

Course Unit Descriptor

Study Programme: Veterinary medicine
Course Unit Title: Feed quality
Course Unit Code: 3IVM4I89
Name of Lecturer(s): Assistant professor PhD Dejan M. Beuković, Teaching Assistant MSc Saša Krstović
Type and Level of Studies: Integrated 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: 3,5
Prerequisites: None
<p>Course Aims:</p> <p>Introducing students with the quality of the most important feed used in animal nutrition. Acquiring practical knowledge in the field of animal feed quality control by various methods (sensory, physical and chemical methods), as well as the application of acquired knowledge in animal nutrition.</p>
<p>Learning Outcomes:</p> <p>Training students for independent work in the field of quality of animal feed.</p>
<p>Syllabus:</p> <p><i>Theory</i></p> <p>Feed, nutrients and mixtures. Composition of feed and the role of nutrients. Classification of nutrients. Means of determining the nutritional value of animal feed. Chemical analysis of animal feed. Quality and quality control, quality assurance according to the standards of the ISO9000 series, deviations in the production of animal feed. Methods for improving the nutritional value of nutrients, dry and hydrothermal. Plant nutrients. Concentrated and concentrated nutrients. Foods of animal origin. Deterioration and harmfulness of food for animals: physical factors, chemical factors. antinutritive substances in animal feed: alkaloids, glucosides, genetically modified nutrients, molds, mycotoxins, bacteria. Protection of feeding stuffs from chemical, biological and radioactive contamination: radioactive contamination, chemical-biological contamination and protection measures. Review and evaluation of certain groups of nutrients.</p> <p><i>Practice</i></p> <p>Sampling of feed and preparation of laboratory sample. Standard chemical analysis - Weende method. Determination of moisture and dry matter. Determination of crude ash. Determination of crude proteins. Determination of raw cellulose. Determination of raw fats. Determination of micro and macroelements by optical methods - Ca, P and Fe. Silage quality testing. Determination of anti nutritive substances - urease activity. Van-Soest's method for the analysis of forage feed: the determination of NDF, ADF and lignin. Food quality control plan on farms.</p>
<p>Required Reading:</p> <ol style="list-style-type: none"> 1. Ненад Ђорђевић, Бора Динић: Производња смеша концентрата за животиње. Институт за крмно биље, Крушевац, 2011 2. Станаћев Видица, Ковчин Станимир: Хранива и технологија сточне хране и основи исхране домаћих животиња, Практикум. Пољопривредни факултет, Нови Сад, 2003

Weekly Contact Hours:	Lectures: 2 x 15 = 30	Practical work: 2 x 15 = 30	
Teaching Methods: Oral presentation, presentations, consultations, practical work.			
Knowledge Assessment (maximum of 100 points):			
Pre-exam obligations	points	Final exam	points
Active class participation	35	written exam	20
Practical work	15	oral exam	30
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.			