Course Unit Descriptor

Study Programme: Biology, module Biology/Ecology

Course Unit Title: Biogeography

Course Unit Code: OB040

Name of Lecturer(s): Associate Professor Goran Anačkov, Associate Professor Olivera Bjelić-Čabrilo

Type and Level of Studies: Bachelor Academic Degree

Course Status (compulsory/elective): Compulsory

Semester (winter/summer): Winter

Language of instruction: English

Mode of course unit delivery (face-to-face/distance learning): Face-to-face

Number of ECTS Allocated: 6

Prerequisites: Passed exams "Systematics of Vascular Plants" and "Zoology of Chordates"

## **Course Aims:**

Introduction to basic concepts and methods in biogeography. Knowing the rules of the distribution of plant and animal species, as well as communities living in different phyto and zoogeographic areas, with special emphasis on the territory of Serbia.

## **Learning Outcomes:**

Acquired basic knowledge about areal and horology of species and communities on Earth, as well as about biogeographic characteristics of Serbia.

## Syllabus:

Theory

Areal. Features of the areal (mapping, typologies, dimensions, forms, dynamic of area), distribution centers and the origin of species. Concept of endemic, relict, cosmopolitan organisms, theory and examples of vicars, Island and mountain biogeography. Horology, the basic research methods in biogeography. Historical biogeography. Ecological biogeography. Phytogeographical division of the world. Floristic area. Phytogeography of Serbia and the Balkan Peninsula. Fauna (concept, structure, analysis, genesis) and zoogeographical division of land. Zoogeographical division and zonobiomes in Serbia and Montenegro, with typical representatives of the tetrapod vertebrates.

Practice

The basic methods of mapping, directly and indirectly mapping in floristic research. Elements of the flora. Floristic statistics. Endemics, relics, diversity of flora and vegetation. Characteristic representatives of vertebrates in some zoogeographic areas.

## **Required Reading:**

1. Cox, B., Moore, P. & Ladle, R. (2016): Biogeography – An Ecological and Evolutionary Approach, 9<sup>th</sup> ed. John Wiley & Sons, Chichester, UK; Hoboken, NJ.

2. Lomolino, M., Riddle, B. & Whittaker, R. (2017): Biogeography – Biological Diversity across Space and Time, 5th ed. Sinauer Associates, Inc. Sunderland.

3. Takhtajan, A. (1986): Floristic Regions of the World. University of California Press, Berkley and Los Angeles.

4. Janković, M. (1985): Fitogeografija. Prirodno-matematički fakultet Univerziteta u Beogradu, Beograd. (in Serbian)

5. Lopatin, I.K.(1995): Zoogeografija, (translation from Russian by Snežana Pešić). Zim-Prom, Kragujevac. (in Serbian)

6. Lopatin, I.K., Matvejev, S. (1995): Kratka zoogeografija sa osnovama biogeografije i ekologije bioma Balkanskog

| Weekly Contact Hours: 5   |            | Lectures: 3          |                       | Practical work: 2 |   |     |
|---------------------------|------------|----------------------|-----------------------|-------------------|---|-----|
| Teaching Methods: Th      | eoretical  | lectures, laboratory | y exercises, video    | screening         | <u>5</u> S.                             |     |
|                           |            |                      |                       |                   |   |     |
| Knowledge Assessmen       | t (maxim   | um of 100 points)    | ):                    |                   |   |     |
| Pre-exam obligations      | points     |                      | Final exam            |                   | points                                  |     |
| Active class              | 5          |                      |                       |                   | 15                                      |     |
| participation             | 5          |                      | written exam          |                   | 45                                      |     |
| Practical work            |            |                      | oral exam             |                   | 20                                      |     |
| Preliminary exam(s)       | 30         |                      |                       |                   |   |     |
| Seminar(s)                |            |                      |                       |                   |   |     |
| The methods of knowled    | dge assess | ment may differ; t   | the table presents of | only some         | e of the options: written exam, oral ex | am, |
| project presentation, ser | ninars etc | •                    | _                     |                   | -                                       |     |