

<b>Study Programme:</b> Agronomy			
<b>Course Unit Title:</b> New technologies in the production of beef and cattle milk			
<b>Course Unit Code:</b> 3DAI3101			
<b>Name of Lecturer(s):</b> Full Professor PhD Miroslav Plavšić; Full Professor PhD Denis Kučević			
<b>Type and Level of Studies:</b> PhD- postgraduate doctorate studies			
<b>Course Status (compulsory/elective):</b> elective			
<b>Semester (winter/summer):</b> Winter			
<b>Language of instruction:</b> English			
<b>Mode of course unit delivery (face-to-face/distance learning):</b> face-to-face			
<b>Number of ECTS Allocated:</b> 6			
<b>Prerequisites:</b> None			
<b>Course Aims:</b> Introducing students to the biotechnology of beef and milk production in order to provide adequate technology and economical production. Upon completion of the doctoral study program, experts are formed capable of scientific research work and application of scientific achievements and new technologies in the production of beef and milk.			
<b>Learning Outcomes:</b> The formation of experts with academic education, which has significantly expanded and deepened knowledge in the field of beef and milk production, relies on the knowledge and skills acquired at second level studies, graduate academ-master studies and / or as a special preparation for research in the given narrow научной области. The acquired knowledge of the Doctor of Science gives students the opportunity to apply deepened knowledge, understanding and skills acquired during doctoral studies, to successfully solve complex problems in a new or unknown environment, especially in the production of beef and milk.			
<b>Syllabus:</b>			
<i>Theory</i>			
Economic importance of beef and dairy production; Development directions and trends; Production type, breed and meat products for meat production and for the manufacture of the bag; Genetic improvement of cattle; New biotechnological methods of importance for improving cattle breeding and dairy breeds; Utilization of cattle in meat and milk production; Saw and slaughtering characteristics of cattle; SEUROP quality assessment system for beef hulls; ICAR and application of its rules in the production of beef and milk.			
Required Reading:			
1. Van Belzen Nico: Achieving sustainable production of milk. Volume 1: Milk Composition, Genetics and Breeding. Burleigh Dodds Science Publishing Limited Cambridge, United Kingdom, 2017.			
2. VanOverbeke, D.L.: Handbook of Beef safety and Quality. Haworth Food & Agricultural products Press, 2007.			
3. Ensminger, E. M., Perry, R.C.: Beef Cattle Science. Seventy Edition. InterstatePublishers, Inc. Danville, Illinois, 1997.			
4. Phillips, C.J.C.: Principles of Cattle Production, 2nd Edition, CABI, 2010.			
5. Chenoweth, J.P. and Sanderson, W.M.: Beef Practice: Cow-calf Production Medicine. Blackwell, 2005.			
6. Marek, E. R.: Dairy Cows: Nutrition, fertility and milk production. Nova Science Publishers, Inc. New York, 2011.			
7. Webster, J. (2012): Management and Welfare of Farm Animals: The UFAW Farm Handbook, 5th Edition. John Wiley & Sons.			
8. Ball, P.J.H. and Peters, A.R.: Reproduction in cattle, Third edition. Blackwell, 2007.			
<b>Weekly Contact Hours: 3</b>	<b>Lectures: 3</b>	<b>Practical work: --</b>	
<b>Teaching Methods:</b> Lectures, and Practical classes, Consultations			
<b>Knowledge Assessment (maximum of 100 points):</b>			
<b>Pre-exam obligations</b>	points	<b>Final exam</b>	points
Active class participation		written exam	
Practical work		oral exam	<b>50</b>
Preliminary exam(s)		.....	
Seminar(s)	<b>50</b>		
The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam, project presentation, seminars, etc.			

