

### Biotechnical Faculty / ANIMAL PRODUCTION / NON-RUMINANT NUTRITION

<b>Course:</b>	NON-RUMINANT NUTRITION			
<b>Course ID</b>	<b>Course status</b>	<b>Semester</b>	<b>ECTS credits</b>	<b>Lessons</b> (Lessons+Exercises+Laboratory)
4010	Mandatory	4	7	3+1+1
<b>Programs</b>	ANIMAL PRODUCTION			
<b>Prerequisites</b>	Basics of animal nutrition and feeds			
<b>Aims</b>	introducing students with specificity of feed formulation, norms, optimal diet models and balancing in nonruminant nutrition			
<b>Learning outcomes</b>	<ul style="list-style-type: none"> <li>• Explain and assess the nutritional value of feed and nutritional needs of pigs, poultry and horses, • Describe the most important characteristics of feed materials used in feeding non-ruminants, • Calculate the needs of different categories of pigs, poultry and horses for certain nutrients and energy • Create a feed mixture and balance meals for all categories of pigs, poultry and horses • Organize and implement different feeding techniques</li> </ul>			
<b>Lecturer / Teaching assistant</b>	Ph.D. Dušica Radonjić			
<b>Methodology</b>	lectures, practical, colloquium, essay, field lecture etc			
<b>Plan and program of work</b>				
Preparing week	Preparation and registration of the semester			
I week lectures	Specificity of pig nutrition			
I week exercises	Selection of feed for pigs			
II week lectures	Requirements, nutrients, feeds and additives in pig nutrition			
II week exercises	Requirements and feed formulation for pigs			
III week lectures	Nutrition of pregnant sow			
III week exercises	Requirements and feed formulation for pregnant and lactating sow			
IV week lectures	Nutrition of lactating sows			
IV week exercises	Calculation of feed consumption per kg of live weight gain and per kg produced piglets weaned at different times			
V week lectures	Gilts and boars nutrition			
V week exercises	Calculation of the minimum content of amino acids in a supplementary mixtures for pigs			
VI week lectures	Piglets nutrition			
VI week exercises	Colloquium I			
VII week lectures	Nutrition of growing pigs			
VII week exercises	Requirements and feed formulation for piglets and growing pigs			
VIII week lectures	Specificity of poultry nutrition. Test I			
VIII week exercises	Requirements and feed formulation for poultry			
IX week lectures	Nutrition of chicken breeding stock, laying hens used for breeding stock, and roosters used as breeding stock. Correction test			
IX week exercises	Requirements and feed formulation for nutrition of chickens, hens and laying hens for breeding, male breeding animals			
X week lectures	Offspring nutrition and nutrition of layers and broilers			
X week exercises	Requirements and feed formulation for layers and broilers			
XI week lectures	Nutrition of turkeys			
XI week exercises	Requirements and feed formulation for turkeys			
XII week lectures	Geese, ducks and other poultry nutrition			
XII week exercises	Requirements and feed formulation for geese, ducks and other species			
XIII week lectures	Nutrition of horses and other equine animals			
XIII week exercises	Colloquium II			

XIV week lectures	Nutrition of rabbits, furry animals, laboratory animals, dogs and cats					
XIV week exercises	Correctional colloquium I and II					
XV week lectures	Nutrition of wild boar and feathered game					
XV week exercises	Field work - Visit the farm of pigs or poultry					
Student workload	A week: 3+2 7 kredita x 40/30 = 9 sati i 20 minuta Struktura: 3 sata predavanja 2 sata vježbi 4 sata i 20 minuta individualnog rada studenata uključujući i konsultacije U semestru Nastava I završni ispit: (9 sati i 20 minuta) x16= 149 sati i 20 minuta Neophodna priprema prije početka semestra (administracija, upis, ovjera) 2 x (9 sati i 20 minuta) = 18 sati i 40 minuta Ukupno opterećenje za predmet 7x30 = 210 sati Dopunski rad: Rad za pripremu ispita u popravnom ispitnom roku, uključujući i polaganje popravnog ispita od 0 - 42 sata. Struktura opterecenja: 149 sati i 20 minuta (nastava) + 18 sati i 40 minuta (priprema) + 42 sata (dopunski rad):					
Per week			Per semester			
7 credits x 40/30=9 hours and 20 minuts 3 sat(a) theoretical classes 1 sat(a) practical classes 1 excercises 4 hour(s) i 20 minuts of independent work, including consultations			Classes and final exam: 9 hour(s) i 20 minuts x 16 =149 hour(s) i 20 minuts Necessary preparation before the beginning of the semester (administration, registration, certification): 9 hour(s) i 20 minuts x 2 =18 hour(s) i 40 minuts Total workload for the subject: 7 x 30=210 hour(s) Additional work for exam preparation in the preparing exam period, including taking the remedial exam from 0 to 30 hours (remaining time from the first two items to the total load for the item) 42 hour(s) i 0 minuts Workload structure: 149 hour(s) i 20 minuts (courses), 18 hour(s) i 40 minuts (preparation), 42 hour(s) i 0 minuts (additional work)			
Student obligations			the presence of lectures and exercises, tests, seminar paper			
Consultations			2 hours during the week (after lectures)			
Literature			Jokić, Ž., Kovčín, S., Joksimović-Todorović, M. (2004): Ishrana živine. Univerzitet u Beogradu, Poljoprivredni fakultet; Đorđević, N., Makević, M., Grubić, G., Jokić, Ž. (2009): Ishrana domaćih i gajenih životinja. Univerzitet u Beogradu, Poljoprivredni			
Examination methods			Lectures and Practical activity - 5 points; Essay - 5 points; Test and exam colloquium 20 each - 40 points total; Exam - 50 points; Minimal number of cumulative points is 50. Score: A ( Points: A (≥ 90 to 100 points); B (≥ 80 to < 90); C (≥ 70 to < 80); D (≥ 60 to < 70); E (≥ 50 to < 60); F < to 50			
Special remarks						
Comment						
Grade:	F	E	D	C	B	A
Number of points	less than 50 points	greater than or equal to 50 points and less than 60 points	greater than or equal to 60 points and less than 70 points	greater than or equal to 70 points and less than 80 points	greater than or equal to 80 points and less than 90 points	greater than or equal to 90 points