

<b>Study program: Ecological agriculture</b>			
<b>Course Title: The application of modern technologies in livestock production</b>			
<b>Teacher: Dr Aleksandar Z. Masic, Associate Professor</b>			
<b>Status: Elective 4, II semester</b>			
<b>ECTS: 6</b>			
<b>Prerequisite: None</b>			
<b>The course objective</b>			
Course objective is to provide information on the modern technologies, farm practices and application of new products as an antibiotic alternative to improve production of food producing animals, their daily weight gain, immunity and meat quality			
<b>Course outcome</b>			
Students will receive and learn new scientific information on modern technologies that are applied or could be applied in organic production of food producing animals. In addition, students will learn about importance of finding and using products as alternatives to antibiotics in organic livestock production.			
<b>Course Syllables</b>			
<i>Theory-lectures</i>			
Open and closed types of livestock production, use of high quality food in improving meat quality. Basic knowledge on embryo transfer and semen selectin based on sex in order to improve genetics of livestock in particular cattle. Use of immune modulators as alternatives to antibiotics and mechanism of action.			
<i>Practical/lab</i>			
Lecture notes, site visits (dairy and beef cattle farms) to demonstrate application of immune modulators, monitoring of daily weight gain and clinical signs in order to reduce and control infectious diseases and reduce use of antibiotics.			
<b>Литература</b>			
1. Lecture notes			
2. National and international peer-reviewed manuscripts, abstracts from scientific conferences			
3. Thomas, Heather Smith ; Storey's Guide to Raising Beef Cattle, 3rd Edition: Health, Handling, Breeding ; Storey Publishing, LLC; 3 <sup>rd</sup> edition (Oct. 28 2009)			
<b>Number of lecture hours: 4</b>	<b>Lectures: 2</b>	<b>Practice: 2</b>	
<b>Teaching methods:</b> The method of oral presentations and discussions, written work (seminars and colloquium). The method of clinical, practical work on animal farms and chemical analytical laboratories.			
Grade (maximum 100 points)			
Pre-commitments	Points	The final exam	Points
Activity during lectures	10	Written exam	30
Practical classes	10	Oral examination	
Colloquia	20		
Laboratory work	10		
Seminars	20		