

Course Unit Descriptor

Study Programme: PHYTOMEDICINE			
Course Unit Title: <i>STORAGE OF FRUITS AFTER HARVEST</i>			
Course Unit Code: 19.FTM036			
Name of Lecturer(s): Full prof. Nenad Magazin, PhD			
Type and Level of Studies: UNDERGRADUATE ACADEMIC STUDIES			
Course Status (compulsory/elective): Elective			
Semester (winter/summer): winter			
Language of instruction: Serbian			
Mode of course unit delivery (face-to-face/distance learning): face-to-face			
Number of ECTS Allocated: 6			
Prerequisites: Plant physiology, fruit growing and viticulture			
<p>Course Aims:</p> <p>The goal is to acquire knowledge in the field of fruit storage, as well as to enable students to apply that knowledge in practice through direct work in the process of harvesting and storing fruit. Students will be trained to independently make decisions about the time of harvest of individual fruit species based on the parameters and methods that will be presented to them in this course. The program of the course allows students to get acquainted with different processes and changes that take place in fruits after harvest, as well as the influence of various external (temperature, humidity, gas composition in the refrigerator) and internal factors (fruit structure, chemical composition, ethylene production). ability to store fruits. A special goal is to acquaint students with non-parasitic diseases that occur during fruit storage, ie the causes, symptoms and ways to combat the occurrence of these diseases. Students will also be introduced to modern types of facilities for storing and storing fruit, the equipment that these facilities have as well as their way of functioning and management.</p>			
<p>Learning Outcomes:</p> <p>Since there are significant losses during fruit storage, the acquired knowledge will significantly help to reduce them, whether it is an individual farm, company or cooperative.</p>			
<p>Syllabus:</p> <p><i>Theory.</i> <i>Biological</i> properties of fruits. Biochemical and physiological processes in harvested fruits. Changes during fruit ripening. Determining the moment of harvest. Fruit storage technology. Non-parasitic diseases on fruits at the time of harvest and during storage. Fruit packaging. Types of cold storages and control of storage conditions.</p> <p><i>Practice.</i> Methods for determining the moment of harvest. Respiration in fruits. Determination of acids in fruits. Determination of dry matter content in fruits. Recognition of non-parasitic fruit diseases. Practical demonstration of packaging used in certain fruit species. Introduction to refrigeration equipment. Fruit storage facilities. Visit to the cold store.</p>			
<p>Required Reading: Wills, R., McGlasson, B., Graham, D., Joyce, D. Postharvest: an introduction to the physiology of fruit, vegetables and ornamentals, CAB International, 2007.</p> <p>Gross, K.C., Wang, C.Y., Saltveit, M. The commercial storage of fruits, vegetables, and florist and nursery stocks, United States Department of Agriculture, Agriculture Research Service, 2016</p>			
Weekly Contact Hours: 2	Lectures: 2		Practical work: 2
<p>Teaching Methods:</p> <p>Lectures, presentations, films, visits to orchards and vineyards, laboratory work, practical work in experimental fields</p>			
Knowledge Assessment (maximum of 100 points):			
Pre-exam obligations	points	Final exam	points
Active class participation	10	written exam	
Practical pre exam test	30	oral exam	60
The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam, project presentation, seminars, etc.			