

Study Programme: Agricultural engineering and information systems			
Course Unit Title: Livestock agricultural technics			
Course Unit Code: 19.PTI029			
Name of Lecturer(s): Miodrag, S, Zoranović			
Type and Level of Studies: Undergraduate , level 1			
Course Status (compulsory/elective): compulsory			
Semester (winter/summer): summer			
Language of instruction: Serbian			
Mode of course unit delivery (face-to-face/distance learning): face-to-face			
Number of ECTS Allocated: 3			
Prerequisites: -			
Course Aims: Acquiring theoretical and practical knowledge about machines, devices and equipment for raising domestic animals, their technical and exploitation characteristics and the choice when equipping farms. Getting to know the specifics of adequate technologies with accompanying process equipment for processing manure.			
Learning Outcomes: The ability of the student to choose machines and equipment, as an integral part of livestock farms, with their proper use and preventive maintenance. Raising the level of energy and ecological efficiency of production processes in animal husbandry.			
Syllabus: <i>Theory: Theoretical basics of electricity with its subtypes. Alternative sources of electricity and thermal energy in animal husbandry. Generators and electric motors. Basics of automation in animal husbandry. Machines and equipment for storing hay, green fodder, silage and haylage. Dehydrator stations. Devices for the preparation of grain and root-tuberous fodder. Farm supply. Electric fence and other auxiliary devices in animal husbandry. Complex mechanization for production in cattle, pig and poultry farming. Mechanization of work in sheep farming and fishing. Air and water purification systems in animal husbandry. Technical and technological management of manure.</i> <i>Practice: Demonstration and calculation procedures for the above areas.</i>			
Required Reading:			
<ol style="list-style-type: none"> Tošić, M.: Savremeni objekti i oprema za gajenje svinja, Nolit, Beograd,2001. Tošić, M.: Objekti i oprema za držanje krava, Poljoprivredni fakultet, Zemun, 2002. Zoranović, M., Potkonjak, V., Ivanišević, M.: Elektronska forma, predizdanje novog udžbenika „Poljoprivrena tehnika i automatizacija procesa u stočarstvu“, Novi Sad. 2013. C. H. BURTON and C. TURNER: MANURE MENAGEMENT. Treatment Strategies for Sustainable Agriculture 2nd Edition. Silsoe Research Institute 2003. Wrest Park. Silsoe. Bedford. UK. Zoranović, M.: Originalne animacija tehničko-tehnoloških procesa u stočarstvu sa njihovim teoretskim i praktičnim osnovama. Novi Sad, 2013. 			
Weekly Contact Hours: 6		Lectures: 3	
		Practical work:3	
Teaching Methods: Oral lectures with active participation of students, slides with originally created animations, created movies using windows movie maker. Going out to farm plots with active monitoring of mechanization for the preparation of bulk fodder. A tour of the farm to learn about the accompanying machinery and various equipment for power supply, nutrition, ventilation, air and water purification, heating, fertilizing, etc.			
Knowledge Assessment (maximum of 100 points):			
Pre-exam obligations	points	Final exam	points
Active class participation	10	written exam	30
Practical work	20	oral exam	25
Preliminary exam(s)		15
Seminar(s)			
The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam, project presentation, seminars, etc.			