|  |  |
| --- | --- |
| **STUDY PROGRAMME:** | **Professional Graduate Study Programme *Agriculture*** **Specific field of study: Sustainable and Organic Agriculture** |
| **Course:** | **ZootechniCS** |
| **Course code:** 240010**Course status**: compulsory  | **Semester:** I | **ECTS credits: 6** |
| **Course holder:** | **Tatjana Jelen**, Ph.D., professor of professional studies |
| **Course associates:**  | **Dejan Marenčić**, Ph.D., professor of professional studies**Marijana Vrbančić Igrić**, M.Eng.Agr., senior lecturer  |
| **Modes of delivery:** | **Number of hours**  |
| Lectures | 40 |
| Excersises | 10 |
| Seminars | 10 |

**COURSE OBJECTIVES:** Enable the students to independently organise organic livestock production and administer all technological processes in sustainable and organic livestock production of monogastric and polygastric domestic animals and poultry.

**COURSE CONTENT**

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | **Modes of delivery:** | **Places of delivery** |
|  | **Course units**  | **L, E, S** |
|  | Basic principles of animal husbandry in organic and sustainable agriculture | L (2) | Lecture room |
|  | The concept and meaning of organic and sustainable agriculture The concept and meaning of organic animal husbandry General principles in organic and sustainable animal husbandry | L (3) | Lecture roomField lecture |
|  | Legislative in organic production of animal productsRecommendations and standards in organic animal husbandry | L (4) | Lecture room  |
|  | Animal welfare | E (2) + S (2) | Lecture room and Field lecture |
|  | The influence of organic production on the quality of livestock products | E (2) + S (2) | Lecture room and Laboratory |
|  | Fodder dry matter composition, nutrients and nutrient supply in context of less environmental pollution | L (6) | Lecture room  |
|  | Fodder and its use in organic production according to the rulebooks of the EC- regulation | L (2) | Lecture room |
|  | Fodder additives (nutritional and other additives) and their use according to the organic rulebook of EC - regulation | L (2) | Lecture room  |
|  | Harmful substances in forage:- anti-nutritional substances- harmful substances arised during the spoilage- contamination with harmful substances | L (4) | Lecture room |
|  | Introduction with feeds and feed quality assessment. | L (4) + E (2) | Lecture room and Laboratory |
|  | Biodiversity | L (4) | Lecture room |
|  | Characteristics of autochthonous species and domestic animals breeds  | L (2) | Lecture room |
|  | Protective measures of native species and breeds | L (2) | Lecture room |
|  | Special selection traits | E (2) | Lecture room and Practicum room |
|  | Accommodation; Reproduction; Care; Treatment; Transport; Slaughter; Disposing of animal waste | L (5) | Lecture room |
|  | The ability of produce certain product types and the possibility of exploitation (milk, meat, eggs, sports)  | S (3) | Lecture room |
|  | National strategy and action plan for the protection of biodiversity - In situ and Ex situ protection and preservation of original and protected breeds of domestic animals. Implementation in practice of certain legal provisions, recommendations and standards in organic animal husbandry on the example of farms - field teaching. *Individual seminar papers or group work with presentatio*n | E (2) + S (3) | Lecture room and Field lecture |
| **In total** | L (40); E (10); S (10) |  |

**L=Lectures, E=Excersises, S=Seminars**

**LEARNING OUTCOMES (LO)**

LO 1. To plan the best way of growing and using original and protected breeds of domestic animals for the purpose of their preservation

LO 2. To organize sustainable and organic breeding as well as exploitation of certain species and breeds of domestic animals with the application of welfare measures and legal provisions in organic zootechnics

LO 3. To anticipate limiting factors and critical points in organic farming of different types and categories of livestock according to recommendations and standards

LO 4. To valorize the influence of organic farming on the quality of livestock food products

LO 5. To evaluate the types of fodder and feed supplements according to their nutritional value for individual types of livestock

LO 6. To assess the occurrence of health disorders due to improper use of feed

 Course holder:

 Tatjana Jelen, Ph.D., professor of professional studies

Križevci, July 2024