bio780 - Biodiversity of Littoral Communities

Module label: Biodiversity of Littoral Communities
Module code: bio780
Credit points: 15.0 KP
Workload: 450 h
Used in course of study: Master's Programme Biology > Background Modules
Contact person: Thomas Glatzel

Module responsibility
  - Thomas Glatzel
Authorized examiners
  - Thomas Glatzel
  - Pedro-Miquel Martinez-Arbizu
Module counselling
  - Pedro-Miquel Martinez-Arbizu

Entry requirements
Safe apnoediving with aptitude test and medical fitness certificate
Skills to be acquired in this module
+ deepened knowledge of biological working methods
+ ability to perform independent biological research
++ teamwork
+ ethics and professional behaviour
+ project and time management

By actively participating in this module students acquire qualifications in the following fields:

Biological oceanography, marine biology and marine ecology:

- Geological formation history of the Mediterranean Sea and Atlantic Ocean, respectively, or the Red Sea and adjacent seas
- Oceanography and hydrology
- Development of the faunal and floral composition of the Atlantic Ocean, the Mediterranean Sea and the Mediterranean region or the Red Sea (biogeography)
- Commercial utilization of the seas and its impacts
- Biotopes and biotic communities
- Evolution, systematics, morphology, modes of life, and ecology of selected animal groups
- Applying theoretical knowledge to real-world organisms/systems
- Improved and specialized knowledge of species
- Adaptation of life cycles
- Interaction between organisms and environment
- Dynamics of reef-building and reef-degrading processes
- Threat to coral reefs/protection of marine environments

Methods:

- Formulation and definition of scientific approaches and selection of methods
- Observation and investigation of organisms and their habitats (snorkelling/diving)
- Documentation of small research projects in groups in the style of a scientific publication
- Editorial work to prepare a module report
- Popular presentation of results to be published by the media and to be presented at the University

Further skills:

- Social engagement in groups/teamwork in projects
- Independent scientific work in groups
- Improvement of scientific discussion culture
- Consciousness of the threat to coral reefs
- Practising English
- Dealing with the culture of the visited region

Culture:
- History, culture, politics, and religion
Additionally:

- Physiological aspects of apnoediving
- Measures in case of accidents (also caused by "poisonous" organisms)

**Module contents**

Biodiversity of littoral biotic communities – topographical field research

GRÜTER, W., 2001: Leben im Meer - Vielfalt und Zusammenhänge. Dr. Friedrich Pfeil Verlag, München.

*Should be read prior to a marine biological excursion! This book will arouse your curiosity about the submarine world. A reading book!*


*This textbook is information and fun for all readers interested in marine life as well as in the protection of marine environments.*


*The textbook for the Mediterranean Sea! The general 1st part provides valuable information on symbioses or feeding types, for example.*


*Very compact, explanatory! Not expensive! A must for biological oceanography! Recommended for preparing examinations! Provides basic information!*


*Highly illustrative! Much additional information on different fields! The authors provide a unique ecological approach that helps students understand the real-world relevance of marine biology by exploring how organisms interact within their individual ecosystems.*


*Connecting biological oceanography with theoretical ecology!*

**Reader’s advisory**

**Literature study:**

Web of science: [externhttp://www.bis.uni-oldenburg.de](http://www.bis.uni-oldenburg.de) – Data banks(DBIS) – Biology – TOP data banks, e.g. ASFA, Science Citation Index, Zoological Record [http://www.biodiversitylibrary.org/bibliography/14107](http://www.biodiversitylibrary.org/bibliography/14107)

[externhttp://scholar.google.de/](http://scholar.google.de/)

[externhttp://www.vifabio.de](http://www.vifabio.de)


**Links**

**Language of instruction**

German

**Duration (semesters)**

1 Semester

**Module frequency**

jährlich

**Module capacity**

unlimited

**Modullevel**

MM (Mastermodul / Master module)

**Modulart**

Wahlpflicht / Elective

**Lerne-/Lehrform / Type of program**

**Vorkenntnisse / Previous knowledge**

**Examination**

Time of examination: during the lectures

Type of examination:

1. Report(s) (30 %)
2. Assignment (70 %) (project report in the style of a scientific publication)

**PLEASE NOTE:**

Additional conditions regarding attendance and ungraded activities as determined by the persons responsible for the module will apply.

**Course type**

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Total time of attendance for the module