Study Programme: Animal Production

Course Unit Title: Basic academic studies, first level

Course Unit Code:

Name of Lecturer(s): Prof. Dr. Tihomir S. Zoranovic

Type and Level of Studies:

Course Status (compulsory/elective): Compulsory

Semester (winter/summer): Summer

Language of instruction: Serbian

Mode of course unit delivery (face-to-face/distance learning): Face-to-face

Number of ECTS Allocated:

Prerequisites: None

Course Aims: Acquisition of basic knowledge in the field of informatics and information technologies, necessary for work in the agricultural profession.

Learning Outcomes: Computer skills for a professional career as an agricultural engineer.

Syllabus:

Theory

Data. Information. Digital computers. PC hardware structure. PC software (operating systems, user programs). Algorithms. Programming languages. Computer networks. Rules of identification on computers. Internet and its functioning. Methods of connecting to the Internet. Safety rules on the Internet. Internet services. The social network. Data organization. Basics of database structure. Optimization. Operation of Decision Support Software (DSS). Practice

Measuring the amount of information. PC architecture and components. Analysis of the most popular operating systems (Windows, Linux, Android, MacOS). Basic tools of operating systems. Advanced work on user programs (Word, Excell, Power Point). Symbols of algorithms. Procedural thinking. Connecting the computer to the network and the Internet. Internet protocols, domain, html. Advanced Internet Search. Analysis of examples of Internet attacks and identity theft. The structure of simple relational database models. Optimization on examples from agriculture (optimal sowing structure, optimal production, maximization of profit, minimization of transport costs, minimization of production costs, etc.).

Required Reading: Srdević B., Informatics, textbook, Faculty of Agriculture, Novi Sad, 1996.

Zoranović T., Applied informatics, collection of tasks, Faculty of Agriculture, Novi Sad, 2016.

 Internet resources (by updating materials on the Faculty's website)

 Weekly Contact Hours:
 Lectures: 2x15=30 Practical work: 2x15=30

 Teaching Methods:
 Lectures are lecture-based.
 Practical classes are held in the Informatics laboratory. It combines

working on computers, creating assignments and working on the Internet (e-mail, web, Word, Excel, etc.). **Knowledge Assessment (maximum of 100 points):**

Pre-exam obligations Final exam points 60 points Active class 3 written exam participation Practical work 3 oral exam 70 Preliminary exam(s) 2x24 Seminar(s)

The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam, project presentation, seminars, etc.