Biotechnical Faculty / CONTINENTAL FRUIT GROWING AND MEDICAL PLANTS / BASIS OF FRUIT GROWING

Course:	BASIS OF FRUIT GROWING			
Course ID	**Course status**	**Semester**	**ECTS credits**	**Lessons** (Lessons+Exercises+Laboratory)
3999	Mandatory	3	6	3+1+1
Programs	CONTINENTAL FRUIT GROWING AND MEDICAL PLANTS			
Prerequisites	None.			
Aims	Introducing students to the fundamentals of biology, ecology, and propagation of fruit trees, as well as orchard establishment and maintenance through the application of agrotechnical and pomotechnical measures.			
Learning outcomes	To define the significance of fruit growing as a profitable economic sector; to recognize physiological processes and biology of fruit species; to explain methods of fruit tree propagation and practically apply the best propagation techniques; to accurately analyze favorable ecological conditions for fruit production and fruit tree seedling production; to design orchards and nurseries; to be proficient in the proper application of agrotechnical measures (pruning, fertilization, irrigation, soil cultivation, disease and pest control) in optimal agricultural deadlines; to provide advice and apply practical work in the field and enhance technological processes in fruit production, fruit harvesting, and storage in cold storage until the moment of sale.			
Lecturer / Teaching assistant	Prof. dr Đina Božović – Professor prof. dr Vučeta Jaćimović – Professor mr Anđela Ljujić – Associate			
Methodology	Lectures, exercises, seminar essays, colloquiums and final exam.			
Plan and program of work				
Preparing week	Preparation and registration of the semester			
I week lectures	The significance of fruit growing. Fruit production worldwide and in Montenegro. The role of fruit in nutrition.			
I week exercises	Chemical composition of fruits.			
II week lectures	Morphology of fruit trees.			
II week exercises	Fruit-bearing branches of fruit trees.			
III week lectures	Classification of fruit trees. Ontogeny of fruit trees.			
III week exercises	Identification of fruit species.			
IV week lectures	Annual fruit trees cycle. Physiology of fruitfulness.			
IV week exercises	Tools and equipment in fruit cultivation practice.			
V week lectures	Fruit growth and development. Sterility and incompatibility of fruit trees.			
V week exercises	Ecological sterility.			
VI week lectures	Colloquium I. Ecology of fruit trees.			
VI week exercises	Determining the harvest time.			
VII week lectures	Basics of nursery production. Generative propagation of fruit trees.			
VII week exercises	Extraction, classification and drying of seeds.			
VIII week lectures	Vegetative propagation.			
VIII week exercises	Visit to the nursery garden.			
IX week lectures	Container seedling production, tissue culture, re-grafting.			
IX week exercises	Nutrient substrates.			
X week lectures	Preparing the soil for orchard establishment, selection of fruit species and varieties.			
X week exercises	Ameliorative fertilization.			
XI week lectures	Planting fruit trees.			
XI week exercises	Digging pits.			
XII week lectures	Formation of the growing form.			
XII week exercises	Modern growing forms.			

XIII week lectures	Fruit species maintenance.
XIII week exercises	Methods of soil maintenance in orchards.
XIV week lectures	Colloquium II. Regulating fruitfulness.
XIV week exercises	Autumn tillage and fertilization.
XV week lectures	Harvesting and fruit storage.
XV week exercises	Seed stratification.
Student workload	

Per week	**Per semester**
6 credits x 40/30=8 hours and 0 minuts 3 sat(a) theoretical classes 1 sat(a) practical classes 1 excercises **3 hour(s) i 0 minuts** of independent work, including consultations	Classes and final exam: **8 hour(s) i 0 minuts x 16 =128 hour(s) i 0 minuts** Necessary preparation before the beginning of the semester (administration, registration, certification): **8 hour(s) i 0 minuts x 2 =16 hour(s) i 0 minuts** Total workload for the subject: **6 x 30=180 hour(s)** Additional work for exam preparation in the preparing exam period, including taking the remedial exam from 0 to 30 hours (remaining time from the first two items to the total load for the item) **36 hour(s) i 0 minuts** Workload structure: **128 hour(s) i 0 minuts (cources), 16 hour(s) i 0 minuts (preparation), 36 hour(s) i 0 minuts (additional work)**
Student obligations	Students are required to attend lectures and exercises, complete their seminar essay, take both colloquiums and the final exam.
Consultations	One hour per week, by arrangement with students.
Literature	Lučić, P., Đurić, G., Mičić, N. (1996): "Fruit Growing I," Partenon, Belgrade; 2. Mišić, P., Ninkovski, I., Popović, R. et al. (2001): "Fruit Growing," Fruit Community, Belgrade; 3. Stanković, D., Jovanović, M. (1990): "General Pomology," Scientific Book, Belgrade. 4. Memić, S. et al. (2009): "Fruit Growing," Faculty of Agriculture, Sarajevo. 5. Keserović, Z., Magazin, N., Milić, B., Dorić, M. (2016): "Fruit Growing and Viticulture (part fruit growing)," University of Novi Sad. 6. Aliman, J., Hasanbegović, J. (2017): "Fundamentals of Fruit Growing with Practice," Mostar. 7. Paunović, Gorica, Kulina, M. (2018): "General Pomology: Biology and Ecology of Fruit Trees."
Examination methods	Activity during lectures: 5 points; Seminar essay: 5 points; Colloquium: 2x 20 points= 40 points; Final exam (oral if necessary) = 50 points.
Special remarks	
Comment	

Grade:	F	E	D	C	B	A
Number of points	less than 50 points	greater than or equal to 50 points and less than 60 points	greater than or equal to 60 points and less than 70 points	greater than or equal to 70 points and less than 80 points	greater than or equal to 80 points and less than 90 points	greater than or equal to 90 points