

Module Requirements

Prerequisites for Module	Successful completion of Stage 1 of the course or equivalent.
Corequisites for module	None.
Precluded Modules	None.

INDICATIVE BIBLIOGRAPHY

- 1 BUTLER, P.J. et al. 2021. Animal Physiology: An Environmental Perspective. 1st Edition. OUP.
- 2 Hill R. 2016. Animal Physiology. 4th Edition. Sinauer.
- 3 RANDALL D. J. 2002. Eckert animal physiology: mechanisms and adaptations. 5th Edition. Freeman.
- 4 REECE, J.B. et al., 2011. Campbell Biology: Concepts and Connections. 7th Edition. Pearson.