

FORM: Syllabus
Course description

General information		
Course Holder	Mladenka Šarolić, PhD, Assistant Professor, Senior lecturer	
Course title	The basics of fruit and vegetable processing	
Study programme	Karst agriculture	
Course status	mandatory	
Year	3. (V semestar)	
Evaluation in ECTS credits and forms of class conducting	ECTS coefficient of student workload	6,0
	Number of classes (L+P+S)	60 (20+40+0)

1. COURSE DESCRIPTION		
<i>1.1. Course objectives</i>		
Acquisition of knowledge in the field of handling raw materials after harvesting (preservation and processing), individual processing and preservation processes in different product types. Achieving the abilities needed to analyze raw materials and identifying changes in the composition and characteristics of fruits and vegetables needed to successfully manage storage capacities and processing plants. Meaning of fruits and vegetables and processing and preservation from an economical, nutritional and technological aspects.		
<i>1.2. Terms for enrollment</i>		
* Approved by the Statute and the Rulebook on Studying (https://www.veleknin.hr/veleknin/web/index.php/cro/O-nama/Dokumenti)		
<i>1.3. Expected learning outcomes related to the course</i>		
Students will be able to: - make basic analyzes of raw materials and products - explain the principles of preserving foodstuffs - to know the chemical composition of fruits and vegetables and the factors affecting the quality of the product - identify, name and describe types of fruit and vegetable products - know the basics of technology for the production of fruit and vegetable products - make technological norms for certain product types - apply acquired knowledge for the production of fruit and vegetable products		
<i>1.4. Course content</i>		
<ol style="list-style-type: none"> 1. General informations about fruit and vegetables from the economical, nutritional and technological point of view 2. Physical and morphometric characteristics, physiology of fruit and vegetables 3. Mechanical and chemical composition of fruit and vegetables 4. Methods of processing and preservation 5. Fruit and vegetable products 6. Packing, labeling and storing of products 7. Independent work in laboratories to carry out selected and important analyzes in this process 8. Visit to food industries dealing with fruit and vegetable processing 		
<i>1.5. Forms of class conducting</i>	<input checked="" type="checkbox"/> lectures <input type="checkbox"/> seminars and workshops <input checked="" type="checkbox"/> practice <input type="checkbox"/> e-learning <input checked="" type="checkbox"/> field learning	<input type="checkbox"/> independent work <input type="checkbox"/> multimedia and the network <input checked="" type="checkbox"/> laboratory <input type="checkbox"/> mentor work <input type="checkbox"/> other

1.6. Comments							
1.7. Student obligations Regular attendance of lectures and practice, tasks, colloquiums, exam preparation, exams							
Students are required to attend 70 % lectures and 100 % practice (laboratory and field learning) and create the report from performed practise. Students are required to pass the final exam which consists of two parts (written and oral). It is possible that students are free from written part of the final exam by passing the 2 colloquiums.							
1.8. Student evaluation method ¹							
Attendance	1,5	Class activity	0,5	Seminar paper		Experimental work	
Written exam	2	Oral exam	2	Essay		Research	
Project				Report		Practical work	
Portfolio							
1.9. Evaluation of the students' work during classes and in the final exam							
Colloquium I				25,0			
Colloquium II				25,0			
Final written exam (mandatory if the student is not free from the exam by passing the colloquiums)				50,0*			
Final oral exam				50,0			
1.10. Compulsory reading (at the time of application of the study program proposal)							
<ul style="list-style-type: none"> • L. De la Rosa, E. Alvarez-Parilla, G. Gonzalez-Aguilar: Fruit and Vegetable Phytochemicals, Wiley-Blackwell, 2010. • Y. H. Hui i sur. Handbook of Fruits and Fruit Processing, Blackwell Publishing, 2006. • W. Jongen: Fruit and Vegetable Processing-Improving Quality, CRC, 2002. 							
1.11. Additional reading (at the time of application of the study program proposal)							
<ul style="list-style-type: none"> • N.K. Sinha et al. Handbook of Vegetables and Vetegable Processing, Blackwell, 2005 							
1.12. Number of copies of the compulsory reading units compared to the number of students currently attending the course							
Title				Number of copies		Number of students	
e-book							
1.13. Quality assurance methods that ensure the acquisition of knowledge, skills and competencies							
Evaluation of the success of students in exercises, colloquiums and exams. Information on progress and potential problems is offered to students during the course. At the end of the semester, the evaluation of teachers and subjects by students (student surveys) is carried out. Student satisfaction information is used to improve the quality of teaching performance. Information on the learning outcomes achieved is used to draw self-evaluation of the teacher and, if necessary, to modify and / or addition the subject program, the methods of work and the assessment of the students.							

¹ IMPORTANT: Each Student Evaluation Method should be followed by a corresponding share in the ECTS credits for each activity so that the total number of ECTS points corresponds to the credit score of the subject. You can use blank fields for additional activities.