



Table 2

**3.2. Course description**

Basic description		
Course coordinator	Professor Vera Vlahović-Palčevski	
Course title	Food toxicology	
Study programme	Nursing graduated study in Clinical nutrition	
Course status	mandatory	
Year	II.	
ECTS credits and teaching	ECTS student 's workload coefficient	3
	Number of hours (L+E+S)	25+0+10

1. COURSE DESCRIPTION		
1.1. <i>Course objectives</i>		
<ul style="list-style-type: none"> <li>- To teach the students recognize foodborne diseases according to the clinical presentation. The most prevalent agents (infective, chemical etc.) and treatment options. To describe pathophysiology, pharmacokinetics and pharmacodynamics of toxins in humans. To present possible pathways of food contamination from food production to consumption</li> </ul>		
1.2. <i>Course enrolment requirements: Passed exam test from subject Ethics in Healthcare</i>		
1.3. <i>Expected course learning outcomes</i>		
<ul style="list-style-type: none"> <li>- explain possible sources / causes of foodborne diseases, agents and ways of food contamination</li> <li>- describe metabolic pathways of specific toxic agents and their elimination from the body</li> <li>- recognize and prove certain agents</li> <li>- evaluate disease severity and anticipate the outcome</li> <li>- treatment plan</li> </ul>		
1.4. <i>Course content</i>		
<ul style="list-style-type: none"> <li>- Pathogens causing foodborne disease. Food toxins, general and specific properties, effects in humans. Food processing and contamination. Sources of microorganisms in food. Patient age and food poisoning. Food additives, substitutes, GMO. Genetic mutation and food. Prevention, diagnosis, clinical presentation, complications and treatment of foodborne diseases. Regulatory aspects of food products.</li> </ul>		
1.5. <i>Teaching methods</i>	<input checked="" type="checkbox"/> <b>lectures</b> <input checked="" type="checkbox"/> <b>seminars and workshops</b> <input type="checkbox"/> exercises <input type="checkbox"/> long distance education <input type="checkbox"/> fieldwork	<input checked="" type="checkbox"/> individual assignment <input checked="" type="checkbox"/> multimedia and network <input type="checkbox"/> laboratories <input type="checkbox"/> mentorship <input type="checkbox"/> other
1.6. <i>Comments</i>		
1.7. <i>Student's obligations</i>		
Full course attendance. Fulfilling the assignments before each teaching unit, knowledge assessment during the course. Seminars, student work and presentation.		
1.8. <i>Evaluation of student's work</i>		



Course attendance	10%	Activity/Participation	10%	Seminar paper	30%	Experimental work	
Written exam	30%	Oral exam		Essay		Research	
Project		Sustained knowledge check	20%	Report		Practice	
Portfolio							

**Student's knowledge will be assessed throughout the course and at the end of the course.**

#### 1.9. References

Duraković Z. i sur.: Klinička toksikologija, Grafos, Zagreb 2000

Duraković S, Duraković L: Mikrobiologija namirnica-osnove i dosignuća, knjiga prva; Kugler, Zagreb, 2001.

L.C. Dolan, R.A. Matulka, G.A. Burdock: Naturally occurring food toxins, Toxins 2010, 2, 2289-2332, [www.mdpi.com/journal/toxins](http://www.mdpi.com/journal/toxins)

J. Begovac, D. Božinović, M. Lisić, B. Baršić, S. Schönwald: Infektologija, Profil, 2008.

#### 1.10. Optional / additional reading (at the time of proposing study programme)

#### 1.11. Number of assigned reading copies with regard to the number of students currently attending the course

Title	Number of copies	Number of students

#### 1.12. Quality monitoring methods which ensure acquirement of output knowledge, skills and competences