Course Unit Descriptor

Study Programme: Animal Production			
Course Unit Title: Animal breeding software			
Course Unit Code: 19MST1I16			
Name of Lecturer(s): Full professor Snežana Trivunović, associate professor Ljuba Štrbac			
Type and Level of Studies: Master academic studies			
Course Status (compulsory/elective): Elective			
Semester (winter/summer): Winter			
Language of instruction: Serbian, but individual consultations and materials are offered to incoming students in English			
Mode of course unit delivery (face-to-face/distance learning): face-to-face			
Number of ECTS Allocated: 6			
Prerequisites: None			
Course Aims: Education of students about computer programs that are applied during the implementation of breeding programs in animal husbandry. Training students for direct work with programs for herd book records in animal husbandry.			
Learning Outcomes: A student who has acquired the theoretical and practical knowledge necessary to analyze and solve practical problems in the field of keeping family records, forming a database and conducting quantitative genetic analyses. A student who is familiar with scientific research work in the field of domestic animal breeding through the use and analysis of literature, collecting and interpreting data, making valid judgments for solving certain problems in this field.			
Syllabus: *Theory* Database. Records in cattle breeding. Records in pig farming. Records in sheep breeding. Records in goat farming. Records in horse breeding. Records in poultry farming. *Practice* Programs for spreadsheet calculations. Formation of the database. Software for keeping registers in cattle breeding. Software for keeping registers in pig farming. Software for keeping registers for sheep breeding. Software for keeping registers in the goat industry. Software for keeping registry records in horse breeding. Software for keeping records in the poultry industry.			
Required Reading: 1. Breeding programs for farm animals: . https://www.stocarstvo.edu.rs/centar 2. Meyer K. (2007): WOMBAT – A tool for mixed model analyses in quantitative genetics by REML, J. Zhejiang Uni. SCIENCE B, 8: 815–821.			
Weekly Contact Hours:	**Lectures: 2**	**Practical work: 2**	
Teaching Methods: The theoretical part of the class is conducted with the use of presentations prepared so that students have a visual representation of the teaching units. Practical teaching takes place in the laboratory for the application of computers and software in the field of implementing breeding programs.			
Knowledge Assessment (maximum of 100 points):			
Pre-exam obligations	points	**Final exam**	points

Active class participation	10	written exam	50
Practical work	40	oral exam	-
Preliminary exam(s)		…….	
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.			