

Study program: Bachelor academic studies ECOLOGICAL ECONOMICS (BASEEC)			
Type and level of studies: Bachelor academic studies, I level			
Subject name: Ecological and Economic Aspects of Direct Use of Genetic Resources		Subject code	6E4PCM
Professor: dr Nada Kosanović, assistant professor			
Subject status: Elective			
Number of ECTS: 6			
Condition: none			
Subject goal Introduction to the concept of genetic resources, their scientific, practical, aesthetic, cultural and ethical significance at the global, regional and local level. Mastering programs and methods of conservation, directed utilization and improve the gene pool of plant and animal species and an understanding of their importance and application in the process of creating additional value products.			
Subject outcome Students will be qualified for the selection of an adequate program of conservation and improvement of plant and animal genetic resources, its definition, elaboration, establishment and compliance with the requirements of the management of agricultural and forest ecosystems, as well as the system of production in agriculture and forestry.			
Subject content <i>Theoretical classes</i> The concept and types of genetic resources. Condition of genetic resources in Europe and in our country. Genetic resources in an international context: processes, agreements, programs and institutions. The forms and sources of variability of genetic resources. Assessment of the variability of genetic resources: genetic markers. Methods of preservation and improvement of genetic resources: static and dynamic conservation. Global climate change and genetic resources. Economic aspects of conservation and improvement of genetic resources. The strategy of conservation and improvement of genetic resources. <i>Practical classes</i> Study research paper on the development of strategies and programs to preserve and improve the genetic resources of selected plant and animal species, with the selection of appropriate evaluation methods of intraspecific variability and model for its preservation.			
Literature 1. Шијачић-Николић, М., Миловановић, Ј. (2010): Конзервација и усмерено коришћење шумских генетичких ресурса. Шумарски факултет Универзитета у Београду. 200 стр. 2. Миловановић, Ј. (2012): Заштита угрожених врста. Факултет за примењену екологију Футура. 147 стр. 3. Миловановић, Ј., Шијачић-Николић, М. (2009): Примена молекуларних маркера у конзервацији генофонда шумског дрвећа. Гласник Шумарског факултета. Београд. бр. 99. стр. 4. Вучићевић, С. (1999): Шума и животна средина. Шумарски факултет у Београду, Србијашуме. Београд. 5. Стојановић, С., Ђорђевић-Милошевић, С. (2003): Аутохтоне расе домаћих животиња. Савезни секретаријат за рад, здравство и социјалну заштиту, Сектор за животну средину. Београд. 6. Иванов, С., Милић, Б. (2005): Мангулица и модел органске свињарске производње. Natura Balkanika. Димитровград. 7. Амићић, Л., Дражић, С., Костић, М., Максимовић, С., Мандић, С., Менковић, Н., Пањковић, Б., Попов, В., Радановић, Д., Роки Ђ., Секуловић, Д., Степановић, Б., Тасић, С. (1999): Стратегија заштите лековитог биља. Министарство заштите животне средине. Београд. 8. Geburek, T., Turok, J (2005): Conservation and Management of Forest genetic Resources in Europe, Arbora Publishers, Slovakia.			
Number of active teaching classes			Other classes
Lectures: 3(45)	Practices: 2(30)	Other class forms:	Study research paper:
Teaching methods Lectures, practical classes with interactive character, work in small groups, study research paper.			
Knowledge evaluation (maximum number of points is 100)			
Pre-exam obligations	points	Final exam	points
Activity during lectures	10	Written exam	50
Practical classes	20	Oral exam	
colloquiums	20		