



No. _____ of _____

USAMV –CN-0704010105

SUBJECT OUTLINE

1. Information on the programme

1.1. Higher education institution	University of Agricultural Sciences and Veterinary Medicine of Cluj-Napoca
1.2. Faculty	Faculty of Food Science and Technology
1.3. Department	Food Engineering
1.4. Field of study	Food Engineering
1.5. Education level	Post graduate
1.6. Specialization/ Study programme	Food Quality Management
1.7. Form of education	Full time

2. Information on the discipline

2.1. Name of the discipline	Quality assurance in the agrifood chain							
2.2. Course coordinator	Prof. dr. Loredana Florina LEOPOLD							
2.3. Seminar/ laboratory/ project coordinator	Prof. dr. Loredana Florina LEOPOLD							
2.4. Year of study	I	2.5. Semester	II	2.6. Type of evaluation	summative	2.7. Discipline status	Content ²	DS
							Compulsoriness ³	DO

3. Total estimated time (teaching hours per semester)

3.1. Hours per week – full time programme	2	out of which: 3.2. lecture	2	3.3. seminar/ laboratory/ project	2
3.4. Total number of hours in the curriculum	56	Out of which: 3.5. lecture	28	3.6. seminar/laboratory	28
Distribution of the time allotted					hours
3.4.1. Study based on book, textbook, bibliography and notes					20
3.4.2. Additional documentation in the library, specialized electronic platforms and field					30
3.4.3. Preparing seminars/ laboratories/ projects, subjects, reports, portfolios and essays					30
3.4.4. Tutorials					6
3.4.5. Examinations					4
3.4.6. Other activities					29
3.7. Total hours of individual study	119				
3.8. Total hours per semester	175				
3.9. Number of credits ⁴	7				

4. Prerequisites (is applicable)

4.1. curriculum-related	Food chemistry, Techno-managerial Principles
4.2. skills-related	Bachelor diploma or equivalent Certificate of language competence (english)

5. Conditions (if applicable)

5.1. for the lecture	Teaching manuals: Luning P.A., W. J. Marcelis, W. M. F. Jongen (eds.), Food Quality management, a techno-managerial approach, Wageningen Pres, 2002 Lecture notes: Quality assurance in the agrifood chain management
----------------------	--



	<p>Course presentation in pptx format: course holder: Loredana Leopold Logistic support: video projector, interactive whiteboard and PowerPoint presentations.</p> <p>The course is interactive, students can ask questions regarding the content of lecture. Academic discipline requires compliance with the start and end of the course. We do not allow any other activities during the lecture, mobile phones will be turned off.</p> <p>Participation in a minimum of 50% of courses is a condition for participation in the exam.</p>
5.2. for the seminar/ laboratory/ project	<p>Teaching manuals: Luning P.A., W. J. Marcelis, W. M. F. Jongen (eds.), Food Quality management, a techno-managerial approach, Wageningen Pres, 2002 Seminar notes: Quality assurance in the agrifood chain management Seminar room equipment: blackboard, a projector, a laptop and a projection screen; a good wireless internet connection is a must. Specialized software used: Microsoft Office package, Quasar, IR and UV-VIS devoted software</p> <p>Adherence to safety protocols: students must prioritize punctuality, wear the prescribed protective equipment, and strictly adhere to academic discipline, technical norms, safety regulations, and fire prevention measures at all times during practical work sessions.</p> <p>Participation in 100% laboratory/seminar work is a condition for the exam participation.</p>

6. Specific competences acquired

6.1 Professional competences	<ul style="list-style-type: none"> - Apply and adhere to national, international, and internal requirements outlined in standards, regulations, and other specifications related to food and beverage manufacturing. - Apply regulations related to food manufacturing and ensure compliance with food safety standards. Implement food safety procedures based on Good Manufacturing Practices (GMP). - Thoroughly evaluate the production, quality, or packaging of goods to ensure compliance with the manufacturer's quality standards.
6.2 Transversal competences	Develop ideas or draw conclusions that lead to the creation and implementation of innovations or changes.

7. Course objectives (based on the list of competences acquired)

7.1. Overall course objective	Domain discipline focused on developing an expertise in a specialized field that use advanced knowledge that allows the development of user-oriented products. Together with the other disciplines in the curriculum, to ensure the implementation and formation of complex concepts on Food Quality Management within the contemporary competitive economy.
7.2. Specific objectives	Obtaining learning outcomes that aim the formation of skills and abilities based on the correlation of the information received with those acquired in other disciplines such as understanding the specific design of the food products.

8. Content

8.1.COURSE Number of hours –28	Methods of teaching	Observations
1 Short history and legislation related to quality assurance		1 lecture (2 hrs)



2. Good practices : GAP, GMP, GLP, GHP	Lectures	2 lectures (4 hrs)
3 Good manufacturing practice codes for food production		1 lecture (2 hrs)
4 Hazard Analysis Critical Control Points (HACCP)		2 lectures (4 hrs)
5 Developing and illustration of a HACCP plan		1 lecture (2 hrs)
6 ISO series or quality assurance		1 lecture (2 hrs)
7 Principles and applications of ISO 9000:2000, 9004:2000		1 lecture (2 hrs)
8 Quality systems in the animal production sector		1 lecture (2 hrs)
9 Quality systems in the vegetalke and fruit-derived production sector		1 lecture (2 hrs)
10 Quality system for the retails		1 lecture (2 hrs)
11 Quality auditing and certification		1 lecture (2 hrs)
12. Quality policy and business strategy related to quality assurance: sstrategic alternatives, benchmarking, quality policy		1 lecture (2 hrs)

8.2.PRACTICAL WORK Number of hours – 14		
1. Good practices: classification and specific features – 4 case studies	Seminars	4 seminars (8 hours)
2. Quality systems in the animal production sector – 4 case studies	Seminars, Case study.	4 seminars (8 hours)
3. Quality systems in the vegetalbe and fruit-derived production sector- – 4 case studies	Seminars, Case study.	4 seminars (8 hours)
4. Applications of ISO 9000:2000, 9004:2000	Seminar	1 seminar (2 hours)
5. Correlation of practical knowledge with theoretical knowledge in order to prepare for the final examination	Verification of knowledge	2 hours
<i>Compulsory bibliography:</i>		
1. Luning P.A., W.J.Marcelis, W.M.F.Jongen (eds.), Food Quality management, a techno-managerial approach, Wageningen Pres, 2002		
2. P.A. Luning, F. Devlieghere and R. Verhé (eds), Safety in the agrifood chain, Wageningen Pres, 2006		
3. Froman B. – “Manualul Calității”, Ed. Tehnică, București, 1998.		
4. Multon J.L. – “La Qualite Des Produits Alimentaires”, Technique & Documentation – Lavoisier, 1994		
<i>Optional bibliography:</i>		
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. Corroborating the course content with the expectations of the epistemic community representatives, of the professional associations and of the relevant stakeholders in the corresponding field

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. Assessment

Type of activity	10.1. Assessment criteria	10.2. Assessment methods	10.3. Percentage of the final grade
10.4. Lecture	Capacity of students to describe the flow of the new product or process development. Considering the need for quality control and improvement	Exam	50%
10.5. Seminar/Laboratory	Students discuss the case studies and solve the quiz questions	Colloquium	50%
<p>10.6. Minimum performance standards</p> <p>Knowledge 50% of the information contained in the course and 50% of the information provided at seminar:</p> <ul style="list-style-type: none"> - An overview of the concept of quality assurance in the context of the agrifood chain, including its importance, objectives and benefits. - Information about relevant laws, regulations, and standards that govern quality assurance in the agrifood industry. - Guidelines and practices for ensuring the quality and safety of agricultural products from the beginning of the production process. - Principles and procedures for maintaining quality and safety in food processing and manufacturing facilities. - Understanding of the HACCP system, which is a systematic approach to identifying, evaluating, and controlling food safety hazards. - Methods and tools for monitoring and maintaining the quality of agrifood products. - The importance of tracking and documenting the movement of agrifood products throughout the supply chain to ensure accountability and facilitate recalls if necessary. - Introduction to quality management systems like ISO 9001 and how they can be applied in the agrifood industry. - Understanding how quality assurance practices are integrated into the entire agrifood supply chain, from production to distribution. - Strategies for identifying and mitigating risks related to food safety, including microbial contamination, chemical hazards, and allergens. - Techniques for conducting quality assurance audits to assess compliance with standards and regulations. - Considerations related to meeting consumer expectations for quality and safety and the role of marketing in promoting these qualities. <p>100% attendance at seminars is mandatory</p> <p>Attendance at 50% courses is a condition for entering the exam.</p>			

¹ Level of study- to be chosen one of the following - Bachelor/Post graduate/Doctoral

² Course regime (content) – for bachelor level it will be chosen one of the following - DF (fundamental subject), DD (subject in the domain), DS (specific subject), DC (complementary subject).

³ Course regime (compulsory level) - to be chosen one of the following - DI (compulsory subject), DO (optional subject), DFac (facultative subject)

⁴ One ECTS is equivalent with 25 de hours of study (didactical and individual study).



UNIVERSITATEA DE ȘTIINȚE AGRICOLE ȘI MEDICINĂ VETERINARĂ CLUJ-NAPOCA

Calea Mănăstur 3-5, 400372, Cluj-Napoca

Tel: 0264-596.384, Fax: 0264-593.792

www.usamvcluj.ro

Filled in on
06.09.2024

Course coordinator
Prof. dr. Loredana LEOPOLD

Laboratory work/seminar coordinator
Prof. dr. Loredana LEOPOLD

Subject coordinator
Prof. dr. Loredana LEOPOLD

Approved by the
Department on
12.09.2024

Head of the Department
Prof. dr. Ramona SUHAROSCHI

Approved by the
Faculty Council on
27.09.2024

Dean
Prof. dr. Elena Mudura