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| **STUDY PROGRAMME:** | **Professional Undergraduate Study Programme *Agriculture***  Specific field of study: Course foundations | |
| **Course:** | **BASIC PROFESSIONAL PRACTICAL TRAINING** | |
| **Course code:** 273330  **Course status**: compulsory | **Semester: I/II** | **ECTS credits: 4,5** |
| **Course holder:** | **Iva Rojnica, M.Eng.Agr., lecturer** | |
| **Course associates:** | Marijana Vrbančić Igrić, M.Eng.Agr., senior lecturer  Iva Šikač, M.Eng.Agr., lecturer  Goran Mikec, M.Eng.Agr., assistant  Marija Jakuš Hrestak, M.Eng.Agr., assistant  Martin Bužić, M.Eng.Agr., | |
| **Modes of delivery:** | **Number of hours** | |
| **Practical training** | 110 + 25 | |

**Course objectives:** To train students to apply acquired knowledge about soil and climate to choose appropriate agrotechnical measures for a stable agroecosystem and agricultural production. Additionally, to acquire basic skills in the breeding of certain types of domestic animals and to develop the ability to assess the work performance and working hours consumption of machines and devices in plant and animal production.

**Course content**

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| **Course units** | | **Modes of delivery:** | **Places of delivery:** |
| **PT** |
|  | Harvesting of spring crops – corn, yield and yield components | 5 | Plant Production Practicum/Experimental Plots |
|  | Soil tillage systems for sowing winter/spring arable crops – deep autumn plowing, conservation tillage | 5 | Experimental Plots |
|  | Basic fertilization of winter and spring arable crops | 5 | Plant Production Practicum/Experimental Plots/Vineyard |
|  | Sowing of winter arable crops – determining sowing depth and rate, planting (replanting) fruit trees/vines | 15 | Experimental Plots |
|  | Care measures: care of perennial plantations (weeding seedlings, supporting seedlings under wire, weeding suckers, topping, defoliation, thinning flowers, mechanical weed removal) | 20 | Experimental Plots/Vineyard |
|  | Harvesting of winter crops, harvesting berries, harvesting apples and grapes | 10 | Experimental Plots/Vineyard |
|  | Monitoring the individual stages of breeding certain types and breeds of domestic animals (cattle, sheep and goats, horses and poultry).  Specific breeding technological procedures and interventions for certain types of domestic animals (e.g., sheep shearing, hoof and claw maintenance, ringing).  Calculation of herd and flock turnover.  Participation in the work with hatcheries and incubators. | 9 | Livestock practicum |
|  | Maintaining hygiene and applying basic zoo-hygienic procedures in animal shelters: cleaning and preparing facilities and equipment, disinfection, rodent control, and insect control. | 4 | Livestock practicum |
|  | Application of biosecurity measures in livestock production | 2 | Livestock practicum |
|  | Control and planning of domestic animal reproduction.  Keeping pedigree records, selection measurements, and marking of domestic animals. | 5 | Livestock practicum |
|  | Preparation of basic feed for feeding domestic animals | 5 | Plant Production Practicum/Experimental Plots |
|  | Calculation of work efficiency and labor time consumption for each agrotechnical operation of the cultivated crop – creation of a technological map | 8 | Plant Production Practicum |
|  | Adjusting the seeder for the sowing rate in the sowing of winter crops – sowing test | 5 | Plant Production Practicum |
|  | Adjusting machines for crop care, fertilization, and protection – protective zone in inter-row cultivation, fertilization rate, water consumption for protection | 5 | Plant Production Practicum |
|  | Monitoring the operation of the universal grain combine in the harvesting of cereal crops | 2 | Plant Production Practicum/Experimental Plots |
|  | Seed processing – work on the selector, trieur | 2 | Plant Production Practicum |
|  | Optimization of incubation parameters for hatching eggs and chicks | 3 | Livestock practicum |
| **IN TOTAL** | | **110** |  |

**PT=Practical training**

**Learning outcomes (LO)**

LO 1. Plan plant production considering the factors of the agricultural habitat (atmospheric and edaphic) and their interconnection

LO 2. Connect theoretical knowledge and demonstrate practical skills in basic technological procedures in various plant production systems (soil tillage, fertilization, sowing, planting, crop care, and care of perennial plantations)

LO 3. Organize and carry out the breeding of certain types and categories of domestic animals and prepare basic feed for their nutrition

LO 4. Assess the exterior and independently keep pedigree records and mark domestic animals

LO 5. Select appropriate machinery and equipment in agricultural production

Course holder:

Iva Rojnica, M.Eng.Agr., lecturer

Križevci, July 2024