

## COURSE OUTLINE

### (1) GENERAL

<b>SCHOOL</b>	APPLIED BIOLOGY AND BIOTECHNOLOGY		
<b>DEPARTMENT</b>	BIOTECHNOLOGY		
<b>STUDY LEVEL</b>	BACHELOR OF SCIENCE		
<b>COURSE CODE</b>	<b>3580</b>	<b>SEMESTER</b>	<b>7<sup>th</sup> (Winter)</b>
<b>COURSE TITLE</b>	<b>FOOD QUALITY CONTROL &amp; SENSORY ANALYSIS</b>		
<b>INDEPENDENT TEACHING ACTIVITIES</b> <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>	<b>WEEKLY TEACHING HOURS</b>	<b>ECTS</b>	
Lectures	3		
Laboratory	2		
<b>Total</b>	<b>5</b>	<b>5</b>	
<i>Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail at (d).</i>			
<b>COURSE TYPE</b> <i>general background, special background, specialised general knowledge, skills development</i>	specialised general knowledge		
<b>PREREQUISITE COURSES:</b>	Food Microbiology, Food Engineering, Food Chemistry, Statistics		
<b>LANGUAGE OF INSTRUCTION and EXAMINATIONS:</b>	Greek		
<b>IS THE COURSE OFFERED TO ERASMUS STUDENTS</b>	Yes (in English)		
<b>COURSE WEBSITE (URL)</b>			

## (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 course is a basic introductory course on the concepts of quality control and sensory evaluation of foods. The objectives of the course are the understanding and adoption of proper approach to the theory of quality concerning the integration of products from the beginning (built-in quality). The course combines theory with exercises in order to effectively cover the basic concepts of food quality control and sensory evaluation. Also, key assessment and control tools of food quality and sensory evaluation are presented. Therefore, the material of the course aims to introduce students to a) the basic concepts of quality and organoleptic tests of foods, b) how to troubleshoot and resolve quality problems with the help of statistical quality control and c) understanding of the methods and analysis of sensory evaluation data.*

*Upon successful completion of this course the student he / she will be able to :*

- *Clearly understand the importance of quality and its benefits, and that quality is a matter of prevention rather than checks or inspections*
- *Has understanding of the importance of the specifications, customers and variability for the definition of quality, and the relationship of the latter with quality problems*
- *A perception of the quality dimensions*
- *Combine statistics with quality to solve or prevent quality problems*
- *Has understanding of the application/implementation of the tools used to solve quality problems*
- *Grasping the need for continuous quality improvement*
- *Has understanding of the concept and methods of sensory examination*
- *Be familiar with the data analysis of the organoleptic tests*

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

- *Search, analyze and synthesize data and information*
- *Decision making*
- *Independent work*
- *Teamwork*
- *Work in an international environment*
- *Work in a multidisciplinary environment*
- *Generating new research ideas*

**(3) SYLLABUS**

- Introduction to the principles of quality control of foods
- Theories of quality
- Qualitative characteristics of foods - Dimensions of quality
- Introduction to statistical quality control of foods
- Data Analysis and Sampling - Sampling plans of foods
- Statistical quality control of foods by the use of control charts
- Process capability analysis
- Solving quality control problems of foods
- Introduction to sensory evaluation of foods
- Methods of sensory evaluation of foods
- Data analysis of sensory evaluation of foods

**(4) TEACHING and LEARNING METHODS - EVALUATION**

<b>DELIVERY</b> <i>Face-to-face, Distance learning, etc.</i>	Face-to-face	
<b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b> <i>Use of ICT in teaching, laboratory education, communication with students</i>	Power point presentations and exercises on the Blackboard and computer Student contact electronically	
<b>TEACHING METHODS</b> <i>The manner and methods of teaching are</i>	<b>Activity</b>	<b>Semester workload</b>
	Lectures	29

<p><i>described in detail.</i>  <i>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.</i></p> <p><i>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</i></p>	Interactive teaching (exercises)	10
	Laboratory	26
	Educative excursion	12
	Shelf-study	48
<b>Total contact hours and training</b>	<b>125</b>	

<p style="text-align: center;"><b>STUDENT PERFORMANCE EVALUATION</b></p> <p><i>Description of the evaluation procedure</i></p> <p><i>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</i></p> <p><i>Specifically-defined evaluation criteria are given, and if and where they are accessible to students.</i></p>	<p>I. Lectures and Interactive teaching: Written exams (100%) in Greek including: - Multiple choice questions (50%) - Short answer questions (20%) - Exercises (30%)</p> <p>II. Laboratory Written exams (100%) in Greek including: - Short answer questions (100%)</p>
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#### (5) ATTACHED BIBLIOGRAPHY

Dora Georgaki, Katerina Kouroupi, Stavros Politis, Dimitrios Rekkas. 2010. Total Quality Management. I. SIDERIS Publications.

Amitava Mitra. 2008. Fundamentals of Quality Control and Improvement, 3rd edition. WILEY Publications.

Herbert Stone and Joel L. Sidel. 2004. Sensory Evaluation Practices, 3rd edition. Academic Press Publications.