

Study Program: Biology			
Type and level of studies: Bachelor studies			
Course name: Plant Anatomy			
Lecturer: Vasić S. Predrag			
Status: Compulsory			
ECTS: 5			
Attendance Prerequisites: none			
Course aims			
The course aims to teach students how to make microscopic slides to study the anatomical structure of plant organs, plant cells, and plant tissue characteristics.			
Course outcome			
The students can make permanent microscopic slides. They have acquired basic knowledge of plant anatomy.			
Course content			
<i>Theoretical part</i>			
Introduction - botany, botanical disciplines. Cytology - plant cell, shape and size, the structure of protoplasts and paraplasts. Histology - classification and characteristics of plant tissues. The anatomical structure of plant organs – trees, roots and leaves.			
<i>Practical part: Exercises, other forms of teaching, research work</i>			
Lateral and apical meristem. Permanent tissues: parenchymal, mechanical, cortical, conductive and tissues for secretion and excretion. The primary and secondary structure of roots and stem. Stem structure of mosses, Licopodiophyta, Equisetophyta, ferns, gymnosperms and angiosperms. Stem structure of aquatic plants. Leaf anatomy of gymnosperms, monocotyledons and dicotyledons. Material of heliomorphic and skeuomorphic leaves. Structure of xeromorphic and hydromorphic leaves. The anatomical structure of sepals (calyx) and petals (corolla), anthers and pistils. Monocotyledons and dicotyledons germs.			
Literature			
<ol style="list-style-type: none"> 1. Николић, Р. и др (1974): Анатомија биљака, Београд. 2. Блаженчић, Ј. (1994): Практикум из анатомије биљака, Научна књига, Београд. 3. Продановић, Д. (2011): Практикум из ботанике, Пољопривредни факултет, Лешак. 4. Петковић, Б., и др (2012): Анатомија и морфологија биљака, Биолошки факултет Универзитет у Београду 			
Number of active classes			Other classes
Lectures: 2	Practical classes: 2	Other forms of teaching:	
			Students' research work
Teaching methods			
Theoretical classes. Laboratory exercises in which students are introduced to structural and ultrastructural characteristics of plant cells and tissues, as well as the anatomical structure of plant organs, using permanent microscopic slides.			
Assessment (maximum 100 points)			
Course assignments	points	Final exam	points
activity during lectures	5	written exam	20
practical classes	5	oral exam	50
term test(s)	20	
seminar(s)			
Total	30		70