Course Unit Descriptor

Study Programme: Master academic studies - ANIMAL PRODUCTION

Course Unit Title: SWINE AND POULTRY NUTRITION

Course Unit Code: 19MST1I19

Name of Lecturer(s): Full. Prof. Miloš Beuković

Type and Level of Studies: MASTER ACADEMIC STUDIES

Course Status (compulsory/elective): Elective

Semester (winter/summer): Summer

Language of instruction: English

Mode of course unit delivery (face-to-face/distance learning): Face to face

Number of ECTS Allocated: 6

Prerequisites: -

Course Aims:

Acquaintance of students with methods of modern feeding of pigs and poultry.

Learning Outcomes:

The formation of experts with academic education who possess significantly expanded and deepened knowledge for the necessary understanding of the scientific basis in non-ruminant nutrition as well as the expertise to work in scientific laboratories and research centers, institutes and faculties in the field of application of modern biotechnological methods in non-ruminant nutrition.

Syllabus:

Theory

Introduction - The role and importance of biotechnology in modern non-ruminant nutrition. Methods in the function of sustainable production and feeding of pigs and poultry. Modern nutrition and ecology. Methods in the preparation of nutrients and mixtures: Methods of improving the nutritional value of nutrients and mixtures: extrusion, micronization, hydrothermal treatment, pelleting. Organically bound microelements in nutrition. Modern food additives: Probiotics, Prebiotics, Phytobiotics, Mananoligosaccharides, Adsorbents Enzymes as additives and their role in improving the nutritional value of food. Synthetic amino acids and peptides in food. Fermented food, impact on nutritional value, health status and use of less valuable nutrients. Biotechnology in the nutrition of certain species and categories of non-ruminants. Nutrient requirements and biotechnology in poultry nutrition.

Practice

Methods of determining digestibility. Calculation and correction of the biological value of protein. Application of the ideal protein concept. Acquaintance of students with the application of modern methods of biotechnology methods in the conception of mixtures for the nutrition of certain species and categories of non-ruminants Field exercise.

Required Reading:

Weekly Contact Hours: Lectures: 2 Practical work: 2

Teaching Methods:

Lectures and Practical classes, Consultations if needed.

Knowledge Assessment (maximum of 100 points):

Pre-exam obligations	points	Final exam	points
Active class	_	written exam	15
participation	-	written exam	
Practical work	-	oral exam	45
Preliminary exam(s)	-		
Seminar(s)	40		

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