Course Unit Descriptor

Study Programme: Crop science

**Course Unit Title:** Vegetable production in greenhouses

Course Unit Code: 19.RIP019

Name of Lecturer(s): Žako Ilin

Type and Level of Studies: Undergraduate 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:** 5

**Prerequisites:** Plant physiology

**Course Aims:** The aim of the course is to emphasize the biological, agro-technical and economic importance of production, placement and consumption of vegetables throughout the year. The goal is to train the students for application of the modern technologies in production of vegetables in greenhouses.

**Learning Outcomes:** Students will learn about the technology of production, harvesting, calibration and distribution of major vegetable crops in vegetable production in various forms and types of greenhouse.

## **Syllabus:**

<u>Theory:</u> Theoretical education includes choice of location for raising and organization of the protected area, control the microclimate conditions, choice of land, organic and inorganic substrates for growing in greenhouses, general principles and specific features of hydroponic cultivation of vegetables, general, special and specific agro-technical practices, seedling production technology. In a special part are processed the most important species from the group fruiting vegetables, leafy vegetables, brassicas, root-tubers vegetables, bulb vegetables and legumes.

**Practice:** Exercise, other methods of teaching, study research work

Introduction with structures and types of protected areas, covering materials, biological and morphological characteristics of vegetable seeds, sowing and planting of vegetable crops, computer controls of microclimate conditions and feeding vegetables

**Required Reading:** Howard, M.R. (2004). Hydroponic food production. Newconcept Pres, Inc., Mahwah, New Jersey Baudoin ,W. (2017). Good agriculture practices for greenhouse vegetable production in the South East European countries. FAO

Baudoin ,W. (2017). ЭМСП тепличных овощных культур в странах ЮгоВосточной Европы. ФАО

Weekly Contact Hours:6 Lectures: 4 Practical work: 2

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        | 3      | written exam |        |
| Practical work       | 5      | oral exam    | 70     |
| Preliminary exam(s)  | 20     |              |        |
| 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.