SYLLABUS
Academic year 2024-2025
Year of Study II / Semester II

1. Information on academic program

1.1. University	**„1 Decembrie 1918" University of Alba Iulia**
1.2. Faculty	**Faculty of Economics**
1.3. Department	**Business Administration and Marketing**
1.4. Field of Study	**Business Administration**
1.5. Cycle of Study	**Bachelor**
1.6. Academic program / Qualification/ ESCO Code	**Business Administration / 242102 Process improvement specialist, 242104 Process manager, 242110 Specialist in planning, control, and reporting of economic performance; ESCO Code 2421 - Management and Organisation Analysts**

2. Information of Course Matter

2.1. **Course**		**Food and Non-food Commodities science and consumer safety**			2.2. Discipline code	BA 229.1	
2.3. **Course Leader/** Seminar Tutor			Asoc. Lecturer PhD. Glevitzky Mirel				
2.4. Seminar Tutor			Lecturer PhD Bostan Roxana				
2.5. Academic Year	**II**	2.6. Semester	**II**	2.7. Type of Evaluation (E – final exam / CE - colloqium examination / CA -continuous assessment)	CA	2.8. Type of course (**C**– Compulsory, **Op** – optional, **F -** Facultative)	**C**

3. Course Structure (Weekly number of hours)

3.1. Weekly number of hours	**4**	3.2. course	**2**	3.3. seminar, laboratory	**2**
3.4. Total number of hours in the curriculum	**56**	3.5. course	**28**	3.6. seminar, laboratory	**28**

Allocation of time:	Hours
a Individual study of readers	**4**
b Documentation (library)	**3**
c Home assignments, Essays, Portfolios	**10**
d Tutorials	
e Assessment (examinations)	**2**
f Other academic activities (study visits, mentoring, projects)	**-**

3.7 Total number of hours for individual study (a+b+c)	**17**
3.8 Total number of hours for academic activities (d+e+f+3.4)	**58**
3.9 Total number of hours per semester (3.7+3.8)	**75**
3.10 Number of ECTS	**3**

4. Prerequisites (*where applicable*)

4.1. curriculum-based	*Disciplines covered in previous semesters, eg* ***Fundamentals of commodities***

4.2. competence-based	*Skills offered by the disciplines listed above, ex .:*
	Knowledge, understanding concepts, theories and methods of the *Fundamentals of commodities*;

5. **Requisites** (*where applicable*)

5.1. course-related	*The room with videoprojectior/board...*
5.2. seminar/laboratory-based	*Laboratory equipped with specific performance laboratory, equipment, reagents, foods for analysis*

6. **Specific competences to be acquired** (chosen by the course leader from the programme general competences grid)

Competences/Study results	1.Knowledge, understanding of the basic concepts, theories and methods of the field and area of specialization; their proper use in professional communication 2. Using basic knowledge to explain and interpret various types of concepts, situations, processes, projects, etc. associated with the field 5. Developing professional projects with the use of established principles and methods in the field
Transversal competences	**CT1** Applying the principles, norms and values of professional ethics within one's own rigorous, efficient and responsible work strategy Solving in real time, in conditions of qualified assistance, a real/hypothetical problem at work, respecting the norms of professional ethics.

7. **Course objectives** (as per the programme specific competences grid)

7.1 General objectived of the course	Developing the capacity for knowledge and understanding of basic concepts related to food and non-food goods
7.2 Specific objectives of the course	- Study of the main concepts on goods throughout their trajectory, from design, production, circulation, consumption and post-consumption, taking into account even before and postexistenţiale phases thereof. - Develop the capacity for knowledge and understanding of the value in use, the systematics, quality and quality guarantee, all this closely related to packaging, storage, transport, handling and sale of goods - The understanding and knowledge of the physicochemical and microbiological processes that influence the quality characteristics of the goods and their commercial value - Ability to understand the physico-chemical and microbiological changes that may occur during storage of goods - Develop the ability to conduct examinations psychosensorial în establish sensory quality characteristics of goods - Building the knowledge and understanding of specific methods and techniques for determining the quality physicochemical characteristics - Develop the capacity for knowledge and understanding and caloric value of the food products and their influence on the essential balance in the human body - Building the knowledge and understanding of the particularities of non-food goods

8. Course contents

8.1 Course	**Teaching methods**	**Remarks**

1 THE OBJECT OF STUDY AND THE IMPORTANCE OF THE DISCIPLINE Definitions. Security of goods. The quality characteristics of the goods	***Lecture, video media, examples, discussions***	***2 hours***
2. CHEMICAL COMPOSITION OF GOODS The substances present in food. Natural substance. Added substances (food additives), Contaminants.	***Lecture, video media, examples, discussions***	***2 hours***
3. THE ROLE OF NATURAL SUBSTANCES IN THE CONSUMER ORGANISM The plastic role. The energy role. The biocatalytic role	***Lecture, video media, examples, discussions***	***2 hours***
4. MINERAL SUBSTANTS AND VITAMINS IN THE CONSUMER ORGANISM Macro elements, microelements and ultra microelements present in food. Water-soluble vitamins and fat-soluble vitamins in foods	***Lecture, video media, examples, discussions***	***2 hours***
5. CARBOHYDRATES AND LIPIDS IN FOODSTUFFS Definition. Classification. Glucose. Fructose. Lactose, Maltose. Sucrose. Starch. Cellulose. Saturated fats and unsaturated fats.	***Lecture, video media, examples, discussions***	***2 hours***
6. PROTIDES AND ORGANIC ACIDS IN FOODSTUFFS Definition, classification, role in the consumer body. Proteins. Proteids. Taxonomy of the organic acids in food	***Lecture, video media, examples, discussions***	***2 hours***
7. FOOD ADDITIVES IN FOOD AND NON-FOOD GOODS Definition. Classification. Natural additives. Synthetic additives. Identical natural substances added to foods. Genetically modified foods	***Lecture, video media, examples, discussions***	***2 hours***
8. THE CONTAMINANT SUBSTANCE Definition. Classification. Causes of contamination. Physical contamination. Chemical contamination. Microbiological contamination. Food intoxications	***Lecture, video media, examples, discussions***	***2 hours***
9. THE ROLE OF MICROORGANISMS IN FOOD The influence of microorganisms on quality characteristics; Bacteria. Molds. Yeast.	***Lecture, video media, examples, discussions***	***2 hours***
10. CALORICAL VALUE AND FOODSTUFFS Energy balance, protein balance, mineral balance, vitamin balance	***Lecture, video media, examples, discussions***	***2 hours***
11. STORAGE OF GOODS Position and role of the warehouse in the storage of goods; Deterioration of goods. Forms of deterioration; Factors that influence the deterioration of goods; Food preservation	***Lecture, video media, examples, discussions***	***2 hours***
12. PRESERVATIONS OF GOODS The biological principles underlying conservation; Conservation methods and techniques	***Lecture, video media, examples, discussions***	***2 hours***
13 GENERAL ASPECTS OF THE NON-FOOD GOODS Particularities regarding non-food goods; Classification of industrial goods; Checking the quality of industrial goods	***Lecture, video media, examples, discussions***	***2 hours***

14. CERAMIC GOODS Introduction; Raw materials; Influence of ceramic goods production in operations over their quality; Defects of ceramic goods; The quality of ceramic goods; Terms of marking, packaging, storage and transport	***Lecture, video media, examples, discussions***	***2 hours***

Bibliography

1. Popa M., Dragan M., *Science of Comodities*- The safety of food products, ROTABENE I MEDIENHAUS, Schneider Druck GmbH, Rotenburg on der Tauber, 2013
2. Popa, M**.,** *The safety of food products*, Seria Didactica, 2013, Alba Iulia;
3.Popa, M., *Merceologie alimentara si nealimentara*, Seria Didactica, Alba Iulia, 2013;
4. Popa, M*., Merceologia Mărfurilor Alimentare – Îndrumător de lucrări practice*, Seria Didactica, Univ. ,,1 Decembrie 1918", Alba Iulia, 2000;
5. Popa, M., *Calitate si siguranta alimentara*, Editura Casa Cartii de Ştiinţa, Cluj Napoca, 2005;
6.Achim, M.I., *Bazele merceologiei*, Seria Didactica, Univ. "1 Decembrie 1918." Alba Iulia, 2000;
7. Popa, M, *Bazele merceologiei- Îndrumător de laborator*, Seria Didactica, Univ. "1 Decembrie 1918." Alba Iulia, 2002;

8.2 Laboratory	**Teaching methods**	**Remarks**
1. Regulation Laboratory of Science of commodities. Safety rules. Operations and utensils used in the Laboratory of Commodities	***Lecture, discussion, exemplification***	***2 hours***
2. Sampling and preparation of samples in order to determine quality characteristics. Conservation and preservation of evidence.	***Lecture, discussion, exemplification***	***2 hours***
3. Merchandising expertise. Specific methods for assessing the quality characteristics	***Lecture, discussion, exemplification***	***2 hours***
4. Psychosensorial and physico-chemical analysis of grain	***Experiment, exemplification***	***2 hours***
5. Psychosensorial and physico-chemical analysis of grain mill products.	***Experiment, exemplification***	***2 hours***
6. Psychosensorial and physico-chemical analysis of bread	***Experiment, exemplification***	***2 hours***
7. Psychosensorial and physico-chemical analysis of pasta and eggs	***Experiment, exemplification***	***2 hours***
8. Psychosensorial and physico-chemical analysis of eggs	***Experiment, exemplification***	***2 hours***
9. Psychosensorial and physico-chemical analysis of milk and milk products	***Experiment, exemplification***	***2 hours***
10. Psychosensorial and physico-chemical analysis of sugar and sugar products	***Experiment, exemplification***	***2 hours***
11. Psychosensorial and physico-chemical analysis of fruits and fruit products	***Experiment, exemplification***	***2 hours***
12. Presentation of semester projects by work teams	***Lecture, discussion***	***2 hours***

13. Recovery laboratory work	***Experiment, exemplification***	***2 hours***
14. Assessment of knowledge	-	***2 hours***

Bibliography

1. Popa, M**.,** *The safety of food products,* Seria Didactica, 2013, Alba Iulia;
2.Popa M., Dragan M., *Science of Comodities*- The safety of food products, ROTABENE I MEDIENHAUS, Schneider Druck GmbH, Rotenburg on der Tauber, 2013
3.Popa, M., Merceologie alimentara si nealimentara, Seria Didactica, Alba Iulia, 2013;
4.Popa, M., Merceologia mărfurilor alimentare, Seria Didactica, Univ. „1 Decembrie 1918", Alba Iulia, 2005.
5.Popa, M., Merceologia Mărfurilor Alimentare – Îndrumător de lucrări practice, Seria Didactica, Univ. „1 Decembrie 1918", Alba Iulia, 2000
6.Popa M., Calitate si siguranta alimentara, Editura Casa Cartii de Ştiinţa, Cluj Napoca , 2005
7.Achim, M.I., Bazele merceologiei, Seria Didactica, Univ. "1 Decembrie 1918." Alba Iulia, 2000
8. Popa,M, Bazele merceologiei- Îndrumător de laborator, Seria Didactica, Univ. "1 Decembrie 1918." Alba Iulia 2002

9. **Corroboration of course contents with the expectations of the epistemic community's significant representatives, professional associations and employers in the field of the academic programme**

The elaboration of the analytical program was achieved by consulting and collaborating with specialists in the field, merchandisers from some partner organizations, as well as from the Veterinary Sanitary and Food Safety Directorate. In the discussions related to the elaboration of the curriculum also participated teachers from other departments of the UAB, or from other institutions of higher education. The meeting aimed to identify the needs and expectations of employers in the field and to coordinate with other similar programs within other higher education institutions.

10. Assessment

Activity	10.1 Evaluation criteria	10.2 Evaluation methods	10.3 Percentage of final grade
10.4 Course	***Final evaluation***	*Written examination*	70%
10.5 Laboratory	*Continuous assessment / final evaluation*	*Practical testing: principles, methodology, applications Development / Project Presentation*	30%
10.6 Minimum standard of performance: obtaining minimum grade 5			
Making an analysis / Prepare an action plan functional analysis / Data interpretation			

Fill in date
16.09.2024

Course leader signature
Associate Lecturer PhD. Glevitzky Mirel

Seminar tutor signature
Lecturer PhD. Bostan Roxana

Approval date in department
16.09.2024

Department director's signature,
Assoc. Prof. PhD. Maican Silvia