

**Table 5.2.** Course specification in the basic study program

<b>Study program:</b> Forestry and Natural Resources Management			
<b>Subject title:</b> Forest Mycology			
<b>Professor:</b> Dr Ivan Milenković, assistant professor			
<b>Status of the subject:</b> Electoral			
<b>ECTS:</b> 5			
<b>Condition:</b> No			
<b>Objective:</b> This course aims to introduce students to mushrooms as organisms. To get a notion of a Kingdom that is different from plants and animals, to get acquainted with edible and toxic mushrooms, to present the metabolites of mushrooms and the possibility of using these organisms in forestry and human nutrition.			
<b>Course outcome:</b> Students are fully able to identify and use the most important fungi and recognise contemporary trends in the use of mushrooms as biological systems.			
<b>Contents of the course</b>			
<i>Theory teaching:</i>			
Students will be presented with general characteristics of mushrooms and their historical significance, as well as possibilities for future use. It will be presented the place of mycology in the living world system. Morphological characteristics will be presented with a special review of the mushroom cell, the occurrence and development of colonies, as well as ways of multiplying and colonising different substrates. The ecology of mushrooms and their spread, as well as pleomorphism, will be presented in detail. The classification will highlight the most important Phylum, classes, rows, and families, etc. In a special part, the most important representatives of different systematic categories, which occur in forest ecosystems, will be presented.			
<i>Practical classes:</i> During practical work, students will work on the general characteristics of the mushrooms kingdom. They will learn about the methods of sporulation of mushrooms, as well as preparations of artificial substrates for isolation and manipulation of mushrooms. They will study ways to sift and cultivate fungi cultures. After learning about the basic characterisation of the systematic categories, it will be possible to study the most important saprophytic, parasitic, and edible and poisonous mushrooms. Ecological characteristics that affect the occurrence and fruiting of mushrooms will be studied. Students will be introduced to the most important fungi they can find in forests and ecosystems that lean on the forest.			
<b>Literature:</b>			
Alexopoulos, C.J., Mims, C.W., Blackwell, M., 1996. Introductory mycology. Wiley & Sons., New York, USA, pp. 869.			
Gerrit J.K., 1998. The Complete Encyclopedia of Mushrooms. International v.b., Lisse, The Netherlands, pp.286. ISBN 90 366 1598 4.			
Aurora, D., 1986. Mushrooms Demystified. Ten Speed Press. pp. 959.			
<b>Number of classes of active teaching</b>	<b>Theoretical teaching: 30</b>	<b>Practical teaching:</b> 30 other forms of teaching	
<b>Methods of teaching:</b> Use of the most modern presentation equipment; use of microscopes, work in phytopathological laboratories (making nutrients, isolating fungi on various nutrients and identifying them).			
<b>Knowledge rating (maximum points 100)</b>			
<b>Pre-exam obligations</b>	Points	Final exam	Points
activity during lectures	10	written exam	25
practical teaching	10	oral exam	30
colloquium	10		
seminars	15		