

BBIO308 Ecology

ECTS Value: 5 ECTS

Module Description

This module will focus on the understanding of ecological concepts and the relationships between different organisms and the environment. The ecological concepts will be discussed at the local, regional and global level through a number of case studies in order to contextualise and afford importance to issues which can be both local and global in nature. The Mediterranean region will however be a special focus for the relations studied throughout this module.

Overall Objectives and Outcomes

By the end of this module, the learner will be able to:

Competences

- a. illustrate in detail the ecological concepts related to relationships;
- b. examine the concept of carrying capacity and its links to population growth and growth factors;
- c. evaluate the evolutionary significance of relationships between organisms and their environment;
- d. Engage critically with literature.

Knowledge

- a. recall and develop detailed knowledge of ecological concepts and natural selection as an observable process;
- b. Explain the meaning of fundamental and realised niche;
- c. consolidate and extend knowledge on generalists and specialists;
- d. develop understanding of heat budgets and temperature regulation;
- e. define the meaning of natality, mortality, immigration and emigration;
- f. outline the importance of Interspecific and intraspecific competition, mutualism, parasitism, commensalism,

Skills

- a. organise and relate the various relationships to ecological concepts;
- b. utilise investigative observations to make inferences about animal behaviour;
- c. draw, label and annotate diagrams depicting energy flow in ecosystems.

Mode of Delivery

This module adopts a blended approach to teaching and learning. Information related to the structure and delivery of the module may be accessed through the IfE Portal. For further details, kindly refer to the Teaching, Learning and Assessment Policy and Procedures found on the Institute for Education's website.

Assessment Methods

This module will be assessed through: Research Assignment and Online Tasks/Reflections

Suggested Readings

1. Molles M., (2015), Ecology: Concepts and Applications 7th Edition. McGraw Hill.
2. Krebs C., (2008). Ecology: The Experimental Analysis of Distribution and Abundance (6th Edition). Benjamin Cummins.
3. Brower J., Zar J., Von Ende C., (1998). Field and Laboratory Methods for General Ecology. 4th Edition