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| **Title and Code** of the subject:  **Animal physiology, MTBE7005A** | **ECTS Credit Points: 4** |
| **Type** of the subject: **compulsory** / optional | |
| **Ratio of theory and practice: 2 / 2** (credit 50-50%) | |
| **Type and number of classes per semester**: 28 hour(s) lecture and 28 hour(s) practice per **semester**  **Number of teaching hours / week**: 2+2 (lecture and practice) | |
| **Type of exam**: **exam** / practical course mark | |
| **Subject in the curriculum:** semester 2 | |
| Preliminary requirements:- | |

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| **Summary of content - theory**: |
| **Course objectives:** to provide information on the anatomy and function of the animal body especially those affecting the quality of raw materials of animal origin.  **Schedule:**   1. Current trends in meat consumption. 2. Main parts of the animal body and their function 3. Tissues of the animal body and their function and homeostasis 4. Animal digestive system and its function 5. Movement and locomotion 6. Animal endocrine system and its function 7. Animal respiratory system and its function 8. Animal circulatory system and its function 9. Animal reproduction 10. Lactation physiology 11. Physiology of egg production 12. Physiology of meat production 13. Hygiene in animal production 14. Animal welfare |
| **Summary of content - practice**: |
| Skills to be learnt: practical issues of animal physiology affecting raw materials of animal origin.   1. Dairy technology 2. Technology issues of milk quality 3. Beef technology 4. Technology issues of beef quality 5. Sheep and goat farming 6. Technology issues of milk & meat quality 7. Poultry farming 8. Technology issues of poultry meat quality 9. Pig farming 10. Technology issues of pork quality |
| **Literature, handbooks in English** |
| * R.D. Frandson, W.L. Wilke, A.D. Fails, Anatomy and Physiology of Farm Animals, 7th ed., Wiley-Blackwell, Iowa, 2009, ISBN9780813813943, 512 pp. * P.B.Reddy: Text Book of Animal Physiology. Ratna Prasad Multidisciplinary Research & Educational Society 2015 DOI: 10.13140/RG.2.1.4807.9441 |
| **Competencies gained** *(acc. to the Regulation on training and outcome requirements)* |
| 1. **Knowledge:**  * Knowledge of technical expressions of animal physiology * Knowledge of basic principles of animal physiology * Knowledge of the methods of skill improvement and learning in the relevant field of study (animal physiology)  1. **Skills:**  * Capable of improving his/her knowledge and to use various methods of obtaining knowledge and self-education * Having good communication skills he/she is able to express his/her professional point of view in a debate * Capable for using the on-line and printed literature in the relevant field * Capable for problem solving individually or in a team  1. **Attitude:**  * Open for the opinion of others in the relevant field (animal physiology) * Open for the plans and questions of economic actors  1. **Autonomy and responsibility:**  * He/she is having the sense of responsibility and reflecting the consequences of his/her activities * Expresses his/her opinion individually with full responsibility and based on professional knowledge * Takes responsibility for the work of others |

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| **Responsible lecturer: László Stündl, PhD, associate professor** |
| **Other lecturer(s): Dr. Zsófia Rózsáné Várszegi, senior lecturer** |

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| **Terms of course completion:** |
| 1. Attendance on lectures/seminars |
| **Form of examination:** |
| Oral exam |
| **Requirement(s) to get signature:** |
| Attendance on lectures/seminars |

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| **Exam questions:** |
| 1. Describe the current trends in meat consumption. The main meat types, nutrients etc. 2. Main parts of the animal body and their function 3. Tissues of the animal body and their function. What is the importance of homeostasis? 4. Main components of the mammal digestive system and their function 5. Main components of the poultry digestive system and their function 6. Structure/components of the endocrine system 7. Role of the hormones in animal production 8. Main components of the respiratory system and their function 9. Main components of the circulatory system and their function 10. Role/purpose of reproduction in animal production 11. Physiology of milk production (organs and hormones involved) 12. Quality indicators of meat 13. Role of traceability in meat production & processing 14. Importance of hygiene in animal production 15. Animal welfare concerns in farming: realistic and exaggerated arguments 16. Main features of the farming technology: ruminants (cattle and sheep) 17. Main features of the farming technology: monogastrics (swine and poultry) |