|  |  |
| --- | --- |
| **Title and code** of the subject: **Agricultural Forestry, MTMKG7016A** | **ECTS Credit Points:**  |
| **Type** of the subject: **compulsory**  |
| **Ratio of theory and practice:** (credit%) **70/30** |
| **Type and number of classes per semester**: 2 hour(s) lecture and 1 hour(s) practice per **semester** Number of teaching hours / week : 2+1 (lecture and practice) |
| **Type of exam**: oral exam  |
| **Subject in the curriculum:** semester 3 |
| Preliminary requirements:- |

|  |
| --- |
| **Summary of content - theory**:  |
| Course objectives: The main aim of the course is to provide basic knowledge on the priorities and tasks of forest management as well as on the main management directions and forest administration.1. Priorities and characteristics of forest management.
2. Criteria of forest site classification.
3. Ecological and silvicultural characteristics of the main stand-forming tree species.
4. Forest tree improvement and forest stand establishment techniques.
5. Agro-forestry systems.
6. Nature-like forest management.
7. Wood utilization and forest subsidiary use.
8. Introduction to forest mensuration.
9. Forest administration and forest management planning.
 |
| **Summary of content - practice**: |
| Skills to be learnt: Identify common tree species.1. Identify the abiotic and biotic factors in a forest ecosystem.
2. Introduction to forest breeding and improvement.
3. Know the plant propagation material management.
4. Understand silvicultural terms, and be able to explain the uses of the following techniques: cleaning, thinning, shelterwood, clearcutting.
5. Explain the plantation forestry and agro-forestry techniques.
6. Explain the nature-like forest management techniques.
7. Know how to use forestry tools and equipment in order to measure single trees and forest stands.
8. Understand why trees and forests are important to recreation, wildlife, and watershed quality.
 |
| **Literature, handbooks in English**  |
| 1. Hibberd, B. G. ed. 1986: Forestry Practice. Forestry Commission Bulletin. 14. London, pp. 104. (ISBN 0 11 710156 7).
2. Savill, P. et al. 1997. Plantation Silviculture in Europe. Oxford University Press. pp 297.

 (ISBN 0 19 854909 1).1. West, P.W. 2006. Growing Plantation Forests. Springer. pp.303. (ISBN-13 978-3-540-32478-2).
 |
| **Competencies gained** *(acc. to the Regulation on training and outcome requirements)* |
| 1. **Knowledge:**
* Apply knowledge and techniques from forest management.
* Integrate knowledge of biology, forest ecology and social sciences.
1. **Skills:**
* Utilize quantitative and qualitative methods for forest resource analysis.
* Choose and apply appropriate concepts, and effective techniques to produce and analyze forest resource plans.
1. **Attitude:**
* Devote to integrated environmental management including ecosystem services.
1. **Autonomy and responsibility:**
* Think effectively about the complexities associated with responsible stewardship of forest resources.
 |
| **Responsible lecturer: Dr. Károly Rédei DSc, univ. professor** |
| **Other lecturer(s): Dr. Zsolt Keserű PhD, honorary univ. associate professor** |
| **Terms of course completion:** |
| 1. Completing exercises
2. Submitting essay
 |
| **Form of examination: oral exam** |
| oral exam |
| **Requirement(s) to get signature:**  |
| attending the lectures and practices |
| **Exam questions:** |
| 1. Definition of forest and its role in environmental development.
2. What is silviculture?
3. Methods of tree breeding and improvement.
4. Seed management and vegetative propagation methods.
5. Basic site requirements for forest management.
6. Forest stand and plantation establishment techniques.
7. Beech management.
8. Oak management.
9. Black locust management
10. Poplar management.
11. Forest tending operations.
12. Nature-like forest management.
13. Agro-forestry systems.
14. Measuring standing trees and forest stands.
15. Forest inventory, forestry planning.
 |