

Course Unit Descriptor

Study Programme : Bachelor of Science in Ecology			
Course Unit Title: Plant Morphology			
Course Unit Code: OE004			
Name of Lecturer(s): Prof. Lana Zoric, PhD; Prof. Jadranka Lukovic, PhD			
Type and Level of Studies: Bachelor's studies			
Course Status (compulsory/elective): compulsory			
Semester (winter/summer): summer			
Language of instruction: English			
Mode of course unit delivery (face-to-face/distance learning): face-to-face			
Number of ECTS Allocated: 7			
Prerequisites: -			
Course Aims: Getting knowledge about structural-functional characteristics of plant tissues, morpho-anatomical structure of vegetative and reproductive organs, as well as about plant reproduction.			
Learning Outcomes: After finishing this course students should know: structure and function of plant tissues, structure of vegetative and reproductive plant organs, structural-functional coordination of organs and organism in a whole, types of plant reproduction and life cycles.			
Syllabus: <i>Theoretical part</i> – Morphological levels of plant organization. Embryo. Histology – origin, structure and function of plant tissues. Meristematic tissues and their classification. Permanent tissues: parenchyma, mechanical, dermal, vascular and secretory tissues. Organography. Morphology and anatomy of vegetative organs (root, stem, leaf). Metamorphoses of plant organs. Morphology and anatomy of reproductive organs of flowering plants (flower, inflorescence, seed, fruit). Types of plant reproduction: asexual and sexual, alternation of generations. Reproduction of angiosperms, pollination and fertilization. Classification and dispersion of fruits. <i>Practical part</i> – Embryo. Meristematic tissues – apical and lateral meristems. Permanent tissues: parenchyma, mechanical, dermal, vascular and secretory tissues. Root morphology. Root anatomical structure (primary and secondary). Shoot morphology (stem and leaf). Stem anatomical structure (primary and secondary). Leaf anatomical structure. Root and shoot metamorphoses. Morphology and anatomy of reproductive organs. Flower (parts, flower formulas). Anatomical structure of stamen and pistil. Inflorescences (types, classification). Morphology of seed and fruit. Classification of fruits. Anatomical structure of seed coat and pericarp.			
Required Reading: 1. Evert, F.R. (2006): Esau's Plant Anatomy. John Wiley & Sons, Inc., Publication 2. Luković, J., Zorić, L. (2013): Morfologija biljaka. Symbol, Novi Sad. 3. Dickison, C.W. (2000): Integrative Plant Anatomy. Harcourt academic press, New York, London. 4. Fahn, A. (1990): Plant Anatomy. Pergamon Press, London.			
Weekly teaching load:		Lectures: 3	Practical lectures: 3
Teaching Methods: lectures, practical work, consultations			
Knowledge Assessment (maximum of 100 points):			
Pre-exam obligations	points	Final exam	points
Colloquia	30	Oral exam	50
		Practical exam	20