Study Programme: Fruit science, viticulture and horticulture – module Ornamental horticulture

Course Unit Title: Nursery production of ornamental trees and shrubs

Course Unit Code: 19.PEJ018

Name of Lecturer(s): Saša Orlović, Lazar Pavlović

Type and Level of Studies: Bachelor

Course Status (compulsory/elective): compulsory

Semester (winter/summer): winter

Language of instruction: english/ serbian

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

**Number of ECTS Allocated: 5** 

Prerequisites: no

#### **Course Aims:**

The goal of the course is to learn and acquire knowledge in the field of production of planting material for ornamental trees and shrubs, i.e. methods of plant propagation in nurseries, production and training of seedlings.

## **Learning Outcomes:**

The student is qualified for further upgrading of knowledge through master's and doctoral studies to engage in scientific work in the field of production of ornamental tree and shrub planting material.

### **Syllabus:**

Theoretical teaching

Production and manipulation with seeds and fruits of stolen trees and shrubs. Importance and place of nursery in forestry and landscape architecture, General concepts, General data on nursery production in Europe, Selection of a place for a nursery, General settings and technical conditions in a nursery, Vegetative propagation of trees and shrubs in a nursery, Generative propagation of trees and shrubs in a nursery, Production of seedlings in seedbeds, Duneman's beds, in pots, production of scars, training of seedlings, training of tree and shrub seedlings in pots.

Practical teaching: Exercises, Other forms of teaching, Study research work

Production of planting material of the most important types of ornamental trees and shrubs: 1. Cl. Gymnospermae (Families: Ginkoaceae, Pinaceae, Taxodiaceae, Cupressaceae, Araucariaceae, Taxaceae) 2. Cl. Angiospermae (Families: Magnoliaceae, Laureaceae, Ranunculaceae, Berberidaceae, Hammamelidaceae, Platanaceae, Ulmaceae, Moraceae, Fagaceae, Betulaceae, Corylaceae, Juglandaceae, Tamaricaceae, Salicaceae, Ericaceae, Vacciniaceae, Tiliaceae, Maqlvaceae, Buxaceae, Rosaceae, Saxifragaceae, Mimosaceae, Cesalpinaceae, Fabaceae, Eleagnaceae, Anacardiaceae, SimaroubaceaeSapindaceae, Hippocastanaceae, Aceraceae, Cornaceae, Araliaceae, Aquifoliaceae, Celastraceae, Rhamnaceae, Vitaceae, Loganiaceae).

## **Required Reading:**

- 1. Стилиновић, С. (1987). Производња садног материјала шумског и украсног дрвећа и жбуња. Универзитет у Београду, Београд
- **2.** Грбић, М., Производња садног материјала-вегетативно размножавање украсног дрвећа и жбуња, Шумарски факултет, Београд, 2004
- 3. Michael Dirr and Charles W. Heuser, Jr. The Reference Manual of Woody Plant Propagation: From Seed to Tissue Culture (Second Edition, content is the same as the 1st edition except resources). (Timber Press, 2006)

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

**Teaching Methods:** Teaching is conducted with the use of modern technology and computer graphics. Method of oral presentation and conversation. Method of presentations, demonstrations, simulations and illustrations using computers and practical demonstrations.

# **Knowledge Assessment (maximum of 100 points):**

Pre-exam obligations	points	Final exam	points
Active class	5	written exam	45
participation	3	written exam	43
Practical work	20	oral exam	30

The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam, project presentation, seminars, etc.