
		<b>UNIVERSITY OF EAST SARAJEVO</b> Faculty of Technology Zvornik						
		<b>Study programme: Chemical Engineering and Technology</b>						
		Cycle I		Year IV				
<b>Course title</b>		Food Allergens						
<b>Department</b>		Department for Food Technology – Faculty of Technology Zvornik						
<b>Course code</b>		<b>Course status</b>		<b>Semester</b>		<b>ECTS</b>		
04-2-115-7		Elective		7		4		
<b>Teacher</b>		Milenko Smiljanić, PhD, associate professor						
<b>Teaching assistant</b>		Vesna Gojković Cvjetković, PhD, assistant professor						
<b>Number of hours/ teaching workload (per week)</b>			<b>Individual student workload (in hours per semester)</b>			<b>Student workload coefficient S<sub>0</sub></b>		
<b>Lectures</b>	<b>Auditory exercises</b>	<b>Laboratory exercises</b>	<b>Lectures</b>	<b>Auditory exercises</b>	<b>Laboratory exercises</b>	<b>S<sub>0</sub></b>		
2	0	2	30	0	30	1.00		
2*15+0*15+2*15=60 hours			(2*15*1.00+0*15*1.00+2*15*1.00)=60 hours					
Total course workload 60 + 60=120 hours per semester								
<b>Learning outcomes</b>		After finishing the course, students will be able to: 1. define allergens in food; 2. demonstrate the knowledge of the classes of allergens in food; 3. manage allergens in the food industry; 4. demonstrate the knowledge of the legal regulations of Bosnia and Herzegovina and the EU on allergens in food.						
<b>Prerequisites</b>								
<b>Teaching methods</b>		Lectures, auditory and laboratory exercises, seminar paper, consultations, mid-term tests (colloquia).						
<b>Syllabus outline per week</b>		<ol style="list-style-type: none"> <li>1. Introduction. Definition of food allergy. Mechanisms of food allergy.</li> <li>2. Classification of food allergens. Allergens from food of plant origin. Allergens from food of animal origin.</li> <li>3. Labelling the presence of allergens in food products.</li> <li>4. Methods for detecting allergens in food.</li> <li>5. Methods for detecting allergens in food.</li> <li>6. Antibodies. Detection of allergens via in vitro and in vivo tests.</li> <li>7. Peanut allergens in food.</li> <li>8. Allergens from nuts in food.</li> <li>9. Allergens from milk and eggs in food.</li> <li>10. Gluten in food.</li> <li>11. Allergens from soy, fish and crustacean shellfish in food.</li> <li>12. Factors affecting the detection of allergens in food.</li> <li>13. Legal regulations in the EU and Bosnia and Herzegovina for allergens that are not labelled in food products.</li> <li>14. Risk analysis for the presence of allergens in food.</li> <li>15. Management of allergens in the food industry.</li> </ol> Mid-term tests are taken after the 8th week and the 15th week. Semester verification is required after the 15th week.						
<b>Obligatory reading</b>								
<b>Author</b>		<b>Title, publisher</b>		<b>Year</b>	<b>Pages</b>			
Dean, T.		Food intolerance and the food industry, Woodhead Publishing in Food Science and Tecnology, Cambridge, England		2000	1-11			
Flaganan, S.		Handbook of Food Allergen Detection and Control, Woodhead Publishing		2014	1-250			
<b>Additional reading</b>								
<b>Author</b>		<b>Title, publisher</b>		<b>Year</b>	<b>Pages</b>			

Mine, Y.	Detecting allergens in food,by Koppelman&Hefie, Woodhead Publishing, Elsevier	2006	1-51
Food Standards Agency	Guidance on allergen control and consumer information	2005	1-43
<b>Obligations, assessment methods and grading system</b>	<b>Type of student evaluation</b>	<b>Grade points</b>	<b>Percentage</b>
	Pre-exam obligations		
	Attendance	6	6 %
	Mid-term test I	25	25 %
	Mid-term test II	25	25 %
	Seminar paper	14	14 %
	Final examination		
	Final examination (oral)	30	30 %
Total	100	100 %	
<b>Web page</b>	www.tfzv.ues.rs.ba		
<b>Date</b>	2023		