KAPITAŁ LUDZKI
NARODOWA STRATEGIA SPÓJNOŚCI

Projekt współfinansowany przez Unię Europejską w ramach Europejskiego Funduszu Społecznego

UNIA EUROPEJSKA
EUROPEJSKI
FUNDUSZ SPOŁECZNY

Course title

Functioning of marine ecosystems

ECTS code

7.2.0621

Name of unit administrating study

Faculty of Oceanography and Geography

Studies

faculty	field of study		
Wydział Chemii	Ochrona środowiska	type	pierwszego stopnia
		form	stacjonarne
		specialty	Podstawowa
		specialization	Podstawowa

Teaching staff

dr Joanna Hegele-Drywa

Forms of classes, the realization and number of hours

Forms of classes

Lecture

The realization of activities

classroom instruction, online classes

Number of hours

Lecture: 30 hours

ECTS credits

2
classes - 30 h
tutorial classes – 2 h
student's own work – 18 h

Total: 50 h - 2 ECTS

The academic cycle

2023/2024 summer semester

Type of course

obligatory

Language of instruction

polish

Teaching methods

- critical incident (case) analysis
- multimedia-based lecture
- seminar lecture

Form and method of assessment and basic criteria for eveluation or examination requirements

Final evaluation

Graded credit

Assessment methods

- written exam with open questions
- written exam (test)

The basic criteria for evaluation

Exam grade (90%), activity grade in the form of seminars (10%)

Method of verifying required learning outcomes

Required courses and introductory requirements

A. Formal requirements
B. Prerequisites
none

Aims of education

The aim of the course is to familiarize students with the basic processes taking place in the aquatic environment, determining the influence of abiotic factors (i.e. temperature, salinity, oxygen depletion, presence of hydrogen sulphide, heavy metals) on the functioning of marine organisms in various environmental conditions. Course cover issues related to the basic concepts/ definitions related to the functioning of organisms, populations, species in aquatic ecosystems.

Course contents

Course focus on the functioning of marine ecosystems on the example of various types of water reservoirs. Students are introduced in to functioning of marine ecosystems, assessment of the diversity of marine life and the principles of its protection. Students take an active part in the seminar by preparing presentations and using the literature on the subject.

Bibliography of literature

Bibliography of literature

Literature required to pass the course

Wolnomiejski N., Pawlikowski T.. Zarys ekologii i ochrony mórz. Część I. Wydawnictwo Uniwersytetu Mikołoja Kopernika. Toruń 2006

Duxbury A.C., Duxbury A.B., Sverdrup K.A.. Oceany świata. Wydawnictwo Naukowe PWN. Warszawa 2002

Byatt A., Fothergill A., Holmes M.. Błękitna planeta. Historia naturalna oceanów. MUZA SA. Warszawa 2002

Pliński M. Hydrobiologia ogólna.Uniwersytet Gdański, 1992

B. Extracurricular readings

The learning outcomes (for the field of study and specialization)

Knowledge

Students can characterize the relationships and dependencies between various scientific disciplines, uses knowledge of mathematics, physics, chemistry and biology for the description of basic concepts and principles in environmental protection. Students are familiar with the type and scope of the influence of abiotic factors on aquatic organisms and chemical as well as biological processes and phenomena occurring in nature on different levels of the organization and get knowledge concerning aquatic environment components: ecosystem, biocenosis, population. Students know the mechanisms of anthropopressure on environment and recognize the possibilities of its limitation with the use of the latest knowledge and achievements of science. Students get the knowledge about the basic methods, techniques and tools concerning sustainable use and restoration of natural resources.

Skills

Students can assess the functioning of natural and human-changed systems and determine the impact of anthropopressure on specific processes taking place in the marine environment. Student can define the influence of disturbing factors on the functioning of organisms in the environment by usage of terminology in the field of environmental protection and nomenclature
specific in disciplines related to it. Student can conducts nature observations, interpret their results and formulate appropriate conclusions based on them.

Social competence

Student can identify the level of own knowledge and skills and the need for continuous learning/training, updating knowledge about the environment and its protection. Student has a self-awareness about need of active following changes in the surrounding environment and studying recent literature to constantly improve itself knowledge and abilities. Student know the value of practical application of the acquired knowledge.

Contact

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