Course Unit Descriptor

Study Programme: CROP SCIENCE

Course Unit Title: Control of soil fertility

Course Unit Code: 19.RIP028

Name of Lecturer(s): Prof. dr. Maja, S., Manojlović

Type and Level of Studies: Undergraduate academic studies

Course Status (compulsory/elective): Elective

Semester (winter/summer): Winter

Language of instruction: English

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

Number of ECTS Allocated: 6

Prerequisites: None

Course Aims:

Acquisition of basic knowledge on soil fertility control and fertilizers application in different production systems.

Learning Outcomes:

The student is able to apply the acquired knowledge about soil fertility and fertilizer application in agricultural practice.

Syllabus:

Theory: Soil quality and fertility. Soil fertility indicators. Interpretation of results of soil chemical analysis. Soil fertility control system. Increasing the efficiency of nutrient use. Principles of fertilizer application in intensive plant production. Application of fertilizers in field crop production. Application of fertilizers in fruit and grape production. Application of fertilizers in vegetable production (in open and closed space). Application of fertilizers in flower production. Fertilization of green areas. Fertilization in organic production. Fertilization according to the principles of precision agriculture.

Practical classes: Determining the need for soil fertilization. System of soil fertility control and fertilizer application. Principles for determining fertilizer doses in different production systems. Soil sampling. Presentation of seminar papers. Field exercises: Visit to the experimental fields of the Institute of Field and Vegetable Crops.

Required Reading:

1. J Havlin, S L. Tisdale. Soil Fertility and Fertilizers: An Introduction to Nutrient Management. Pearson Prentice Hall, 2005

1. D. Atkinson, J.E. Jackson, W.M. WallerMineral Nutrition of Fruit Trees Elsevier Ltd, 1980

Weekly Contact Hours:		Lectures:2	Practical work:2
Teaching Methods: Lectures, Practical classes, Consultations			
Knowledge Assessment (maximum of 100 points):			
Pre-exam obligations	points	Final exam	points
Active class participation		written exam	n 30
Practical work		oral exam	30
Preliminary exam(s)			
Seminar(s)	40		
The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam, project presentation, seminars, etc.			