UNIVERSITATEA DE ŞTIINŢE AGRICOLE ŞI MEDICINĂ VETERINARĂ CLUJ-NAPOCA
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No._____of _____ **USAMV–CN-0702030324**

SUBJECT OUTLINE

1. Information on the programme

1.1. Higher education institution	University of Agricultural Sciences and Veterinary Medicine of Cluj-N
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 Expertize
1.7. Form of education	Full time

2. Information on the discipline

2.1. Name of the discipline	Traditional food products technology							
2.2. Course coordinator				Lecturer PhD. Teodora Emilia Coldea				
2.3. Seminar/ laboratory/ project coordinator				Lecturer PhD. Teodora Emilia Coldea				
2.4. Year of study	III	2.5. Semester	**VI**	2.6. Type of evaluation	Summative	2.7. Discipline status	Content[2]	DD
							Compulsoriness[3]	DFac

3. Total estimated time (teaching hours per semester)

3.1. Hours per week – full time programme	3	out of which: 3.2. lecture	1	3.3. seminar/ laboratory/ project	2
3.4.Total number of hours in the curriculum	42	Out of which: 3.5.lecture	14	3.6.seminar/laboratory	28
Distribution of the time allotted					hours
3.4.1. Study based on book, textbook, bibliography and notes					5
3.4.2. Additional documentation in the library, specialized electronic platforms and field					1
3.4.3. Preparing seminars/ laboratories/ projects, subjects, reports, portfolios and essays					1
3.4.4.Tutorials					1
3.4.5.Examinations					5
3.4.6. Other activities					
3.7. Total hours of individual study	8				
3.8. Total hours per semester	50				
3.9. Number of credits[4]	2				

4. Prerequisites (is applicable)

4.1. curriculum-related	Food biochemistry. Food microbiology.
4.2. skills-related	Handling of samples safely for the user and the environment.

5. Conditions (if applicable)

5.1. for the lecture	- room equipped with video projector

5.2. for the seminar/ laboratory/ project	- the student will not start the activity without the protective equipment; -control laboratory on the technological flow equipped with distillation installation, spectrophotometer, automatic analyser of beverages during the fermentation, ebuliometer.

6. Specific competences acquired

Professional competences	• C2.1. Description and use of basic concepts, theories and methods in the field of processes and operation of agro-food chain installations • C2.2. Explanation and interpretation of basic engineering concepts, methods and models in equipment exploitation issues in the agro-food industry • C2.4. Critical analysis, evaluation of the characteristics, performances and limits of some technological processes and equipment's in the field of the agro-food industry
Transversal competences	• CT2 Application of interrelation techniques within a team; amplifying and refining the empathic capacities of interpersonal communication and of assuming specific attributions in carrying out the group activity in order to treat / resolve individual / group conflicts, as well as the optimal time management.

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

7.1. Overall course objective	Familiarization and application of knowledge related to traditional technologies for obtaining food..
7.2. Specific objectives	Knowledge of traditional technological flows for obtaining food Knowledge of control parameters on the technological flow

8. Content

8.1.LECTURE **Number of hours – 28**	Teaching methods	Notes
Traditional technologies for obtaining alcoholic beverages based on fruits and cereals.	Lecture, heuristic conversation, explanation	3 lectures
2. Traditional technologies for obtaining non-alcoholic fermented beverages	Lecture, heuristic conversation, explanation	2 lectures
3. Traditional technologies for obtaining food vinegar	Lecture, heuristic conversation, explanation	2 lectures

8.2. PRACTICAL WORK **Number of hours – 28**	Teaching methods	Notes
Control over the technological flow in obtaining fruit brandies	Heuristic conversation, case study	3 lectures
Control over the technological flow of wine production	Heuristic conversation, case study	3 lectures
Control over the technological flow in obtaining vinegar	Heuristic conversation, case study	3 lectures
Control over the technological flow in obtaining the *borș*	Heuristic conversation, case study	2 lectures
Control over the technological flow in obtaining craft beer	Heuristic conversation, case study	3 lectures

Compulsory bibliography:

1. 1.Mudura, E. 2004. Tehnologii fermentative. Tehnologia berii: Indrumator de lucrări practice . Editura Risoprint, Cluj-Napoca.
2. 2.Elena Mudura, 2012. Controlul calităţii produselor alimentare în industria băuturilor alcoolice. Editura AcademicPres.
3. 3.Elena Mudura, 2013.Tehnologia malţului şi berii. Editura Mega, Cluj Napoca.
4. 4. Banu, C.(coordonator). 2000. Tratat de ştiinţa şi tehnologia malţului şi berii,vol I şi II. Editura Tehnică.Bucureşti.

5. 5.Cotea V. 1985. Tratat de oenologie. Vol I. Vinificaţia şi biochimia vinului. Bucureşti. EdituraCeres
6. 6.Cotea V., Sauciuc I., 1988. Tratat de Oenologie. Vol II Limpezire, stabilizarea şi îmbutelierea vinului.Bucureşti, Editura Ceres
7. 7.Cotea V., Pomohaci, N., Gheorghiţă M.,1982. Oenologie. Bucureşti, Editura didactică şi pedagogică
8. 8.Pomohaci N., Stoian V., Gheorghiţă M., Sîrghi C., Cotea V.V., Năməloşanu I., 2000. Oenologie. vol. I.
9. Prelucrarea strugurilor şi producerea vinurilor, Editura Ceres, Bucureşti.
10. 9.Pomohaci N., Cotea V.V., Stoian V., Namoloşanu I., Popa A., Sîrghi C., Antoce Arina, 2001. Oenologie. vol. II.
11. Îngrijirea, stabilizarea si îmbutelierea vinurilor. Construcţii si echipamente vinicole.Editura Ceres, Bucureşti.
12. 10.Modoran, D., 2005. Procesarea industrială a alcoolui rafinat, Editura Academicpress, Cluj-Napoca

Optional bibliography:

1. 1.Kunze,W.-Technology brewing and malting,VLB,Berlin,1999
2. 2.Modoran, D.(2002), Tehnologii fermentative, Editura ICPIAF, Cluj-Napoca
3. 3.Aurel I Popa, Ştefan C. Teodorescu- Microbiologia vinului. Bucureşti:, Editura Ceres, 1990
4. 4.Mudura, E. 2014. Calitatea şi inocuitatea berii. Editura Mega, Cluj Napoca
5. 5. Elena Mudura, 2014. Bioprocese fermentative, în Modelarea, simularea şi conducerea avansată a bioproceselor fermentative. Coordonator Anca Sipoş. Editura Universităţii "Lucian Blaga" din Sibiu.

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

It meets the training requirements for a competent specialist due to the high degree of applicability and topicality of the discipline's content (identification and solution of quality problems that may occur on the technological flow of obtaining fermented and distilled alcoholic beverages).

10. Assessment

Type of activity	10.1. Assessment criteria	10.2. Assessment methods	10.3. Percentage of the final grade
10.4. Lecture	Knowledge of traditional technologies for obtaining alcoholic and non-alcoholic beverages. Control of quality parameters on the technological flow of obtaining alcoholic and non-alcoholic beverages.	Exam (oral)	50%
10.5. Project/Laboratory	Identifying the quality parameters and knowing the method principles in controlling the quality parameters of traditional alcoholic and non-alcoholic beverages. Use of laboratory equipment to determine the control parameters of traditional alcoholic and non-alcoholic fermented beverages.	Colloquium (C)	50%
10.6. Minimum performance standards			
Course (E): Knowledge of traditional technologies for obtaining traditionally fermented and distilled beverages. Minimum standard grade 5. Colloquium (C): Knowledge of the quality parameters pursued on the technological flow of obtaining traditional alcoholic and non-alcoholic beverages. Minimum standard note 5. Final grade = 50% E + 50% C. Minimum standard grade 5.			

[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
08.09.2021

Course coordinator
Prof. PhD. Elena Mudura

Laboratory work/seminar coordinator
Lecturer PhD. Teodora Emilia Coldea

Subject coordinator
Prof. PhD. Elena Mudura

Approved by the
Department on
22.09.2021

Head of the Department
Prof. PhD. Sevastița Muste

Approved by the Faculty
Council on
28.09.2021

Dean
Prof. PhD. Elena Mudura