

| | | | |
|---|--------------------|--|--------|
| Study Programme: Agronomy | | | |
| Course Unit Title: Mycotoxigenic fungi | | | |
| Course Unit Code: 19.AGR112 | | | |
| Name of Lecturer(s): full prof. Ferenc Bagi, full prof. Mila Grahovac | | | |
| Type and Level of Studies: Doctoral | | | |
| Course Status (compulsory/elective): elective | | | |
| Semester (winter/summer): winter | | | |
| Language of instruction: English | | | |
| Mode of course unit delivery (face-to-face/distance learning): face-to-face | | | |
| Number of ECTS Allocated: 10 | | | |
| Prerequisites: - | | | |
| Course Aims: Identification of the most significant mycotoxin-producing fungi, with the aim of ensuring accurate detection and enabling the implementation of appropriate preventive measures. | | | |
| Learning Outcomes: Acquire the competences to independently perform detection, diagnosis, and preliminary characterization of mycotoxigenic fungi. | | | |
| Syllabus: | | | |
| <i>Theory</i> | | | |
| The most important genera of microscopic mycotoxigenic fungi. Morphological, cultural, and mycotoxigenic characteristics of the key species within the genera <i>Aspergillus</i> , <i>Penicillium</i> , <i>Fusarium</i> , <i>Alternaria</i> , and <i>Claviceps</i> . Ecological conditions influencing the development of toxigenic fungi in the field and during storage. Symptoms of infection caused by mycotoxigenic fungi. Molecular techniques for the identification of mycotoxigenic fungi. Preventive and protective measures against toxigenic fungi. | | | |
| <i>Practice</i> | | | |
| Hands-on application of diagnostic and identification techniques for mycotoxigenic fungi, including the examination of their morphological, cultural, and toxigenic characteristics, using basic and up-to-date laboratory methods for accurate and reliable identification. | | | |
| Required Reading: | | | |
| Klich A. Maren (2002): Identification of Common Aspergillus Species. USDA, New Orleans, USA. | | | |
| Nelson, P.A., Toussoun, T.A. and Marasas, W.F.O. (1983): Fusarium species, An Illustrated Manual for Identification. The Pennsylvania State University Press. | | | |
| Simmons, E.G. (2007): Alternariaan identification manual. CBS Fungal Biodiversity Centre, Utrecht, the Netherlands. | | | |
| Weekly Contact Hours: 8 | Lectures: 3 | Practical work: Student research work - 5 | |
| Teaching Methods: | | | |
| Interactive teaching | | | |
| Knowledge Assessment (maximum of 100 points): | | | |
| Pre-exam obligations | points | Final exam | points |
| Active class participation | | written exam | |

| | | | |
|--|----|-----------|----|
| Practical work | | oral exam | 60 |
| Seminar(s) | 40 | | |
| The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam, project presentation, seminars, etc. | | | |