COURSE OUTLINE

1.GENERAL

SCHOOL	AGRICULTURAL SCIENCE		
DEPARTMENT	FOOD SCIENCE AND TECNOLOGY		
LEVEL OF COURSE	UNDERGRADUATE		
COURSE CODE	**FST_601**	**SEMESTER OF STUDIES**	6th
COURSE TITLE	TECHNOLOGY & QUALITY CONTROL OF FOOD OF PLANT ORIGIN II		

INDEPENDENT TEACHING ACTIVITIES *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*	**WEEKLY TEACHING HOURS**	**ECTS CREDITS**
Lectures	3	
Exercises	2	
Total	**5**	**5**
Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail at (d).		

COURSE TYPE *general background, special background, specialised general knowledge, skills development*	Compulsory special background
PREREQUISITE COURSES:	No
LANGUAGE OF INSTRUCTION and EXAMINATIONS:	Greek
IS THE COURSE OFFERED TO ERASMUS STUDENTS	No
COURSE WEBPAGE (URL)	https://eclass.upatras.gr/

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*

The main objective of the course is to provide basic knowledge the field of Food Technology of plant origin, which specifically concerns the olive as well as other plant species producing oils and vegetable fats.

At the end of this course the student will be able to:

- possess the basic knowledge in the field of technology and quality control of olive oil and other types of fat
- know the harvesting and processing technology of olive oil and other fats
- to combine the above knowledge to assess the effects of various technologies, individual processes and other parameters in the chemical, physical and

physicochemical characteristics of fats
- to understand and analyze problems related to applications of fats in technologies containing fatty.

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	*Search for, analysis and synthesis of data and information, with the use of the necessary technology*
Adapting to new situations	*Adapting to new situations*
Decision-making	*Decision-making*
Working independently	*Working independently*
Team work	*Team work*
Working in an international environment	*Working in an international environment*
Working in an interdisciplinary environment	*Working in an interdisciplinary environment*
Production of new research ideas	*Production of new research ideas*

- Search for, analysis and synthesis of data and information, with the use of the necessary technology
- Decision-making
- Working independently
- Team work

3. SYLLABUS

1. Olive fruit: composition, biosynthesis, chemical composition, components that contribute to aroma and flavor
2. Olive types and varieties cultivated in Greece
3. Processing of edible olive and post-harvest treatment.
4. World statistics on production, imports, exports and consumption of olive oil and table olives.
5. Olive oil production and processing (storage and packaging).
6. Olive oil composition (quality nutritional-organoleptic characteristics, factors affecting quality).
7. Types of oils and fats.
8. Source and extraction and of fats and oils – quality assurance
9. Quality control – methods for chemical analysis of fats and oils.
10. Products and applications of fats and oils.
11. Margarines, fats and oils for special applications.
12. Emulsifiers derived from lipids and applications.
13. Effect of lipids on health, toxicity and food safety.

4. TEACHING AND LEARNING METHODS - EVALUATION

DELIVERY *Face-to-face, Distance learning, etc.*	Face-to-face
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY *Use of ICT in teaching, laboratory education, communication with students*	Use of Information and Communication Technologies (ICTs) (e.g. powerpoint) in teaching. Communication with students: through e-mail, department's website and platform e-class. The lectures content of the course for each chapter are uploaded on the internet, in the form of a series of .pdf files, where students can freely download them from the platform e-class.upatras.gr
TEACHING METHODS	***Activities*** | ***Work Load per semester***

The manner and methods of teaching are described in detail. *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.* *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*	Lectures (3 hours per week x 13 weeks): 39 Seminars (1 hour per week x 13 weeks): 13 Final examination (3 hours): 3 Non-guided study: 70 ***Total number of hours for the Course (25 hours of work-load per ECTS credit)***: **125**
STUDENT PERFORMANCE EVALUATION *Description of the evaluation procedure* *Language of evaluation, methods of evaluation, summative or conclusive, multiple choice questionnaires, short-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.*	Written examination after the end of the semester (100%) including: • Multiple-choice questions • Solving descriptive statistics problems • Solving probability and probability distributions problems • Solving statistical inference problems • Benchmarking theory elements Grading scale: 1 to 10. Minimum passing grade: 5. Examination time: 3 hours.

5.**ATTACHED BIBLIOGRAPHY**

1. H.D. Belitz, W. Grosch, P. Schieberle Χημεία τροφίμων; επιστημονική επιμέλεια Σ. Ν. Ραφαηλίδης ; μετάφραση Μαρία Δ. Παπαγεωργίου, Άγγελος Ι. Βάρναλης Θεσσαλονίκη: Τζιόλας, 2007.
2. Κυριτσάκης, Α. Κ. Ελαιόλαδο : συμβατικό & βιολογικό, βρώσιμη ελιά, πάστα ελιάς: τεχνολογία, ποιότητα, νοθεία, HACCP, ιχνηλασιμότητα, λειτουργικές ιδιότητες. Θεσσαλονίκη: ΑγροΤύπος, 2007
3. Αλεξάκης Α. Το ελαιόλαδο και η παραγωγή του. Αθήνα : Σιδέρης, Μ., 1998.

Related scientific journals:

1. JAOCS - Journal of American Oil Chemists' Society
2. European Journal of Lipid Science and Technology
3. OCL - Oleagineux Corps Gras Lipides
4. Grasas y Aceites