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| **Subject** | **Mushrooms Production** |
| **Type** | **Semester** | **ECTS** | **Code** |
| E |  III |  6 | / |
| **Aims and Objectives** | The purpose and objectives of this course is to provide students with knowledge about the mushroom world and their commercial cultivation. Mushroom cultivation is a major field of work, including food production, processing technology, pharmaceuticals, and environmental protection. For this reason, it is important to introduce students to what are mushrooms as food and how to produce mushrooms for both profitable food and the transformation of organic matter. Today, millions of tons of different mushrooms are produced in the world, which are processed, stored, or used as ingredients in the processing of meat, syrup, and the production of various ready-made foods. To complete knowledge of mushroom cultivation, students should be familiar with the fungi morphology, systematics, cultivation methods, mycelium as planting material for mushrooms, and storing conditions for the mycelium to extend the shelf life of planting material. Also, issues such as knowledge about diseases that can appear during the cultivation of mushrooms, environmental impact as well as their nutritional and medicinal values will be discussed towards the end of this subject. |
| **Learning outcomes** | Mushrooms - the basic concepts related to fungus, their way of life and nutrition, mushroom morphology, reproduction growth of fungal cells, cytoplasm, organelles and mycelium growth, mushroom systematics - classification of mushrooms and their role in agronomy and environment, the importance of mushrooms for nutrition and environmental protection, mushroom production and cultivation methods, post-harvest, and principles of mushroom preservation.Students at the end of this course should gain basic knowledge about the importance of mushrooms and their nutritional and curative values. They should achieve basic knowledge about cultivation and cultivation methods, conditions, and requirements for growth and development. Students during laboratory work should adopt the methods of propagation and inoculation substrate with mycelium. Visits to mushroom-growing farms will be in the interest to reach student knowledge in the management of mushroom farms and post-harvest activities. |
| **Literature/References** | 1. S.C. Tiwari & Pankaj Kapoor (2018) Mushroom Cultivation. Mittal Publications
2. Bahl N. (2000). Handbook On Mushrooms. Oxford & Ibh Publishing Co. Pvt Ltd
3. Ashok Aggarwal, Yash Pal Sharma, Esha Jangra (2021). A Textbook on Mushroom Cultivation: Theory and Practice. Newrays Publishing House
4. Božac R. (2002): Gljive, morfologija, sistematika, toksikologija. Školska knjiga, Zagreb
5. Novak B. (1997): Uzgoj jestivih i ljekovitih gljiva. Hrvatsko agronomsko društvo, Zagreb
6. Božac R. (2006): Enciklopedija gljiva 1. Školska knjiga, Zagreb
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