Course Unit Descriptor

Study Programme: Fruit science, Viticulture and Horticulture – module Fruit growing and Viticulture

Course Unit Title: Nursery Production

Course Unit Code: 19.VI1003

Name of Lecturer(s): Sandra M. Bijelić and Predrag Božović

Type and Level of Studies: Undergraduate 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

Number of ECTS Allocated: 6

Prerequisites:: Biology of fruit species, Grapevine Biology

Course Aims: The aim of the course is education and training of students in the field of production of fruit and grapevine planting material.

Learning Outcomes: The outcome of the course is the formation of experts with academic education who have extended knowledge that will be able to professionally and practically apply in the production of planting material.

Syllabus: *Theory* Fruit growing: Fruit nursery. Nursery location. Nursery parts and establishment of individual parts. Characteristics of rootstocks of different fruit species. Grafting of fruit trees. Mutual influence of rootstock and grafted cultivar, supply of graft twigs. Ways of grafting fruit trees. Production of walnut seedlings. Production of pear seedlings incompatible with quince. Production of hazelnut seedlings. Care of fruit grafts. Extraction, classification, packaging and transport of seedlings.

Viticulture: Rootstock mother vines block. Rootstock mother vines block management. Operations in the rootstock block during cutting harvest. *Vitis vinifera* mother vines management. Scion harvest and storage during the dormancy. Grafting techniques. Stratification. Certification program. Grafted vines management in the field.

Practice Fruit growing: Recognition of fruit rootstocks. Grafting of fruit trees. Preparation of grafting wax. Formation of mother trees in order to produce grafting twigs. Isolation of fruit trees for the production of generative rootstocks. Examination of fruit seed germination.

Viticulture: Shoot thinning and removal of laterals in the rootstock mother vines block. Cutting harvest. Preparation of the scion and rootstock cuttings prior the grafting. Different grafting techniques. Practical work in the callus room and in the field. Evaluation and packaging of the grapevine planting material.

Required Reading:

- 1. Avramov L, Nakalamić A., Žunić D., Vinogradarstvo, Poljoprivredni fakultet, Beograd, 1999
- 2. Burić D., Savremeno vinogradarstvo, Nolit, 1996
- 3. Gvozdenović D. i sar., Breskva, Poljoprivredni fakultet, Novi Sad, 1997
- 4. Korać M., Cerović S., Gološin Branislava, Orah, Prometej, Novi Sad, 1998
- 5. Korać M. i sar. Leska, Tehnosoft, Novi Sad, 2000
- 6. Medigović J., Kalemljenje voćaka, Nolit, 1977
- 7. Milosavljević M., Biotehnika vinove loze, Draganić 1998
- 8. Mišić P., Podloge voćaka, Nolit, 1984
- 9. Cerović, S., Gološin, B., Bijelić, S., Bogdanović, B.: Rasadnička proizvodnja. Univerzitet u Novom Sadu, Poljoprivredni fakultet, 2015.

Weekly Contact Hours: Lectures: 4 Practical work: 2

Teaching Methods: Lectures, laboratory work, practical training in experimental fields.

Knowledge Assessment (maximum of 100 points):

11110 (1100 points)			
Pre-exam obligations	points	Final exam	points
Active class participation	10	written exam	
Practical work	10	oral exam	30
Preliminary exam(s)	30		
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.