

<b>Study Programme: Fruit science, viticulture and horticulture, module Ornamental horticulture</b>
<b>Course Unit Title: <i>Diseases and pests in horticulture</i></b>
<b>Course Unit Code: 19.VI2002</b>
<b>Name of Lecturer(s): Mila Grahovac, Aleksandra Popović</b>
<b>Type and Level of Studies: undergraduate academic studies</b>
<b>Course Status (compulsory/elective): compulsory</b>
<b>Semester (winter/summer): winter</b>
<b>Language of instruction: Serbian</b>
<b>Mode of course unit delivery (face-to-face/distance learning): face-to-face</b>
<b>Number of ECTS Allocated: 7</b>
<b>Prerequisites: -</b>
<b>Course Aims:</b> Introduction to economically significant disease causal agents and pests in horticulture and possibilities for their integrated control.
<b>Learning Outcomes:</b> Mastering independent disease diagnosis and pest identification on ornamental plants, vegetables, fruits and vine, which is a base for successful disease management and pest populations reduction to tolerant level, which enables targeted, eco-friendly plant protection.
<p><b>Syllabus:</b></p> <p>Lectures:</p> <p>Causal agents and economic significance of plant diseases. Symptoms. Basic characteristics of phytopathogenic pseudofungi, fungi, bacteria, viruses and phytoplasmas. Pathogenesis. Concept of integrated plant protection. Diseases and protection of seedlings in greenhouses and fields. Diseases and disease control on ornamental plants, the most important vegetable plants, fruits and vine. Introduction and economic significance of plant pests. Basic morphology and anatomy, reproduction and development, basic systematics and ecology of insects and other pests. Polyphagous pests. Basic morphological traits, distribution, significance, harmfulness, biology and ecology of pests of trees, flowers, bushes, lawns, vegetables, fruits and vines.</p> <p>Practical classes:</p> <p>Symptom classes (plant material observing). Basics of phytopathogenic pseudofungi, fungi, bacteria and viruses identification. Diseases of ornamental plants, the most important vegetable plants, fruits and vine. Identification of pests and plant damages resulting from their activity on trees, flowers, bushes, lawns, vegetables, fruits and vines (atlases, photos, collections, damages).</p>
<p><b>Required Reading:</b></p> <p>Kereši T., Sekulić R., Popović A., (2017): Bolesti i štetočine u hortikulturi (deo- štetočine u hortikulturi). Poljoprivredni fakultet, Novi Sad.</p> <p>Mihajlović, Lj. (2008): Šumarska entomologija, Šumarski fakultet, Beograd.</p> <p>Sekulić, R., Spasić, R., Kereši, T. (2008): Štetočine povrća i njihovo suzbijanje, Poljoprivredni fakulteti Novi Sad i Beograd, Institut za ratarstvo i povrtarstvo, Novi Sad.</p> <p>Ivanović Milan, Ivanović Mirko (2017): Bolesti voćaka i vinove loze. University of Belgrade, Faculty of Agriculture.</p> <p>Balaž, F., Balaž, J., Tošić, M., Stojšin, V., Bagi, F. (2010): FITOPATOLOGIJA - bolesti ratarskih i povrtarskih biljaka. Univerzitet u Novom Sadu, Poljoprivredni fakultet.</p>

<b>Weekly Contact Hours: 6</b>	<b>Lectures: 4</b>	<b>Practical work: 4</b>	
<b>Teaching Methods:</b>			
Lectures – oral presentation using contemporary equipment; visual (presentations, illustrations) in classrooms.			
Practical classes – microscopic techniques using herbarized plant material expressing disease symptoms and insect damage, and conserved insect material.			
<b>Knowledge Assessment (maximum of 100 points):</b>			
<b>Pre-exam obligations</b>	Points	<b>Final exam</b>	Points
Active class participation	5	written exam	
Practical work	5	oral exam	70
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.			