

# FOOD HYGIENE AND TECHNOLOGY (4<sup>rd</sup> year)

**Number of credits** 3

## Structure of the subject (weekly assigned hours)

Semester	Course	Seminar	Practical session	Project
VIII	2	-	2	-

## Subject status

Compulsory

## Person in charge

Borş Alina DVM PhD - Lecturer

## Subject objectives (lectures and applications)

- to understand the basic dairy processing plant operations;
- to describe processing steps of main dairy products;
- to understand the role and mechanism of different preservation methods used in dairy products;
- to evaluate critically specific problems in dairy processing;
- to understand the role of food hygiene and sanitation procedures in assurance of food safety.

## Subject content (Syllabus)

Course (chapters/sub-chapters)	No of hours
<b>2nd Semester</b>	
Milk introduction: production, consumption and trends	2
Milk biosynthesis, structure and composition	2
Milk sensorial and physical properties	2
Milk microbiology	2
General technology of milk processing	4
Specific technology of milk processing	4
Milk and dairy packaging	2
Hygiene and good manufacturing practice in milk processing	2
HACCP in dairy products	2
Eggs: structure and composition, egg microbiology, egg products technology	2
Honey: composition, sensory and physicochemical characteristics; processing of honey	2
Colloquium	2

Practical Sessions	No of hours
<b>2nd Semester</b>	
Raw milk collecting and reception in dairy plants	2
Dairy plants construction and design	2
Raw milk evaluation	4
Technology of fluid milk products	2
Technology of fermented milk products	2
Technology of milk fat products	4
Technology of dehydrated milk products	2
Technology of cheese	2
Technology of ice cream	2
Technology of eggs and honey	2
Technology of dairy by-products	2
Practical test	2

## Bibliography

1. Bylund G., (2003) - Dairy Processing Handbook, Tetra Pak Processing Systems AB, Sweden.
2. Fernandez R., (2008) - Microbiology Handbook Dairy Products, Leatherhead Publishing, UK.
3. Marth E.H., Steele J.L, (2001) - Applied Dairy Microbiology, Marcel Dekker, Inc., New-York, USA.
4. Motarjemi Y., Lelieveld H., 2014 – Food Safety Management. A Practical Guide for the Food Industry, Elsevier, UK.
5. Muehlhoff E., Bennett A., McMahon D., (2013) – Milk and Dairy Products in human nutrition, FAO, Italy.
6. Tamime A. Y., (2009) – Milk processing and Quality Management, Wiley-Blackwell, UK.
7. Walstra P., Wouters J.T.M., Guerts T.J., (2006) – Dairy Science and Technology, Second Edition, Taylor & Francis.

## Subject content knowledge (Final evaluation)

Evaluation form	Evaluation modalities	Percentage from the final grade
Colloquium	Written test	60 %
Assessment of the activity throughout the year	Practical test	40 %

## Contact person

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