Study Program: Biology

Type and level of studies: Bachelor studies

Course name: Systematics and phylogeny of flowering plants

Lecturer: Krivošej, Đ. Zoran

Status: Compulsory

ECTS: 7

Attendance Prerequisites:

## **Course aims**

The course aims to familiarise students with: phylogenetic development of higher plants, principles and methods in plant taxonomy, hierarchy and recognition of important taxa within the flora of Serbia, especially endemic and relict vascular plants.

# Course outcome

The students have gained:

1) knowledge/ability to understand the phylogenic development of higher plants;

2) knowledge/ability to understand the principles of plant taxonomy;

3) knowledge/ability to understand the characteristics of specific taxonomic categories, chosen based on their presence in the Serbian flora and their phylogenic significance.

4) the skills to identify and classify vascular plants using botanical determination keys.

### **Course content**

Theoretical Part:

Introduction, Historical development of Systematics, Sources and methods of phylogenetic systematics, Levels (degrees) of classification (principles of taxonomy), Botanical nomenclature, Origin of higher plants, On the origin of higher plant organs, Systematic examination of higher plants, Mosses (Bryophyta), Lycopodiae (Lycopodiophyta), Horsetails (Equisetophyta), Ferns (Polypodiophyta), Gymnosperms (Pinophyta), Angiosperms (Magnoliophyta).

Practical Part: Exercises, Other forms of teaching, research work

Processing of fresh or herbarium material of mosses, shortcuts, ferns, Gymnospermae and Magnoliophyta (flowering plants), introducing the morphological characteristics of plants of the mentioned groups.

#### Literature

- 1. Татић, Б., Блечић, В. СИСТЕМАТИКА И ФИЛОГЕНИЈА ВИШИХ БИЉАКА, Завод за уџбенике и наставна средства, Београд, 1984.
- 2. Магдефрау, К., Ехрендорфер, Ф. БОТАНИКА СИСТЕМАТИКА, ЕВОЛУЦИЈА, ГЕОБОТАНИКА, Школска књига, Загреб, 1978.
- 3. Петковић, Б., Марин, П., Божа, П. ПРАКТИКУМ ИЗ СИСТЕМАТИКЕ ВИШИХ БИЉАКА, Наука, Београд

Number of a	ctive classes		Other classes	
Lectures: 3	Practical classes:	Other forms of	Students'	
		teaching: 2	research work	

# **Teaching methods**

Theoretical classes, Practical classes (exercises), Field exercises, Vascular plant identification tests, consultations.

Assessment (maximum 100 points)					
Course assignments	points	Final exam	points		
activity during lectures	10	written exam/identification	15		
practical classes	10	oral exam	55		
Term test/s					
Seminar/s	10				
Total	30		70		