

Study Programme: Animal Production
Course Unit Title: Breeding programs in livestock production
Course Unit Code: 19.ANM052
Name of Lecturer(s): Full professor Snežana Trivunović, assistant professor Ljuba Štrbac, teaching assistant Momčilo Šaran
Type and Level of Studies: Undergraduate academic studies
Course Status (compulsory/elective): Elective
Semester (winter/summer): Summer
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: Animal breeding
Course Aims: Education and training of students for direct work on the implementation of breeding programs with the aim of improving the yield and quality of livestock products through genetic improvement.
Learning Outcomes: A student will have the theoretical and practical knowledge necessary to analyze and solve practical problems from areas of genetics, selection and crossing of existing breeds, lines and hybrids in production conditions on farms, breeding organizations and public services.
Syllabus: <i>Theory</i> Structure of breeding programs. Organizations in the implementation of breeding programs. Concept and structure of breed - traditional pyramid. Implementation of breeding programs in dairy cattle breeding. Implementation of breeding programs in beef cattle breeding. Implementation of breeding programs in pig breeding. Implementation breeding programs in sheep breeding. Implementation of breeding programs in goat breeding. Implementation of breeding programs in horse breeding. Implementation of breeding programs in poultry breeding. <i>Practice</i> Defining the direction of production. Defining breeding goals. Collecting Information: Control of productivity and registry records in dairy cattle breeding; Productivity control and registry in beef cattle breeding; Productivity control and registry records in pig breeding; Productivity control and registry records in sheep breeding; Productivity control and registry records in goat breeding; Productivity control and registry records in horse breeding; Productivity control and registry records in poultry breeding. Evaluation of the effectiveness of the implementation of the breeding program.
Required Reading: 1. Glavna odgajivačka organizacija za teritoriju AP Vojvodine (2019): Glavni odgajivački programi po vrstama životinja, Faculty of Agriculture, Novi Sad. 2. Trivunović, S. (2012): Oplemenjivanje životinja, Faculty of Agriculture, Novi Sad. 3. Kor Oldenbroek en Liesbeth van der Waaij (2014): Textbook Animal breeding: Animal breeding and genetics for BSc students, Centre for Genetic Resources and Animal Breeding and Genomics Group, Wageningen University and Research Centre, the Netherlands.

Weekly Contact Hours:	Lectures: 2	Practical work: 2
------------------------------	--------------------	--------------------------

Teaching Methods:

The theoretical part of the teaching is performed with the use of films and presentations that have been prepared so that students have a visual representation of lessons. Practical classes are conducted with the use of computers and software for the implementation of breeding programs, and by visiting producers and breeding organizations.

Knowledge Assessment (maximum of 100 points):

Pre-exam obligations	points	Final exam	points
Active class participation	6	written exam	-
Practical work	4	oral exam	50
Preliminary exam(s)	30	
Seminar(s)	10		

The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam, project presentation, seminars, etc.