COURSE OUTLINE

1. GENERAL

SCHOOL	APPLIED ECONOMIC AND SOCIAL SCIENCES		
ACADEMIC UNIT	AGRIBUSINESS AND SUPPLY CHAIN MANAGEMENT		
LEVEL OF STUDIES	*Undergraduate*		
COURSE CODE	**5605**	**SEMESTER**	3rd
COURSE TITLE	Introduction to Food Science and Technology		

INDEPENDENT TEACHING ACTIVITIES	**WEEKLY TEACHING HOURS**	**CREDITS**
Lectures	3	4

COURSE TYPE	General Background – Skills Development
PREREQUISITE COURSES	NO
LANGUAGE OF INSTRUCTION and EXAMINATIONS	Greek
IS THE COURSE OFFERED for ERASMUS STUDENTS?	YES (in English)
COURSE WEBSITE (URL)	https://oeclass.aua.gr/eclass/

2. LEARNING OUTCOMES

Learning Outcomes

The aim of the course is:

The course is the basic introductory course of food science and technology Introduces:
• the basic and fundamental principles of food science and the underlying technologies associated with the production of safe and nutritious, fresh and processed food for humans.
• the main technologies of food processing and preservation such as dehydration (drying), refrigeration, freezing, heat treatment (canning).

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

Will have knowledge and understanding of key issues and the latest developments in Food Science and Technology.
• Has acquired the ability to understand complex concepts and to be informed about developments in the field of Food Science and Nutrition.

• Will be able to formulate and express views on Food Science and Nutrition issues to multiple recipients such as the scientific community of other fields of knowledge, the Food Industry, especially professionals in the professional field, society as a whole.

- Has acquired communication skills in Food and Nutrition.

The knowledge, scientific abilities and skills that the student will have acquired with this introductory course can be used (if they wish to be led) in the next course of study in it or in related scientific subjects.

General Competences

Adapting to new situations

Decision-making

Working independently

Teamwork

Working in an international environment

Working in an interdisciplinary environment

Production of new research ideas Teamwork

Project planning and management

Respect for difference and multiculturalism

Respect for the natural environment

Showing social, professional, and ethical responsibility and sensitivity to gender issues

Criticism and self-criticism

Production of free, creative and inductive thinking

3. SYLLABUS

1. Introduction - The nature of food - Main chemical components
2. Food quality and safety
3. Food preservation methods
4. Special part - Food processing
5. Fruits - Vegetables
6. Cereals, Potatoes, Sugar
7. Wine
8. Olive Products: - Table (Edible) Olive - Olive Oil
9. Seed oils - Fats
10. Milk and dairy products
11. Meat and Poultry
12. Catch

13. Future trends -Special issues

A combination of teaching and learning methods will be used, aiming at the active participation of the students and the practical application of the thematic units under examination; there will also be lectures using audiovisual media, discussions, and analyses of case studies on real business issues, experiential (group) activities, as well as projections of relevant videos. The students will also undertake an individual or group project. Furthermore, articles, audiovisual lecture materials, web links/addresses, useful information, case studies and exercises for further practice are posted in digital form on the AUA Open e-Class platform.

4. TEACHING and LEARNING METHODS - EVALUATION

<table>
<tr><td>DELIVERY</td><td>Face -to-face, Distance learning</td></tr>
<tr><td>USE OF INFORMATION and COMMUNICATIONS TECHNOLOGY</td><td>• Support of the learning process through the University's AUA Open eClass platform (integrated e-Course Management System)
• Support of lectures using presentation software
• Use of audiovisual material
• Use of web applications

Communication with students: face-to-face at office hours, email, eclass platform</td></tr>
<tr><td>TEACHING METHODS</td><td>
<table>
<tr><th>Activity</th><th>Workload</th></tr>
<tr><td>Lectures (direct)</td><td>39</td></tr>
<tr><td>Laboratory Practice</td><td>26</td></tr>
<tr><td>Essay Writing</td><td>20</td></tr>
<tr><td>Autonomous study</td><td>36</td></tr>
<tr><td>Advisory Support</td><td>0,5</td></tr>
<tr><td>Examination</td><td>2</td></tr>
<tr><td>Laboratory Examination</td><td>2</td></tr>
<tr><td>Total
(About 25 hours of study per ECTS)</td><td>125,5</td></tr>
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</td></tr>
<tr><td>STUDENT PERFORMANCE EVALUATION</td><td>The evaluation process is in the language that the course is taught (Greek or English) and consists of:
i. Compulsory written final examination at the end of the semester (weighting factor 70% at least) which may includes:
● Multiple choice questionnaires
● Open-ended questions
● Problem solving</td></tr>
</table>

	● Oral examination **Evaluation criteria:** correctness, completeness, clarity ii. Optional written exam or essay during the semester (weighting factor 30%) which may includes: ● Multiple choice questionnaires ● Open-ended questions ● Problem solving ● Essay/report ● Oral examination **Evaluation criteria:** correctness, completeness, clarity **Special learning difficulties:** Students with **special learning difficulties** in writing and reading (as they are certified and characterized by a competent body) are examined based on the procedure provided by the Department. **Specifically-Defined Criteria:** The evaluation criteria are made known during the first lesson and are clearly stated on the course website and the AUA Open e-class platform. The answers to the exam questions are posted on the AUA Open e-Class platform after the exam. The students are allowed to see their exam paper after its grading (during the announced office hours) and receive explanations about the grade they received.

5. ATTACHED BIBLIOGRAPHY

Suggested Bibliography in Greek Language:

- ΧΗΜΕΙΑ ΤΡΟΦΙΜΩΝ, BELITZ D.-H., GROSCH W., SCHIEBERLE P. Εκδότης ΤΖΙΟΛΑΣ ISBN13 9789604183678
- ΑΡΧΕΣ ΤΕΧΝΟΛΟΓΙΑΣ ΤΡΟΦΙΜΩΝ, ΚΙΟΣΕΟΓΛΟΥ ΒΑΣΙΛΕΙΟΣ, ΜΠΛΕΚΑΣ ΓΕΩΡΓΙΟΣ, Εκδότης ΓΑΡΤΑΓΑΝΗΣ ISBN13 9789609828857

- Τεχνολογίες επεξεργασίας και συσκευασίας τροφίμων Αρβανιτογιάννης Ιωάννης Σ. , Στρατάκος Αλέξανδρος Χ. Εκδότης: University Studio Press, ISBN: 9789601220161

Suggested Bibliography in English Language:

Related academic Journals:

- Journal of Agricultural and Food Chemistry,
- Journal of Food Science and Technology,
- Agricultural and Environmental Chemistry,
- International Journal of Agricultural and Food Research (IJAFR)
- Journal of Food Processing & Technology

Instructor's Notes