|  |  |
| --- | --- |
| **STUDY PROGRAMME:** | **Professional Undergraduate Study Programme *Agriculture*** Specific field of study: Zootechnics  |
| **Course:** | **RUMINANT NUTRITION** |
| **Course code:** 273305**Course status**: compulsory  | **Semester:** IV | **ECTS credits: 4.5** |
| **Course holder:** | **Dejan Marenčić,** Ph.D., professor of professional studies |
| **Course associates:**  | - |
| **Modes of delivery:** | **Number of hours**  |
| Lectures | 30 |
| Excersises | 25 |
| Seminars | 5 |
| Practical training | 8 |

**Course objectives:** enable the students to use adequate and balanced nutrition in order to fully use ruminant genetic potential with increases profitability and environment protection

**Course content**

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | **Modes of delivery:** | **Places of delivery** |
|  | **Course units**  | **L, E, S, PT** |
|  | The specifics of ruminants feeding  | L (4)  | Lecture room |
|  | Recommendations of needs (normatives) and ways of ruminants feeding  | L (4) | Lecture room |
|  | Lactation ruminant feeding - Dry period - Post partum feeding, early lactaction (transition phase)* Feeding in fully lactation till the end of lactation
 | L (8) | Lecture room |
|  | Feeding of breeding youngs* feeding of female/male breeding calve
* feeding of female/male breeding lambs and kids
 | L (4) + S (2,5) | Lecture room |
|  | Feeding of fattening ruminants* Fattening male/female cattle
* Fattening male/female sheep and lambs
 | L (5) + S (2,5) | Lecture room |
|  | Metabolic disorders* Indigestion (acid, alkaline, traumatic)
* Acute Tympany (Bloat in Ruminants)
* Milk fever
* Ketosis
 | L (5) | Lecture room |
|  | Nutrition composition designing (Introduction, Evaluation ruminant needs (Maintenance, Production, Total), Determination nutritional value of feed according to the chemical analysis | E (3) | Lecture room |
|  | Ruminant fatteningCompilation and balancing of ration depending on the production stages | E (7) | Lecture room |
|  | Ruminant LactationCompilation and balancing of ration depending on the production stages | E (15) | Lecture room |
| **In total** | L (30); E (25); S (5) |  |
| Practical training and integrated project task | PT (8) | outside Univerdsity |

**L=Lectures, E=Excersises, S=Seminars, PT=Practical training**

**Learning outcomes (LO)**

LO 1. To compare ruminant feeding specifics

LO 2. To organize ruminants feeding, depending on the breeding phase

LO 3. To identify problems in ruminants feeding

LO 4. To design appropriate food rations for all types and categories of ruminants

LO 5. To analyze and recommended food ration on an individual farm

 Course holder:

 Dejan Marenčić, Ph.D., professor of professional studies

Križevci, July 2024