



Nr. _____ din _____

Formular USAMV–CN-0704020102

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	Food Science and Technology
1.3. Department	Food Science
1.4. Field of study	Food Science
1.5. Education level	Master
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	Laboratory Quality Assurance							
2.2. Course coordinator	Assoc. Prof. PhD Liana Claudia Salanță Lecturer PhD Elena-Suzana Biris-Dorhoi							
2.3. Seminar/ laboratory/ project coordinator	Assoc. Prof. PhD Liana Claudia Salanță Lecturer PhD Elena-Suzana Biris-Dorhoi							
2.4. Year of study	II	2.5. Semester	III	2.6. Type of evaluation	Summative	2.7. Discipline status	Content ²	DS
							Compulsorine ss ³	DI

3. Total estimated time (teaching hours per semester)

3.1. Hours per week –full time programme	4	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					35
3.4.2. Additional documentation in the library, specialized electronic platforms and field					14
3.4.3. Preparing seminars/ laboratories/ projects, subjects, reports, portfolios and essays					30
3.4.4. Tutorials					20
3.4.5. Examinations					25
3.4.6. Other activities					20
3.7. Total hours of individual study	144				
3.8. Total hours per semester	200				
3.9. Number of credits ⁴	8				

4. Prerequisites (is applicable)



4.1. curriculum-related	Food chemistry, analytical chemistry, food control, and safety
4.2. skills-related	Identification, description, and appropriate use of specific concepts of food science and food safety

5. Conditions(if applicable)

5.1.for the lecture	Teaching manuals: Luning P.A., W.J. Marcelis, W.M.F.Jongen, Food Quality management, a techno-managerial approach, Wageningen Pres, 2002 Lecture notes: ppt Course presentation in ppt format: Liana Salanță and Suzana Biriș Logistic support: video projector, interactive whiteboard, and PowerPoint presentations. Participation in a minimum of 50% of courses is a condition for participation in the exam.
5.2.for the seminar/ laboratory/ project	Teaching manuals: Early R., Guide to quality management systems for the food industry, 1995, Springer Science + Bussiness Media, LLC, New York Laboratory/seminar notes: ppt Liana Salanță and Suzana Biriș Place of laboratory: laboratory room/resort/place of private partner sector Laboratory equipment: analytical equipment, glassware, consumables Specialized Software used: Specific laboratory reagents/supplies Participation in 100% laboratory/seminar work is a condition for exam participation.

6. Specific competences acquired

Professional competences	C1. Conduct scientific research C6. Evaluate the quality standards
Transversal competences	

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

7.1.Overall course objective	Domain discipline of advanced knowledge that allows the development of knowledge regarding the implementation systems for quality assurance in agri-food laboratories. Together with the other disciplines in the curriculum, it ensures the implementation and formation of complex concepts on Food Quality Management.
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 Quality Assurance in the Agrifood Chain.

8. Content



<p>8.1.LECTURE Number of hours – 28 International standards for agro-food laboratories. Management requirements of ISO 17025 for agro-food laboratories – e.g. management system, control of documents and records, corrective and preventive actions, complaints, non-conformities in analysis. Technical requirements of ISO 17025 for agro-food laboratories – human resources, method validation, traceability, assurance of quality results. Internal audit of the management system of the laboratory Evaluation and certification of agro-food laboratories Correspondence between ISO 17025:2005 and ISO 9001: 2000</p>	<p>Teaching methods</p> <p>Lecture, heuristic conversation, debate, algorithmic, case study, directed observation.</p> <p>Lecture, heuristic conversation, debate, algorithmic, case study, directed observation</p>	<p>Notes</p> <p>2lectures 3lectures</p> <p>3 lectures</p> <p>2 lectures 2 lectures 2 lectures</p>
<p>8.2. PRACTICAL WORK Number of hours– 28 Case studies – ensuring control of documents and records, corrective and preventive actions, and non-conformities in food analysis Case studies – intra- and interlaboratory method validation, traceability, assurance of quality results Case studies – internal audit Case study – example of a procedure of method validation Case study – example of a procedure for corrective and preventive actions Case study – example of a procedure for document control Knowledge verification</p>	<p>Conversation, argumentation, debate</p> <p>Debate, algorithmic, case study, heuristic conversation</p> <p>Learning by discovery, debate, case study, conversation, argumentation</p>	<p>2 lectures</p> <p>2 lectures</p> <p>1 lecture</p> <p>1 lecture</p> <p>1 lecture</p>
<p><i>Compulsory bibliography:</i></p> <ol style="list-style-type: none"> 1. Course notes 2. Luning P.A., W.J. Marcelis, W.M.F.Jongen, Food Quality management, a techno managerial approach, Wageningen Pres, 2002 3. Konieczka, P., & Namiesnik, J. (2018). <i>Quality Assurance and Quality Control in the Analytical Chemical Laboratory</i> (2nd ed.). CRC Press. Retrieved from https://www.perlego.com/book/1575156/quality-assurance-and-quality-control-in-the-analytical-chemical-laboratory-a-practical-approach-second-edition-pdf 4. Early R., Guide to quality management systems for the food industry, 1995, Springer Science + Bussiness Media, LLC, New York 		
<p><i>Optional bibliography:</i></p> <ol style="list-style-type: none"> 1. FromanB. ..ManualulCalitatii., Ed. Tehnic , București, 1998. 2. Multon J.L., La Qualite Des Produits Alimentaires, Technique & Documentation .Lavoisier, 1994 3. ASRO - ManagementulCalitățiișiAsigurareaCalității .Colecție de Standarde 		

9. Corroborating the course content with the expectations of the epistemic community representatives, of the professional associations and of the relevant take holders in the corresponding field

The course has a similar content compared with other European university courses and considers students' level of preparation.
The course is important/fundamental for the development of working skills as future specialists in the graduate field.



10. Assessment

Type of activity	10.1.Assessment criteria	10.2.Assessment methods	10.3.Percentag e of the final grade
10.4. Lecture	Logic, correct, and coherent application of the concept learned	Exam	70%
10.5. Seminar/Laboratory	Ability to appropriately interpret the result obtained from food safety and control studies/analyses	Continuous assessment	30%
10.6. Minimum performance standards			
Knowledge of 50% of the information contained in the course. Knowledge of 50% of the information provided at practical work/seminar. 100% attendance at practical work/seminars is mandatory. Attendance at 50% of courses is a condition for entering the exam. Solving a concrete problem/case study regarding the Laboratory Quality Assurance including the argumentation of the applied methods, techniques, procedures, and/or instruments. Carrying out an individual project by efficiently using relevant and current documentation sources and resources (including the internet, databases, online courses, etc.) Obtaining the pass mark at the knowledge verification at the end of the laboratory work is a condition for obtaining an overall passing grade. Final grade = 70% CA + 35% C			

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).

Filled in on
06.09.2024

Course coordinator
Assoc. Prof. PhD Liana Salanță
Lecturer PhD Elena-Suzana Biris-
Dorhoi

Laboratory work/seminar
coordinator
Assoc. PhD Liana Salanță
Lecturer PhD Elena-Suzana Biris-
Dorhoi

Subject coordinator
Assoc. Prof. PhD Liana Salanță

Approved by the
Department on
12.09.2024

Head of the Department
Prof. PhD Ramona Suharoschi



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Approved by the
Faculty Council on
27.09.2024

Dean
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