

Study program: Environmental protection			
Type and level of study: Bachelor academic studies			
Course Title: Biology			
Teachers: Dejana Panković, Željka Jeličić Marinković			
Status: Obligatory, semester I			
ECTS: 8			
Prerequisite: None			
The goal of course Enabling students to master the basic concepts of different biological disciplines relevant to the ecological agriculture.			
The outcome of the subject Students will be able to apply biological concepts in agroecological farming.			
Syllabus <i>Theoretical study</i> - Cytology as a biological discipline. Tissue - structure and function. Cell division - mitosis and meiosis. The chemical composition of the cell. Metabolism: catabolism and anabolism. Physiological processes: photosynthesis and disanje. Kruženje matter and energy flow. Genetics and biological disciplines. Basic ecological concepts: individual, species, biotope, biocenosis, ecosystems, biomes biosphere. Biotic and abiotic environmental factors. Types of food - the food chain, trophic pyramid. Evolution as a biological discipline. <i>Practical classes</i> - practical classes will support theoretical knowledge through experimental and demonstrative exercises and enable students to be able to apply them in specific working conditions.			
Literature 1. Borojević, S. & Borojević, K. (1971). Genetika. Univerzitet u Novom Sadu. Kulturni centar. Novi Sad. 2. Kovačević, Z. (1999). Biohemija i molekularna biologija. Univerzitet u Novom Sadu. Medicinski fakultet. Novi Sad. 3. Stanković, Ž., Krstić, B., Petrović, M. & Erić, Ž. (2006). Fiziologija biljaka. Univerzitet u Novom Sadu, Univerzitet u Banja Luci. 4. Milankov, V. (2007). Osnovi konzervacione biologije I. Univerzitet u Novom Sadu. Prirodno-matematički fakultet, Departman za biologiju i ekologiju. 5. Stevanović B. & Janković M. (2001). Ekologija biljaka sa osnovima fiziološke ekologije biljaka. Beograd. 6. Tucić, N. (1987). Uvod u teoriju evolucije. Zavod za izdavanje udžbenika i nastavnih sredstava, Beograd. 7. Stephen R. Bolsover, Elizabeth A. Shephard, Hugh A. White, Jeremy S. Hyams (2011): Cell Biology. Wiley-Blackwel 8. Biology, Peter; Johnson, George; Mason, Kenneth; Losos, Jonathan; Singer, Susan Raven, MC Graw Hill Education, New York, ISBN-13: 978-0073383071 ISBN-10: 0073383074			
Number of lectures: 5			Other Classes
Lectures: 3	Practices: 2	Other forms of teaching: Student research work:	
Teaching methods: Lectures, discussions with students, experimental exercises, preparation and public defense of practical applied work.			
Score (maximum 100 points)			
Pre-commitments	Poens	The final exam	Poens
Activity during lectures	10	Written exam	
Practical classes		Oral examination	30
Colloquia	2 x 25		
Seminars	10		
<i>Total</i>	70		30