

Study programme: Food Technology				
Type and level of study: Bachelor's degree (240 ECTS) – First cycle				
<b>Course title: Physical Chemistry 2</b>				
<b>Lecturer:</b> Ass. Prof. Igor Đurović, PhD				
<b>Language of instruction:</b> English				
ECTS credits: 6				
Prerequisite:				
Semester: <i>winter</i>				
<b>Course objective</b> Training students for monitoring and understanding the issues that are being studied in the professional objects. Acquired knowledge in the Physical Chemistry 2 course is essential for understanding the process production in the food industry and a precondition for the good management of the process in the production of healthcare safe food and quality control of final products.				
<b>Learning outcomes</b> Understanding of fundamental laws in Physical Chemistry Analytical approach to problems and the use of theoretical and experimental knowledge in practice Training for individual creative work, independent organization and management of individual processes in the food industry and introduction innovation in the production process.				
<b>Course contents</b> <i>Theoretical instruction</i> Electrolyte solution properties. Basics of electrochemistry. Colloids and macromolecules. Structure of the atom. Chemical bond and structure of molecules. Intermolecular forces. Gaseous state. Solid state. Liquid state. <i>Practical instruction</i> Practical classes consist of experimental exercises and computational tasks from the Physical Chemistry 2 materials customized teaching level in the Food Technology study program.				
<b>Recommended reading</b> <ol style="list-style-type: none"> <li>1. Minić, D., Antić-Jovanović, A. (2005): Physical Chemistry. Faculty of Physical Chemistry, Belgrade, p..626</li> <li>2. Đorđević, S. Dražić V. (2005): Physical Chemistry. TMF, Belgrade, p..692</li> <li>3. Ovcin, D., Jovanović, D., Dražić, V., Maksimović, M., Jakovljević-Halai, N., Vračar, Lj., Jovanović, S., Jeremić, K., Šepa, D., Vojinović, M. (1996): Physical Chemistry-workbook. TMF, Belgrade, p..420</li> <li>4. Vračar, Lj., Despić, A., Dražić, V., Zečević, S., Jeremić, K., Jovanović, D., Jovanović, S., Maksimović, M., Nikolić, B., Ovcin, D., Šepa, D. (2001): Experimental Physical Chemistry. TMF, Belgrade, p..350</li> </ol> <p>Ристић, М., Пашти, И., Цекић-Ласковић, И. (2010): Практикум из општег курса физичке хемије. Факултет за физичку хемију, Београд, стр. 233.</p> <ol style="list-style-type: none"> <li>5. Ristić, M., Pašti, I., Cekić-Lasković, I. (2010): General course of Physical Chemistry- Practicum. Faculty of Physical Chemistry, Belgrade, p 233</li> </ol>				
<b>Hours of active teaching 2+1+1</b>				<b>Other classes</b>
Lectures: 2x15=30	Practicals: 1x15=15	Other forms of teaching Tutorials 1x15=15	Individual work:	
<b>Teaching methods</b> <ul style="list-style-type: none"> <li>• Interactive lectures using video presentation , with the active participation of students .</li> <li>• Individual consultations on issues arising from theoretical and practical teaching , laboratory exercises involving the work of appropriate instruments and devices.</li> <li>• Lectures are held in modernised classrooms using modern devices and teaching aids.</li> </ul>				
<b>Assessment (maximum points 100)</b>				
<b>Examination requirements</b>	<b>Points</b>	<b>Final examination</b>		<b>Points</b>
Class participation	5	oral examination		55
Practical sessions/tests	10	written examination		(25)
Class tests	30	.....		
Other				
<b>Grading system</b>				
<b>Grade</b>	<b>ECTS</b>	<b>Description</b>		
<b>10</b>	<b>91-100</b>	Excellent		
<b>9</b>	<b>81-90</b>	Exceptionally good		
<b>8</b>	<b>71-80</b>	Very good		
<b>7</b>	<b>61-70</b>	Good		
<b>6</b>	<b>51-60</b>	Passing		
<b>5</b>	<b>≤50</b>	Failing		