

<b>Study program:</b> Organic crop and livestock production
<b>Type and level of study:</b> Bachelor academic studies
<b>Course Title:</b> ORGANIC CROP PRODUCTION
<b>Professors:</b> Dr. Olivera Nikolić, Associate Professor
<b>Status:</b> Compulsory, semester V
<b>ECTS:</b> 8
<b>Prerequisite:</b> None
<p><b>The goal of the course</b></p> <p>The objective of the course in organic farming is to provide students with knowledge of cropping on the principles and requirements of organic farming. In addition to the yield and quality of products, the system of environmental management in crop production in terms of improving biodiversity is of almost identical importance, as well as natural cycling of matter, improvement of environmental protection and obtaining healthy and safe products.</p>
<p><b>The outcome of the course</b></p> <p>Enabling students for independent and professional organization of organic farming, by applying the principles and methods of organic production in crop technology of main and alternative plants. Proper selection of adaptable varieties and hybrids, non GMO, agricultural crops under specific ecological conditions must be in compliance with the requirements of a consumer market and the expected financial effects. This subject allows the registration of differences between conventional and ecological farming and transformation systems into sustainable management of agricultural production.</p>
<p><b>Syllabus</b></p> <p><i>Theoretical study -</i></p> <p>The concept and characteristics of crop production, traditional, conventional and organic farming (characteristics and differences). Basic principles and goals of organic agriculture. Legislative of organic production (Law on Organic Production of Republic of Serbia, EU acts, Codex Alimentarius for organic agriculture, NOP, private standards), percentage and importance of organic (farming) production in our country and abroad. Technology in organic crop production, depending on the biological characteristics of species and varieties (tolerant, healthy and certified seeds), growing conditions, application of agrotechnical measures unfavorable to the development of pathogens and pests, crop rotation, the use of physical and mechanical measures and tools for tillage (conservation structures, flora, fauna and processes in the soil). The use of organic and microbial fertilizers, natural chemicals, biological control, integrated use of permitted chemicals, harvesting and storage of products, the possibility of using organic products. Necessary plant requirements: temperature, water, air, mineral nutrients will be studied. Control and certification in organic farming. Origins, botanic classification, prevalence, economic and nutritional importance, variability of use, areas and yields of the most important and alternative crops will be studied, too. Organic production of real grains (wheat, barley, oats, triticale), especially less cultivated species of high biological value (rye, durum wheat and spelled). Organic farming of sour wheat (maize, sorghum, millet), pseudo cereals (buckwheat, amaranth), grain legumes (soybean, peas, beans, lentils, Vigna, chickpeas, peanuts), oil crops (sunflower, poppy seed oil, black mustard, safflower, marigold), energy type plants (canola, sugar beet), textile plants (hemp, flax) and root - tubers (potatoes, Jerusalem artichokes, chicory). Comparative planting technology in conventional and organic production of studied crops.</p> <p><i>Practical lessons -</i> Morphology of field types, characteristics of varieties for different purposes of use, less cultivated species in our fields, terrain exercise, tour of producers.</p>
<p><b>Literature</b></p> <ol style="list-style-type: none"> <li>1. Bavec F, Bavec M. (2006): Organic Production and Use of Alternative Crops, Taylor and Francis (CRC).</li> <li>2. Elisa Morgera, Carmen Bullón Caro, Gracia Marín Durán. (2012): Organic agriculture and the law. <a href="http://www.fao.org/docrep/016/i2718e/i2718e.pdf">http://www.fao.org/docrep/016/i2718e/i2718e.pdf</a></li> <li>3. Lampkin, N. (2010): Organic farming myth and reality, World agriculture, 1, 46-53.</li> <li>4. FAO/WHO Codex Alimentarius commission: Codex Alimentarius. Organically Produced Foods, 2007.</li> </ol>

<b>Number of lectures: 6</b>				Other Lessons
Lectures: 3	Practices: 3	Other forms of teaching:	Student research work:	
<b>Teaching methods:</b> Lectures, discussions with students, experimental exercises, preparation and public defense of practical applied work.				
Score (maximum 100 points)				
<b>Pre-commitments</b>	<b>Points</b>	<b>The final exam</b>		<b>Points</b>
Activity during lectures	10	Written exam		
Practical lessons	10	Oral examination		40
Preliminary exams	2x10=20			
Seminars	20			
<i>Total</i>	60			40