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| **Title and Code** of the subject:  **Quality evaluation of food protein, MTMEL7029A** | **ECTS Credit Points: 3** |
| **Type** of the subject: optional | |
| **Ratio of theory and practice** (credit%) 100 % theoretical, 0 % practical | |
| **Type and number of classes per semester**: 28 hour(s) lecture and 0 hour(s) practice per **semester**  Number of teaching hours / week : 2 lectures + 0 seminar | |
| **Type of exam**: **colloquium** | |
| **Subject in the curriculum:** 1st semester | |
| Preliminary requirements:**none** | |

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| **Summary of content - theory**: |
| Course objectives: structure and properties of proteines, description of technics and methods used in protein determination.   1. Nitrogene requirements of plants. 2. Chemical structure of proteins. 3. Methods to determine amino acids. 4. Methods for the grading food proteins. 5. Chemical methods. 6. Enzimatic methods. 7. Microbiological methods. 8. Utilization of proteins. 9. Degrabability of proteins. 10. Determining proteins in swine forages, in vivo, in vitro methods 11. Determining proteins in swine forages, in vivo, in vitro methods 12. Isolation of proteins. 13. Purification of proteins. 14. Seqencing techniques. |
| **Literature, handbooks in English** |
| Daniel Chasman: Protein Structure: Determination, Analysis, and Applications for Drug Discovery (2003) |

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| **Competencies gained** *(acc. to the Regulation on training and outcome requirements)* |
| 1. **Knowledge**   Students learn about the structure and properties of proteines and these determination.   1. **Ability**   Theoretical aspects of proteins.   1. **Attitude:**   The student has a strong professional identity and professionalism that she/he can take for professional and wider social community.   1. **Autonomy and responsibility:**   The student sees the importance of protein determination and has special knowledge that he/she can formally incorporate into their further university studies and at the end of their studies. Students will be able to autonomously and responsibly use the knowledge acquired in the course for their work in a deliberate manner. |
| **Responsible lecturer: Gálné Dr. Remenyik Judit, senior research** |
| **Other lecturer:-** |
| **Terms of course completion:** |
| 1. Completing assignments / exercises 2. Giving presentation |
| **Form of examination:** |
| **written** (only if the subject is signed) |
| **Requirement(s) to get signature:** |
| Attendance at lectures is recommended, but not compulsory. Students must hand in a presentation once during the semester. |
| **Requirement(s) to get a grade:** |
| During the semester students have to write 2 theoratical tests. The minimum requirement for both mid-term and end-term tests is 50%. Based on the score of the tests separately, the grade for the tests is given according to the following table:  Score (%) Grade  0-49 fail (1)  50-65 pass (2)  66-74 satisfactory (3)  75-89 good (4)  90-100 excellent (5)  The student has to reach minimum 50% in every test. The sudent can take a retake test of the whole semester material twice. |