

## 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	Projecting an eco innovative foodstuff						
2.2 Course holder	Timar Adrian						
2.3 Seminar/Laboratory/Project holder	Vuscan Adrian						
2.4 Year of study	II	2.5 Semester	IV	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	36	out of which: 3.5 course	24	out of which 3.6 seminar/laboratory/project	12
Time allotment					hours
Study assisted by manual, course support, bibliography and notes					20
Additional documentation in the library/ on specialised electronic platforms and in the field					20
Preparation of seminars/laboratories/ topics/reports, portfolios and essays					30
Tutorship					7
Examinations					2
Other activities.....					10
<b>3.7 Total hours of individual study</b>					89
<b>3.9 Total hours per semester</b>					125
<b>3.10 Number of credits</b>					5

**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 production specific equipment for practical applications

**6. Specific competences acquired**

Professional competences	<p>C2 Monitoring of general engineering processes, operation of food industry facilities and equipment from the point of view of food safety</p> <p>C3 Know how to prepare and implement food safety measures</p>
Transversal competences	<p>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 .</p> <p>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.</p> <p>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 .</p>

#### 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 innovative food systems and foodstuff.
7.2 Specific objectives	<p>Emphasis will be placed on critical evaluation:</p> <p>sustainability,</p> <p>legal norms,</p> <p>quality characteristics,</p> <p>food safety</p> <p>labeling</p> <p>packaging</p> <p>The technical aspect will be corroborated with the legislative one in the field</p>

#### 8. Content\*/

8.1 Course	Methods of teaching	No. of hours/ Remarks
1. THE NEW PRODUCT CONCEPT. LIFE CYCLE OF A PRODUCT. NEW PRODUCT DEVELOPMENT STRATEGY. DEVELOPMENT OF THE RESEARCH - DEVELOPMENT COMPARTMENT	Interactive lecture with video projection	2
2. STAGES OF NEW PRODUCT DEVELOPMENT	Interactive lecture with video projection	2
3. SPECIFIC FOOD CONSUMPTION AND	Interactive lecture with	2

PREFERENCES TO THE CONSUMER TO CONSUMPTION AND TO PURCHASE. OBJECTIVE, SUBJECTIVE AND MIXED COMPONENTS IN THE DECISION - MAKING ACT	video projection	
4. OBJECTS OF INDUSTRIAL AND INTELLECTUAL PROPERTY	Interactive lecture with video projection	2
5. INNOVATION MANAGEMENT AND TECHNOLOGY TRANSFER	Interactive lecture with video projection	2
6. TECHNOLOGY TRANSFER MANAGEMENT	Interactive lecture with video projection	2
7. PRINCIPLES OF LAUNCH AND PROMOTION	Interactive lecture with video projection	2
8. BIOLOGICAL, ECOLOGICAL AND ORGANIC PRODUCTS	Interactive lecture with video projection	2
9. THE SWOT ANALYSIS	Interactive lecture with video projection	2
10. FOOD LABELING LEGISLATION	Interactive lecture with video projection	2
11. HYGIENE OF FOOD PRODUCTS	Interactive lecture with video projection	2
12. CERTIFICATION OF TRADITIONAL, LOCAL AND ECOLOGICAL FOOD PRODUCTS	Interactive lecture with video projection	2
Bibliography 1. Banu C., Suveranitate, securitate și siguranță alimentară, Edit. Assab, București, 2007 2. Stoica, M., Alexe, P., 2016, „Elemente de proiectare a produselor alimentare noi”, Ed. Academica, ISBN 978-973-8937-98-7 , pag. 278 3. Alexe, P., 2002 - Proteine din surse neconvenționale, Ed. Academica, Galați, 350 pag., ISBN 973-8316-55- 4. Timar Adrian, Proiectarea alimentelor ecoinovative, 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. Choosing raw materials	Demonstration, Practical Application	1
6. Identification of potential hazards	Demonstration, Practical Application	1
7. Choosing machineries	Demonstration, Practical	1

	Application	
8. Assessment of bioactive properties	Demonstration, Practical Application	1
9. Eco innovative packaging	Demonstration, Practical Application	1
10. Labeling	Demonstration, Practical Application	1
11. SWOT analysis	Demonstration, Practical Application	1
12. Market studies	Demonstration, Practical Application	1

#### Bibliography

- Banu C., Suveranitate, securitate și siguranță alimentară, Edit. Assab, București, 2007
- Timar Adrian, Siguranța alimentară, suport de curs
- Standardele : HACCP, ISO 22 000, SR 13462 – 1 : 2001 ; SR 13462 – 2 : 2002, SR 13462 – 3 : 2002
- Banu C.; Alexe, Petre; Camelia Vizireanu, Procesarea industrială a cărnii, Ed. TEHNICĂ, București, 2002,
- Banu C., Manualul inginerului de industrie alimentară vol. I și II Editura Tehnică, București 1998.
- Banu Ct., Vizireanu C. – “Procesarea industrială a laptelui”, Ed. Tehnică, București, 1998,
- Modoran D., Tehnologii fermentative, vol. I, Editura ICPIAF Cluj-Napoca 2002,
- Modoran, Constanța – „Produse de panificație și patiserie”, Editura Agenția de Dezvoltare Regională Nord – Vest, 2003
- Timar Adrian, Tehnologia Prelucrării Cărnii, Editura Universității din Oradea, 2010  
Timar Adrian, Tehnologii generale în industria alimentară, Editura Universității 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 innovation and product development.

#### 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	Summative assessment - exam - written or oral test	70%

	subject for grade 9 - 90% knowledge of the subject for grade 10 - 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  
01.10. 2020

Signature of the course holder  
Ș.L. dr. Ing. Timar Adrian  
[atimar@uoradea.ro](mailto:atimar@uoradea.ro)

Signature of laboratory holder  
Ș.L. dr. Ing. Bura Giani

Date of approval in the department  
01.10. 2020

Signature of the Head of Department  
Lecturer dr. Chirilă Ramona

Dean signature  
Prof. dr. eng. Chereji Ioan  
.....