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| **Title and Code** of the subject:**Quality control of animal origin food products MTBE7037A**  | **ECTS Credit Points: 3** |
| **Type** of the subject: compulsory / **optional**  |
| **Ratio of theory and practice: 50/50** (credit%)  |
| **Type and number of classes per semester**: 14 hours theory and 14 **hours practice** per **semester** Number of teaching hours / week :1+1 (lecture and practice) |
| **Type of exam**: **exam** / practical course mark |
| **Subject in the curriculum:** 5th semester  |
| Preliminary requirements:- |

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| **Summary of content - theory**: During the course students learn about the manufacturing problems of dairy products and their qualification possibilities. Basic rules for meat certification are presented. We analyze the more common quality defects in meat products. The students who have attended the course can learn the possibilities of eliminating the errors and the critical points during the qualification. |
| **Schedule:**1. Quality requirements of milk composition (dry matter, fat, carbohydrate, protein, mineral, vitamin, enzyme, etc.)2. Change in the microbial content of the milk, the most important micro-organisms in the,3. Certification system for raw milk, and production of low-fat milk, 4. Quality defects and qualification of yoghurt and kefir during and after the processing5. Technological solutions of cottage cheese making, critical points in production, qualification.6. Cheeses manufacturing processes, critical points in production, certification7. Butter production processes, critical points in production, certification8. Historical review of meat inspection of domestic animal. Types of slaughterhouses, small and large-scale slaughter.9. Rules, conditions of meat inspection, examination of meat of different species.10. Cooling, freezing and storage of products.11. Postmortal changes in muscle and fat tissue.12. Technology of poultry processing, quality requirements.13. Production of dry goods, sampling and inspection procedures.14. Production of marinated goods, sampling and control procedures…. |
| **Literature, handbooks in English**  |
| 1. **Meat Science: An Introductory Text 2 nd edition ISBN 9780851994246**
2. **Muscle Development of Livestock Animals: Physiology, Genetics and Meat Quality,** [**Marinus Te Pas**](https://www.amazon.co.uk/s/ref%3Ddp_byline_sr_book_1?ie=UTF8&text=Marinus+Te+Pas&search-alias=books-uk&field-author=Marinus+Te+Pas&sort=relevancerank)[**Henk Haagsman**](https://www.amazon.co.uk/s/ref%3Ddp_byline_sr_book_2?ie=UTF8&text=Henk+Haagsman&search-alias=books-uk&field-author=Henk+Haagsman&sort=relevancerank)[**Maria Everts**](https://www.amazon.co.uk/s/ref%3Ddp_byline_sr_book_3?ie=UTF8&text=Maria+Everts&search-alias=books-uk&field-author=Maria+Everts&sort=relevancerank)**, CABI Publishing, , ISBN-10: 9780851998114**
3. **Dairy Science and Technology :** P. Walstra;Pieter Walstra;Jan T. M. Wouters;Tom J. Geurts, **CRC Press, ISBN 08247-2763-0**
4. **Meat products handbookPractical science and technology, G. Feiner, eBook ISBN: 9781845691721, Woodhead Publishing, 2006.**
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| **Competencies gained** *(acc. to the Regulation on training and outcome requirements)* |
| **a)knowledge**Students can learn about the factors that affect the quality of various dairy and meat products, they learn the about the critical points during the processing.**b) ability:**They carry out a detailed analysis of the various ideas that make up the knowledge system of the given field, synthesizes the comprehensive and special contexts and performs an adequate evaluation activity with them.It identifies specific professional problems with a versatile, interdisciplinary approach, explores and formulates a detailed theoretical and practical background to their solution.**c) attitude**- Credentially conveys summary and detailed problems of your profession.- Deciding on a new, complex approach to strategic decision-making situations and unexpected life situations, taking full account of legislation and ethical standards.**d) its autonomy and responsibility**- Engage in research and development projects, autonomously in the project team to mobilize theoretical and practical knowledge and skills in collaboration with other members of the group.- In a variety of complex and varyingly predictable contexts, apply a wide range of methods and techniques in practice |

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| **Responsible lecturer: Zsófia Rózsáné Várszegi PhD,**  |
| **Terms of course completion:** |
| 1. Completing assignments / exercises
2. Submitting essay
3. Giving presentation
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| **Form of examination:** |
| oral exam |
| **Requirement(s) to get signature:** |
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| **Exam questions:** |
| 1. Chemical composition of meat, Post-Slaughtering Events
2. External factors affecting post-mortem processes
3. Types of post-cut pH reduction
4. Palatability factors
5. Nutritional factors
6. Technological properties
7. Factors influencing the quality and usability of meat
8. Methods of qualifying pigs
9. Current methods of cattle grading
10. Current methods for sheep grading
11. Techniques and critical points of pig processing
12. .The steps of processing cattle, its critical points
13. .The steps of poultry processing, its critical points
14. Change in the microbial life of the meat during cooling, freezing and storage
15. Critical point in the production of marinated goods, occurring errors
16. Hygienic aspects of milk yield
17. EU requirements for raw milk
18. Ingredients of milk, properties of milk
19. .Inhibition of microorganisms' life-acting by chemicals
20. Production of pasteurized consumer dairy products, its critical points
21. Errors occurring during the productions of acidified milk products
22. Basic, additives and treatment of butter production, common defects in butter and butter products
23. The practice of cheese making. Common mistakes in cheeses
24. The practice of bulk cheese production. Frequent mistakes in bulk cheese
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