

## SYLLABUS

Name: **Biodiversity and biogeography (25-BI-S2-E1-BB-AN)**

Name in Polish: **Bioróżnorodność i biogeografia**

Name in English: **Biodiversity and biogeography**

### Information on course:

Course offered by department: Faculty of Biological Sciences

Course for department: Faculty of Biological Sciences

### Default type of course examination report:

Grading

### Language:

English

### Short description:

Prerequisites regarding knowledge, skills, and social competences for the course/module

Basic knowledge of biogeography.

Student's own work:

- preparing for classes: 30h

- reading scientific publications: 30h

### Description:

Educational aims:

(a) provide an overview of the approaches and methods used in biogeographical studies;

(b) to teach students how to apply knowledge of biogeographic patterns and mechanisms to solving important problems, e.g., biodiversity conservation;

(c) to teach students how to identify, examine, assess and interpret scientific literature related to modern biogeography;

(d) to develop in students a scientific way of thinking about biological diversity and conservation.

Course content:

Program: patterns of biodiversity: from local gradients to global biodiversity hotspots; the Theory of Island Biogeography; biogeography in the anthropocene: habitat loss, over-harvest, pollution, and climate change impacts on species distribution and abundance; human impact on biodiversity, e.g. domestication, invasive species; advances in phylogeography.phy.

### Bibliography:

Mandatory and recommended reading list:

Scientific papers published in journals, e.g. Journal of Biogeography;

Nature Ecology and Evolution;

Global Change Biology;

Global Environmental Change;

Conservation Letters;

Global Ecology and Biogeography;

Conservation Biology;

Nature;

Science.

### Learning outcomes:

Intended learning outcomes

Student:

K\_W06

- knows the the distribution patterns of living organisms on Earth;

K\_W07

- knows the research topics, terminology and research methods used in biogeography;

K\_U07

-correctly interprets changes in the biodiversity patterns on Earth, based on data from various sources;

K\_U02

- efficiently research biogeographical literature and properly analyses data that it contains;

K\_K05

- shows pro-conservation attitudes and is aware of the threats to species diversity resulting from the unbalanced management of natural resources;

K\_U13

-uses terminology and vocabulary necessary to explain and describe biological processes.

### Assessment methods and assessment criteria:

Assessment methods for the intended learning outcomes:

- continuous evaluation,

Credit requirements for individual components of the course/module:

- continuous evaluation,

- oral presentation.

### Course credits in various terms:

| <without a specific program>           |        |            |           |
|--|--------|------------|-----------|
| Type of credits                        | Number | First term | Last term |
| European Credit Transfer System (ECTS) | 3      | 2023/24-Z  |           |