

**Table 5.2) Course unit description**

<b>Study program:</b> ECOLOGY				
<b>Type and level of studies:</b> Master academic studies of second degree				
<b>Course unit:</b> E-205 Fungal ecology				
<b>Teacher in charge :</b> Marijana M. Kosanić, Ph.D.				
<b>Language of instruction:</b> English				
<b>ECTS:</b> 6				
<b>Prerequisites:</b> /				
<b>Semester:</b> Winter Semester				
<b>Course unit objective:</b> The study of the role of fungi in a variety of ecosystems, their relationships with other organisms and biodegradation processes in nature.				
<b>Learning outcomes of Course unit:</b> Mastering the necessary knowledge about the role of fungi in various ecosystems (such as organic decomposers, as parasites of plants and animals and symbiotic organisms). Application of acquired knowledge in the field of environmental protection in biological control and in biotechnological processes.				
<b>Course unit contents</b>				
<i>Theoretical classes</i>				
Basic principles of the fungal ecology. Structure and function of mycelium and its structures. The biotic and abiotic factors affecting the fungal population. Ecological groups of fungi. Colonization and decomposition of organic material and succession of fungi. Ecology of terrestrial, freshwater and marine fungus. Symbiotic fungi and their associations. Parasitic fungi and their hosts. Fungal plant parasites. Fungi vertebrates parasites. Fungal invertebrate parasites. Fungi parasites of other fungi and lichens. The importance of fungi in the biological control (insect pests of crops and other insect pests, and nerka parasitic fungi). Fungal extreme habitats. Ecological and biochemical adaptation of fungi in nature and their effects on the environment. Geographical distribution of the fungi.				
<i>Practical classes</i>				
Practical classes follow the teoretical classes with the same program. Include experimental and field work in the area of selected themes.				
<b>Literature</b>				
Hock B. (2010). Fungal Associations (The Mycota). Springer, Verlag, Berlin and Heidelberg, pp.350.				
Dix N.J., Webster J. (1994). Fungal Ecology. Chapman and Hall. London, pp. 560.				
Griffin D.M. (1973). Ecology of Soil Fungi. Champan and Hall, London., pp.560				
Ainsworth, G. C.; & Alfred S. Sussman (1968). The Fungi, An Advanced Treatise : Volume III, The Fungal Population. Academic Press, New York, London, pp.738.				
<b>Number of active teaching hours</b>				<b>Other classes</b>
Lectures:	Practice:	Other forms of classes: Mentoring (consultative) system	Independent work:	
<b>Teaching methods</b>				
Theoretical classes (power-point presentations)				
Practical classes (laboratory exercises and field work)				
<b>Examination methods (maximum 100 points)</b>				
<b>Exam prerequisites</b>	<b>No. of points:</b>	<b>Final exam</b>		<b>No. of points:</b>
Student's activity during lectures		oral examination		40
practical classes/tests		written examination		30
Seminars/homework	30			
Other				
<b>Grading system</b>				
<b>Grade</b>	<b>No. of points</b>	<b>Description</b>		
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		

