

Biotechnical Faculty / CONTINENTAL FRUIT GROWING AND MEDICAL PLANTS / POME FRUIT TREES

Course:	POME FRUIT TREES			
Course ID	Course status	Semester	ECTS credits	Lessons (Lessons+Exercises+Laboratory)
8412	Mandatory	5	7	3+1+1
Programs	CONTINENTAL FRUIT GROWING AND MEDICAL PLANTS			
Prerequisites	No prerequisites required			
Aims	Familiarizing students with the origin, biology, modern fruit variety, establishing orchards and with the economy of pome fruit production.			
Learning outcomes	After getting the passing grade, the student will be able to: Explain the origin and scientific classification of pome fruit varieties. Recognize biological characteristics of pome fruits, varieties and rootstocks, as well as specific technologies for cultivation the same. Distinguish characteristics of varieties, quality and maturity periods. Identify the benefits of agro-ecological conditions for the cultivation of specific fruit trees, as well as for the practical implementation of measures to establish and maintain orchards. Describe the techniques of fruitfulness regulation in pome fruit varieties. Students must also develop efficient learning, critical thinking and properly evaluate methods of teaching and learning outcomes.			
Lecturer / Teaching assistant	Prof. dr Šebek Gordana and dr Stojanović Milena			
Methodology	student engagement, seminar paper, both tests and final exam			
Plan and program of work				
Preparing week	Preparation and registration of the semester			
I week lectures	The origin, historical development, scientific classification of pome fruit varieties. Ecology of pome fruit varieties.			
I week exercises	The morphology of the root, stem, crown, buds, flowers and fruits.			
II week lectures	Physiology of growth, development, formation and the growth of flower buds, flowering, pollination, fructifying, fruit development.			
II week exercises	The spread and description of some more important morphological characteristic of different types of fruiting branches and fruiting buds.			
III week lectures	Significance of varieties, assessment of variety fruitfulness and assessment of the fruit quality			
III week exercises	Short fruit bearing branches. Short fruiting woods. Long slender fruiting branches.			
IV week lectures	Summer apple varieties			
IV week exercises	Determining the yield potential of fruit trees			
V week lectures	Autumn apple varieties			
V week exercises	Practical demonstrations of pruning pome fruit species trees in the experimental field.			
VI week lectures	Winter apple varieties			
VI week exercises	Morphological and organoleptic fruit properties in the apple varieties			
VII week lectures	First test			
VII week exercises	Morphological and organoleptic fruit properties in the pear varieties			
VIII week lectures	Summer pear varieties. Make-up first test			
VIII week exercises	Morphological and organoleptic fruit properties in the quince and medlar varieties			
IX week lectures	Autumn pear varieties.			
IX week exercises	Physiological maturity. Technological maturity. Iodine-starch test.			
X week lectures	Winter pear varieties.			
X week exercises	Determination of the percentage of dry matter (Brix).			
XI week lectures	Pears and apples processing. Seminar paper.			
XI week exercises	Generative and vegetative apple rootstocks.			
XII week lectures	Quince, medlar and mountain ash (sorb).			

XII week exercises	Generative and vegetative pear rootstocks.					
XIII week lectures	Second test					
XIII week exercises	Generative and vegetative quince rootstocks.					
XIV week lectures	Orchard establishment, land treatment, fertilization, irrigation. Fruitfulness regulation and production economy.					
XIV week exercises	Generative and vegetative medlar rootstocks.					
XV week lectures	Make-up second test					
XV week exercises	Pomotechnical measures in orchards.					
Student workload						
Per week			Per semester			
7 credits x 40/30=9 hours and 20 minuts 3 sat(a) theoretical classes 1 sat(a) practical classes 1 excercises 4 hour(s) i 20 minuts of independent work, including consultations			Classes and final exam: 9 hour(s) i 20 minuts x 16 =149 hour(s) i 20 minuts Necessary preparation before the beginning of the semester (administration, registration, certification): 9 hour(s) i 20 minuts x 2 =18 hour(s) i 40 minuts Total workload for the subject: 7 x 30=210 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) 42 hour(s) i 0 minuts Workload structure: 149 hour(s) i 20 minuts (cources), 18 hour(s) i 40 minuts (preparation), 42 hour(s) i 0 minuts (additional work)			
Student obligations			Lessons attendance is mandatory for students, doing both tests and the final exam as well as writing essay (seminar paper).			
Consultations			In agreement with the students			
Literature			Literature: 1.Velickovic, M. (2004) General fruit growing., 2. Veličković M. (2006): Fruit growing, National Library Beograd., 3. Bulatović, S., Mratinić, E. (1992): Biotechnological bases of fruit growing, Belgrade 4. Dr. Asen Stancevic: Pear, Nolit, 1980. 5. Dr. Asen Stancevic: Quince, medlar, hawthorn, Nolit, 1986. 6. Dr. Petar Misic: Apple, Nolit, 1985. 7 Dr. Petar Mišić: New varieties of fruit trees, Nolit, 1987. 8. Dr. Spasoje Bulatović: Contemporary fruit growing, Nolit, 1979			
Examination methods			The forms of testing and grading: student engagement: 5 points seminar paper: 5 points first and second test: 2 x 20 40 points final exam: 50 points Ocjena Broj poena: A (≥ 90 do 100 poena); B (≥ 80 do< 90); C (≥ 70 do < 80); D (≥ 60 do < 70); E (≥ 50 do < 60) F < od 50			
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