UNIVERSITATEA DE ŞTIINŢE AGRICOLE ŞI MEDICINĂ VETERINARĂ CLUJ-NAPOCA
Calea Mănăştur 3-5, 400372, Cluj-Napoca
Tel: 0264-596.384, Fax: 0264-593.792
www.usamvcluj.ro

No._____of _____ **USAMV form CN-0702020115**

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 Control and Expertise (CEPA)
1.7. Form of education	Full time

2. Information on the discipline

2.1. Name of the discipline	Domain practice							
2.2. Course coordinator								
2.3. Seminar/ laboratory/ project coordinator	Borşa Andrei, PhD, Lecturer							
2.4. Year of study	II	2.5. Semester	IV	2.6. Type of evaluation	continuous	2.7. Discipline status	Content[2]	DD
							Compulsoriness[3]	DI

3. Total estimated time (teaching hours per semester)

3.1. Hours per week – full time programme	8.57	out of which: 3.2. lecture	-	3.3. seminar/ laboratory/ project	8.57
3.4.Total number of hours in the curriculum	120	Out of which: 3.5.lecture	-	3.6.seminar/laboratory	120
Distribution of the time allotted					hours
3.4.1. Study based on book, textbook, bibliography and notes					0
3.4.2. Additional documentation in the library, specialized electronic platforms and field					0
3.4.3. Preparing seminars/ laboratories/ projects, subjects, reports, portfolios and essays					0
3.4.4.Tutorials					0
3.4.5.Examinations					0
3.4.6. Other activities					0

3.7. Total hours of individual study	0
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

	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	C2.1 Describe and use basic concepts, theories and methods in the field of processes and operation of agri-food chain installations C2.2. To explain and interpret the basic engineering concepts, methods and models in equipment exploitation issues in the agri-food industry
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 CT2 Apply interrelationship techniques within a team; to amplify and refine their empathic capacities for interpersonal communication and to assume specific attributions in carrying out group activity in order to treat / resolve individual / group conflicts, as well as for optimal time management.

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

7.1	hods in food science for solving engineering and technological problems.
7.2. Specific objectives	To ensure the consolidation of the theoretical knowledge and the development of the communication and organization skills of the undergraduate in accordance with the principles of food technologies, in order to facilitate their insertion on the labor market.

8. Content

8.1.LECTURE **Number of hours –**	Teaching methods -	Notes -

8.2. PRACTICAL WORK **Number of hours – 120**		
Technological practice in a profile unit (practice in individual or organized system) or in a pilot station (in groups of maximum 6 students)		45 practical works = 90 hours
Unit description: name, address, history, field of activity, production capacity, production profile (assortment structure / product groups), unit structure (productive and non-productive technological spaces, auxiliary spaces), unit compartmentalization	Observation, explanation, conversation, problematization	2 laboratory works = 4 hours
Description of the general technological flow of manufacturing the products in the unit	Observation, explanation, conversation, problematization	2 laboratory works = 4 hours
Description of raw materials used in production (name, composition, action, method of use, dosage)	Explanation, conversation, problematization, case study	2 laboratory works = 4 hours
Description of operations specific to the technological flow of manufacturing of various product groups.	Observation, explanation, conversation, problematization	2 laboratory works = 4 hours
Description of equipment used in processing. Comparative analysis with existing technologies: presentation of technological alternatives in the literature	Explanation, conversation, problematization, case study	2 laboratory works = 4 hours
Description of the daily activities carried out in the respective unit	Observation, explanation, conversation problematization, case study	2 laboratory works = 4 hours
Opinions / impressions regarding the activity carried out in the respective unit (positive, negative aspects, conclusions and recommendations)	Observation, conversation	1 laboratory works = 2 hours
Individual project - Case study	Assisted presentation	2 project meeting = 4 hours

Compulsory bibliography:

Manualul inginerului de industrie alimentară, vol. I, Editura Tehnica, 2000
Manualul inginerului de industrie alimentară, vol. II, Editura Tehnica, 2002

Optional bibliography:

SORIN STĂNILĂ, (2013), Utilaje în îndustria Alimentară, Ed. Risoprint Cluj Napoca;
Gherman V., Utilaje pentru industria alimentară, Edit. Sincron, Cluj, 1997.
Banu, C-tin. şi colab. – Progrese tehnice, tehnologice şi ştiinţifice în industria alimentară, vol. I, Ed. Tehnica, Bucuresti, 1992

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

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	Continuous assessment	Activity evaluation form	50%
	Final assessment	Practice colloquium in which the practice documents presented by the student and the presentation of the skills and knowledge acquired by him will be analysed	50%
10.6. Minimum performance standards			
Integral achievement of the technological practice activity and completion of the practice documents Description of the equipment and operations corresponding to the products manufactured in the profile unit			

[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

Laboratory work/seminar coordinator
Borşa Andrei, PhD, Lecturer

Filled in on
06.09.2021

Course coordinator
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Subject coordinator
Mirela Jimborean, PhD, Assoc. Proffesor

Approved by the Department on
22.09.2021

Head of the Department
Sevastiţa Muste PhD, Professor

Ap **Elena Mudura PhD, Professor**
Council on
28.09.2021