No._____of _____ **USAMV form CN-0703040113**

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	Bachelor
1.6.Specialization/ Study programme	Food Engineering (IPA)
1.7. Form of education	Full time

2. Information on the discipline

2.1. Name of the discipline		Practice for the diploma project						
2.2. Course coordinator								
2.3. Seminar/ laboratory/ project coordinator				Borșa Andrei, PhD, Assist.				
2.4. Year of study	IV	2.5. Semester	VIII	2.6. Type of evaluation	continuous	2.7. Discipline status	Content[2]	DS
							Compulsoriness[3]	DI

3. Total estimated time (teaching hours per semester)

3.1. Hours per week – full time programme	4.28	out of which: 3.2. lecture	-	3.3. seminar/ laboratory/ project	4.28
3.4.Total number of hours in the curriculum	60	Out of which: 3.5.lecture	-	3.6.seminar/laboratory	60
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					20
3.4.3. Preparing seminars/ laboratories/ projects, subjects, reports, portfolios and essays					10
3.4.4.Tutorials					6
3.4.5.Examinations					4
3.4.6. Other activities					0

3.7. Total hours of individual study	60
3.8. Total hours per semester	120
3.9. Number of credits[4]	4

4. Prerequisites (is applicable)

4.1. curriculum-related	Operations and machinery in the food industry, raw vegetable and animal materials
4.2. skills-related	The student must have general knowledge of food engineering

5. Conditions (if applicable)

5.1. for the lecture	During practical activities, the students will present themselves in the pilot stations or at the economic agents in the scheduled period with the results of the medical

	analyzes according to the sanitary-veterinary norms in force and will carry out activities with the raw and auxiliary materials provided. The use of protective equipment such as a robe and cap is mandatory during practical activities.
5.2. for the seminar/ laboratory/ project	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 competences acquired

Professional competences	C2.3. Application of basic engineering principles and methods for solving technological problems in the agri-food chain and for the design of new food products C3.2. Explain and interpret the principles and methods used in technological processes in the food chain C3.3 Monitor and control technological processes in the food industry, identify abnormal situations and propose solutions
Transversal competences	CT1 Apply strategies of perseverance, rigor, efficiency and responsibility at 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 food field CT3 Efficient use of various ways and techniques of learning - training for the acquisition of bibliographic and electronic database information both in Romanian and in an international language, as well as assessing the need and usefulness of extrinsic and intrinsic motivations of continuing education

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

7.1. Overall course objective	To ensure the consolidation of the theoretical knowledge and the development of the communication and organization skills of the graduate of the bachelor cycle in accordance with the principles of food technologies, to solve engineering and technological problems and to facilitate their insertion on the labor market.
7.2. Specific objectives	To acquire the knowledge regarding the legislation in force and the instructions for safety and health at work specific to the food practice To understand the role and the way of organization, development and evaluation of the internship for the elaboration of the Bachelor Diploma and to use efficiently and planned the various ways and techniques of learning To acquire general knowledge regarding the management of production processes and the management of production quality.

8. Content

8.1.LECTURE **Number of hours –**	Teaching methods -	Notes -
8.2. PRACTICAL WORK **Number of hours –120:** Technological practice in individual system in a profile unit or in a pilot station - documentation for the diploma project	Theoretical presentation of practical works	1 lab work (2 hours / work) 30 individual practical works = 60 hours
Opportunity and justification of the chosen topic	Explanation, conversation	4 seminars = 8 hours
Documentary study	Explanation, conversation	4 seminars = 8 hours
The final choice of technological manufacturing schemes with detailing the parameters	Explanation, problematization conversation, case study	4 seminars = 8 hours
Technological calculation	Explanation, problematization conversation, case study	4 seminars = 8 hours
Equipment calculation	Explanation, conversation	5 seminars = 10 hours
Quality and hygiene management in the designed section	Explanation, problematization conversation, case study	4 seminars = 8 hours
The graphic part (at least the sketch of the designed section and the sketch of its general location; scores are	Explanation, conversation	5 seminars = 10 hours

awarded additional for all utility diagrams, diagram operations, equipment schedule, equipment representations and so on)		
Compulsory bibliography: All subjects in the curriculum are specific to the chosen topic. Technology-specific guidance / design notes.		
Optional bibliography: C. Banu ș.a- Manualul inginerului de industrie alimentară, Editura Tehnică, vol. I și II		

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 content of the discipline is in accordance with the requests of specific national professional associations

10. Assessment

Type of activity	10.1. Assessment criteria	10.2. Assessment methods	10.3. Percentage of the final grade
10.4. Lecture	-	-	
10.5. Seminar/Laboratory	Observance of working procedures, verification of results	Presentation of the results related to the license project	100%
10.6. Minimum performance standards			
Completion of experimental activities related to the bachelor project.			

[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
10.09.2021

Course coordinator
.....

Laboratory work/seminar coordinator
Borșa Andrei, PhD, Assist.

Subject coordinator
Borșa Andrei, PhD, Assist.

Approved by the Department on
22.09.2021

Head of the Department
Professor Sevastița Muste PhD,

Approved by the Faculty Council on
28.09.2021

Dean
Professor Elena Mudura PhD,