SUBJECT: **ANIMAL NUTRITION AND FEEDSTUFFS** 

## **GENERAL INFORMATION:**

DIDACTIC UNIT: **INSTITUTE OF ANIMAL NUTRITION AND BROMATOLOGY** 

FACULTY OF ANIMAL SCIENCES AND BIOECONOMY

PLACE: RECTORATE, 3<sup>rd</sup> floor, Room No. 412 (lectures), 423/503 (classes)

Thursdays 11-14 (11-12.30 Lecture / 12.30-14.00 Classes )

4 ECTS/ exam/ 60 h total: 30L 10A 20Lab COURSE INFO:

LECTURER: **EDYTA KOWALCZUK-VASILEV, PhD** 

e-mail: edyta.kowalczuk@up.lublin.pl

LECTURES:		
DATE	TOPIC	
03-10-2019	Introduction to the course (general information). Gastrointestinal (GI) tract (construction, parameters, role) of mono- and polygastric animals. Physiological bases of animal nutrition.	2
10-10-2019	Basic nutrients transformation - their digestion, absorption and metabolism after	4
17-10-2019	absorption. Antinutritional factors in feeds.	
24-10-2019	Minerals (role, requirements - physiological and nutritional needs, resources).	2
31-10-2019	Vitamins (role, requirements - physiological and nutritional needs, resources).	2
07-11-2019	Digestibility of feeds. Methods of defining digestibility.	2
14-11-2019	<b>Energy and matter balance.</b> Units of energy and protein value of feeds and animal requirements.	2
21-11-2019 28-11-2019	Feeds. Divisions of resources of animal nutrition:   Roughages, green forages (assortment, factors determining their nutritional value);   Concentrates: grains, leguminous seeds;   By-products of food industry;   Feed additives;   Industrial Feeds;	4
05-12-2019	Feed preservation methods (drying, ensiling)	2
12-12-2019	Feeds intake (physiological determination, measure)	2
19-12-2019	Nutritional requirements of particular groups of animals (ruminants, horses, pigs,	4
09-01-2020	poultry, dogs and cats). Nutrient requirements for growth, lactation and reproduction.	
16-01-2020	Feeding models of animals.	2
23-01-2020	Nutrition and health consequences in animals.	2
CLASSES:		
10-10-2019	Basic analysis of feeds.	1A 3L
17-10-2019		
24-10-2019	Digestibility of nutrients - methods of estimation.	2A
31-10-2019	Energy and matter balance.	2A
21-11-2019	Evaluation of nutritive value of feeds.	1A 1L
28-11-2019	Methods of feeds evaluation. Recognition of feed samples.	2A 1L
05-12-2019	Formulation of diets for different groups of animals.	2A 4L
	Practical training – on-farm nutritional management evaluation.	11L

## Literature:

- Recent advances in animal nutrition 2009 / [eds.] P. C. Garnsworthy, J. Wiseman.
- Animal Nutrition, 2002/ McDonald P., Edwards R.A., Greenhalgh J.F.D., Morgan C.A.
  Principles Of Animal Nutrition And Feed Technology 2001 / D.V. Reddy
  Applied Animal Nutrition: Feeds and Feeding 2005 / Cheeke P.R.

- 5. Forages and grazing in horse nutrition 2012/ ed. by Markku Saastamoinen [et al.].