GHENT UNIVERSITY

Course Specifications

From the academic year 2020-2021 up to and including the academic year

Species Distribution Modelling as a Marine Conservation Tool (C004312)

Due to Covid 19, the education and assessment methods may vary from the information displayed in the schedules and course details. Any changes will be communicated on Ufora.

Course size *(nominal values; actual values may depend on programme)*

Credits 5.0 **Study time 125 h** **Contact hrs** 39.0h

Course offerings in academic year 2021-2022

A (semester 1) English Gent

Lecturers in academic year 2021-2022

O'Connor, Ian GALWAY02 lecturer-in-charge

Offered in the following programmes in 2021-2022	crdts	offering
International Master of Science in Marine Biological Resources	5	A

Teaching languages

English

Keywords

Marine ecology, population distribution, modelling, conservation

Position of the course

Contents

Modelling species' distribution has widespread application in marine ecology and conservation. BY combining data on the abundance/distribution/presence of a species with biotic and abiotic co-variable it is possible to model a predictive distribution of species of interest. This biogeographic output may in turn, be used to identify locations where species can exist, or how changes in environmental conditions may affect current distribution patterns.
Syllabus to include:
Introduction to species distribution modelling
Species distribution modelling techniques
- Data types and sources
- Model types and sources

Interpretation of model data for conservation purposes

Initial competences

Final competences

1 Demonstrate an understanding of the theoretical basis and limitations of species distribution modelling.
2 Employ appropriate species distribution modelling techniques.
3 Assess the efficacy a model in predicting species distributions.
4 Using a case study approach, apply models to address marine conservation questions.

Conditions for credit contract

Access to this course unit via a credit contract is determined after successful competences assessment

Conditions for exam contract

This course unit cannot be taken via an exam contract

Teaching methods

Lecture: plenary exercises, Lecture

Extra information on the teaching methods

This module utilises a case study approach to teach the theoretical and practical aspects of the topic

Learning materials and price

none

References

Journals and other module material will be placed on moodle by the module co-ordinator

Course content-related study coaching

Students experiencing difficulties should engage with course staff, or academic support units within GMIT

Assessment moments

continuous assessment

Examination methods in case of periodic assessment during the first examination period

Examination methods in case of periodic assessment during the second examination period

Examination methods in case of permanent assessment

Assignment

Possibilities of retake in case of permanent assessment

examination during the second examination period is possible

Calculation of the examination mark

100 % continuous assessment by way of assignments