### **COURSE OUTLINE**

## (1) GENERAL

SCHOOL	School of Applied Economics & Social Sciences			
ACADEMIC UNIT	Agricultural Economics & Rural Development			
LEVEL OF STUDIES	Undergraduate			
COURSE CODE	271 SEMESTER 7th			
COURSE TITLE	PRINCIPLES OF FOOD INDUSTRY			
INDEPENDENT TEACHI	NG ACTIVITIES			
if credits are awarded for separate co				
lectures, laboratory exercises, etc. If				CREDITS
the whole of the course, give the wee		ours and the	HOURS	
Lectu	res and Prac	tice Exercises	3	5
Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail at (d).				
COURSE TYPE				•
general background,	Background and General Knowledge			
special background, specialised	_			
general knowledge, skills				
development				
PREREQUISITE COURSES:				
LANGUAGE OF INSTRUCTION	Greek			
and EXAMINATIONS:				
IS THE COURSE OFFERED TO	Yes (in English)			
ERASMUS STUDENTS	165 (III Eligibil)			
COURSE WEBSITE (URL)				

#### (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

This course is the basic introductory course in food science and technology. It 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 food processing and preservation technologies such as dehydration (drying), cooling, freezing, heat treatment (canning).

Upon successful completion of the course, the student:

- Will have knowledge and understanding of the basic issues as well as the latest developments in Food Science and Technology.
- Will have acquired the ability to understand complex concepts and to informed about developments in the field of Food Science and Nutrition.
- Will be able to formulate and express an opinion on issues of Food Science and Nutrition to multiple recipients such as the scientific audience of other fields of knowledge, the Food Industry, especially audiences of the professional area and the society as a whole.
- Will have acquired Food and Nutrition communication skills.

The knowledge, scientific abilities and skills that the student will have acquired with this introductory course will be able to be used (if they wish to be guided) in a subsequent cycle of studies in this or related scientific subjects.

#### **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

Adapting to new situations

Decision-making

Working independently

Team work

Working in an international environment Working in an interdisciplinary environment 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

..... Others...

#### Production of new research ideas

 Search, analysis and synthesis of data and information, using the necessary technologies.

.....

- Adaptation to new situations.
- Autonomous work.
- Work in an interdisciplinary environment.
- Generating new research ideas.
- Respect for diversity and multiculturalism.
- Respect for the natural environment.
- Demonstration of social and moral responsibility and sensitivity to gender issues.
- Exercise criticism.
- Promotion of free, creative and inductive thinking.

#### (3) SYLLABUS

#### A. General part

- 1. Introduction
- 2. The nature of food Principal chemical constituents
- 3. Food quality and safety
- 4. Food preservation methods

#### B. Special part - Food processing

- 5. Fruits Vegetables
- 6. Cereals
- 7. Potato
- 8. Sugar
- 9. Wine
- 10. Olive Products: Table (Edible) Olive Olive Oil
- 11. Seed oils Fats
- 12. Milk and milk products
- 13. Meat and Poultry
- 14. Catches

#### **TEACHING and LEARNING METHODS - EVALUATION**

<b>DELIVERY</b> Face-to-face, Distance learning, etc.	Lectures in the amphitheate Video, slides)	er using teaching aids (ppt,
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY Use of ICT in teaching, laboratory education, communication with students	Use Powerpoint slides. Communication with students via e-mail, e-class and e-student platforms. Learning process support through access to e-class, online databases, etc.	
TEACHING METHODS  The manner and methods of teaching are described in detail.  Lectures, seminars, laboratory practice,	Activity Lectures Bibliographic research	Semester workload 39 40

fieldwork, study and analysis of bibliography, tutorials, placements, clinical practice, art workshop, interactive teaching, educational visits, project, essay writing, artistic creativity, etc.

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

papers (individual or	
group) in a case study. A	
total of 7 tasks	
Research bibliography	17
with thesis presentation	
Weekly Study Hours	26
Written final exam	3
Course Total (25	
workload hours per	125
credit unit)	

# STUDENT PERFORMANCE EVALUATION

Description of the evaluation procedure

Language of evaluation, methods of evaluation, summative or conclusive, multiple choice questionnaires, shortanswer 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.

Examination language Greek (and English for ERASMUS Students) Evaluation of the student:

**A)** Each student undertakes to prepare 7 bibliographic research papers on the subjects of the course during the semester. These assignments give 20% of the final grade.

At a fixed time at the end of the semester, the student develops a topic with sufficient bibliography, which he presents in PowerPoint to all his colleagues, under the supervision of the responsible professor. The writing and presentation of this paper gives the student 40% of the final grade of the course.

B) Written final exam including:
Multiple choice questions
Short answer questions
Benchmarking theory elements
It gives the student 40% of the final grade of the course.

#### (4) ATTACHED BIBLIOGRAPHY

- Food Chemistry, BELITZ D.-H., GROSCH W., SCHIEBERLE P. Publisher GIOLAS ISBN13 9789604183678
- Principles of Food Technology, KIOSEOGLOU VASILIOS, BLEKAS GEORGIOS, Publisher GARTAGANIS ISBN13 9789609828857
- Food processing and packaging technologies, Arvanitogiannis Ioannis S., Stratakos Alexandros X., Publisher: University Studio Press, ISBN: 9789601220161 -Related scientific 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