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| **Title and Code** of the subject:  **Plant protection in greenhouses** (MTMNO7033A) | **ECTS Credit Points: 2** |
| **Type** of the subject: **compulsory** / optional | |
| **Ratio of theory and practice: 1/1** (credit%) | |
| **Type and number of classes per semester**: 14 hour(s) lecture and 14 hour(s) practice per **semester**  Number of teaching hours / week : 1+1 (lecture and practice) | |
| **Type of exam**: exam / **practical course mark** | |
| **Subject in the curriculum:** semester 1 | |
| Preliminary requirements: *-* | |

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| **Summary of content – theory**  **lectures:**   1. Introduction to plant protection in greenhouses 2. The role of greenhouses, plant hygiene peculiarities 3. Integrated pest management solutions for greenhouses 4. Biological protection options in greenhouses 5. Damage during seedling growing and options for plant protection 6. Major diseases of vegetable crops (lettuce species, peppers, tomatoes, cucumbers, etc.) in greenhouses 7. Major diseases of vegetable crops (lettuce species, peppers, tomatoes, cucumbers, etc.) in greenhouses 8. Major animal pests of vegetable crops (lettuce species, sorrel, spinach, peppers, tomatoes, cucumbers, etc.) in greenhouses 9. Major animal pests of vegetable crops (lettuce species, sorrel, spinach, peppers, tomatoes, cucumbers, etc.) in greenhouses 10. Major diseases of ornamental plants produced in greenhouses (azalea, gerbera, carnation, cyclamen, geraniums, petals, chrysanthemums) 11. Major animal pests of ornamental plants produced in greenhouses (azalea, gerbera, carnation, cyclamen, geraniums, irises, chrysanthemums) 12. Modern cultivation technology of tobacco seedlings 13. Phytopathological and animal pest problems of cultivated mushroom species (champignons, oyster mushrooms, etc.) 14. Knowledge summary |
| **practices:**   1. Greenhouses in practice 2. Practical aspects of integrated plant protection in greenhouses 3. Practical aspects of integrated plant protection in greenhouses 4. Practical aspects of biological plant protection in greenhouses 5. Practical aspects of biological plant protection in greenhouses 6. Practical aspects of plant protection against the major diseases of vegetable crops (lettuce species, sorrel, spinach, peppers, tomatoes, cucumbers, etc.) in greenhouses 7. Practical aspects of plant protection against the major animal pests of vegetable crops (lettuce species, sorrel, spinach, peppers, tomatoes, cucumbers, etc.) in greenhouses 8. Practical aspects of plant protection against the major diseases of ornamental plants produced in greenhouses (azalea, gerbera, carnation, cyclamen, geraniums, petals, chrysanthemums) 9. Practical aspects of plant protection against the major animal pests of ornamental plants produced in greenhouses (azalea, gerbera, carnation, cyclamen, geraniums, irises, chrysanthemums) 10. Practical aspects of plant protection against the major pests of cultivated mushroom species (champignons, oyster mushrooms, etc.) 11. Practical aspects of tobacco seedling growing 12. Practical visit to vegetable growing greenhouses 13. Practical visit to ornamental plant producing greenhouses 14. Practical visit to other greenhouses |
| **Literature, handbooks in English** |
| 1. The materials of the lectures in PDF format 2. Agrios, G.N. (2005): Plant Pathology, Fifth Edition. Academic Press |

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| **Responsible lecturer: Dr. Gabor Tarcali senior research fellow** |

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| **Terms of course completion:** |
| 1. Take a written exam at the end of the semester |
| **Form of examination:** |
| writing test |
| **Requirement(s) to get signature:** |
| Take part in practice |

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| **Exam questions:** |
| Equal to the course and practice objectives |