

SYLLABUS
Food and Non-food Commodities science and consumer safety
2019-2020

1. Data about the program

1.1. Educational institution	„1 Decembrie 1918” University
1.2. Faculty	Faculty of Economics
1.3. Department	Business Administration and Marketing
1.4. Field of study	Business Administration
1.5. Study cycle	Undergraduate
1.6. Academic programme / Qualification	Business Administration/ 242102 Process improvement specialist, 242104 Process manager, 242110 Economic performance planning, control and reporting specialist

2. Data about discipline

2.1. Discipline name	<i>Food and Non-food Commodities science and consumer safety</i>		2.2. Discipline code	AA 229			
2.3. Holder of the course	Prof.univ. dr. POPA MARIA						
2.4. Holder of the seminar	Lect .Dr. BOSTAN ROXANA						
2.5. Year of study	II	2.6. Semester	II	2.7. Evaluation type (E/C/VP)	E	2.8. Discipline regime (O - mandatory Op - optional, F - optional)	O

3. The estimated total of time

3.1. Number of hours per week	4	in which: 3.2. course	2	3.3. seminar/laboratory	2
3.4. Total hours from the educational plan	56	in which: 3.5. course	28	3.6. seminar/laboratory	28
Distribution of the time fund					hours
Study after manually course support, bibliography and notes					26
Additional documentation at the library, specialized electronic platforms and in the field					15
Training seminars / labs, homework, essays, portfolios and essays					30
Tutorship					-
Examinations					4
Other activities					-
3.7 Total hours of individual study	75				
3.8 Total hours from the educational plan	56				
3.9 Total hours per semester	131				
3.10 Numbers of credits	4				

4. Preconditions (where applicable)

4.1. of curriculum	<i>Disciplines covered in previous semesters, eg</i> Fundamentals of commodities
4.2. of competences	<i>Skills offered by the disciplines listed above, ex .:</i>

	C1. Knowledge, understanding concepts, theories and methods of the <i>Fundamentals of commodities</i> ;
--	---

5. Conditions (where applicable)

5.1. to conduct the course	<i>The room with videoprojector/board...</i>
5.2. to conduct the seminar/laboratory	<i>Laboratory equipped with specific performance laboratory, equipment, reagents, foods for analysis</i>

6. Specific skills acquired

Professional Skills	C5.1. Description of concepts, theories and methodologies C 5.2. Explanation and interpretation of quantitative and qualitative information C5.3. Application of appropriate tools for data analysis
Transversal skills	Applying the principles, norms and values of professional ethics in their work strategy rigorous, efficient and responsible Solving in real time under qualified assistance of a real problem / hypothetical in the workplace

7. Discipline objectives (based on the specific skills accumulated grill)

7.1 The general objective of the discipline	Developing the capacity for knowledge and understanding of basic concepts related to food and non-food goods
7.2 Specific objectives	<ul style="list-style-type: none"> - Study of the main concepts on goods throughout their trajectory, from design, production, circulation, consumption and post-consumption, taking into account even before and postexistential 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 physico-chemical 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 in 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. Content

8.1 Course	Teaching methods	Observations
1 THE OBJECT OF STUDY AND THE IMPORTANCE OF THE DISCIPLINE Definitions. Security of goods. The quality characteristics of the goods	<i>Lecture, video media, examples, discussions</i>	2 hours
2. CHEMICAL COMPOSITION OF GOODS The substances present in food. Natural substance. Added substances (food additives), Contaminants.	<i>Lecture, video media, examples, discussions</i>	2 hours
3. THE ROLE OF NATURAL SUBSTANCES IN THE CONSUMER ORGANISM The plastic role. The energy role. The biocatalytic role	<i>Lecture, video media, examples, discussions</i>	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	<i>Lecture, video media, examples, discussions</i>	2 hours
5. CARBOHYDRATES AND LIPIDS IN FOODSTUFFS Definition. Classification. Glucose. Fructose. Lactose, Maltose. Sucrose. Starch. Cellulose. Saturated fats and unsaturated fats.	<i>Lecture, video media, examples, discussions</i>	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	<i>Lecture, video media, examples, discussions</i>	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	<i>Lecture, video media, examples, discussions</i>	2 hours
8. THE CONTAMINANT SUBSTANCE Definition. Classification. Causes of contamination. Physical contamination. Chemical contamination. Microbiological contamination. Food intoxications	<i>Lecture, video media, examples, discussions</i>	2 hours

9. THE ROLE OF MICROORGANISMS IN FOOD The influence of microorganisms on quality characteristics; Bacteria. Molds. Yeast.	<i>Lecture, video media, examples, discussions</i>	2 hours
10. CALORICAL VALUE AND FOODSTUFFS Energy balance, protein balance, mineral balance, vitamin balance	<i>Lecture, video media, examples, discussions</i>	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	<i>Lecture, video media, examples, discussions</i>	2 hours
12. PRESERVATIONS OF GOODS The biological principles underlying conservation; Conservation methods and techniques	<i>Lecture, video media, examples, discussions</i>	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	<i>Lecture, video media, examples, discussions</i>	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	<i>Lecture, video media, examples, discussions</i>	2 hours

8.2 Bibliography

1. Popa M., Dragan M., *Science of Commodities- 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 Știință, 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;		
Seminar - Laboratory	Teaching methods	Observations
1. Regulation Laboratory of Science of commodities. Safety rules. Operations and utensils used in the Laboratory of Commodities	<i>Lecture, discussion, exemplification</i>	<i>2 hours</i>
2. Sampling and preparation of samples in order to determine quality characteristics. Conservation and preservation of evidence.	<i>Lecture, discussion, exemplification</i>	<i>2 hours</i>
3. Merchandising expertise. Specific methods for assessing the quality characteristics	<i>Lecture, discussion, exemplification</i>	<i>2 hours</i>
4. Psychosensorial and physico-chemical analysis of grain	<i>Experiment, exemplification</i>	<i>2 hours</i>
5. Psychosensorial and physico-chemical analysis of grain mill products.	<i>Experiment, exemplification</i>	<i>2 hours</i>
6. Psychosensorial and physico-chemical analysis of bread	<i>Experiment, exemplification</i>	<i>2 hours</i>
7. Psychosensorial and physico-chemical analysis of pasta and eggs	<i>Experiment, exemplification</i>	<i>2 hours</i>
8. Psychosensorial and physico-chemical analysis of eggs	<i>Experiment, exemplification</i>	<i>2 hours</i>
9. Psychosensorial and physico-chemical analysis of milk and milk products	<i>Experiment, exemplification</i>	<i>2 hours</i>
10. Psychosensorial and physico-chemical analysis of sugar and sugar products	<i>Experiment, exemplification</i>	<i>2 hours</i>
11. Psychosensorial and physico-chemical analysis of fruits and fruit products	<i>Experiment, exemplification</i>	<i>2 hours</i>
12. Presentation of semester projects by work teams	<i>Lecture, discussion</i>	<i>2 hours</i>
13. Recovery laboratory work	<i>Experiment, exemplification</i>	<i>2 hours</i>
14. Assessment of knowledge	-	<i>2 hours</i>
Bibliography		
1. Popa, M., <i>The safety of food products</i> , Seria Didactica, 2013, Alba Iulia;		
2. Popa M., Dragan M., <i>Science of Comodities- The safety of food products</i> , 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 Știința, 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. Corroborating discipline content with the expectations of epistemic community representatives professional associations and employers representatives in the field related to the program

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 Type	10.1 Evaluation criteria	10.2 Evaluation methods	10.3 Percentage of final grade
10.4 Course	Final evaluation	<i>Written examination</i>	70%
	-	-	-
10.5 Laboratory	<i>Continuous assessment / final evaluation</i>	<i>Practical testing: principles, methodology, applications Development / Project Presentation</i>	30%
	-	-	-

10.6 Minimum standard of performance: obtaining the minimum grade 5

Making an analysis / Prepare an action plan functional analysis / Data interpretation

Date of completion Signature of the holder of the course Signature of the holder of the seminar

01.09.2019

Prof.Dr. POPA MARIA

Lect. Univ. dr. BOSTAN ROXANA




Date of approval in the Department

Signature of Department Director
Conf.dr. Gavrilă Paven Ionela

04.09.2019

