

Study programme: General Agronomy			
Type and level of study: Bachelor's degree (240 ECTS) – First cycle			
Course title: Animal Nutrition			
Lecturer: Vladimir Dosković, PhD, associate professor			
Language of instruction: English			
ECTS credits: 6			
Prerequisite:			
Semester: <i>winter</i>			
Course objective			
The subject should enable the student to gain knowledge and understanding:			
a) basic concepts from the nutrition of domestic animals and methods of quality control of animal feed;			
b) nutritional ingredients of food; nutritional value of food; knowledge of the role of food ingredients in the animal organism; knowledge of food-nutrients; the needs of animals in accordance with their genetic potential and production; the basics of making meals for animals.			
Oral and written presentation of acquired knowledge.			
Learning outcomes			
The acquired knowledge should equip students for independent and collective work in the technology of feeding domestic animals.			
Course contents			
<i>Theoretical instruction</i> Importance, object and purpose of feeding domestic animals. Nutrient substances and their metabolism: water, proteins-amino acids, carbohydrates, lipids, mineral substances: macro, micro and toxic elements in animal nutrition, vitamins: liposoluble and water soluble, antinutritional factors in animal nutrition, animal feed additives. Food digestion: digestion in non-ruminants, digestion in poultry; digestion in ruminants. Fodder: coarse, concentrated, complete mixes, premixes, feed additives. Hygienic correctness of feed for animals, spoilage and harmfulness of food, influencing factors: physical, chemical and biological. Poisonous plants, mycotoxins in food, food bacteria, food parasites,...Special nutrition: nutrition of certain categories of cattle, sheep, goats, horses, pigs, poultry, fish, dogs and cats, influence of nutrition on the quality of animal products.			
<i>Practical instruction</i>			
Examination of the chemical composition of food. Evaluation of the nutritional value of food. Nutrient review and assessment. Composition of meals and complete mixes for certain species and categories of domestic animals.			
Recommended reading			
P. McDonald, R. A. Edwards, J. F. D. Greenhalgh, C. A. Morgan, L. A. Sinclair, R. G. Wilkinson (2011): Animal nutrition, Seventh Edition. 1-714. Pearson, Harlow, Essex, UK.			
Dr. J. Häffner, Dr. D. Kahrs, Dr. J. Limper, J. de Mol, Dr. M. Peisker, Dr. P. Williams(2000): Amino acids in animal nutrition. 1-61. ISBN 3-86037-126-6. Agrimedia GmbH.			
M. R. Bedford, G. G. Partridge (2001): Enzymes in farm animal nutrition. 1-412. ISBN 0 85199 393 1. CABI Publishing.			
Dr. N. Albers, Dr. G. Gotterbarm, Dr. W. Heimbeck, Dr. Th. Keller, Dr. J. Seehawer, Dr. T. D. Tran (2002): Vitamins in Animal Nutrition. 1-78. ISBN 3-86037-167-3. Agrimedia GmbH.			
Hours of active teaching			Other classes
Lectures:	Practicals: 3x15=45	Other forms of teaching Tutorials 2x15=30	
Teaching methods			
Theoretical and practical instruction combined with interactive teaching. Assessment of students' knowledge acquired during practical instruction through midterm tests (a total of 3). Assessment of students' knowledge acquired during theoretical instruction through written examinations after every 3 topics covered in the course.			
Assessment (maximum points 100)			
Examination requirements	Points	Final examination	Points
Class participation	10	oral examination	50
Practical sessions/tests	10	written examination	
Colloquiums	25	
Term paper assignments/homework	5		
Other			
Grading system			
Grade	ECTS	Description	
10	91-100	Excellent	
9	81-90	Exceptionally good	
8	71-80	Very good	
7	61-70	Good	
6	51-60	Passing	
5	≤50	Failing	