

Study programme: Food Technology			
Type and level of study: Bachelor's degree (240 ECTS) – First cycle			
Course title: Additives in the food industry			
Lecturer: Ass. Prof. Pavle Mašković, PhD			
Teacher/Instructor (practical sessions): Ass. Jelena Pantović			
Language of lecture/instruction: English			
ECTS credits: 6		Status (compulsory/elective): elective	
Prerequisites: None			
Semester: <i>spring</i>			
Course objective			
To provide knowledge of international and national legislation on the use of food additives. Classification and mechanism of action of food additives. Advantages and risks of additives.			
Learning outcomes			
Students will acquire competence in the proper use of additives in safe food production.			
Course contents			
<i>Theoretical instruction</i>			
Classification, physicochemical properties and role of food additives. Health aspects and legalisation of food additives. Classification, chemical structure, quality standards of food additives and their determination in raw materials, food products. Natural and synthetic colourants. Major preservatives, their effect on product shelf life, toxicological aspects. Natural, nature-identical and synthetic flavours and their identification. Chemical structure of emulsifiers, thickeners, antioxidants, stabilisers and other additives, and their effect on product quality. Mechanisms of action of food additives.			
<i>Practical instruction</i>			
Analysis of food additives. Analytical methods for the quality control of food additives. New methods in detecting food additives.			
Recommended reading			
Food Additives. Edited by A. Larry Branen, P. Michael Davidson, Seppo Salminen, John H. Thorngate III, Second Edition, Revised and Expanded. Copyright © 2001 by Marcel Dekker, Inc. ISBN: 0-8247-9343-9. Available at: http://www.dekker.com			
Hours of active teaching			Other classes
Lectures:	Practicals: 3x15=45	Other forms of teaching Tutorials 2x15=30	
Teaching methods			
Interactive teaching combined with video presentations. Office hours open to individual students related to problems occurring during theoretical and practical instruction, laboratory sessions.			
Assessment (maximum points 100)			
Examination requirements	Points	Final examination	Points
Class participation	5	oral examination	
Participation in practicals	5		
Practical sessions/tests	25	written examination	55
Term paper assignments/homework	10	
Project			
Other			
Grading system			
Grade	ECTS	Description	
10	91-100	Excellent	
9	81-90	Exceptionally good	
8	71-80	Very good	
7	61-70	Good	
6	51-60	Passing	
5	≤50	Failing	