

Course Unit Descriptor

<b>Study Programme:</b> Food engineering		
<b>Course Unit Title:</b> Food mycology and mycotoxicology		
<b>Course Unit Code:</b> DTI38		
<b>Name of Lecturer(s):</b> Associate Professor Sunčica Kocić-Tanackov		
<b>Type and Level of Studies:</b> Doctoral academic studies		
<b>Course Status (compulsory/elective):</b> Elective		
<b>Semester (winter/summer):</b> Winter		
<b>Language of instruction:</b> English		
<b>Mode of course unit delivery (face-to-face/distance learning):</b> Face-to-face		
<b>Number of ECTS Allocated:</b> 10		
<b>Prerequisites:</b> None		
<b>Course Aims:</b> Gaining of scientific knowledge and skills for independent researching in field of food mycology and mycotoxicology.		
<b>Learning Outcomes:</b> Training students for mastering all necessary knowledge for scientific and professional work, for introduce innovations, improvement of methods and dealing with problems in field of food mycotoxicology and mycotoxicology.		
<b>Syllabus:</b> <i>Theory</i> Mycotoxin producing moulds. Factors that stimulates mycotoxigenic moulds growth and mycotoxins biosynthesis. Food as substrate for mycotoxin biosynthesis. Pathways of food contamination of animal and plant origin with mycotoxigenic moulds and mycotoxins. Prevention of mycotoxigenic moulds growth in food. Detoxification of mycotoxins in food. Aflatoxins. Ochratoxin A. Sterigmatocistin. Patulin. <i>Fusarium</i> toxins (fumonisins, trichothecens, zearalenone, etc.). <i>Alternaria</i> toxins and other toxic metabolites of moulds. Biological activity of mycotoxins. Human, animal, and plant mycotoxicoses. Legislation about maximum allowed mycotoxin concentrations in foodstuff. <i>Practice</i> Independent search of available library funds and data, analysis and discussion of achievements in new scientific literature in the field of food mycology and mycotoxicology. Analysis of collected data and preparation of seminar work.		
<b>Required Reading:</b> Pitt, J., Hocking, A. (2009). Fungi and Food Spoilage. 3rd ed. Springer, New York. Diaz D. (2005). The Mycotoxin Blue Book, Nottingham University Press, Nottingham. Samson, A.R., Hoekstra, S.E., Frisvad, C.J., 2004. Introduction to Food-and Airborne Fungi. Centraalbureau vor Schimmelcultures, Utrecht. Klich, A.M., 2002. Identification of common <i>Aspergillus</i> species. Centraalbureau vor Schimmelcultures, Utrecht. van Egmond, H. (1989). Mycotoxins in dairy products. Elsevier Applied Science, London and New York.		
<b>Weekly Contact Hours:</b>	<b>Lectures: 4</b>	<b>Practical work: 2</b>
<b>Teaching Methods:</b> Interactive lectures, consultations, analysis of new scientific literature, in group and individually, depending on the number of students.		

<b>Knowledge Assessment (maximum of 100 points):</b>			
<b>Pre-exam obligations</b>	points	<b>Final exam</b>	points
Active class participation	5	written exam	
Practical work	10	oral exam	50
Preliminary exam(s)		.....	
Seminar(s)	25		

The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam, project presentation, seminars, etc.