



Nr. _____ din _____

Formular USAMV–CN-0704020209

COURSE DESCRIPTION

1. General data

1.1. Higher Education Institution	University of Agricultural Sciences and Veterinary Medicine
1.2. Faculty	Faculty of Food Science and Technology
1.3. Department	Food Science
1.4. Study field	Food Science
1.5. Study level ¹⁾	Master
1.6. Specialization/ Study Program	Food Quality Management
1.7. Teaching Form	Full time

2. Course Characteristics

2.1. Name of the course	Food Safety and Security							
2.2. Course leader	Assoc. Prof. Cristina Coman							
2.3. Coordinator of the laboratory/seminar activity	Assoc. Prof. Cristina Coman							
2.4. Year of study	II	2.5. Semester	I	2.6. Type of Evaluation	Continuous	2.7. Course regime	Content ²	FD
							Level of compulsory ³	CD

3. Total estimated time (hours/semester for the teaching activities)

3.1. Number of hours/week– frequency form	3	of which care: 3.2. course	1	3.3. seminar/ laboratory/ project	2
3.4.Total hours in the curricula	42	Of which: 3.5.course	14	3.6.seminar/laboratory	28
Distribution of time					
3.4.1.Study based on handbook, notes, bibliography					10
3.4.2. Extra documentation in the library, on specific electronic platforms and on field					15
3.4.3. Prepare the seminars / laboratories / projects, theme, essays, reports, portofolio					15
3.4.4.Tutorial					4
3.4.5.Examination					4
3.4.6. Other activities					
3.7. Total hours of individual study	48				
3.8. Total hours per semester	90				
3.9. Number of ECTS ⁴	3				

4. Pre-conditions (where is the case)

4.1. of curriculum	Food chemistry, Biochemistry, Organic Chemistry, FQM-Techno-managerial Principles
4.2. of competences	Bachelor diploma or equivalent Certificate of language competence (english)

5. Conditions (where is the case)

5.1. of course development	Amphitheater and Classrooms equipped with computers and videoprojectors The course is interactive, students can ask questions regarding the content of lecture. Academic discipline requires compliance with the start and end of the
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	course. We do not allow any other activities during the lecture, mobile phones will be turned off.
5.2. of seminar/laboratory/project development	Seminar room equipped with projector & computer During practical works, each student will develop an individual activity with laboratory materials (made available in the book that describes the laboratory work). Academic discipline is imposed throughout the course of practical works.

6. Specific acquired competences

P r o f f e s s i o n a l c o m p e t e n c e s	C3.1. To learn and deepen of the chemical, biochemical and microbiological composition of foods in correlation with hygiene C3.2. To use the knowledge regarding methods: experimental, expertise, sociological, statistical to assess the level of quality and safety of agri-food products C3.3. To use of modern food quality methods for food safety and quality assessment C3.4. To use of the most modern techniques, standards and evaluation and analysis criteria for food quality and safety, authenticity and traceability C3.5. To develop, implement and validate new control methods for food quality and safety
T r a n s v e r s a l c o m p e t e n c e s	CT1. Applying strategies of perseverance, rigor, efficiency and responsibility in work, punctuality and taking responsibility for the results of personal activity, creativity, common sense, analytical and critical thinking, problem solving, etc., based on the principles, norms and values of the code of professional ethics in the field food. CT3 Efficient use of various ways and techniques of learning - training for the acquisition of information from bibliographic and electronic databases both in Romanian and in an international language, as well as assessing the needs and utilities of extrinsic and intrinsic motivated continuing education .



7. Subject Objectives (as a result of the specific acquired competences)

7.1. Subject general objectives	This course initiates and define the concepts of food safety/security , quality assurance.
7.2. Specific objectives	▪ Advanced knowledge of the concepts of food safety and security ▪ Acquiring knowledge on aspects related to legislation, risk factors and documentation in food safety. ▪ Acquiring knowledge on specific analytical tools that can be used in food safety

8. Content

8.1.COURSE Number of hours –14	Methods of teaching	Observations
1. Definition and classification, safety vs security	Lectures	2 hours
2. Food safety: physical , chemical and biological risk factors	Lectures	4 hours
3. Analytical methods applied in food safety	Lectures	2 hours
4. International and national legislation regarding the food safety	Lectures	4 hours
5. Structure of the food safety documents delivered by a company	Lectures	2 hours
6 Food safety in the agrifood chain	Lectures	2 hours

8.2.PRACTICAL WORK Number of hours – 28	Methods of teaching	
1. Risk factors, comparative analysis, case studies	Seminar, case studies, discussions, debate argumentation, heuristic conversation	2 seminars (4 hours)
2. Analytical methods for risk factors - rapid analysis, spectrometry, chromatography	Practical work Demonstration/Explanation Brainstorming/Discussions	7 labs (14 hours)
3. International legislation – case studies FAO, WHO	Seminar, case studies, discussions, debate argumentation, heuristic conversation	1 seminar (2 hours)
4. Creating a portofolio with all required documentation regarding the food ingredients with risk potential	Seminar, case studies, discussions, debate argumentation, heuristic conversation	3 seminars (6 hours)
5. Colloquim/Knowledge verification	Seminar	1 seminar (2 hours)

Compulsory bibliography:

1. P.A. Luning, F. Devlieghereand R. Verhé (eds), Safety in the agrifood chain, Wageningen Pres, 2006
2. Cynthia A. Roberts, The Food Safety Information Handbook,Oryx Press, 2001
3. Veena Jha; Edward Elga, Environmental Regulation and Food Safety: Studies of Protection and Protectionism International Development Research Center, 2005
4. Ludwig Theuvsen, Achim Spiller, Martina Peupert and Gabriele Jahn, Quality management in food chains Wageningen Academic Publishers Books, 2007

Optional bibliography:

1. Paraschivescu V. – Asigurarea, Certificarea Și Controlul Calității Mărfurilor, Ed. Neuron, Focșani, 1994.
2. Scorei R. Și Colab. – “Ghid Practic Pentru Industria Agro-Alimentară”, Ed. Aius, Craiova 1998.



3. *** - Managementul Calității Și Asigurarea Calității – Colecție De Standarde, Ed. Tehnică, București, 1996.
4. Codex Alimentarius Standards (<http://www.codexalimentarius.org/standards/en/>)
5. European Union: European Food Safety Authority (<http://www.efsa.europa.eu/>)
6. Food and Agriculture Organisation (<http://www.fao.org/home/en/>)
7. Institute of Food Science and Technology (<http://www.ifst.org>)

9. Correlations between the subject against the expectations of the epistemic community representatives, of the professional associations and employers' representatives in the domain

The course curriculum meets the requirements for a qualified preparation, harmonized with the same master program at Wageningen University (eg Food safety in the agrifood chain and development for food industry) and topical content (compliance with legal regulations, compliance with the latest standards in the field)

10. Evaluation

Type of activity	10.1. Evaluation criteria	10.2. Evaluation methods	10.3. Percent of the final grade
10.4. Course	Capacity of students to describe notions related to food safety and security Logic, correct and coherent application of the concept learned	Continuously	50%
10.5. Seminar/Laboratory	Students will discuss the case studies and create a portfolio on a food containing the ingredients at risk	Colloquim	50%
10.6. Minimal standard of performance Course: Minimal standards: Admitted Seminars: Minimal standard: mark 5			

¹ Education levels- choose of the three options: Bachelor/* Master/Ph.D.

² Discipline status (content)- for the undergraduate level, choose one of the options:- **FD** (fundamental discipline), **BD** (basic discipline), **CS** (specific disciplines-clinical sciences), **AP** (specific disciplines-animal production), **FH** (specific disciplines-food hygiene), **UO** (disciplines based on the university's options).

^{3/} Discipline status (compulsoriness)- choose one of the options – **CD** (compulsory discipline) **OD** (optional discipline) **ED** (elective discipline).

⁴ One credit is equivalent to 25-30 hours of study (teaching activities and individual study).

^{5/*} Disciplines: AK- Advanced knowledge, CT- Complementary Training, S- Synthesis

Filled in on
09.09.2021

Course coordinator
Assoc. Prof. Cristina Coman

Coman

Laboratory work/seminar coordinator
Assoc. Prof. Cristina Coman

Coman

Subject coordinator
Assoc. Prof. Cristina Coman

Coman

Approved by the
Department on 22.09.2021

Head of the Department
Prof. Ramona Suharoschi

[Signature]

Approved by the Faculty
Council on 28.09.2021



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