



No _____ from _____

Form code USAMV–CN-0703040110

COURSE DESCRIPTION

1. Information on the programme

1.1. Higher Education Institution	University of Agricultural Sciences and Veterinary-Medicine Cluj-Napoca
1.2. Faculty	Food Science and Technology
1.3. Department	Food Engineering
1.4. Study field	Food Engineering
1.5. Level field ¹⁾	Bachelor
1.6. Specialization/ Study Program	IPA
1.7. Form of education	Full time

2. Information on the discipline

2.1. Name of the course	Control and quality assurance in the food industry 3							
2.2. Course leader	Assoc. Prof.PhD. Mureșan Crina							
2.3. Coordinator of seminary/laboratory activity/project	Lectures. PhD Marc Romina							
2.4. Year of study	IV	2.5. Semester	VIII	2.6. Type of evaluation	continue	2.7. Course regime	Content ²	DS
							Level of compulsory ³	DI

3. Total estimated time (teaching hours per semester)

3.1. Number of hours/week – frequency form	4	of which : 3.2. course	2	3.3. seminary/ laboratory/ project	2
3.4. Total hours in the curricula	56	of which: 3.5.course	28	3.6.seminary/laboratory	28
Distribution of time					Hours
3.4.1.. Study based on handbook, notes, bibliography					5
3.4.2. Extra documentation in the library, on specific electronic platforms and on field					5
3.4.3. Preparation of seminars/ laboratories/ projects, themes, papers, portfolios and essays					5
3.4.4.Tutorial					2
3.4.5. Examination					2
3.4.6. Other activities					
3.7. Total hours of individual study	19				
3.8. Total hours per semester	75				
3.9. Number of ECTS ⁴	3				

4. Prerequisites (if applicable)

4.1. of curriculum	Biochemistry, Vegetal raw materials, Rheology, Extraction technologies, Fermentation technologies.
4.2. of competences	The student must have knowledge regarding the chemical composition of food products, the technology for obtaining vegetal origin food products, changes that occur during processing, rheology terms.

5. Conditions (if applicable)

5.1. of course development	Projector, presentation In the case of carrying out didactic activities online, the teaching methods will be adapted
5.2. of seminary/laboratory/	Computer, projector, standards



project development	In the case of carrying out didactic activities online, the teaching methods will be adapted
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6. Specific competences acquired

Professional competences	C5.1 Identify the specialized terminology regarding quality management, standards and good practices, in order to collaborate and cooperate with the responsible institutions in the field of food quality and safety. C5.3 Identify the problems specific to quality management and the responsibilities related to solving them.
Transversal competences	CT1. Applying strategies of perseverance, rigor, efficiency and responsibility at work, punctuality and accountability for the results of personal activities, creativity, common sense, analytical and critical thinking, solving matters etc, by principles, norms and values of the professional ethics code in food area.

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

7.1. Subject general objectives	Knowing the concepts regarding the quality of vegetal products.
7.2. Specific objectives	To understand the importance of the obtaining process (technological parametres) over the quality parametres of vegetal origin products. To know the quality parametres for vegetal origin products. To know the machines and methods for determining the quality of vegetal origin products.

8. Contents

8.1.COURSE Number of hours – 28	Methods of teaching	Observations
Order and the importance of quality technical control in the food industry. The quality and its' features. The factors that have an influence over the quality of vegetal origin food products. The pastry quality control. Fabrication faults. The sweet products control. The alcohol and alcoholic products quality control. The wine quality control. The beer quality control. The oil and margarine quality control. The mixed and vegetal origin cans quality control. Management system of safety in accordance with SR EN ISO 22000; standard presentation, PRP Management system of safety in accordance with SR EN ISO 22000; system documentes The projection of a HACCP system ;General considerations;The terminology used in HACCP system The HACCP functions and principles The general criteria of constructing a HACCP plan.	Lecture, Heuristic conversation, Explanation	1 Lectures 1 Lecture 1 Lecture 2 Lectures 1 Lectures 1 Lectures 2 Lectures 3 lectures 2 lectures
8.2. PRACTICAL WORK Number of hours – 14		
Work safety measures. First care norms. The preparing	Heuristic conversation,	1 laboratory work



of samples for the physico-chemical analysis. Sampling.	working group	
The pastry quality control. Fabrication faults		1 laboratory work
The sweet products quality control.		1 laboratory work
The strong alcoholic drinks and ethyl alcohol quality control. The wine quality control. The beer quality control.		2 laboratories work
The oil quality control.		1 laboratory work
The mixed and vegetal origin cans quality control.		1 laboratory work
HACCP plan elaboration for vegetal originating products technological flow. Case study.		3 seminars
Documents elaboration of mangement system. Case study.		3 seminars
Final test to check acquired knowledge.		1 laboratory work
Compulsory Bibliography: <ol style="list-style-type: none"> 1. Muresan Crina, 2021, Lecture notes 2. Vlaic Romina, Muresan Crina, 2019, <i>Controlul calitatii produselor de origine nonanimala-indrumator de laborator</i>, Mega Cluj-Napoca 3. Tofana Maria , Muresan Crina, 2012, <i>Controlul calitatii produselor de origine vegetala,- Caiet de lucrari practice</i>, Editura AcademicPres 		
Facultative Bibliography: <ol style="list-style-type: none"> 1. Muresan Crina, Marc Romina, 2021, <i>Siguranta alimentara-trecut si prezent</i>, Editura Risoprint, Cluj-Napoca 2. Banu, C., col., 2002, <i>Calitatea și controlul calității produselor alimentare</i>, Editura Agir, București 3. Banu, C., col., 2007, <i>Suveranitate, securitate și siguranță alimentară</i>, Editura ASAB, București 		

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

Course content is consistent with national professional associations specific applications.

10. Evaluation

Type of activity	10.1. Evaluation criteria	10.2. Evaluation methods	10.3. Percent of the final grade
10.4. Course	Knowing the factors that influence the quality parametres of vegetal origin food products. Quality parametres for vegetal origin food products. Quality parametres methods of analysis. Management safety requirements.	Exam	50 %
10.5. Seminary/ Laboratory	Knowing the principles for determining the physico-chemical characteristics of vegetal origin food products. The usage of quality parametres determining machines. Documents elaboration in accordance with SR EN ISO 22000	Portfolio overview	50 %
10.6. Minimal standard of performance			
Preparation of a technical specification for a finished product of plant origin. Completion of a test report for a finished product of plant origin. Mastering the scientific information transmitted through lectures and creating the portfolio at an acceptable level..			

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 hours of study (didactical and individual study).

Course coordinator

Assoc. Prof.PhD. Mureșan Crina

**Coordinator of the
laboratory/seminary**

Lectures PhD Marc Romina

Date of competition

06.09.2021

Discipline coordinator

Assoc. Prof. PhD. Mureșan Crina

Approved by the
Department on
22.09.2021

Head of the Department
Prof. PhD. Muste Sevastița

Approved by the Faculty
Council on
28.09.2021

Dean
Prof. PhD. Mudura Elena