

SCHOOL	ENVIRONMENT		
ACADEMIC UNIT	FOOD SCIENCE AND TECHNOLOGY		
LEVEL OF STUDIES	UNDREGRADUATE		
COURSE CODE	FST503	SEMESTER	5
COURSE TITLE	MILK AND MILK PRODUCTS SCIENCE AND TECHNOLOGY		
INDEPENDENT TEACHING ACTIVITIES <i>if credits are awarded for separate components of the course, e.g. lectures, laboratory exercises, etc. If the credits are awarded for the whole of the course, give the weekly teaching hours and the total credits</i>		WEEKLY TEACHING HOURS	CREDITS
Lectures		2	
Laboratory exercise		2	
Total		4	6
<i>Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail at (d).</i>			
COURSE TYPE <i>general background, special background, specialised general knowledge, skills development</i>	Specialized general knowledge		
PREREQUISITE COURSES:	-		
LANGUAGE OF INSTRUCTION and EXAMINATIONS:	Greek		
IS THE COURSE OFFERED TO ERASMUS STUDENTS			
COURSE WEBSITE (URL)			

LEARNING OUTCOMES

Learning outcomes

The course learning outcomes, specific knowledge, skills and competences of an appropriate level, which the students will acquire with the successful completion of the course are described.

Consult Appendix A

- Description of the level of learning outcomes for each qualifications cycle, according to the Qualifications Framework of the European Higher Education Area
- Descriptors for Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong Learning and Appendix B
- Guidelines for writing Learning Outcomes

Upon successful completion of the course the student will be able to:

- Know and describe the composition of milk and the changes that occur in milk and its components during processing
- Determine the factors that affect milk and dairy products during the production stage
- Outline the physical properties of milk
- Understand the process of converting milk into its various products.
- Perform the necessary chemical and other analyzes on the raw and auxiliary materials and on the final products.
- Learn hygiene issues, nutritional value, packaging, safety and quality assurance.
- Acquire knowledge for the production and evaluation of various dairy products.

General Competences

Taking into consideration the general competences that the degree-holder must acquire (as these appear in the Diploma Supplement and appear below), at which of the following does the course aim?

Search for, analysis and synthesis of data and information, with the use of the necessary technology	Project planning and management Respect for difference and multiculturalism Respect for the natural environment
Adapting to new situations	Showing social, professional and ethical responsibility and sensitivity to gender issues
Decision-making	Criticism and self-criticism
Working independently	Production of free, creative and inductive thinking
Team work Others...
Working in an international environment Working in an interdisciplinary environment Production of new research ideas

1. Adapting to new situations
2. Decision-making
3. Working independently
4. Team work
5. Criticism and self-criticism
6. Production of free, creative and inductive thinking
7. Search for, analysis and synthesis of data and information, with the use of the necessary technology

(1) SYLLABUS

SYLLABUS

Content of theoretical course:

Structure - milk composition, production and utilization of milk, Factors that affect the composition and amount of milk, Antibiotics – Mastitis, Milk ingredients, Physical properties of milk (Organoleptic characteristics, acidity, pH, specific gravity, freezing point, redox potential, etc.), Nutritional value of milk, Milk treatments, Heat Treatments of milk, Production of milk on the farm, quality control of milk, Cheese, Yogurt, Sour milk, Kefir, Butter, Cream, Ice cream

Content of laboratory course:

Physicochemical characteristics of raw milk (pH, titrated acidity, indirect methods for assessing acidity, stability of fresh milk, specific gravity), Identification of main milk components, Checking the quality of raw milk, Check on standardization problems, Control of the degree of heat treatment of milk, Mechanism of coagulation of milk, Sensory evaluation of dairy products, Production of cheese, yogurt, butter, ice cream.

SYLLABUS

TEACHING and LEARNING METHODS - EVALUATION

Performance Statistics of the last 2years			
Grade (descending order)	absolute frequency	relative frequency %	sum of success rates per class
SCIENCE AND TECHNOLOGY OF MILK & THEIR PRODUCTS			
10	9	16%	16%
9	18	32%	48%
8	17	30%	79%
7	6	11%	89%
6	6	11%	100%
	56	100%	