DISCIPLINE DESCRIPTION

1. Information on the study programme

1.1 Academic institution	**UNIVERSITY OF ORADEA**
1.2 Faculty	**FACULTY OF ENVIRONMENTAL PROTECTION**
1.3 Department	**FOOD ENGINEERING**
1.4 Field of study	**FOOD ENGINEERING**
1.5 Cycle of study	**MASTER**
1.6 Study programme/Qualification	**AGRI-FOOD SAFETY AND SECURITY**

2. Information on the discipline

2.1 Name of discipline	Food Safety						
2.2 Course holder	Timar Adrian						
2.3 Seminar/Laboratory/Project holder	Chirilă Ramona						
2.4 Year of study	I	2.5 Semester	I	2.6 Type of evaluation	Ex	2.7 Regime of discipline	C

(C) Compulsory; (O) Optional; (E) Elective

3. Total estimate time (hours per semester of didactic activities)

3.1 Number of hours per week	3	out of which: 3.2 course	2	out of which 3.3 seminar/laboratory/project	1
3.4 Total hours in the curriculum	42	out of which: 3.5 course	28	out of which 3.6 seminar/laboratory/project	14

Time allotment	hours
Study assisted by manual, course support, bibliography and notes	30
Additional documentation in the library/ on specialised electronic platforms and in the field	30
Preparation of seminars/laboratories/ topics/reports, portfolios and essays	30
Tutorship	6
Examinations	2
Other activities..................................	10

3.7 Total hours of individual study	108
3.9 Total hours per semester	**150**
3.10 Number of credits	6

4. Prerequisites (where appropriate)

4.1 curriculum	-
4.2 competences	-

5. Conditions (where appropriate)

5.1. related to course	Video projector, Screen	
5.2. related to seminar/laboratory/ project	Food safety specific equipment for practical applications	

6. Specific competences acquired

Professional competences	C2Monitoring of general engineering processes, operation of food industry facilities and equipment from the point of view of food safety C3Know how to prepare and implement food safety measures
Transversal competences	CT1 skills. Applying strategies of perseverance, rigor, efficiency and responsibility at work, punctuality and taking responsibility for the results of personal activity, creativity, analytical and critical thinking, problem solving, etc., based on the principles, norms and values of the code of professional ethics in food . CT2. Applying interrelationship techniques within a team; amplifying and refining the empathic capacities of interpersonal communication and assuming specific attributions in carrying out the group activity in order to treat / resolve individual / group conflicts, as well as the optimal time management. CT3. Effective use of various ways and techniques of learning - training for the acquisition of information from bibliographic and electronic databases, both in Romanian and in a language of international circulation, as well as assessing the need and usefulness of extrinsic and intrinsic motivations of continuing education .

7. Objectives of discipline (coming from the specific competences acquired)

7.1 General objective	The discipline aims to provide students with training so that they can design, implement and monitor a food safety system for the safe production and storage of food.
7.2 Specific objectives	Emphasis will be placed on critical evaluation: legal norms, ♣ the form and how to prepare the documentation, ♣ quality characteristics, ♣ the potential substances that can contaminate agri-food products and how this is done. ♣ There will also be ways to rectify the incidents. The technical aspect will be corroborated with the legislative one in the field

8. Content*/

8.1 Course	Methods of teaching	No. of hours/ Remarks
1. General aspect regarding food safety and security	Interactive lecture with video projection	1
2. Food security - objectives and priorities	Interactive lecture with video projection	1
3. Food safety - a symbol of food quality and hygiene	Interactive lecture with video projection	1
4. Food traceability - a basic component of food safety and security	Interactive lecture with video projection	1
5. Food safety policy	Interactive lecture with	1

	video projection	
6. Certification of the food safety management system	Interactive lecture with video projection	1
7. HACCP - food safety management tool	Interactive lecture with video projection	1
8. The need to comply with the preliminary requirements for the implementation of the food safety management system according to the HACCP principles	Interactive lecture with video projection	1
9. Legislative regulations in Romania regarding food safety and security	Interactive lecture with video projection	1
10. Legislative regulations in the European Union regarding food safety and security	Interactive lecture with video projection	1
11. Food safety from nutritional point of view	Interactive lecture with video projection	1
12. Hygienic-sanitary quality of food products	Interactive lecture with video projection	1
13. National Sanitary Veterinary and Food Safety Authority - attributions, rights, competences	Interactive lecture with video projection	1
14. Particularities regarding the certification of the food safety management system	Interactive lecture with video projection	1

Bibliography
1. Banu C., Suveranitate, securitate şi siguranţă alimentară, Edit. Assab, Bucureşti, 2007
2. Timar Adrian, Siguranta alimentara, suport de curs

Standardele : HACCP, ISO 22 000, SR 13462 – 1 : 2001 ; SR 13462 – 2 : 2002, SR 13462 – 3 : 2002

8.3 Laboratory	Methods of teaching	No. of hours/ Remarks
1. Product information sheet	Demonstration, Practical Application	1
2. Elaboration of the technological flow diagram I	Demonstration, Practical Application	1
3. Elaboration of the technological flow chart II	Demonstration, Practical Application	1
4. Elaboration of the technological flow diagram III	Demonstration, Practical Application	1
5. Identification of potential hazards I	Demonstration, Practical Application	1
6. Identification of potential hazards II	Demonstration, Practical Application	1
7. Identification of potential hazards III	Demonstration, Practical Application	1
8. Assessment of potential risks	Demonstration, Practical Application	1
9. Establishing CCPs	Demonstration, Practical Application	1
10. Setting up PCs	Demonstration, Practical	1

	Application	
11. Standard values (target) and critical limits (tolerances)	Demonstration, Practical Application	1
12. Monitoring	Demonstration, Practical Application	1
13. Establish corrective actions	Demonstration, Practical Application	1
14. Preparation of documents and records and Verification	Demonstration, Practical Application	1

Bibliography
1. Banu C., Suveranitate, securitate şi siguranţă alimentareă, Edit. Assab, Bucureşti, 2007
2. Timar Adrian, Siguranta alimentara, suport de curs
3. Standardele : HACCP, ISO 22 000, SR 13462 – 1 : 2001 ; SR 13462 – 2 : 2002, SR 13462 – 3 : 2002
4. Banu C.; Alexe,Petre; Camelia Vizireanu, Procesarea industrilă a cărnii,Ed. TEHNICĂ, Bucureşti, 2002,
5. Banu C., Manualul inginerului de industrie alimentară vol. I şi II Editura Tehnică, Bucureşti 1998.
6. Banu Ct., Vizireanu C. – "Procesarea industrială a laptelui", Ed. Tehnică, Bucureşti, 1998,
7. Modoran D., Tehnologii fermentative, vol. I, Editura ICPIAF Cluj-Napoca 2002,
8. Modoran, Constanţa – „Produse de panificaţie şi patiserie", Editura Agenţia de Dezvoltare Regională Nord – Vest, 2003
9. Timar Adrian, Tehnologia Prelucrării Cărnii, Editura Universităţii din Oradea, 2010
Timar Adrian, Tehnologii generale în industria alimentară, Editura Universităţii din Oradea, 2010

* The content, respectively the number of hours allocated to each course / seminar / laboratory / project will be detailed during the 14 weeks of each semester of the academic year.

9. Corroboration of discipline content with the expectations of the epistemic community, professional associations and representative employers from the field corresponding to the study programme

Discipline provides knowledge to food industry specialists for positions in charge of Food Safety Programs inplementation

10. Evaluation

Type of activity	10.1 Evaluation criteria	10.2 Evaluation methods	10.3 Share in the final grade
10.4 Course	- for grade 5 - 50% knowledge of the subject for grade 6 - 60% knowledge of the subject for grade 7 - 70% knowledge of the subject for grade 8 - 80% knowledge of the subject for grade 9 - 90% knowledge of the subject for grade 10 -	Summative assessment - exam - written or oral test	70%

	knowledge of the subject in proportion of 100% (the student proves the consultation of the presented bibliographic material).		
10.5. Seminary			
10.6 Laboratory	for grade 5 - the student answers 50% of the questions correctly for grade 6 - the student answers 60% of the questions correctly for grade 7 - the student answers 70% of the questions correctly for grade 8 - the student answers 80% of the questions correctly for grade 9 - the student answers 90% of the questions correctly for grade 10 - the student answers 100% of the questions correctly	Practical evaluation	30%
10.8 Minimum standard of performance			
Execution of specific operations in the food safety sphere based on the job description, respecting the norms and values of professional ethics. Realization of an individual project. Creating a portfolio with the identification and description of professional roles at the level of a subordinate team. Carrying out a team project. Elaboration of a technical study through the efficient use of relevant and current sources of documentation and resources (including internet, databases, online courses, etc.) in the topic of food safety.			

Date of completion   Signature of the course holder   Signature of laboratory holder
   01.10. 2020   Ș.L. dr. Ing.Timar Adrian   Ș.L. dr. Ing.Bura Giani
                              atimar@uoradea.ro

Date of approval in the department   Signature of the Head of Department
                                   Lecturer dr. Chirilă Ramona

   01.10. 2020

                                          Dean signature
                                      Prof. dr. eng. Chereji Ioan
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