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| **Title and Code** of the subject: **Advanced Molecular Genetics, MTMAL7030A** | **ECTS Credit Points: 3** |
| **Type** of the subject: compulsory / optional  |
| **Ratio of theory and practice: 67/33** (credit%) |
| **Type and number of classes per semester**: 28 hour(s) lecture and 14 hour(s) practice per **semester** Number of teaching hours / week : eg.:2+1 (lecture and practice) |
| **Type of exam**: exam / practical course mark |
| **Summary of content - theory**:  |
| 1. Introduction to animal husbandry
2. DNA, RNA
3. Rules of heritage
4. Genomes
5. Main genome projects
6. Genes
7. Genetic markers-methods I.
8. Genetic markers-methods II.
9. Genetic markers-methods III.
10. Genetic markers-methods VI.
11. Genetic markers-methods V.
12. Genetic markers-methods VI.
13. Genetic markers-methods VII.
14. General use of bioinformatic tools
15. Consultation
 |
| **Literature, handbooks in English**  |
| 1. Genetics and analysis of quantitative traits/ Lynch, Michael; Walsh, Bruce. 1998: Sinauer Associates, Inc.
2. Falconer, D.S.: Introduction to quantitative genetics. Prentice Hall, New York, 1996.
3. Geoff Simm: Genetic Improvement of Cattle and Sheep, CABI Publishing. 2002
4. Laurie Piper, Anatoly Ruvinsky. The Genetics of Sheep, CABI Publishing. 1997.
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| **Responsible lecturer: Dr. Szilva Kusza** |
| **Terms of course completion:** |
| 1. Completing assignments
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| **Form of examination:** |
| written |
| **Requirement(s) to get signature:** |
| Attendance at lectures is recommended, but not compulsory. Participation at practice is compulsory. Students must attend the practice classes and may not miss more than three times during the semester. In case a student does so, the subject will not be signed and the student must repeat the course. Attendance at practice classes will be recorded by the practice leader. |