Study Programme: Fruitgrowing and Viticulture

Course Unit Title: Fruit growing
Course Unit Code: 3OBB6O21

Name of Lecturer(s): Sandra M. Bijelić

Type and Level of Studies: Undergraduate academic studies

Course Status (compulsory/elective): Compulsory

Semester (winter/summer): summer Language of instruction: English

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

**Number of ECTS Allocated:** 6

**Prerequisites:** Fruit Tree Biology and Propagation

#### **Course Aims:**

Educating and training students in the field of fruit growing. Students should gain basic knowledge of designing, raising and nurturing various fruit species.

# **Learning Outcomes:**

Creating professionals with academic education for the technology of raising and nurturing orchards.

# **Syllabus:**

## Theory

Raising orchards: Terrain choice, soil preparation for raising an orchard. Land parceling. Measuring and marking places for planting. Fruit tree spacing. Excavating pits. Arrangement of cultivars in the orchard. Nursery stock preparation for planting and planting. Raising plantations on terraced land. Nurturing fruit trees: ways of soil maintenance, fruit tree fertilization. The role and significance of the most important nutrient elements. Micro-elements. The need of fruit trees for nutrient elements. Types of fertilizers. Time and method of fertilizing fruit trees. Fruit tree irrigation. Pruning of fruit trees: Physiological basics of pruning. Winter pruning. Summer pruning. Formation of training systems. Pruning of mature fruit trees. Fruit tree protection from frost, wind, hail, and rodents: fruit tree damage caused by low temperatures. Nurturing fruit trees damaged by frost. Providing wind protection. Nurturing fruit trees damaged by hail and rodents. Rejuvenating and re-grafting of fruit trees: the method and time of re-grafting.

#### Practice

Raising orchards: Demonstration of agricultural meliorative fertilization and soil preparation. Fruit tree productivity: Formation of flower buds of pome and stone fruit species. Laboratory exercise in making a preparation for determining the phase of differentiation. Determining the differentiation of fruit buds and identifying frozen flower buds in order to identify the method and intensity of pruning for particular species and cultivars. Pruning of fruit trees: Basic principles for pruning different fruit species. Formation of training systems. Pruning mature fruit trees according to different fruit species.

### **Required Reading:**

- 1. Veličković, M., Voćarstvo, Poljoprivredni fakultet, Zemun, 2002
- 2. Gvozdenović D., Mićić N. Rezidba voćaka, Poljoprivredni fakultet, Novi Sad 1995
- 3. Keserović Z., Korać Nada, Magazin N., Grugurević V., Gvozdenović D., Bijelić S., Vračević B., Proizvodnja voća i grožđa na malim površinama, Univerzitet u Novom Sadu, Poljoprivredni fakultet Novi Sad 2008
- 4. Stančević A., Praktično voćarstvo, Litopapir, Čačak, 1990
- 5. Šoškoć M. Voćarstvo, Nauka, Beograd 1991

Weekly Contact Hours: Lectures: 4 Practical work: 3

**Teaching Methods:** Teaching is conducted with the use of modern techniques. Theoretical classes are conducted in faculty classrooms. All lectures are computerized and presented. Practical classes are conducted in classrooms for practical teaching where materials are prepared, and at the experimental field of the Faculty of Agriculture in Rimski Sancevi.

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

Pre-exam obligations	points	Final exam	points
Lecture attendance	10	oral exam	30
Test	30		
Exercise attendance	10		
Term paper	20		

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