

Study programme: Fruit growing and viticulture			
Type and level of study: Bachelor's degree (240 ECTS) – First cycle			
<b>Course title: Pomotechnical practices</b>			
<b>Lecturer:</b> Assoc. Prof. Ivan Glišić, PhD, Radmila Ilic			
<b>Language of instruction:</b> English			
ECTS credits: 8			
Prerequisite: -			
Semester: <i>winter</i>			
<b>Course objective,</b> The main goal of the course is to acquaint students with planting care measures that are taken on the above-ground part of fruit trees. The listed care measures include: selection and formation of the cultivation form, planting intervals, pruning (during dormancy and during the growing season), operations on young shoots, perennials, conductors and older parts of the canopy, measures that contribute to the control of vigourness, then fruit thinning (mechanical and chemical), frost protection, fruit and tree protection from high temperatures and other limiting biotic and abiotic factors.			
<b>Learning outcomes.</b> Based on the obtained theoretical and practical knowledge, the candidate will be able to independently apply auxiliary techniques and cutting-edge pruning methods and models in the field in order to form and maintain the cultivation form and achieve a balance between vegetative growth and fertility, and thus modern, stable and highly intensive production fruit.			
<b>Course contents</b>			
<i>Theoretical instruction.</i> Concept of auxiliary technology, growing and pruning systems; Division of pruning (according to execution time, according to intensity...); Pruning during dormancy; Pruning during the growing season; Cultivation forms and apple pruning; Cultivation forms and pruning of pear and quince; Cultivation forms and pruning of plum; Cultivation forms and pruning of peach and apricot; Cultivation forms and pruning of cherry and sour cherry; Cultivation forms and pruning of walnuts and hazelnuts; Assistance in berry plantations.			
<i>Practical instruction.</i> Pomotechnical practices in winter pruning; Pomotechnique interventions that are carried out during the growing season; Formation of slender spindle, superspindle and solaxa as the most important growing forms for apple; Formation of spindly bush; Formation of pyramidal growing forms (level pyramid, improved pyramid, combined pyramid); Formation of a bowl-shaped crown (vase); Formation of cultivation forms of apricot, cherry and sour cherry; Formation of raspberry rows; The difference in the support technology of monoecious and dioecious raspberry cultivars			
<b>Recommended reading</b>			
Olsen J. (2011): Training and Pruning Your Home Orchard. Oregon State University.			
Wade G. L., Westerfield R. (2022): Basic principles of Pruning woody plants. University of Georgia in cooperation with Fort Valley State University.			
Ingels C., Geisel P. Unruh C. (2022): Fruit trees: Training and Pruning Deciduous Trees. University of California, Division of Agriculture and Natural Resources.			
Musacchi S., Iglesias I., Neri D. (2021): Training Systems and Sustainable Orchard Management for European Pear ( <i>Pyrus communis</i> L.) in the Mediterranean Area: A Review. <i>Agronomy</i> , 11, 1765. <a href="https://doi.org/10.3390/agronomy11091765">https://doi.org/10.3390/agronomy11091765</a>			
Lott D., Fisk C., Hammond V. (2018): Pruning Fruit Trees. University of Nebraska.			
Parker M. (2015): Training and pruning fruit trees. North Carolina State University.			
<b>Hours of active teaching</b>			
Lectures:	Practicals: 2x15=30	Other forms of teaching Tutorials 3x15=45	Individual work:
<b>Other classes</b>			
Teaching is conducted in two ways: a) theoretical teaching (lectures) and b) practical teaching (exercises).			
<b>Assessment (maximum points 100)</b>			
<b>Examination requirements</b>	<b>Points</b>	<b>Final examination</b>	<b>Points</b>
Class participation	20	oral examination	
Practical sessions/tests	30	written examination	50
<b>Grading system</b>			
<b>Grade</b>	<b>ECTS</b>	<b>Description</b>	
10	91-100	Excellent	
9	81-90	Exceptionally good	
8	71-80	Very good	
7	61-70	Good	
6	51-60	Passing	
5	≤50	Failing	