# Course Unit Descriptor

Study Programme: BSc in Biology

Course Unit Title: Biology of algae and fungi

Course Unit Code: OB001

Name of Lecturer(s): Full Professor Dragan Radnović, Associate Professor Jelica Simeunović

Type and Level of Studies: Bachelor 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: 7** 

Prerequisites: None

#### **Course Aims:**

Understanding biology, ecology and taxonomy of prokaryotic and eukaryotic algae, fungi and lichens, in order to understand their distribution and importance in natural ecosystems.

### **Learning Outcomes:**

Students are trained to understand theoretical and practical basis of diversity, morphology, physiology and ecology of algae, fungi and lichens, the essence of phylogenetic relatedness, their role in different ecosystems as well as their indicator characteristics and application.

### **Syllabus:**

# Theory

Basic characteristics of algae including structure of the algal thalli and cells, their mode of nutrition, review their modes of reproduction, types of the life cycle of the representative genera and their basic role in the nature and different environments. Understanding general principles of classification of algae and biology of divisions: Cyanophyta, Rhodophyta, Euglenophyta, Pyrrophyta, Xanthophyta, Chrysophyta, Bacillariophyta, Phaeophyta Chlorophyta and Charophyta.

General characteristics of fungi and funguslike organisms. Physiology of growing hypha. Hyphal aggregates (mycelial cords, mycelial cords, sclerotia, haustorium etc.). Spores of fungi. Taxonomy of fungi. Biology of divisions Myxocota and Eumycota including subdivisions Mastigomycotina, Zygomycotina, Ascomycotina, Basidiomycotina, Deuteromycotina, as well as the characteristics and biology Lichenes.

#### Practice

Practical classes follow lectures by learning about morphology and life cycles of the individual genera of algae, fungi and lichens - members of the taxa treated in the theoretical teaching.

#### **Required Reading:**

- 1. Lee, E. (2007): Phycology. 4rd Edition. Cambridge University Press. ISBN-10: 0521864089.
- 2. Webster, J., Weber, R. (2007) Introduction to Fungi. 3rd Edition. Cambridge University Press. ISBN:9780521014830

Weekly Contact Hours: 15 Lectures: 45 Practical work: 45

# **Teaching Methods:**

Lectures and students group work

Knowledge Assessment (maximum of 100 points): 100

Pre-exam obligations	points	Final exam	points
Active class participation	2	practical exam	22
Tests: I - IV	36	oral exam	40
Preliminary exam(s)	-		
Seminar(s)	-		

The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam, project presentation, seminars, etc.