

Study Programme: Food Engineering
Course Unit Title: Technology of Cheeses, Concentrated and Dried Dairy Products
Course Unit Code: 07TKH02
Name of Lecturer(s): Full Professor Mirela Iličić, Associate Professor Katarina Kanurić
Type and Level of Studies: Undergraduate Academic Degree
Course Status (compulsory/elective): Compulsory
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: 6
Prerequisites: None
<p>Course Aims:</p> <p>Students are trained to understand theoretical and practical base of technology and control quality of the cheeses, concentrated and dairy products.</p>
<p>Learning Outcomes:</p> <p>The objective of this course is to form highly skilled experts for work in the dairy industry, project, scientific, professional and educational institutions dealing with similar problems.</p>
<p>Syllabus:</p> <p><i>Theory</i></p> <p>Cheese- classification and diversity. Manufacture of cheese (process, equipment): traditional cheeses , various types of cheeses (hard varieties, semi-hard, soft, surface mould-ripened cheeses, <i>Pasta-Filata Cheeses</i>, cheese varieties ripened in brine, acid and acid /rennet curd cheeses and acid-heat coagulated cheeses/fresh cheeses, whey cheese, processed cheese). Manufacture of concentrated and dried dairy products- milk powder; instant milk powder; lactose and refined lactose; casein, caseinates, coprecipitate; whey powder and other powder products of the milk industry; modified dairy products, imitation milk products, infant formula, reconstituted milk powder. Quality of cheeses, concentrated and dried milk products, legislation.</p> <p><i>Practice</i></p> <p>Methods of sampling and sensory evaluation of cheeses, concentrated and dried dairy products. Material balance in the technological process of cheese and processed cheese production. Production of cheese, casein, powdered milk and whey beverage. Methods of analysis: enzymes for milk coagulation; traditional dairy products, various types of cheese, spreadable cheese; powdered milk, other dried dairy products, casein and caseinates, whey and whey powder. Physicochemical analysis of selected milk products : Kajmak, Kashkaval, Urda.</p>
<p>Required Reading:</p> <ol style="list-style-type: none"> 1. Carić, M. : Concentrated and Dried Dairy Products, VHC, New York, 1994. 2. Carić, M., Milanović, S., Vucelja, D.: Standardne metode analize mleka i mlečnih proizvoda, Prometej, Novi Sad, 2000. 3. Fox, P. F., Mc Sweeney, P. L. H., Cogan, T. M., Guinee, T. P.: Cheese, Chemistry, Physics and microbiology-General aspects, third edition, vol 1, 2004. 4. Fox, P. F., Mc Sweeney, P. L. H., Cogan, T. M., Guinee, T. P.: Cheese, Chemistry, Physics and microbiology - Major Cheese Groups, Third Edition, Vol 2, Elsevier, 2004. 5. Robinson, R.K., Tamime, Y. A.: Feta and Related Cheeses, Ellis Horwood Limited, 1991.

Weekly Contact Hours:	Lectures: 3	Practical work: 3	
Teaching Methods: Lectures and students group work.			
Knowledge Assessment (maximum of 100 points):			
Pre-exam obligations	points	Final exam	points
Active class participation	5	written exam	
Practical work	15	oral exam	30
Preliminary exam(s)	25+25	
Seminar(s)			
The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam, project presentation, seminars, etc.			