Course Unit Descriptor

Study Programme: Soil, plant and genetics

Course Unit Title: Field Vegetable Production

Course Unit Code: 19.ZB4001

Name of Lecturer(s): Žarko Ilin

Type and Level of Studies: Master academic studies

Course Status (compulsory/elective): Compulsory

Semester (winter/summer): Winter

Language of instruction: English

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

Number of ECTS Allocated: 6

Prerequisites: None

Course Aims: Introduce students to the latest international trends and latest technologies of vegetable production on open field in conditions of intensive production for industrial processing, short-term and long-term storage in adequately ventilated warehouses for fresh consumption of vegetables throughout the year.

Learning Outcomes: Knowledge: Students should be informed, through the teaching process, with the latest technologies in intensive vegetable production, but primarily to be familiar with the results of scientific research related to application of new technologies in our agro ecological conditions.

Skills: Students are required to independently create and manage the production of development projects in the field of modern and intensive vegetable production.

Syllabus:

<u>Theory</u>: In this course "Field vegetable production" is processed: History of vegetables growing, Distribution of vegetable species. Biological, agro-technical, ecological and economic importance of open field vegetable production. The time, place and method of vegetable production. Requirements of vegetables according to growing conditions and measures for minimizing abiotic stress and negative effects of climate change on the global and regional level. Agro-technical measures in vegetable production. Vegetable production systems (controlled by conventional, integrated, organic, biological, biodynamic, organic, alternative). The time and method of harvesting, storage and preservation, packaging and distribution of fresh and processed vegetables. It will be processed: root vegetables (carrots, parsley, parsnip, celery and beetroot). Bulb vegetables (onion, garlic, leek). Root vegetables (young potatoes). Cabbages and leafy vegetables (cabbage, cauliflower, broccoli, kale, Brussels sprouts, lettuce and spinach). Fruit vegetables (peppers, tomatoes, egg plant, cucumbers, melons, watermelons and pumpkins). Legumes (peas and beans).

<u>Practice</u>: After an introduction in exercises student is required to do individual work. Introduction refers to the theoretical basis and individual task that represents practical execution of some general, special and specific measures. Then, the choice of substrate, care measures in the seedling production for open field production. Practical training on some critical points in the production process (sowing, pricking, grafting, planting, fertigation, mulching and direct covering of specific measures of care, conventional and biological protection, vintage of roots and tubers, bulbous, foliage, fruit vegetables and legumes.

Required Reading:				
Weekly Contact Hours:4		Lectures: 3		Practical work: 1
Teaching Methods: Lectures, Practice/ Practical classes, Consultations, study, research work				
Knowledge Assessment (maximum of 100 points): 100				
Pre-exam obligations	points		Final exam	points
Active class	5		written exam	
participation	5		written exam	
Practical work	5		oral exam	60
Preliminary exam(s)	10			
Seminar(s)	20			
The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam,				
project presentation, seminars, etc.				