

FORM: Syllabus
Course description

General information		
Course Holder	Emilija Friganović, Senior Lecturer	
Course title	Technology of Confectionery and Related Products	
Study programme	Undergraduate Professional Study of Food Technology	
Course status	Elective	
Year	3. (V semester)	
Evaluation in ECTS credits and forms of class conducting	ECTS coefficient of student workload	5,5
	Number of classes (L+P+S)	75 (45+30+0)

1. COURSE DESCRIPTION		
<i>1.1. Course objectives</i>		
The objective of this course is to prepare students for work, guidance and process control in the production of confectionery and related products.		
<i>1.2. Terms for enrollment</i>		
None		
<i>1.3. Expected learning outcomes related to the course</i>		
After passing the exam, students will be able to:		
<ul style="list-style-type: none"> - define the basic concepts related to raw materials, products and production technology of confectionery and related products - describe the machinery, equipment and devices, and their application - schematically show the production stages and processes - use the technical regulations and standards relating to the quality and safety of confectionery and related products - Calculate the energy value and the amount of nutrients for the product - explain the parameters of product and production control - carry out basic analyses of raw materials and products - explain the impact of certain components of the raw material on the technological process - explain the impact of certain components of the raw material on human health - calculate production normative 		
<i>1.4. Course content</i>		
1. Introduction 2. The origin and chemical composition of raw materials in confectionery industry 3. Production of cocoa products; technological stages of the process, machinery and equipment 4. Cream - products; technological stages of the production process, machinery and equipment 5. Production of sugar confectionery products, technological stages of the process, machinery and equipment 6. Coffee and coffee substitutes. Tea; technological stages of the process, machinery and equipment 7. Confectionery product and health 8. Quality parameters and legislative framework		
<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															
Students are obligated:															
<ul style="list-style-type: none"> - to attend 80 % of lectures and practice and actively participate in classes - to present and defend 1 seminar paper, - to pass a final exam consisting of a written and oral exam (passing grade of two colloquia is recognized as a grade on the final written exam). 															
1.8. Student evaluation method ¹															
Attendance	2,00	Class activity	0,50	Seminar paper	1,00	Experimental work									
Written exam	0,05	Oral exam	0,05	Essay		Research									
Project		Preparing for continuous assessment	1,90	Report		Practical work									
Portfolio															
1.9. Evaluation of the students' work during classes and in the final exam															
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Attendance and class activity</td> <td style="width: 50%;">4,00 % of a grade</td> </tr> <tr> <td>Seminar paper (1)</td> <td>10,00 % of a grade</td> </tr> <tr> <td>Colloquia/Final written exam</td> <td>36,00 % of a grade</td> </tr> <tr> <td>Final oral exam</td> <td>50,00 % of a grade</td> </tr> </table>								Attendance and class activity	4,00 % of a grade	Seminar paper (1)	10,00 % of a grade	Colloquia/Final written exam	36,00 % of a grade	Final oral exam	50,00 % of a grade
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Colloquia/Final written exam	36,00 % of a grade														
Final oral exam	50,00 % of a grade														
1.10. Compulsory reading (updated)															
<ul style="list-style-type: none"> - L., Goldoni, Tehnologija konditorskih proizvoda I (kakao proizvodi), Kugler, Zagreb, 2004. - L., Goldoni, Tehnologija konditorskih proizvoda II (bombonski proizvodi), Kugler, Zagreb, 2004. - L., Goldoni, Kava i kavovine, Veleučilište u Karlovcu, interna skripta, 2005. 															
1.11. Additional reading (updated)															
<ul style="list-style-type: none"> - S. T. Beckett (2009): Industrial chocolate manufacture and use. Wiley-Blackwell Publishing. Chichester, UK. - Edwards, W. P. (2000) The science of sugar confectionary, The Royal Society of Chemistry, Cambridge, UK. - R.J. Clarke, R. Macrae (1987): Coffee-Technology. Elsevier Applied Science, London, New York. - R.J. Clarke, R. Macrae (1985): Coffee-Chemistry. Elsevier Applied Science, London, New York. - Zakonski propisi o hrani, www.nn.hr 															
1.12. Number of copies of the compulsory reading units compared to the number of students currently attending the course															
		<i>Title</i>			<i>Number of copies</i>	<i>Number of students</i>									
		- L., Goldoni, Tehnologija konditorskih proizvoda I (kakao proizvodi), Kugler, Zagreb, 2004.			1	10									
		- L., Goldoni, Tehnologija konditorskih proizvoda II (bombonski proizvodi), Kugler, Zagreb, 2004.			1	10									
		- L., Goldoni, Kava i kavovine, Veleučilište u Karlovcu, interna skripta, 2005.			1	10									
1.13. Quality assurance methods that ensure the acquisition of knowledge, skills and competencies															
Testing is conducted regularly during classes, through presentation, colloquia, the written and oral exam. Information on progress and potential problems is provided to students during semester. At the end of the semester, the evaluation of teachers and course by students (student surveys) is carried out. The information obtained regarding student satisfaction 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 amend the course 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.