

Study Programme: AGRONOMY			
Course Unit Title: Fruit growth and development			
Course Unit Code: 3DAI1017			
Name of Lecturer(s): Gološin R. Branislava and Bijelić M. Sandra			
Type and Level of Studies: Doctoral studies			
Course Status (compulsory/elective): Elective			
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: 10			
Prerequisites: Passed exams on the subjects in the field of Fruit growing in basic academic studies			
Course Aims: Acquiring advanced knowledge in the field of fruit growth and development which has or it is expected to have application in modern fruit growing practice.			
Learning Outcomes: Students enabled to follow the latest literature in the field of Fruit growth and development. In addition, students will adequately apply acquired knowledge in their research which could later be applied in practice.			
Syllabus:			
<i>Theory</i> Growth and development of vegetative and generative fruit organs. Morphological aspects of the growth. The life cycles of fruits. Annual cycles of fruits. Phytohormones and growth regulators. Natural and synthetic growth substances. The influence of exterior factors on fruit growth. The influence of exterior factors on fertilization. <i>In vitro</i> morphogenesis: Micropropagation; Organogenesis; Somatic embryogenesis; Development of haploid and doubled haploid fruits.			
<i>Practice</i> Modern methods for studying fruit organogenesis. Methods for examining the influence of fruit rootstocks on scions as well as scions on rootstocks. Studying and presenting selected representative papers on fruit growth and development. Work on experiments.			
Required Reading:			
1. Jules Janick, Robert Paull: The encyclopedia of fruit & nuts. CAB International, 2008.			
2. Dozet, B., Mezei Snežana, Gološin Branislava, Galović Vladislava, Šesek, S., Vasiljević, LJ., Vasić Dragana, Ognjanov, V., Macet Ksenija i sar.: Kultura tkiva u poljoprivredi. Štamparija FELJTON, Novi Sad, 1995.			
3. Nešković Mirjana, Konjević, R., Čulafić Ljubinka: Fiziologija biljaka. NNK-Internacional, Beograd, 2010.			
4. Taji, Acram, Kumar, P.P, Lakshmanan, P.: In Vitro Plant Breeding. Food Products Press, An Imprint of The Haworth Press, INC. New York.London.Oxford, 2001.			
5. Kastori R.: Fiziologija biljaka. Feljton, Novi Sad, 1998.			
6. Scientific journals and papers in this field			
Weekly Contact Hours:	Lectures: 3	Practical work: 5	
Teaching Methods: Method of oral presentation and discussion. Method of presentation, demonstration and illustration by computer. Method of practical laboratory and field work.			
Knowledge Assessment (maximum of 100 points):			
Pre-exam obligations	points	Final exam	points
Test	10	written exam	20
Seminar	30	oral exam	40
The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam, project presentation, seminars, etc.			