Course Unit Descriptor

Study Programme: PRECISION AGRICULTURE

Course Unit Title: Technical-information systems in vegetables production

Course Unit Code: 19.PRP013

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

Type and Level of Studies: MASTER ACADEMIC STUDIES

Course Status (compulsory/elective): elective

Semester (winter/summer): summer

Language of instruction: sebian

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

Number of ECTS Allocated: 5

Prerequisites: none

Course Aims:

Acquisition of theoretical and practical knowledge related to the application of modern information systems in the production of vegetables in open fields and in protected areas.

Learning Outcomes:

The knowledge gained within the course should enable the proper selection and use of modern technical and information systems in the production of vegetables in the open field and in a protected area.

Syllabus:

Theory: Technical information systems for soil condition control. Technical information systems for tillage, sowing, seedling production, planting and care of crops. Technical information systems in protected area facilities: regulation of growth conditions (irrigation and feeding, ventilation and regulation of air composition, regulation of the light regime by shading and additional lighting), production in soil and without soil. Precision irrigation, types of sources and water quality. Technical information systems on machines for semi-mechanized and mechanized harvesting of vegetables. Technical information systems of primary processing and storage of vegetables.

Practice: Acquaintance with the purpose, basic parts, principle of operation, settings, maintenance during exploitation and safety measures at work of modern Technical Information Systems in vegetable growing according to the curriculum of lectures. 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 participation		written exam	
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.