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| Name of course: **Food chain safety** | **Credit value: 3** |
| **Course** **classification**: optional | |
| **The proportion of the practical nature of the course, „educational character”: 50/50** | |
| **Type of course:** theoretical / practical, and the **total number: 14/14 hours** in the given **semester.**  Further (unique) means and properties of knowledge transfer: | |
| **Exam** type (colloquium / practical grade / **other** ):  **practical grade**  Further (unique) means of knowledge verification**:** | |
| The curricular **place of the course** (which semester): 3 | |
| Prerequisites (if any): **-** | |

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| **Course description: a brief, but informative description of the knowledge to be acquired (14 weeks).** |
| The main aim of the lectures and practices is to know the physical, chemical and biological/microbiological hazards which have important effects on food chain safety. In this semester, students will learn the methodology of risk analysis (mainly the risk assessment) and the methodology of the determination of safe human dose, tolerable intakes and other toxicological values. Student will learn the methodology of hazard analysis and preparation of HACCP plans.   1. Food quality 2. Influencing factors of food chain safety 3. Microbiological hazards in foods 4. Chemical hazards in foods 5. Introduction to toxicology 6. Human exposure assessment 7. Introduction to risk analysis 8. Preliminary risk management activities 9. Chemical risk assessment 10. Risk management and risk communication 11. Methodology of HACCP handbook 12. Hazard analysis of plant origin food production 13. Hazard analysis of animal origin food production 14. Food labelling 15. Geographical indicators and trademarks |
| **Required and recommended reading:** |
| **Required reading:**  FAO FOOD AND NUTRITION PAPER 87 (2009): Food safety risk analysis. A guide for national food safety authorities. ISBN: 978 92 5 105604 2  WHO (2004): Risk Assessment Terminology. ISBN: 92 4 156267 6  US EPA (2019): Guidelines for human exposure assessment. (<https://www.epa.gov/sites/production/files/2020-01/documents/guidelines_for_human_exposure_assessment_final2019.pdf>)  **Recommended reading:**  WHO (2009): Pribciples and methods for the risk assessment of chemicals in food. ISBN: 978 92 4 157240 8  EFSA (2015): Manual for reporting on foodborne outbreaks in accordance with Directive 2003/99/EC for information derivingfrom the year 2014. (http://onlinelibrary.wiley.com/doi/10.2903/sp.efsa.2015.EN-770/pdf) |
| **Competencies to be acquired, related to the course:** |
| **a) Knowledge:**  - Students will gain the knowledge and skills required for human exposure assessment, risk assessment and risk management  - Students will gain the knowledge and skills required for hazard and risk assessment related to plant and animal origin foods  **b) Ability:**  - Students will be able to apply the tools of risk assessment  - Students will be able to characterise hazards and determine risks related to food safety  **c) Attitude:**  - Students will be endeavoured to apply the newest scientific results  **d) Autonomy and responsibility:**  - Students shall be able to feel responsible for safe food production |

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| **Course leader** (name, post, academic degree): **Dr. Nikolett Czipa, associate professor, PhD** |
| **Other lecturer(s) involved in teaching the course, if any** (name, post, academic degree): **Loránd Alexa, assistant lecturer** |