

Study Programme: AGRICULTURAL ENGINEERING AND INFORMATION TECHNOLOGIES			
Course Unit Title: Plant Protection			
Course Unit Code: 19 PTI005			
Name of Lecturer(s): Ass. Prof. Dušan Marinković, PhD			
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:-			
Course Aims: Introduction to plant diseases, pathogens and weeds in conjunction with the damages and losses caused by bio- agences. Measures and methods of control strategies in plant and environment protection. The pesticides/biocides formulations of the products to be applied. The dose/concentration of the products, safe use and rational approach regarding the thresholds of the pathogens and pests. Needed effectiveness of the applied products. Application techniques. Personal protection in relation to toxicity pesticide classes. The equipment used in agriculture and rural/urban environment.			
Learning Outcomes: Developed skills in distinguishing causatives of losses in plant breeding and obtained knowledge in plant protection disciplines , various degrees of damages caused by different biological agents and possible/contemporary methods to be applied in suppression of pathogens, pests and weeds. Recognition of different products formulations available for the treatments of plants, soil or environment. Use of optimal combination of methods and application techniques in obtaining high degree of effectiveness.			
Syllabus: <i>Theory:</i> Significance of Plant protection. Causes of losses and quality of plants (pathogens, pests, weeds). The most striking symptoms of the most important cultivated plants. Harmful and beneficial insects and other organisms (acarines, rodents, snails). Distribution and abundance of pests. Economic threshold for different damage causatives. Integrated plant protection approach. Equipment for pesticide application. Application techniques and compatibility of the products to be applied simultaneously. <i>Practice:</i> Demonstration of plant material damaged by pathogens, pest insects and stages of the development that are phytophagous . The place and the plant organs that are affected by various diseases/pests. The basic properties of the pesticides, formulations and the treatments that can be carried out either within agriculture or rural/urban area. The criteria for obtaining optimal degree of plant protection in respect to equipment requirements.			
Required Reading:-			
Weekly Contact Hours:4	Lectures:2	Practical work:2	
Teaching Methods: Lectures, Practical classes			
Knowledge Assessment (maximum of 100 points):			
Pre-exam obligations	points	Final exam	points
Active class participation	5	written exam	
Practical work	25	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.			