Study Programme: Growing of fruits and grapevine

**Course Unit Title: Grapevine organogenesis** 

Course Unit Code: 19.VI2016

Name of Lecturer(s): Full prof. Ivan D. Kuljančić, PhD

Type and Level of Studies: Academic, master studies

Course Status (compulsory/elective): compulsory

Semester (winter/summer): winter

Language of instruction: Serbian

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

Number of ECTS Allocated: 6

Prerequisites: Grapevine biology, Grapevine growing and technology, Nursery production

## **Course Aims:**

The education and training of master students in the field of grapevine organogenesis. Candidate should be based registry study of literatures and scientific works, expand knowledge of the origin of some organs and tissues.

## **Learning Outcomes:**

The formation of professionals with academic qualifications, which has an extended knowledge in relation to the knowledge acquired at the undergraduate studies. Student must be prepared to upgrade his knowledge, in the field of grapevine organogenesis, in both, theoretical and practical work, and especially on the terrain in the vineyard. He must be prepared to resolve a large number of problems, which are increasingly common in the last time, in nursery and grapevine production

## Syllabus:

*Theory* Root: root zones, primary anatomical cross-section of roots, secondary anatomical cross-section of roots (cambium activity, felogen activity), adventive roots formation (with green and mature shoots).

Shoot: primary anatomical cross-section of shoot, secondary anatomical cross-section of shoot ( cambium activity, felogen activity). Inflorescence, flower, berry: origine and formation of inflorescence, flower origine and its formation, macrosporogenesis, microsporogenesis,

flowering, pollination and fertilization, berry structure, seed structure.

Practice Practical classes an research work: at the experimental field of Sremski Karlovci, using the contemporary techniques.

## **Required Reading:**

Ivan D. Kuljančić and Predrag Božović, Biologija i ekologija loza i vinove loze te božanske biljke. Prometej, Novi Sad, 2018.

Marcus Keller. The science of grapevines-anatomy and physiology. Elsevier-Academic Press, San Diego 2012.

Peter R. Dry and B.G. Coombe: Viticulture (Volume 1), Resources, Adelaide, 2004.

Weekly Contact Hours: Any time		Lectures:		Practical work: 6				
						Teaching Methods:		
Teaching and research are conducted in the classrooms of the Faculty of Agriculture and at the Experimental field in Sremski Karlovci								
Knowledge Assessment (maximum of 100 points): 100 points								
Pre-exam obligations	points		Final exam		100 points			
Active class			writton oxom					
participation			written exam					
Practical work			oral exam		100			
Preliminary exam(s)			•••••					

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.						