Study Programme: AGRICULTURAL ENGINEERING AND INFORMATION TECHNOLOGIES

Course Unit Title: Irrigation and drainage equipment

Course Unit Code: 19.PTII45

Name of Lecturer(s): Full time Prof. Ondrej Ponjičan, PhD

Type and Level of Studies: UNDERGRADUATE ACADEMIC STUDIES

Course Status (compulsory/elective): compulsory

Semester (winter/summer): winter

Language of instruction: sebian

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

Number of ECTS Allocated: 6

Prerequisites: none

Course Aims:

The aim of the course is to prepare and acquaint students with the requirements and characteristics of irrigation and drainage techniques in agricultural practice.

Learning Outcomes:

The training of students to successfully master basic melioration problems that can be encountered in agricultural practice, with the aim of achieving stable and high yields of agricultural crops.

Syllabus:

Theory: The task and role of land reclamation, conditions for the introduction of irrigation. Irrigation methods: surface, underground, irrigation with artificial rain, micro irrigation (drop by drop). Irrigation systems with artificial rain, structural elements of devices for irrigation with artificial rain, types of devices for artificial rain.

Practice: Introduction to the purpose, basic parts, working principle, settings, maintenance during operation and safety measures at work of biotechnical systems and equipment according to the curriculum of the lecture. Preparation of project and seminar papers.

Required Reading:

Weekly Contact Hours: Lectures: 30 Practical work: 30

Teaching Methods:

Theoretical teaching: verbal-textual and demonstrative illustrative methods. *Practical classes*: managing students' independent work, demonstrative illustrative methods, demonstration of machines in operation, calculation methods.

Knowledge Assessment (maximum of 100 points):

Pre-exam obligations	points	Final exam	points
Active class		written exam	
participation		Witten Caum	
Practical work	10	oral exam	50
Preliminary exam(s)	40		
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.