

Study Programme: Growing of fruits and grapevines		
Course Unit Title: Orchard and vineyard design		
Course Unit Code:		
Name of Lecturer(s): Full prof. Ivan D. Kuljančić, Associate prof. Sandra Bijelić, Asst. prof. Predrag N. Božović		
Type and Level of Studies: Master academic		
Course Status (compulsory/elective): Compulsory		
Semester (winter/summer): Winter/summer		
Language of instruction: English		
Mode of course unit delivery (face-to-face/distance learning): Face-to-face		
Number of ECTS Allocated: 6		
Prerequisites: All courses in the field of Fruit growing and Viticulture from the undergraduate academic studies		
Course Aims: Educating and training students in the field of orchard and vineyard design. Students should gain comprehensive knowledge of orchard and vineyard design based on the analysis of meteorological factors, soil, cultivar assortment, planting material, available support systems, material resources, and work force.		
Learning Outcomes: Creating professionals with master's education who will have comprehensive knowledge which will enable them to independently carry out projects of planting orchards and vineyards in practice.		
<p>Syllabus:</p> <p><i>Theory</i> Orchard design: Modern concepts of growing various fruit species. Project structure for planting orchards. Analysis of natural and economic conditions for raising fruit plantations. Technology of growing and exploiting fruit plantations. Economic analysis of raising and nurturing plantations until trees start bearing fruit. Harvesting and storage of crops of different fruit species. Appendices required for the project.</p> <p>Vineyard design: Research papers, Investment structure, Technological process of planting a vineyard, Technological process of regular production, Procurement of mechanical equipment, Resources needed for raising a vineyard during the first three years, Costs of planning a project and engineering, Appendices (charts).</p> <p><i>Practice</i> Taking soil specimens, analyzing and explaining the results of the chemical analysis of soil, calculation of required fertilizers according to chemical analysis, drawing tables of average meteorological indicators and their analysis, drawing plans of parceling and cultivar arrangement, parceling.</p>		
Required Reading:		
D. Gvozdenović, N. Mičić: Rezidba voćaka, Poljoprivredni fakultet Novi Sad, Novi Sad, 1995.		
M. Veličković: Voćarstvo, Poljoprivredni fakultet Zemun, Beograd-zemun, 2002.		
Z. Keserović, Nada Korać, N. Magazin, V. Grgurević, D. Gvozdenović, Sandra Bijelić, Biserka Vračević: Proizvodnja voća I grožđa na malim površinama. Univerzitet u Novom Sadu, Poljoprivredni fakultet, Novi Sad, 2008.		
I. D. Kuljančić: Vinogradarstvo-vinova loza, ta božanska biljka. Prometej, Novi Sad, 2007.		
D. P. Burić: Vinogradarstvo II. Radnički univerzitet „Radivoj Čirpanov”, Novi Sad, 1979.		
N. Marković: Tehnologija gajenja vinove loze. Poljoprivredni fakultet Zemun i Zadužbina Sv. manastira Hilandara, Beograd, 2012.		
Weekly Contact Hours: 40	Lectures: 30	Practical work: 30

Teaching Methods: Classes are conducted in classrooms at the Faculty of Agriculture and at the experimental fields in Sremski Karlovci and Rimski Sancevi, with the use of modern techniques. Practical classes are conducted in classrooms for practical teaching and at experimental fields.

Knowledge Assessment (maximum of 100 points):

Pre-exam obligations	points	Final exam	points
Active class participation	10	written exam	
Practical work	20	oral exam	50
Preliminary exam(s)	20	
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.