

Food safety (IIIrd Year of study, Vth Semester)

Credit value (ECTS) 2

Course category

Domain (Imposed)

Course holder:

Assoc. Prof. PhD Viorel-Cezar FLORIȘTEAN

Discipline objectives (course and practicum)

The aim of the course is to provide students the information necessary for: (1) understanding of concepts, theories and methods to study specific food innocuity, (2) understand the importance of food innocuity in the overall context of food quality assurance and (3) appropriate use of knowledge gained in professional communication and implementation of food safety management systems

The practical training seeks to develop abilities to analyze level of food safety across the food chain, identify crises in terms of food safety and consumer protection and design plans in order to minimize action of risk factors on food innocuity.

Contents (syllabus)

Course (chapters/subchapters)
General terms of food innocuity: The role food in the proper functioning of the human body; Biological, chemical, and physical hazards in food; Response of human organism to the action of hazards: foodborne infection, food intoxication, and food allergy.
Response of human organism to the action of food hazards: Foodborne infection, Food intoxication, and Food allergy. Other conditions that can be caused by food consumption (food intolerance, metabolic disorders, idiosyncrasy, etc.). Diseases caused by improper food consumption.
The role of raw materials in food innocuity: natural constituents, contaminants, and residues.
Food processing - a factor that can affect food innocuity - Hazards formed during the food processing chain; New technology and food safety.
„Food improvement agents” and their impact on food safety: food additives, food flavor substances, food enzymes, technological aids, fortification agents.
Management of factors that may affect food innocuity: Good manufacturing practice and Food safety management system.
Food fraud and innocuity. Food crisis.

Practicum
Organization of laboratory activity (informing students on discipline objectives, targeted skills, working methods in the laboratory and the criteria and methods of evaluation of the specific activities).
Characterization of food hazards: biological, chemical and physical hazards.

Management of innocuity issues in the food industry: Operational Prerequisite Programs (OPRPs) and HACCP plan.

Food Crisis Management Plan.

References

1. **Bârzoi D, Meica S, Neguț M** (1999) – Toxiinfecțiile alimentare, Editura Coresi,
2. **Banu, C. Preda, N. Vasu, S.** (1982) Produsele alimentare și inocuitatea lor. Editura tehnică, București
3. **Desphande, S.S.** (2002) Handbook of food toxicology. Marcel Dekker, Inc. New York
4. **DeVries, J.** (1997) Food safety and toxicity. CRC Press LLC, Boca Raton, FL.
5. **Bagchi, D., Swaroop, A.** (2016) Food toxicology. CRC Press, Boca Raton, FL.
6. **Savu, C.** (1999) Poluarea mediului și prezența substanțelor toxice în alimente. Editura Semne, București
7. **Spink, J.** (2019) Food fraud prevention. Springer New York, NY. USA
8. **Shibamoto, T., Bjeldanes, L.F.** (2009) Introduction to food toxicology 2nd. Academic Press Inc., San Diego.

Evaluation

Evaluation form	Evaluation Methods	Percentage of the final grade
Exam	Written Test	60%
Appreciation of the activity during the semester	Oral assessment during the semester, verification tests and final practical test.	40%

Contact

Assoc. Prof. PhD Viorel-Cezar FLORIȘTEAN
Faculty of Veterinary Medicine - USAMV Iași
Aleea Mihail Sadoveanu nr. 8, Iași, 700489, Romania
telefon: 0040 232 407372, fax: 0040 232 219175
E-mail: vfloristean@uaiasi.ro