



EDUCONS UNIVERSITY

Faculty of Ecological Agriculture

Master Academic Studies

CURRICULUM

ECOLOGICAL AGRICULTURE

Sremska Kamenica 2021

Table 5.2 Courses -MAS

Study program: Ecological agriculture			
Course title: METHODS OF RESEARCH			
Teacher/teachers: Dejana Panković, Zorica Mrkonjić			
Status: Compulsory, 1st semester			
ECTS: 5			
Requirement:none			
The course aims To enable students to understand the problem, hypothesis, using appropriate methods and equipment in experiments, analysis of results by using appropriate software and literature and presentation in the form of papers, term papers, etc. Introduction to laboratory equipment used in agricultural research.			
The course outcome <ul style="list-style-type: none"> - Multidisciplinary approach to understanding and defining the research course - Understanding the importance of using a detailed literature review - Using different databases -Understanding the importance and identification of the basic hypothesis - Understanding and use of appropriate methodology in experimental work - Adequately presenting the results of research - Usage of laboratory and field equipment for various agricultural research - Biostatistics methods in research 			
The course content <i>Theoretical study</i> The basic characteristics of scientific research. The standard scientific method. Experimental methods. Hypothesis, the subject of the experiment, the realization of experiments, analysis of results. Interpretation of results, agreement with the hypothesis, compliance with national and international literature. Standardization of the term, and other measures. Searching the database. Software for statistical analysis of the results. Software for the graphical presentation the results. Introduction and work on different laboratory equipment as well as field equipment used in agriculture. <i>Practical classes</i> Setting the experiments, conducting experiments, books, choice of methods, setting experiments, collecting the results, analysis of results with appropriate software, statistical processing, presentation of the results, the order of writing using appropriate literature, presentation of work.			
Literature Bojović, S., Mitrović S. (2010).Biostatistika - primenastatističkihmetoda u biologiji. Institut za šumarstvo, Beograd. 1-125. Kimball, N. (2013): Glossary of Biotechnology and Agrobiotechnology Terms. CRC Press Kothari, C. R. (2004). Research methodology, methods and techniques. New Age International Publishers, New Delhi, India, ISBN (13).978-81-224-2488-1, 1-401. Lawal, B. (2014). Applied Statistical Methods in Agriculture. Health and Life Sciences. Ed. Springer			
Number of active teaching classes:4	Lectures: 2	Practices: 2	
Teaching methods Lectures with use of computer technology, discussions with students, individual and team work, experimental exercises, preparation and public defense of seminary work.			
Knowledge assesment (maximum 100 points)			
Pre-exam tasks	Points	The final exam	Points
Activity during lectures	10	Written exam	20
Practical lessons	10	Oral exam	30
Colloquia	10		
Seminars	20		
Study program: Ecological agriculture			
Course title: STANDARDIZATION IN AGRICULTURE			
Teacher/teachers: Olivera Nikolić			

Status: Compulsory, 1stsemester			
ECTS:5			
Requirement:none			
The course aims The goal of the subject is to present the most important standards in agriculture, especially in ecological agriculture, their specifics and common characteristics and importance of their introduction into the chain of production, processing and marketing of agricultural products. At the same time, the aim is to enable students to consider all actual agricultural systems, among them and in relation to traditional agriculture, according to the most important criteria: environmental impact, health safety of products, the integrity of producers and consumers and their relationship, social and other events in the environment.			
The course outcome Mastering the program, students would understand the point of standardization in contemporary agriculture, from primary production across processing to marketing of products and recognize benefits for all participants in that chain, especially for final consumers such products. It is expected that students will be able to define critical, control points in each part of the production - processing - trade chain, in practice, according to the specific characteristics of activities within each of them as well as that these competencies can be used in all current systems of agricultural production, faced with such professional demands.			
The course content <i>Theoretical study</i> Codex Alimentarius: organization, areas of law enforcement, aims Quality: term and definition. Food quality criteria. Traditional and modern approach to quality and concept of quality management. Standard and standardization. Standards division. The reasons for standardization, based principles, types, demands and aims. Levels of standardization and areas of apply. The impact of market globalization to standardization. Economic aspects of standardization. International organizations dealing with standardization in agriculture and food products. Organization responsible for standardization in Serbia. Standards in the field of agriculture and food industry, represented on the Serbian market. ISO: organization, relation with European standardization organizations, standards in agriculture and food sector, subject and area of implementation ISO 9001, 22000 and 14001. HACCP: term, structure, principles, demands, flow diagram, setting up of documents and record keeping, traceability and its significance for food safety concept. Good agriculture practice and good hygiene practice. Global GAP: principles, steps. Kosher and Halal standards. Other standards. Geographical origin and tradition. International Organization of the Organic Agriculture Movement (IFOAM): significance, activities, standardization. Organic agriculture in Serbia: significance, state, characteristics of organic producers. Stages at creation of strategy for standardization. Types of certification and certificate issuing. <i>Practical study</i> Tour of producers/organizations that implement the standard and possess some of the certificates. организацијама који поседују неки од стандарда, monitoring the work process according to the given standard, exercise of making a control plan (determination of control points, corrective measures, ...) for some procedure in agricultural production.			
Literature http://www.fao.org/3/i6677e/i6677e.pdf : Good Agricultural Practices - Food and Agriculture ISO and agriculture - ISO https://www.iso.org › publication › PUB100412 https://agrosmart.net › 2015/05/02 http://www.fao.org/fao-who-codexalimentarius/en/			
Number of active teaching classes: 4	Lectures: 2	Practices: 2	
Teaching methods Lectures with use of computer technology, discussions with students, individual and team work, experimental exercises, preparation and public defense of seminary work.			
Knowledge assesment (maximum 100 points)			
Pre-exam tasks	Points	The final exam	Points

Activity during lectures	10	Written exam	
Practical lessons	10	Oral exam	50
Colloquia	2x10		
Seminars	10		

Study program: Ecological agriculture			
Course title: THE PRODUCTION AND PROCESSING OF ORGANIC FOOD			
Teacher/teachers: Mira Pucarević, Dragana Linda Mitić			
Status: Compulsory, 1st semester			
ECTS:5			
Requirement:none			
The course aims Acquiring knowledge and skills to work for organic final products of plant and animal production. The characteristics of the harvest, storage and processing of organic products. Also, students acquire the knowledge, skills and competencies in basic processing of organic production. Certification of the finished products and legislation.			
The course outcome Upon completion of the semester, students will be well-known with the basic principles for the production processing and distribution of organic food as well as trained in the use of terminology and communication in the field of knowledge production, processing and distribution of organic food Possibility of your own thinking on improving the existing procedures in the production and processing of organic food. Graduates will be able to produce their own finished products from materials produced according to the principles of organic production.			
The course content <i>Theoretical teaching</i> Introduction to the subject. Organic production to the world and in Serbia. Harvesting, storage and packaging of products consists of organic origin. The importance of livestock production in organic production. Organic production of milk and meat. Processing of organic products of animal and plant origin. Legal frameworks in the processing of organic products. Labeling of products derived from organic production. Economic aspects of organic agriculture. <i>Practical teaching</i> Visits Food processing plants, Selenča (organic crop) and Curug (organic animal). Laboratory classes to determine the quality of conventional and organic food. Mycotoxins, the characteristics of the milk obtained from organic production.			
Literature Fink-Gremmels, J. (2012). Animal Feed Contamination. 1st Edition Effects on Livestock and Food Safety. Woodhead Publishing USDA ORGANIC (2012). Guide for Organic Crop Producers. Wright S., McCrea D. (2000). Handbook of organic food processing and production. Blackwell Science Ltd. Oxford University, England. Znaor, D. (1996). Ekološka poljoprivreda. Nakladni zavod Globus. Zagreb. Senčić, Đ., Z. Antunović, P. Mijić, M. Baban, Z. Puškadija (2011). Ekološka zootehnika. Osijek, sveučilišni udžbenik. Veladžić, M., F. Čaklovića, N. Fejzić (2003). Organska proizvodnja hrane. IK Ljiljan, Sarajevo, univerzitetski udžbenik. Mirecki N., Wehinger T., Repič P., Jaklič M. (2011). Priručnik za organsku proizvodnju –za osoblje savjetodavne službe. Biotehnički fakultet Podgorica. Butorac, A. (1999). Opća agronomija – izabrana poglavlja. Školska knjiga, Zagreb.			
Number of active teaching classes: 4		Lectures: 2	Practices: 2
Teaching methods Lectures with use of computer technology, discussions with students, individual and team work, experimental exercises, preparation and public defense of seminary work.			
Knowledge assesment (maximum 100 points)			
Pre-exam tasks	Points	The final exam	Points
Activity during lectures	10	Written exam	
Practical lessons	10	Oral exam	30
Diary of work	40		
Expert report	10		

Study program: Ecological agriculture			
Course Title: ECOLOGY OF MICROORGANISMS			
Teacher/teachers: Radić Danka, Gordana Racić			
Status: Elective 1, 1st semester			
ECTS: 5			
Requirement: none			
The course aims			
The course should enable students to gain knowledge/understanding of basic concepts related to the ecology of microorganisms, their role in the circulation of elements in the ecosystem, the impact of abiotic factors, and the importance of microorganisms in the preservation and protection of ecosystems.			
The course outcome			
Upon completion of the course in this course, the student should be able to describe and explain: the role and importance of microorganisms in the processes of matter circulation in nature; the influence of various abiotic factors on their growth; the relationships that microorganisms enter into with other microorganisms and plants and the importance of microorganisms in preserving the stability of ecosystems. Also, the student should be trained for critical thinking, team work, to possess the skill of performing simple microbiological methods, and presenting and understanding literature data.			
The course content			
<i>Theoretical part</i>			
Introduction. Historical development and significance of ecological microbiology. Influence of abiotic factors on microbial populations. Interactions between microorganisms. Interactions between microorganisms and plants. The role of microorganisms in the circulation of carbon, nitrogen, potassium, and phosphorus. Distribution and importance of microorganisms in the atmosphere, hydrosphere, and pedosphere. Biodiversity of soil microorganisms. Importance of microorganisms in agriculture. Application of microorganisms in bioremediation.			
<i>Practical classes</i>			
Soil sampling for microbiological analysis. Preparation and sterilization of nutrient media. Determination of ammonifiers, fungi, and actinomycetes in soil. Determination of the number of nitrogen fixers, nitrifiers, and denitrifiers in soil. Microbiological analyzes of surface and groundwater. Influence of abiotic factors on the growth of microorganisms isolated from different environments.			
Literature:			
Raičević, V., Lalević, B., Kljujev, I., Petrović, J. (2010). Ekološka mikrobiologija. Univerzitet u Beogradu, Poljoprivredni fakultet.			
Lalević, B., Jovičić-Petrović, J., Vujović, B. (2015). Praktikum: Biotehnologija u zaštiti životne sredine. Univerzitet u Beogradu, Poljoprivredni fakultet.			
Barton, L., Northup, D. (2011). Microbial ecology. John Wiley & Sons, Inc., Hoboken, New Jersey. ISBN 978-0-470-04817-7.			
Number of active teaching classes: 4		Lectures: 2	Practices: 2
Teaching methods:			
Lectures, laboratory exercises, and interactive classes (e-week).			
Knowledge assessment (maximum 100 points)			
Pre-exam tasks	Points	The final exam	Points
Activity during lectures	5	Written exam	20
Practical lessons	5	Oral exam	50
Project presentation	20		
Seminars			

Study program: Ecological agriculture			
Course title: CONSERVATION TILLAGE			
Teacher/teachers: Vladan Ugrenović, Olivera Nikolić			
Status: Elective 1, 1stsemester			
ECTS:5			
Requirement:none			
The course aims			
The aim of the course is to acquaint students with the basic procedures of conservation tillage, as well as the productive potential of this type of farming and its effects on the ecosystem. Part of the course program also refers to the introduction of cover crops, as an integral part of conservation tillage and complex technology in conventional and organic food production.			
The course outcome			
Upon completion of the course in this course, the student should be able to describe and explain: basic principles of conservation tillage, use of conservation systems of tillage in different agroecosystems, basic process of soil degradation (erosion, decreasing of organic matter content in soil, soil structure degradation), the role and significance of conservation tillage on decreasing degradative soil process.			
The course content			
<i>Theoretical teaching</i>			
<ul style="list-style-type: none"> - Introduction to conservation tillage - concept, definition, role and significance; - Degradation of agricultural land: erosion, organic matter, structure, biogenicity; - Specifics of the system of conservation tillage: Reduced tillage, Mulch tillage, Partial width tillage, No tillage; - Cover crops - role, importance and management; - The impact of conservation tillage on climate change. 			
<i>Practical teaching</i>			
Visiting certified organic farms where conservation tillage systems are applied. Field exercise: measuring the coverage of the soil with plant residues, measuring the cover of crops, determining the number of worms in the soil and sampling the soil to determine chemical and biological properties.			
Literature			
Ugrenović, V., Filipović, V. (2017). Cover Crops: Achievement of Sustainability in the Ecological Systems of Agriculture. In A. Jean-Vasile & D. Nicolò (Eds.) Sustainable Entrepreneurship and Investments in the Green Economy, IGI Global, USA, 255-278.			
Ugrenović, V. (2020): Soil management. In Organic farming handbook, Forum CSRD, Skoplje, North Macedonia, Handbook, 26-30.			
Clark, A. (2008): Managing cover crops profitably. DIANE Publishing (3rd ed.): 1-248.			
Number of active teaching classes: 4		Lectures: 2	Practices: 2
Teaching methods			
Lectures, discussions with students, experimental exercises, preparation and public defense of seminary work.			
Knowledge assesment(maximum 100 points)			
Pre-exam tasks	Points	Final exam	Points
Activity during lectures	10	Written exam	
Practical lessons	10	Oral exam	40
Colloquia	3x10		
Seminars	10		

Study program: Ecological agriculture			
Course title: AGRO-GENETIC RESOURCES AND THEIR CONSERVATION			
Teacher/teachers: Dragan Perović			
Status: Elective 2, 1stsemester			
ECTS:5			
Requirement:none			
The course aims			
The aim of the course is to provide students with basic knowledge about the types and importance of agricultural genetic resources, their conservation as well as the methods and techniques of their utilization in organic production. The aim of this course is to teach students why the abundance of diversity of plants is necessary to keep land from further erosion and why it is important to protect the ecological balance for future generations.			
The course outcome			
After successfully completing the pre-exam and exam commitments student will have the basic knowledge about agricultural genetic resources as a starting material of natural variability of cultivated plants and methods, techniques and concepts that are used in the conservation and the use of agro-genetic resources in organic agriculture. An important aspect of this course is to examine the biological diversity and diversity within various species and between species and ecosystems as an important resource for human existence, with a crucial role in sustainable development.			
The course content			
<i>Theoretical teaching</i>			
Theoretical study involves systematizing individual components of genetic resources in agriculture and local population, genotypes, old and new varieties, plant breeding material of actual or potential value. Methods of conservation: Ex situ conservation, in situ conservation, on farm conservation. Conventional and marker-based estimation of the authenticity of the collected populations, ecotypes and old varieties. Preservation of duplicate genotypes of special significance (threatened, resistant and carrier etc.). The formation and maintenance of field collection, collection and preservation of wild relatives, standardization of evaluation methods			
<i>Practical teaching</i>			
Interactive teaching with laboratory and field exercises, discussions with experts on certain topics, essay.			
Literature			
Penčić, M. 2005. Biljni genetički resursi: izabrani radovi. Jugoslovenska inženjerska akademija. Beograd.			
Engels, J.M.M. & Visser, L. 2003. A guide to effective management of germplasm collections. IPGRI. Rome, Italy.			
Konvencija o zaštiti evropske flore i faune i prirodnih staništa, 1982. (Bernska konvencija) (http://www.ecnc.nl/)			
Nagoya protocol on access to genetic resources and the fair and equitable sharing of benefits arising from their utilization to the convention on biological diversity. Convention on Biological Diversity United Nations https://www.cbd.int/abs/doc/protocol/nagoya-protocol-en.pdf			
K.S. Varaprasad and N. Sivaraj (2010):Plant genetic resources conservation and use in light of recent policy developments. Electronic Journal of Plant Breeding, 1(4): 1276-1293 (July 2010)			
Number of active teaching classes: 4		Lectures: 2	Practices: 2
Teaching methods			
Practical teaching in the field, oral explanation and practical introduction to the agroecological work operations and work on performing research and development research.			
Knowledge assesment (maximum 100 points)			
Pre-exam tasks		Points	The final exam
		Points	Points
Activity during lectures		10	Written exam
Practical lessons		10	Oral exam
Colloquia		20	
Seminars		10	
			50

Study program: Ecological agriculture			
Course title: TECHNOLOGY OF THE PRODUCTION AND PROCESSING OF BEE PRODUCTS			
Teacher/teachers: Sladan Rašić			
Status: Elective 2, 1st semester			
ECTS:5			
Requirement:none			
The course aims			
<p>The course should enable students to acquire knowledge about all bee products: honey, pollen, royal jelly, propolis, bee venom, wax, their obtaining and processing methods, the most modern methods of storing and processing as well as fostering quality of bee products and the ecological aspects of modern beekeeping.</p> <p>The course also enables students to acquire knowledge in the field of organic production in beekeeping, learn to distinguish organic from non-organic bee products, master methods for the production of organic honey, organic royal jelly, organic pollen, organic propolis and organic wax and acquire the necessary knowledge of the permitted packaging and on the recommended storage conditions of organically produced bee products.</p>			
The course outcome			
<p>The students should demonstrate knowledge and understanding of the ways of production of bee products, master the knowledge in the field of production technology and proper storage and handling of bee products. Also, the students should acquire knowledge in the field of conventional, organic and organic production of bee products, and master the methods of production of organic honey, organic identification details, organic propolis and organic wax, methods of storage and packaging of the obtained organic bee products.</p>			
The course content			
<i>Theoretical study</i>			
<p>The course is designed so that the first part of the process include production and obtaining of all bee products in the hive. The second part is processed in the area of the seizure, storage and packaging of bee products, with special emphasis on packaging and packaging decrystallization and equalization product. The third part provided for the study of technological properties of bee products and the study of critical points in the beekeeping production with special emphasis on the application of good beekeeping practices. About a quarter of the section deals with the organic production of bee products, technology of organic honey and other bee products, methods of storage, warehousing and packaging, and manner of their correct use. Also, special attention is paid to the economic effect of increasing the production of organic products in beekeeping</p>			
<i>Practical classes</i>			
<p>Theoretical and practical introduction to beekeeping technologies and different ways of obtaining bee products; introduction to quality, storage, decrystallization, processing and packaging bee products conventionally and in organic production</p>			
Literature			
<p>Mladenović M., Rašić, S. (2016): Pčelarenje. UniverzitetEkukons, Sremska Kamnenica Ćerimagić H. (1991): Pčelarstvo, Zadružnknjiga, Sarajevo. Mladenović M., Stevanović G. (2003): Uzgajanjevisokokvalitetnihmatica. Zavet, Beograd. Kulinčević J., Gačić R (1991): Pčelarstvo, BIGZ, Beograd Rinderer T. (1986): Bee genetics and breedings, Academic Press, USA Conrad, R. (2007): Natural Beekeeping: Organic Approaches to Modern Apiculture, Acres U.S.A. Wang An and Peng Wen Jun (2011): Books ecological beekeeping ecological farming techniques, China Agricultural Pub Mader, E., Spivak, M., Evans, E. (2010): Managing Alternative Pollinators, Ithaka, NewYork Crane, E. (1979). Honey a Comprehensive Survey. Heinemann, London.</p>			
Number of active teaching classes:4	Lectures: 2	Practices: 2	
Teaching methods			
Lectures, discussions with students, experimental exercises, preparation and public defense of seminary work.			
Knowledge assesment (maximum 100 points)			
Pre-exam tasks	Points	The final exam	Points
Activity during lectures	10	Written exam	20

Practical lessons	10	Oral exam	30
Colloquia	10		
Seminars	20		

Study program: Ecological agriculture				
Course Title: PROFESSIONAL PRACTICE 1				
Teacher/teachers: Zorana Srečkov				
Status: Compulsory, 1st semester				
ECTS:3				
Requirement:none				
The course aims				
The goal of Professional Practice 1 is to improve student theoretical knowledge and upgrade it that is excellent base for successfully realization of study program and involving in professional work.				
The course outcome				
After completing their practice, students should be able to independently perform basic working operation of some agro - technical practices and organize some part of livestock on the ecological agriculture principles. It is expected that students will acquire the approach to solving certain problems in ecological production, too.				
The course content				
<i>Theoretical study</i>				
<i>Practical lessons</i>				
Professional practice can be performed in organizations and farms with registered activities that are in accordance with study program and with whom Faculty has adequate contractions. In dependence on previous knowledge and experiences of students, professional practice will be described as familiarization students with the basic operations and processes in organic and conventional agriculture or as student duties to follow farm activities, notice changes and critical points and recommend adequate treatments. Students will be, directly, involved in work on a farm with ecological and conventional type of production, and in the current seasonal jobs.				
There are planned visits to important institutions, research center and agricultural - professional services in the country and, depending on the conditions, in surroundings in aim to learn about current trends and demands in agricultural practice and theory, in terms of researches in the field of biotechnology. Students keep practice diary and analyze it with subject teacher.				
Literature				
Number of active teaching classes: 6		Lectures:	Practices: 6	
Teaching methods				
Practical teaching in the field, practical introduction to the ecological work operations and activities in professional services and researches centers and work on performing scientific and development research.				
Knowledge assesment (maximum 100 points)				
Pre-exam tasks		Points	The final exam	Points
Activity during practice		50	Written exam	
Signed practice diary		50	Oral exam	

Study program: Ecological agriculture
Course title: SPECIFICS OF ORGANIC CROP PRODUCTION
Teacher/teachers: Olivera Nikolić
Status: Elective 3, 2nd semester
ECTS:5
Requirement:none
<p>The course aims</p> <p>The aim of this course is to acquire knowledge about the principles of field crop species in an organic cropping system and the ability of detecting substantial differences compared to conventional farming as well as to develop ability of students to acquired knowledge apply in practical production.</p>
<p>The course outcome</p> <p>Mastering this program, student will be able for independent and professional implementation of principles in organization of organic crop production, with the proper selection of adaptable varieties and hybrids, and in accordance to specific agro-ecological conditions and in accordance with the requirements of a consumer market and the expected financial effects. An important place in crop production organizing is period of conversion including education, adaptability, evidence as well as just certification, so it is expected that students would be able to educate producers and be their support in that period. This course makes ability, too, for students involving in further research in improvement of crop production.</p>
<p>The course content</p> <p><i>Theoretical study</i></p> <p>Ecological guidelines for managing sustainable agroecosystems. Organic agriculture within system of sustainable agriculture. The principles and goals of sustainability of organic agriculture. Conversion from conventional organic crop production (control and certification). The concept and characteristics of organic crop production (field history, selection of plots and location, selection of previous crop, selection of plant species, hybrids and genotypes). Technology of organic crop production, depending on the biological characteristics of species and varieties of organic and microbial fertilizers, soil traits and its fertility. Sowing crop plants and reproductive material in organic system. Soil improvers, plant nutrition, irrigation, crop protection, harvesting and storage of products, the possibility of using organic products. Basic principles of organic farming conditions, the importance of biological properties of soil for plants and plant requirements under environmental conditions (temperature, water, aeration, mineral nutrition).</p> <p>Organic production of small grains and other cereals, fodder plants, legumes and non legumes, high protein plants, oil crops and alternative crops.</p> <p>Intercrops in organic crop production (importance of intercrops, exploitation such as fertilizers, fodder, additional income, the most important species for sowing intermediate crops). Crop consociation, ecocorridors in organic crop production (importance, role, establishment, species selection).</p> <p>Legislation in organic production, (national and international): production methods, processing, storage, transport, labeling, declaration and trade of organic products. Issuing certificates and recertifications, supervision, import of organic products, with special reference to field production.</p> <p><i>Practical study</i></p> <p>Assessment of agro – technical treatment and their impact to some soil properties. Design of plant rotation plan. Analysis certification procedures in organic crop production. Field trial: tour eco farms, interviews with producers. Evaluation of system sustainability.</p>
<p>Literature</p> <p>Goldammer, T. (2016): Organic Crop Production. Management Techniques for Organic Farming. Apex Publishers.</p> <p>Guide for Organic Crop Producers, Pamela Coleman, 2012. https://www.ams.usda.gov/sites/default/files/media/Guide-OrganicCropProducers.pdf</p> <p>FAO/WHO Codex Alimentarius commission: Codex Alimentarius. Organically Produced Foods, 2007.</p> <p>Kovačević D., Oljača S. (2005). Organska poljoprivredna proizvodnja. Monografija. Poljoprivredni fakultet Zemun.</p> <p>Glamočlija Đ. (2004). Posebno ratarstvo, žita i zrne mahunarke. Draganić D.O.O.</p> <p>Malešević. M., Jaćimović. G., Babić. M., Latković, D. (2008). Upravljanje proizvodnjom ratarskih</p>

kultura. U monografiji Organska poljoprivreda tom I., Lazić B., Babović J (urednici). Institut za ratarstvo i povrtarstvo N. Sad.			
Zakon o organskoj proizvodnji Republike Srbije (2010) i pravilnici			
Number of active teaching classes: 4	Lectures: 2	Practices: 2	
Teaching methods			
Lectures with use of computer technology, discussions with students, individual and team work, experimental exercises, preparation and public defense of seminary work.			
Knowledge assessment (maximum 100 points)			
Pre-exam tasks	Points	The final exam	Points
Activity during lectures	10	Written exam	
Practical lessons	10	Oral exam	50
Colloquia	2x10		
Seminars	10		

Study program: Ecological Agriculture			
Name of Subject: THE SPECIFICS OF ORGANIC LIVESTOCK PRODUCTION			
Teacher/teachers: Milomir Blagojević, Sladan Rašić			
Course status: Elective 3, 2nd semester			
ECTS:5			
Requirement:none			
The course aims			
To acquaint students with the use of appropriate methods and enable them to understand the most important principles of organic livestock production, relationships between organic livestock systems, proper choice of breeds of domestic animals in organic livestock production, the importance of proper application of animal husbandry practices (nutrition, selection, placement, care, etc.) in organic livestock production.			
The course outcome			
Students should be able to explain the importance of organic livestock production and describe necessary changes which should be made on a farm registered for organic livestock production; describe and distinguish the most important breeds of domestic animals that are grown in organic livestock production; explain the most important farm operations that are used in organic livestock production; describe, compare and contrast various methods of cultivation which are used in organic livestock production.			
The course content			
Production systems in organic livestock production: manure and grazing systems, intensive and extensive systems, the impact of livestock production on the environment; The choice of breeds of farm animals for organic livestock production; Principles; The production of organic livestock - food, accommodation, selection, care and welfare of farm animals in organic livestock production; Control of productivity, safety and product quality in organic livestock production.			
Literature			
Lazarević, R. (2008): Stočarstvo u organskoj proizvodnji, Novi Sad			
Jovanović i sar. (2014): Proizvodnja i menadžment u organskoj poljoprivredi, Edukons.			
Senčić, Đ., Antunović, Z., Mijić, P., Baban, M., Puškadija, Z. (2011). Ekološka zootehnika. Poljoprivredni Fakultetu u Osijeku.			
Mitić, N., Ferčej, J., Zeremski, D., Lazarević, Lj.: Govedarstvo, Zavod za udžbenike i nastavna sredstva, Beograd, 1987.			
Mitić N.: Ovčarstvo, Zavod za udžbenike i nastavna sredstva, Beograd, 1987.			
Flack, S. (2011). Organic Dairy Production, Chelsea Green Publishing			
Telford, L., Macey, A. (2014). Organic Livestock Handbook. Acres, U.S.A.			
Number of active teaching classes: 4		Lectures: 2	Practical classes: 2
Teaching methods			
The method of oral presentations and discussions, written work (seminars and preliminary exam)			
Knowledge assesment(maximum score 100)			
Pre-exam tasks	points	The final exam	points
Activity during the lectures	10	Written exam	30
Practical lessons	10	Oral exam	
Colloquia	20		
Laboratory works	10		
Seminars	20		

Study program: Ecological Agriculture			
Name of Subject: SPECIAL PLANT PROTECTION IN ECOLOGICAL AGRICULTURE			
Teacher/teachers: Slobodan Milenković			
Course status: Elective 4, 2nd semester			
ECTS:5			
Requirement:none			
The course aims			
Provide students with the knowledge of biological plant protection measures and the use of bio agents for combating phytopathogenic microorganisms, insects and weeds in order to protect the environment.			
The course outcome			
The acquired knowledge is the basis for the application of biological measures in the protection of cultivated plants from harmful microorganisms, insects and weeds in order to reduce waste and pollution of the environment, which encourages agro-environment agriculture.			
The course content			
<i>Theoretical study</i>			
Biological control, definition, history and development. Mechanisms of biological control. Biological products in agriculture. Micro parasites, microorganisms, antagonists, antibiotics, bacteriophages, isolation, obtaining pure cultures. Results of application. Bioinsecticides. Predators and parasites, relationship to their host, the most important species. Results of application. Microbial components as potential herbicides. Biology and environmental conditions for the occurrence of the most important plant pathogenic microorganisms (fungi, bacteria, viruses, mycoplasmas), insects and weeds. Short-term and long-term prognosis phenomenon. Signalling. Preventive direct actions in the protection of cultivated plants. Software programs forecasts in crop protection.			
<i>Practical lessons</i>			
Isolation and Identification of <i>Bacillus subtilis</i> and <i>Bacillus thuringiensis</i> . Antagonism. Results of biological agents. Bioinsecticides. Determination of predators of the order Coleoptera, Diptera, Neuroptera. Determination of parasites from the order Hymenoptera and Diptera. Results of application.			
Literature			
Campbell, R. (1989). Biological control of microbial plant pathogens. Cambridge University Press.			
Copping, L.G. (2009). The Manual of Biocontrol Agents. BCPC, UK.			
Van Driesche, R., Hoodle, M., Center, T.(2009). Control of Pests and Weeds by Natural Enemies: An Introduction to Biological Control. Wiley-Blackwell, Ma and Oxford.			
Jarak, M., Govedarica, M. (2003). Mikrobiologija. Poljoprivredni fakultet, Novi Sad.			
Štrbac, P., Čupina, A. (2000).: Entomologija. Poljoprivredni fakultet, Novi Sad.			
Štrbac, P., Čamprag, D. (2013). Integralna zaštita bilja (Agrotehničke mere) i štetočine njivskih kultura. Poljoprivredni fakultet, Novi Sad			
Number of active teaching classes: 4		Lectures: 2	Practical classes: 2
Teaching methods			
The method of oral presentations and discussions, written work (seminars and preliminary exam)			
Knowledge assesment(maximum score 100)			
Pre-exam tasks		Points	The final exam
Activity during the lectures		10	Written exam
Practical lessons		10	Oral exam
Colloquia		20	
Seminars		10	

Study program: Ecological agriculture			
Course title: INTEGRATED WEED MANAGEMENT IN ORGANIC AGRICULTURE			
Teacher/teachers: Miloš Rajković			
Course status: Elective 4, 2nd semester			
ECTS:5			
Requirement:none			
The course aims			
The course should enable the student: acquiring knowledge about direct and indirect damage that weeds cause to cultivated plants, basic methods of weed control in organic production, the importance of preventive measures, proper combination of direct measures depending on biological and meteorological conditions, and application of new technologies in the integrated concept weed control.			
The course outcome			
At the end of the course, the student should show knowledge and understanding of direct and indirect measures in weed control in certain crops. The student should be encouraged to think independently regarding the combination of all available weed control measures, in order to choose the optimal solution depending on the biological and meteorological conditions of agricultural production.			
The course content			
<i>Theoretical classes</i>			
Weed damage, Weed propagation methods, Weed attitude towards plant production systems and agrotechnics, Preventive weed control measures, Agrotechnical measures, Physical weed control measures, Biological weed control, Application of bioherbicides, Application of new technologies in weed control.			
<i>Practical classes</i>			
Significance of preventive measures in weed control, Agrotechnical measures of importance for weed control, Machines for mechanical weed control, Application of mulch foil, Application of flame-weed control, Bioherbicide testing.			
Literature			
Merfield, C. N. (2019). Integrated weed management in organic farming. Chapter 5 in: Organic farming, pp. 117-180, Woodhead Publishing. https://www.sciencedirect.com/science/article/pii/B9780128132722000057			
Milenković, S. (2015). Weed control in organic agriculture. Manual 9, ISBN 978-86-88997-04-1, National Association for the Development of Organic Production Serbia Organica. https://serbiaorganica.info/wp-content/uploads/2019/01/8.jpg			
Van der Schans, D.A., Bleeker, P.O., Molendijk, L.P.G., Plentinger, M.C., Van Der Weide, R.Y., Lotz, L.A.P., Baumann, D. T. (2006). Practical weed control in arable farming and outdoor vegetable cultivation without chemicals (No. 352). Wageningen UR, Applied Plant Research. https://edepot.wur.nl/24553			
Merfield, C.N. (2002). Organic Weed Management: A Practical Guide. Lincoln University. https://orgprints.org/id/eprint/31940/1/organic-weed-management-2003-merfield.pdf			
Liebman M., Mohler C.L., Staver C.P. (2001): Ecological management of agricultural weeds. Cambridge university press. https://doi.org/10.1017/CBO9780511541810			
Number of active teaching classes: 4		Theoretical teaching: 2	Practical teaching: 2
Teaching methods			
Lectures, interactive teaching, experimental work.			
Knowledgeassessment(maximum number of points 100)			
Pre-exam tasks		Points	The final exam
Activity during lectures		10	written exam
Practical lessons		10	
Colloquia		2 x 15	
Seminars		10	
			40

Study program: Ecological agriculture			
Course title: PRECISION AGRICULTURE			
Teacher/teachers: Miloš Rajković			
Course status: Elective 5, 2nd semester			
ECTS:5			
Requirement:none			
The course aims			
Course objective is to introduce students to modern methods of data collection, processing and analysis that in combination with other information, with the help of modern information technology, give the opportunity to manage agricultural production while improving resource efficiency, productivity, quality, profitability and sustainability.			
The course outcome			
At the end of the course the student should show knowledge and understanding of: geo-positioning, application of sensors, unmanned aerial vehicles and satellites for measuring soil properties, crops and yields on harvesting machines, as well as spatially adaptable technological processes (tillage, sowing, irrigation, care, crop protection and harvesting), all with the application of modern machines and information technologies.			
The course content			
<i>Theoretical classes</i>			
History of precision agriculture, Acceptability of modern solutions, Satellite location and guidance of machines, Remote detection, Application of unmanned aerial vehicles in agriculture, Sensors for determining soil characteristics, Remote control of irrigation systems, Sensors for measuring seasonal characteristics of crops and yields, Application of self-managing systems and robots in production.			
<i>Practical classes</i>			
Digital weather stations, Vegetative indices, Weed, disease and pest detection, Mobile phone positioning, Field book management platforms, Mobile production management applications.			
Literature			
Kostić, M. (2021): Precision Agriculture. Faculty of Agriculture, University of Novi Sad. http://polj.uns.ac.rs/sites/default/files/udzbenici/Precizna%20poljoprivreda%20-%20Kosti%C4%87%20Marko%20kona%C4%8Dno.pdf			
Hamrita, T.K. (2020): Women in Precision Agriculture: Technological Breakthroughs, Challenges and Aspirations for a Prosperous and Sustainable Future. Springer Nature. https://doi.org/10.1007/978-3-030-49244-1			
Duncombe, R. (2018): Digital technologies for agricultural and rural development in the Global South. CABI. https://www.cabi.org/bookshop/book/9781786393364			
Pedersen, S.M., Lind, K.M. (2017): Precision Agriculture: Technology and Economic Perspectives. Springer International Publishing. https://doi.org/10.1007/978-3-319-68715-5			
Krishna, K. R. (2017): Push button agriculture: Robotics, drones, satellite-guided soil and crop management. eBook ISBN9781315366500, Apple Academic Press. https://doi.org/10.1201/b19940			
Number of active teaching classes:4		Theoretical teaching: 2	Practical teaching: 2
Teaching methods			
Lectures, interactive teaching, experimental work.			
Knowledge assesment(maximum number of points 100)			
Pre-exam tasks	Points	The final exam	Points
Activity during lectures	10	Written exam	40
Practical lessons	10	Oral exam	
Colloquia	2 x 15		
Seminars	10		

Study program: Ecological agriculture			
Course Title:ORGANIC VEGETABLE PRODUCTION IN GREENHOUSES			
Teacher/teachers: Zorana Srećkov, Janko Červenski			
Status:Elective 5,2ndsemester			
ECTS:5			
Requirement:none			
The course aims			
The aim of this course is to introduce students with organic growing technics of vegetable in different forms and types of greenhouses, as well as with growing methods of different types of vegetables.			
The course outcome			
Student will be trained for organic vegetable production in different type and forms of greenhouses.			
The course content			
<i>Theoretical study</i>			
Different forms and types of greenhouses. Choosing place for building greenhouses. Growing conditions in greenhouses. Control the microclimate conditions. Growing methods in greenhouses (crop rotation, nutrition of plants, sowing, planting). Growing seedlings. Growing the most important species of vegetables.			
<i>Practical classes:</i>			
Covering materials. Biological and morphological traits of vegetables. Growing substrates. Growing seedlings. Field exercises – growing different vegetables in greenhouses.			
Literature:			
Baudoin, W., Nersisyan, A.,Shamilov, A., Hodder, A., Gutierrez, D., Nicola, S., Chairperson, V., Gruda, N., Urban, L., Tany, J. (2017). Good agricultural practices for greenhouse vegetable production in the South East European countries. Food and agriculture organization of the united nations, Rome.			
Baudoin, W., Nono-Womdim, R.,Lutaladio, N., Hodder, A.,Castilla, N., Leonardi, C.,De Pascale, S.,Qaryout, M. (2003). Good agricultural practices for greenhouse vegetable crops. Food and agriculture organization of the united nations, Rome			
Laitenberger, K. (2013). Vegetables and herbs for the greenhouse and polytunnel. Constable & Robinson, London.			
Lazić, B., Ilić, Z., Đurovka, M. (2013). Organska proizvodnja povrća. Centar za organsku proizvodnju Selenča i Edukons Univerzitet, Sremska Kamenica.			
Lazić B., Srećkov, Z. (2017). Rasad – organska proizvodnja. Luka znanja, Novi Sad			
Todorović V., Zeljković, S., Moravčević, Đ. (2019). Proizvodnja rasada povrća i cveća. Poljoprivredni fakultet Univerziteta u Banjoj Luci, Banja Luka			
Number of active teaching classes: 4	Lectures: 2	Practices: 2	
Teaching methods: Lectures, discussions with students, experimental exercises, field work			
Knowledge assesment(maximum 100 points)			
Pre-exam tasks	Points	The final exam	Points
Activity during lectures	10	Written exam	50
Practical lessons	10	Oral exam	
Colloquia	20		
Seminars	10		

Study program: Ecological agriculture
Course Title: AGROFORESTRY
Teacher/teachers: Nevena Čule, Mirjana Bojović
Status: Elective 5, 2nd semester
ECTS:5
Requirement:none
<p>The course aims</p> <p>The course aims to expand students' knowledge about methods and technologies of agroforestry. Through the course, students should gain the ability to solve specific problems, thorough knowledge and understanding of the theory of planning, design, establishing, nurturing and evaluation of agroforestry systems as well as readiness for analysis and synthesis of acquired knowledge from this discipline.</p>
<p>The course outcome</p> <p>Students are trained to solve complex problems innovatively and independently and thus contribute to the development and improvement of research and practical techniques in this field. Based on the acquired knowledge, students can plan, design, establishing and maintain in a functional state different types of agroforestry systems, as well as evaluate emerging ecosystems based on different criteria.</p>
<p>The course content</p> <p><i>Theoretical study</i></p> <p>Analysis of environmental conditions; Ecological factors of degraded landscapes and their importance in establishing and nurturing agroforestry systems; Planning and design of different types of agroforestry systems (Windbreaks, Silvoarable, Forest Farming Systems, Silvopasture, Forest gardening, Riparian forest buffers and others). Planning and design of different types of biological reclamation of degraded areas (surface mines, mines, tailings, ash dumps, landfills, etc.); The role and function of vegetation in the remediation of degraded areas; Selection of tree and shrub species for establishing of agroforestry systems and biological reclamation; Selection of planting material for establishing of agroforestry systems and biological reclamation; Methods and technological procedures of establishing, planting, sowing, monitoring and maintenance of plantings; Preparatory works for establishing of agroforestry systems and greenery on degraded areas; Selection and protection of existing tree species in the field; Transfer of the project to the field; Agrotechnical soil preparation; Time of planting and sowing; Planting and sowing; Initial plant care; Soil care measures; Plant care measures; Monitoring of emerging ecosystems; Economic and sociological aspects of agroforestry systems; Evaluation of agroforestry systems.</p> <p><i>Practical classes:</i></p> <p>Organizing practical workshops, group discussions as well as preparation and defense of seminar papers</p>
<p>Literature:</p> <p>Rosati, A., Borek, R., Canali, S. (2021): Agroforestry and organic agriculture. <i>Agroforestry Systems</i> 95, 805–821.</p> <p>Plieninger, T., Muñoz-Rojas, J., Buck, L.E., Scherr S.J. (2020): Agroforestry for sustainable landscape management. <i>Sustainability Science</i> vol. 15, 1255–1266.</p> <p>Marsden, C., Martin-Chave, A., Cortet, J., Hedde, M., & Capowiez, Y. (2020). How agroforestry systems influence soil fauna and their functions-a review. <i>Plant and Soil</i>, 453(1), 29-44.</p> <p>Raskin, B., Osborn, S. (eds.) (2019): <i>The Agroforestry Handbook: Agroforestry for the UK</i>. Bristol: Soil Association Limited. 151. ISBN 978-1-904665-07-6.</p> <p>Dagar, J. C., Tewari, V. P. (eds.) (2018): <i>Agroforestry: anecdotal to modern science</i>. Springer, Singapore. 879. eBook ISBN978-981-10-7650-3.</p> <p>Montagnini, F. (ed.) (2018): <i>Integrating landscapes: Agroforestry for biodiversity onservation and food sovereignty</i> (Vol. 12). Springer, Cham, 501. eBook ISBN978-3-319- 69371-2.</p> <p>Muschler R.G. (2016): <i>Agroforestry: Essential for Sustainable and Climate-Smart Land Use?</i> In: Pancel L., Köhl</p>

M. (eds) Tropical Forestry Handbook. Springer, Berlin, Heidelberg. 1- 104. eBook ISBN 978-3-642-41554-8.

Nair, P.K.R. (1993). An introduction to agroforestry. Kluwer Academic Publishers, Dordrecht, The Netherlands.

Nair, P. K. R. (1993). An introduction to agroforestry. Kluwer Academic Publishers, Dordrecht, The Netherlands. ISBN 0-7923-2134-0.

Vujić, S., Miljanović, I., Cvejić, J., Dražić, D. (2009). Projektovanje rekultivacije i uređenje predelapovršinskih kopova, Rudarsko-geološkifakultetUniverzitet u Beogradu; 1-366. ISBN 86-7352-225-0.

Dražić, D. (2002). Multifunkcionalna valorizacija predela i ekosistema stvorenih rekultivacijom odlagališta površinskih kopova Kolubarskog basena. Monografija. Saveznisekretarijat za rad, zdravstvo i socijalnostaranje - Sektor za životnu sredinu, Beograd; 1-261. ISBN 86-7650-000-2.

Kangas, P. (2003). Ecological engineering: Principles and Practice, Lewis Publishers CRC Press LLC, Florida; 1-472. ISBN 0203486544.

Anastasijević, N. (2011). Podizanje i negovanje zelenih površina, Šumarskifakultet, Beograd;

Cook, T. W., Vanderzanden, A. M. (2011). Sustainable Landscape Management: Design, Construction and Maintenance, John Wiley and Sons, Inc, USA; 1-256. ISBN 0470880422.

Number of active teaching classes: 4	Lectures: 2	Practices: 2	
Teaching methods: Lectures, discussions with students, preparation and public defence of practical applied works.			
Knowledge assesment (maximum 100 points)			
Pre-exam tasks	Points	The final exam	Points
Activity during lectures	10	Written exam	50
Practical lessons	10	Oral examination	
Colloquia	20		
Seminars	10		

Study program: Ecological agriculture			
Course Title: PROFESSIONAL PRACTICE 2			
Teacher/teachers: Zorana Srečkov			
Status: Compulsory, 2nd semester			
ECTS: 3			
Requirement: none			
The course aims			
The Professional practice 2 is aimed to provide students with the knowledge of scientific and professional issues of agricultural ecological system, in particular, the characteristics of specific agro-technical and zoo – technical treatments and procedures, especially ones which contribute to the conservation of ecosystems and agricultural landscapes.			
The course outcome			
The Professional practice 2, done in different organizations with open and closed type of organic farming, together with acquired theoretical knowledge, allows students to organize optimal ecological production, but other systems of sustainable agriculture and allows involvement in research projects.			
The course content			
<i>Theoretical study</i>			
<i>Practical lessons</i>			
Content of Practical practice 2, carried out in production ambience, includes: analysis of technology of plant growing and keeping cattle, analysis of meteorological factors and indicators of soil fertility, evaluation of conditions and success of production, design of own production plan, like a trial, and its implementation, with interpretation of planed and applied procedures and techniques.			
During Practical practice 2 in researching centers the students familiarize with the conditions, methods of implementation and goals of ecological research and participate in some phases of the scientific research process, process samples, select and process results.			
Student keep practice diary and analyze it with their teachers.			
Literature			
Number of active teaching classes: 6		Lectures:	Practices: 6
Teaching methods			
Practical teaching in the field, practical introduction to the ecological work operations and activities in professional services and researches centers and work on performing scientific and development research.			
Knowledge assesment (maximum 100 points)			
Pre-exam tasks	Points	The final exam	Points
Activity during practice	50	Written exam	
Signed practice diary	50	Oral examination	

Study program: Ecological agriculture			
Course title: Final work 1- STUDY RESEARCH WORK			
Teacher/teachers: Mentor to final work 1			
Status: Elective, 2nd semester			
ECTS: 9			
Requirement: none			
The course aims			
The goal of subject is ending of experimental work, up to half of semester, results collecting and sorting, their statistical and graphical processing, with the final goal: writing master thesis in accordance with University and Faculty rules and its defense. In parallel, an integral part of the goal is establishing continuous communication between mentor and student, cooperation in the analysis of literature data and comparison with those obtained in the research.			
The course outcome			
It is expected that students will be able for systematic use of literatures, process date and independent placement of results as a base for, further, ability for analytical and systematic monitoring of trends, critical analysis occurrence, identification of problems and definition of models for their solution, in the field of agricultural science and practice.			
The course content			
Subject content is in accordance with demands of master thesis writing. The parts of structure of study investigation work are: investigation phenomena and choice of topic, review of literature, setting up experiment, processing, analysis and formatting of data.			
Literature			
Recommended references relevant to the topic of master thesis			
Number of active teaching classes: 8		Lectures:	SIW: 8
Teaching methods			
The student consults with a mentor and other professors, who are engaged in research and theory in the field of final work. Depending on the chosen topic, the student applies the adopted methods and procedures, acquired through compulsory and elective courses (measurements, tests, statistical data processing, etc.).			
Knowledge assesment (maximum 100 points)			
Pre-exam tasks	50	The final exam	50
Preparing literature	10	Systematization of results	20
Experiment performing	40	Data analysis and results discussion	30

Study program: Ecological agriculture			
Course title: THE FINAL WORK 2 – drafting and defense			
Teacher/teachers: Mentor to final work			
Status: Compulsory, 2ndsemester			
ECTS: 5			
Requirement:25 ECTS			
The course aims			
Activities on the preparation, writing and defense of the final work provide the student with the opportunity to combine and connect the acquired knowledge from different fields within ecological agriculture and to, working on a specific, theoretical or practical topic, recognize and define current problems and phenomena in modern agricultural science and practice. The aim is to enable students to fully and independently apply the methodology of scientific research in the field of organic agriculture, and appropriate computer tools, from defining the topic through analysis and examination, systematization of obtained results and their interpretation to concluding remarks, recommendations, presentations and public work defense.			
The course outcome			
By mastering this program, student would be able to recognize actual topics, trends, phenomena and problems in ecological agriculture as well as in the wider, multidisciplinary areas and, further, comprehensive consideration and analysis of the same, and their solution by applying appropriate experimental methods, procedures and research processes. It is expected, too, that student will acquire the necessary knowledge in the field of information and communication technologies and master the skills of oral and written communication, and public speaking skills, which, in total, indicates the mastery of specific practical skills needed to perform the profession.			
The course content			
The final work as a scientific research paper presents an individual, professional processing a particular topic in which the students unite, expand and round thematic content, which have been course to investigations of selected areas of ecological agriculture during graduate studies. Students can apply to do the final master work after passing all the curriculum provided for the exams, and with achieved 25 ECTS. Student applies to final work with the prescribed form. Consultation on the topic and structure of work is done with the selected mentor. After the adoption of the theme, student is writing a paper with the chapters as follow: Introduction, Literature Review, Hypothesis Setting, Experimental Methods, Results and Discussion, Conclusion and List of Literature. Student acquires the right to defense after evaluating the work and written consent of the supervisor and fulfillment of all other obligations provided by the Law and acts of the University. Before public defense, the student submits 5 (five) copies of the hard covered work, with standard spacing, margins and other technical characteristics in accordance with the general acts of the University and the Faculty. When defending the final master work, student gains a title "agriculture engineer-master."			
Literature			
Recommended references relevant to the topic of master thesis			
Number of lectures: 2		Lectures:	Other classes: 2
Teaching methods			
Experimental methods, in accordance with topic of thesis, review of scientific and professional literature, collecting and processing data, mentoring work with the candidate and writing and oral presentation of thesis			
Knowledge assesment (maximum 100 points)			
Pre-exam tasks		Points	Final exam
Final work preparation		20	Final work presentation
Finishing equipment in printed form (content, impressum)		20	Final work defense
Preparation of final work presentation		10	