

<b>Study programme: Bachelor with honours in Geography</b>			
<b>Course title: Agroecological problems in Vojvodina (GE404)</b>			
<b>Teacher(s): <a href="#">dr Milana Pantelić</a></b>			
<b>Status: elective</b>			
<b>ECTS: 6</b>			
<b>Requirements: none</b>			
<b>Learning objectives</b>			
Students need to acquire the basic knowledge about the agroecological problems, as well as the possibility of solving them in Vojvodina. It is necessary to know complex relationships in agroecosystems in order to be able to properly apply appropriate measures. The course should enable students to acquire knowledge of the principles of agroecology, natural resources management in agriculture, the formation of agroecosystems, sustainable functioning of agroecosystems, ecological concepts that will be useful to farmers. The course enables acquiring skills for proper management of agroecosystems, assessment of productivity and condition of agroecosystems, avoiding harmful influences of certain technologies in agriculture on the environment.			
<b>Learning outcomes</b>			
Students will become familiar with the problems of the environment (air, water and soil pollution), as well as their impact on agricultural production. At the end of the course, students should show understanding of the basic principles of agroecology, the impact of environmental factors on cultivation of the plants and additional elements of agroecosystems, as well as the operation and management of agroecosystems. Students should be prepared to apply ecological technologies in the cultivation of crops, recognize the negative impact of agrotechnical measures on natural resources and the environment, change and adapt agrotechnical measures applied to agricultural land in order to protect and preserve the environment			
<b>Syllabus</b>			
<i>Theoretical part:</i>			
Ecology and Agriculture; The most important abiotic factors - climate or atmospheric, edaphic and orographic; The most important biotic factors - mutual relations between living organisms in the agroecosystem, anthropogenic impacts; pollution and air protection; management of water resources, pollution and water protection; Pollution and soil protection; Sustainable agriculture; Population ecology of plants in agriculture; The concept of biocenosis, ecological niche and application in agriculture; Agroecosystems; Interactions between agroecosystems and natural ecosystems; The application of ecological principles in agriculture.			
<i>Practical part:</i>			
Visit to the Institute of Field and Vegetable Crops in Novi Sad			
<b>Literature</b>			
Molnar Imre, 2003. Agroekologija. Poljoprivredni fakultet, Novi Sad. Oljača Snežana, 2008. Agroekologija, udžbenik Poljoprivredni fakultet- Zemun. Wojtkowski, P.A. 2006. Introduction to agroecology: principles and practices, Instructor's manual, Food Products Press, An Imprint of The Haworth Press, Inc., New York, London, Oxford, 404 str. Miguel A. Altieri, Clara I. Nicholls, 2005. Agroecology and the Search for a Truly Sustainable Agriculture. University of California, Berkeley. Miguel A. Altieri, 2000. Agroecology: principles and strategies for designing sustainable farming systems. University of California, Berkeley.			
<b>Weekly teaching load 3 (45)</b>		<b>Lectures 2</b>	<b>Exercises 1</b>
<b>Methods of Teaching</b>			
Lectures, Illustration and Demonstration, Practical skills			
<b>Grading method (maximu 100 points)</b>			
<b>Pre-examination assignments</b>	points	<b>Final examination</b>	points
Activities during lectures	<b>0-5</b>	Written examination	
Activities during exercises	<b>0-5</b>	Oral examination	<b>30-45</b>
Colloquia	<b>20-40</b>	.....	
Seminar paper	<b>0-5</b>		