

Title	Biology and cultivation of fungi		
Code	3ZT14NAK41M		
Prerequisites			
Description	<p>The mushroom cultivation is a specific horticultural segment. The taxonomical status of the fungi require specific approach for growing them, therefore strong principles of knowledge needed about their biological and ecological importance. The main aim of the subject is to have information about local and global mushrooms production technologies, trends, research and developments targets for the future. Finishing the course the students will have information about biology, life cycle, primary and secondary metabolites of relevant Basidiomycetes and Ascomycetes fungi. The students will know about artificial propagation of cultivated mushrooms and spawn production technologies, they will be able to evaluate by quality of this product. Detailed information will be shared by the most important cultivated species (Agaricus, Pleurotus, Lentinula, Ganoderma, Flammulina, Coprinus), their substrate preferences, growing conditions, market share. The integrated pest and disease management on a mushroom farm will be demonstrated. To increase the skills of the student, a laboratory work (establishing fungal culture, spawn preparation, mycelia preservation techniques) will be organized during the course.</p>		
Lecturer	Dr. András Geösel, Dr. Anna Szabó		
Semester	2nd, spring	Contact hours/week	2+1
Level	MSc	ECTS	3
Teaching and Learning Methods:	student presentation, English vocabulary test		
Reading:	<p>Compulsory literature: http://kertesztananyag.hu/modern-mushroom-cultivation-technologies - shared presentations</p> <p>Recommended literature:</p> <ul style="list-style-type: none"> - den Ouden M. (2016): Mushroom signals. A practical guide to optimal mushroom growing. Mushroom Office. - Stamets P. (2000) Growing Gourmet and Medicinal Mushrooms. Ten Speed Press, Toronto. 		
Assessment:	exam		