

Subject name	Basics of Animal Nutrition	
Subject code	H.ZZWa.BAS9.SM.HZOXY	
Department	Animal Nutrition and Dietetics	
Faculty	Animal Sciences	
Subject supervisor/Lecturer	Dr. Pawel G6rka, Professor Zygmunt Kowalski	
General information	semester	winter
	ECTS credits	10
	Lectures total	30 hrs
	classes	45 hrs
Objective and general description	<p>The main objective of the course is to provide students with basic knowledge on feedstuff chemical composition and nutritive value, digestion and metabolism as well as on feed management, including conservation, and on diet formulation. Some basic aspects of practical feeding of livestock will also be discussed. Physiological role of nutrients (protein, energy, minerals and vitamins).</p> <p>2.Digestibility of nutrients and tissue metabolism.</p> <p>3.Assessment of nutritive value of feedstuffs.</p> <p>4.Classification of feedstuffs.</p> <p>5.Methods of feedstuffs conservation and processing.</p> <p>6.Feeding of farm animals (dairy cows and calves, beef cattle, swine, horses, sheep and poultry).</p> <p>7.Animal nutrition lab (chemical analysis of feedstuffs, NIRs, gas chromatography, amino acids analyzer).</p> <p>Assessment of nutrient digestibility (in vivo, in sacco, and in vitro methods: gas techniques, Tilley-Terry, Ankom filter bag method)</p> <p>Calculation of nutritive value of feedstuffs.</p> <p>Diet formulation for dairy cows and calves, beef cattle, swine, horses, sheep and poultry.</p> <p>8.Assessment of feedstuffs quality.</p> <p>9.Field trip on conservation and processing of feedstuffs and to study practical nutrition problem (modern dairy barn, swine unit, horse breeding farm)</p>	
Assessment method	Final examination	
References	<p>Farm Animal Metabolism and Nutrition J.P.F. D'Mello (ed.) CABI Publishing, 2000.</p> <p>Rook J.A.F., Thomas P.C., Nutritional Physiology of Farm Animals. Longman London and New York</p> <p>Cullison A.E. Lowrey R.S., 1987. Feeds and Feeding. Reston Book. Prentice-Hall, Inc.</p> <p>NRC, 2001. Nutrient Requirement of Dairy Cattle. National Academy Press, Washington, D.C.</p> <p>Van Soest P.J. 1994. Nutritional Ecology of the Ruminant. Comstock Publishing Associates.</p>	

