

Tárgytematika / Course Description **Theoretical foundation of livestock nutrition**

N_DMA24

Tárgyfelelős neve /

Teacher's name: Dr. Zsédely Eszter

Félév / Semester: 2023/24/2

Beszámolási forma /

Assesment: Vizsga

Tárgy heti óraszám /

Teaching hours(week): 0/0/0

Tárgy féléves óraszám /

Teaching hours(sem.): 30/0/0

OKTATÁS CÉLJA / AIM OF THE COURSE

The purpose of teaching the course is to extend students' knowledge of biochemistry, physiology and animal nutrition, which is necessary to acquire a high level of knowledge concerning animal breeding and nutrition during their PhD studies. Teaching the course is also justified by the fact that students who were not admitted with MSc degrees in animal breeding will be able to acquire the knowledge of animal breeding and nutrition studies more easily during the PhD training.

TANTÁRGY TARTALMA / DESCRIPTION

The N-metabolism in the animal organism. Specialties of N-metabolism in ruminants.

Lipid metabolism. Lipid metabolism in the rumen.

Carbohydrate metabolism. The role of starch and row fibre in the nutrition of monogastric animals and ruminants.

Carbon metabolism of livestock animals.

Energy metabolism of livestock animals. Direct and indirect calorimetry methods to determine energy metabolism.

Acid base balance and cation-anion ratios in livestock animals

Antinutritional factors in the feed ingredients.

Determination of energy value with digestible and metabolizable energy

Determination of energy value with net energy. National net energy system.

Measuring the protein value in the nutrition of monogastric animals and ruminants. National metabolizable protein system

Nutrition requirements of milk production and reproduction

Nutrition requirements of fattening animals and egg production

SZÁMONKÉRÉSI ÉS ÉRTÉKELÉSI RENDSZERE / ASSESSMENT'S METHOD

Kakuk T., Schmidt J. (1988): Takarmányozástan. Mezőgazdasági Könyvkiadó, Budapest

Schmidt J. (2015): A takarmányozás alapjai. Mezőgazda Kiadó, Budapest

Schmidt J., Várhegyi J-né, Várhegyi J., Cenkvári É. (2000): Kérődzők takarmányainak energia- és fehérjeértékelése. Mezőgazda Kiadó, Budapest

D.A. Tisch (2006): Animal feeds, feeding and nutrition and ration evaluation. Delmar Cengage Learning, USA

W.G.Pond, D.C. Church, K.R. Pond, P.A. Schoknecht (2005): Basic animal nutrition and feeding. WILEY, USA

KÖTELEZŐ IRODALOM / OBLIGATORY MATERIAL

AJÁNLOTT IRODALOM / RECOMMENDED MATERIAL