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| **STUDY PROGRAMME:** | **Professional Undergraduate Study Programme *Agriculture*** Specific field of study: Zootechnics  |
| **Course:** | **PIG RAISING** |
| **Course code:** 240016**Course status**: compulsor  | **Semester: V** | **ECTS credits: 6,5** |
| **Course holder:**  | **Tatjana Jelen,** Ph.D., professor of professional studies |
| **Course associates:**  | **Goran Mikec**, M.Eng.Agr, assistant |
| **Modes of delivery:** | **Number of hours**  |
| Lectures | 45 |
| Excersises, | 20 |
| Seminars | 10 |
| Practical training | 23 |

**Course objectives:** To train students for independent organization of pig production.

**Course content**

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|  | **Course units**  | **Modes of delivery:**  |  **\*\*\***  |
| **L** | **E**  | **S**  |
| 1.  | Origin, domestication and zoological classification of pigs.  | 2  |   |   | Classroom  |
| 2.  | Development and economic importance, the distribution of pigs. The importance and state of pig farming in the world and in the Republic of Croatia.  | 2  |   |   | Classroom.  |
| 3.  | Advantages and disadvantages of pig farming  | 1  |   |   |  Classroom |
| 4.  | Production cycles, technological process of production (large farms, family farms)  | 1  |   |   |  Classroom |
| 5.  | Biological basis and inheritance  | 1  |   |   | Classroom |
| 6.  | Pig breeds, hybrids (origin, divisions, characteristics)  | 4  |   |   | Classroom |
| 7.  | Morphological and physiological characteristics of pig production types  | 1  |   |   | Classroom  |
| 8.  | Selection (methods) - selection, maturity, development; fertility, fattening; Offal characteristics  | 2  | 2  |   | Classroom  |
| 9.  | Pig testing: Direct and indirect tests, testing of pigs' propensity for stress syndrome,  | 2  |   |   | Classroom  |
| 10.  | Aids in the implementation of selection: scoring, measuring and marking  | 1  | 2   |   | Classroom  |
| 11.  | Production records, selection records  |   | 2  |   | FT  |
| 12.  | Assessment of the slaughter value of pig carcasses and meat  | 2  | 2  |   | L, FT |
|  | **COLLOQUIUM 1** |   | 1  |   | Classroom  |
| 13.  | Pig reproduction – basics of anatomical and physiological features, Sexual and mating maturity of pigs, reproductive cycle and exploitation  | 2  |   |   | Classroom  |
| 14.  | Indulgence, suppository, farrowing  | 1  |   |   | Classroom  |
| 15.  | Breeding and use of boars  | 2  |   |   | Classroom  |
| 16.  | Breeding and selection methods for increasing fertility, synchronizing estrus, ovulation and farrowing  | 1  |   |   | Classroom  |
| 17.  | Production Performance Calculations – Reproduction  |   | 2  |   | Classroom  |
| 18.  | Zootechnical procedures in the breeding of individual categories  | 2  |   |   | Classroom, TN  |
| 19.  | Rearing piglets to weaning, weaning piglets, rearing piglets to fattening, breeding stigmata  | 2  |   |   | Classroom  |
| 20.  | Basics in pig feeding – basic characteristics of the digestive tract and digestion; feed; mixtures; rations in pig feeding.  | 4  | 2  |   | Classroom  |
| 21.  | Pig fattening  | 2  |   |   | Classroom  |
| 22.  | Technologies for the production of certain categories of pigs  |   | 3  |   | Classroom, TN  |
| 23.  | Calculations of nutritional needs, mixtures, norms, profitability  |   | 3  |   | Classroom  |
| 24.  | Housing and equipment in pig farming  | 2  |   |   | Classroom, TN |
| 25.  | \*\* Calculations of accommodation capacities  |   |  | 2\*\*  | Classroom  |
| 26.  | Healthcare  | 3  |   |   | Classroom  |
| 27.  | Organic pig farming  | 3  |   |   | Classroom  |
| 28.  | Pig welfare  | 2  |   |   | Classroom, FT  |
|  | **COLLOQUIUM 2**  |   | **1**  |   | Classroom  |
| 29.  | **\*\*** Calculations of production indicators – examples from practice  |   |  | 4\*\*  | Classroom  |
| 30.  | **\*\* Report – task/assignment**  |   |  | 4\*\*  |   |
|  |  |  | **PT** |  |  |
| 31.  | \* Practical training and integrated project assignment \* One part (8 hours) of the internship is field work, the students stay on the selected farm where they collect data related to breeding procedures on the farm (zootechnical procedures, meeting well-being, feeding, health care), which are determined by the teacher. \* The second part of the practice is related to the integrated project assignment - students divided into groups do a project task according to a given topic on selected farm |   | **23**  |   | Out of KUAS  |
|   | **TOTAL CLASSES**  | **45**  | **43**  | **10**  |   |

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

Place of delivery Classroom = lecture hall, L = laboratory, FT = Field teaching \*\* Seminars/assignment

**Learning outcomes (LO)**

LO 1. Choose the method/system of pig breeding and breeding technological procedures for a particular breed, i.e. its use

LO 2. Suggest an appropriate way of conducting selection and reproduction

LO 3. Plan accommodation capacities on the farm and preventive and curative health care with welfare measures for individual categories in pig breeding

LO 4. To judge production indicators and propose improvements in pig breeding on a practical example

Course holder:

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

Križevci, July 2024