# **COURSE OUTLINE**

### 1. GENERAL

SCHOOL	School of Applied Economics and Social Sciences				
ACADEMIC UNIT	Department of Agricultural Economics and Rural Development-MBA				
	Food & Agribusiness				
LEVEL OF STUDIES	Postgraduate				
COURSE CODE	410005	SEMESTER 1 <sup>st</sup>			
COURSE TITLE	Food Technology				
INDEPENDENT TEACHIN if credits are awarded for separate components of exercises, etc. If the credits are awarded for the teaching hours and the t	PENDENT TEACHING ACTIVITIES separate components of the course, e.g. lectures, laboratory ts are awarded for the whole of the course, give the weekly eaching hours and the total credits			RS	CREDITS
		Lectures	3		4
Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail at (d).					
<b>COURSE TYPE</b> general background, special background, specialised general knowledge, skills development	Special background				
PREREQUISITE COURSES:	Food microbiology, Food chemistry, Food Engineering				
LANGUAGE OF INSTRUCTION and EXAMINATIONS:	Greek				
IS THE COURSE OFFERED TO ERASMUS STUDENTS	No				
COURSE WEBSITE (URL)	http://mba.aua.gr/en/category/education/courses/				

### 2. 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

It is an introductory course in selected subjects of food science and technology providing basic knowledge of food chemistry, food microbiology, food engineering, food processing and preservation. In addition, the student will be able to apprehend various issues related to food safety and quality. Finally, the aim of the course is to provide information on cutting-edge technologies in food science through the application of Information and Communication Technologies (ICTs) as well as introductory information on Safety and Quality Management Systems.

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

- Understand the basic vocabulary and technical terminology of food science
- o Comprehend the basic concepts of food microbiology and hygiene
- o Understand the use of basic tools and techniques for assessing food quality and safety
- Assess food spoilage and implement control measures
- o Comprehend the basic chemical characteristics of food
- Know the basic processes implicated in food processing and preservation

#### **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	Project planning and management
use of the necessary technology	Respect for difference and multiculturalism
Adapting to new situations	Respect for the natural environment
Decision-making	Showing social, professional and ethical responsibility and sensitivity to gender
Working independently	issues
Team work	Criticism and self-criticism

 Working in an international environment
 Production of free, creative and inductive thinking

 Working in an interdisciplinary environment
 ......

 Production of new research ideas
 ......

 O
 Working independently

 O
 Decision making

 O
 Team work

 O
 Adapting to new situations

- Working in an interdisciplinary environment
- o Working in an international environment
- o Search for, analysis and synthesis of data and information, with the use of the necessary technology
- Production of free, creative and inductive thinking

### 3. SYLLABUS

- Introduction-Definitions-Terminology of Food Science and Technology
- Food Chemistry Food Constituents
- o Microbiological Quality and Safety of Foods
- Principles of Food Hygiene
- Principles of Food Engineering
- o Principles and Methods of Food Processing
- Principles and Methods of Food Preservation
- State-of-the-Art Subjects in Food Science and Technology
- Basic Principles in Food Safety and Quality Management Systems

## 4. TEACHING and LEARNING METHODS - EVALUATION

DELIVERY	Face-to-face				
Face-to-jace, Distance learning, etc.					
USE OF INFORMATION AND	Powerpoint slides. Student communication via E-mail. Dissemination				
COMMUNICATIONS TECHNOLOGY	of training material through E-class.				
Use of ICT in teaching, laboratory education,					
	A		1		
The memory and methods of teaching and described in	Activity	Semester workload	-		
detail	Lectures	50			
Lectures, seminars, laboratory practice, fieldwork, study and analysis of bibliography, tutorials, placements, clinical practice, art workshop, interactive teaching, educational visits, project, essay writing, artistic creativity, etc.	Project	30	]		
	Student's study 20				
The student's study hours for each learning activity are					
given as well as the hours of non-directed study according					
to the principles of the ECTS	Course total	100			
STUDENT PERFORMANCE EVALUATION	<ul> <li>Written examination</li> </ul>	n (60%)			
Description of the evaluation procedure	• Project (20%)				
Language of evaluation, methods of evaluation, summative or conclusive, multiple choice questionnaires, short-	<ul> <li>Oral examination during project presentation (20%)</li> </ul>				
	Evaluation criteria are accessible to students through the E-class				
answer questions, open-ended questions, problem solving,					
written work, essay/report, oral examination, public presentation laboratory work clinical examination of					
patient, art interpretation, other					
Specifically-defined evaluation criteria are given, and if and where they are accessible to students.					

## 5. ATTACHED BIBLIOGRAPHY

- Suggested bibliography:

- Adams, M.R., Moss, M.O., McClure, P., 2016. Food Microbiology, 4th Edition, Royal Society of Chemistry, Cambridge, UK.
- Fellows, P.J., 2016. Food Processing Technology: Principles and Practice, 4th Edition, Woodhead Publishing, Ltd., Cambridge, UK.
- Αρβανιτογιάννης, Ι.Σ., Στρατάκος, Α.Χ., 2011. Τεχνολογίες Επεξεργασίας και Συσκευασίας Τροφίμων.
   Εκδόσεις University Studio Press, Θεσσαλονίκη.

 Γιαβάσης, Ι., Μποζιάρης, Ι., Γκιαούρης, Ε., 2021. Μικροβιολογία Τροφίμων. 1<sup>η</sup> Ελληνική Έκδοση, Εκδόσεις Δίσιγμα, Αθήνα.

- Related academic journals:

Journal of Food Science, Journal of Food Engineering, Food Chemistry, Food Microbiology, International Journal of Food Microbiology, Journal of Food Protection, International Journal of Food Science and Technology