

## **FOOD HYGIENE AND TECHNOLOGY 2**

### STRUCTURE

<b>Study program</b>	<b>Veterinary Medicine</b>
<b>Year of study</b>	V
<b>Semester</b>	IX
<b>Type of discipline</b>	DS-DOB
<b>Total number of hours / week</b>	Course – 2 hours; PW - 2 hours
<b>Total number of hours according to curriculum</b>	Course – 28 hours; PW - 28 hours
<b>ECTS</b>	3

### DISCIPLINE OBJECTIVES

General objective of the discipline	Acquiring knowledge on the technology of obtaining and processing food of animal origin.
Specific objectives	<p>At the end of the discipline the student:</p> <ul style="list-style-type: none"> <li>▪ Identifies technological steps for obtaining food products, adapts theoretical knowledge to reality in the field and identifies possible deviations from the legal requirements that define food processing technology.</li> <li>▪ Classifies dairy products and knows the technological differences in obtaining them.</li> <li>▪ Understands the operation of the equipment and machines used in obtaining the main groups of food products and their impact on food safety risks.</li> </ul>

### DISCIPLINE CONTENT

COURSE	Nr. ore
Chapter 1. Preservation and packaging of food products.	
1.1 Preservation methods	
1.2 Packagies used in the food industry Packaging of food products. Introductory notes. Importance and objectives of packaging. General conditions for packaging. Packaging classification. Packaging methods. Physico-chemical properties of packaging materials	2 (C1)
1.3. Description of packaging materials.	
1.4. Packaging materials: glass	2 (C2)
1.5. Packaging materials: plastic materials	
1.6. Cellulosic packaging materials	2 (C3)
1.7. Metal packaging materials.	
1.8. Food packaging techniques	2 (C4)
1.9. Modern packaging technologies - "smart" packaging.	
1.10. Food labelling	2 (C5)
1.11. The refrigeration chain. Cold preservation technology	2 (C6)
1.12. New/ Modern food preservation methods.	2 (C7)
Chapter 2. The milk processing unit's infrastructure.	
Biovigilance and bioterrorism measures applicable in the diary industry	2 (C8)
2.1. Microbiology of lactic acid bacteria. General aspects. Lactic bacteria - features. Classification of lactic bacteria.	2 (C9)
2.2. Lactic fermentation.	2 (C10)
2.3. Preparation of lactic cultures. Cultivation features for kefir. Defects of lactic bacteria cultures.	2 (C11)

Chapter 4. Hygiene and technology of collecting, sorting and packing eggs and egg products.	2 (C12)
Chapter 5. Hygiene and beekeeping technology. Honey (general aspects, classification, organoleptic characteristics, physical properties, chemical composition). Pollen. Wax. Propolis. Bee bread.	4 (C13-C14)

PRACTICAL WORK PW/S/P	Nr. ore
1. Work field protection. Basic notions of dairy technology. Milk processing technology. Milk treatment and filtration.	2
2. Milk processing technology - milk cooling and storage	2
3. Milk processing technology - milk collection and transportation.	2
4. Milk processing technology - drinking milk	2
5. Milk processing technology – UHT milk	2
6. Sour cream technology. Case studies	2
7. Fermented milk products technology (yoghurt).	2
8. Sour milk processing technology and acidophilic milk processing technology	2
9. Kefir processing technology.	2
10. Processing technology – fresh cheses.	2
11. Soft cheese technology.	2
12. Semi-firm cheeses technology. Firm cheeses technology.	2
13. Powder milk technology. Butter technology.	2
14. Honey technological flows.	2

#### BIBLIOGRAPHY

1. Course and practical work notes 2025-2026.
2. \*\* Regulation (EC) no. 178/2002 of the European Parliament and of the Council of January 28, 2002 establishing the principles and general requirements of food legislation, establishing the European Food Safety Authority and establishing procedures in the field of food safety.
3. \*\*\* Regulation (EC) no. 852/2004 of the European Parliament and of the Council of April 29, 2004, regarding the hygiene of food products.
4. \*\*\* Regulation (EC) no. 853/2004 of the European Parliament and of the Council of April 29, 2004 establishing specific hygiene rules that apply to foods of animal origin (Official Journal of the European Union L 139 of April 30, 2004).
5. \*\*\* Regulation (EU) 625/2017 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 15 March 2017 on official controls and other official activities carried out to ensure the application of food and feed legislation, animal health and welfare rules, plant health and plant protection products.

#### EVALUATION

Type of activity	Evaluation criteria	Method of evaluation	Percentage of final grade %
<b>Course</b>	Acquisition of theoretical notions regarding packaging materials and techniques used in food industry units, methods of preserving food of animal origin, preparation of lactic cultures used to obtain dairy products, processing technology of beekeeping products, sorting, marking and packaging of eggs	Colloquium in the form of a multiple-choice written test with 35 questions with 5 possible answers, one of which is correct and marked with 0.2 points.	70%
<b>PW</b>	Acquisition of practical notions in the field.  Preparation and presentation of worksheets.	Questions in the form of a multiple-choice test.  Assessment worksheets.	30%
<b>Other activities</b>			

**Course teaching staff:** Teaching Assistant Oana Diana MIHAI, PhD

**Practical work teaching staff PW:** Teaching Assistant Oana Diana MIHAI, PhD