

COURSE MODULE INFORMATION

ZO318: Geographic Information Systems and Biostatistics

Semester 2 | Credits: 5

This module is focused on using data analysis to understand the environment. It includes an introduction to statistical analyses using examples from field ecology. There is also an introduction to mapping ecological data using geographic information systems (GIS).

Learning Outcomes

1. Demonstrate an understanding of the different types of data used in ecology and geographic analyses
2. Explore data using descriptive statistics and apply inferential statistics
3. Understand the role of statistics in planning, validating and communicating the findings of ecological research
4. Describe different habitat classification schemes in use
5. Be able to create, edit and analyse spatial data using geographic information systems
6. Produce maps for visualisation and interpretation of ecological data

Assessments

- Written Assessment (50%)
- Continuous Assessment (50%)

Module Director

- MARK PETER JOHNSON: [Research Profile](#) | [Email](#)

Lecturers / Tutors

- LOUISE ALLCOCK: [Research Profile](#)
- MARK PETER JOHNSON: [Research Profile](#)
- ROBERT KENNEDY: [Research Profile](#)
- ANNE MARIE POWER: [Research Profile](#)

- ANNE CRYAN: [Research Profile](#)

Reading List

1. "Geographic Information Systems and Science" by Longley P, Goodchild M, Maguire DJ, and DW Rhind
Publisher: John Wiley and Sons, 536pp.
2. "An Introductory Guide for Life Scientists" by McKillup, S
Publisher: Cambridge University Press
3. "Experimental Design and Data Analysis for Biologists" by Quinn G and MJ Keough
Publisher: Cambridge University Press

The above information outlines module ZO318: "Geographic Information Systems and Biostatistics" and is valid from 2015 onwards.

Note: Module offerings and details may be subject to change.