

COURSE OUTLINE

1. GENERAL

SCHOOL	FOOD AND NUTRITIONAL SCIENCES		
ACADEMIC UNIT	FOOD SCIENCE & HUMAN NUTRITION		
LEVEL OF STUDIES	BACHELOR OF SCIENCE		
COURSE CODE	3580	SEMESTER	7
COURSE TITLE	FOOD QUALITY CONTROL AND SENSORY ANALYSIS		
INDEPENDENT TEACHING ACTIVITIES <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>		WEEKLY TEACHING HOURS	CREDITS
		5	5
Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail at (d).			
COURSE TYPE <i>general background, special background, specialised general knowledge, skills development</i>			
PREREQUISITE COURSES:			
LANGUAGE OF INSTRUCTION and EXAMINATIONS:			
IS THE COURSE OFFERED TO ERASMUS STUDENTS			
COURSE WEBSITE (URL)	https://w1.aua.gr/etda/en/courses/food-quality-control-and-sensory-analysis/		

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 serves as a fundamental introductory module to the concepts of Quality Control and Sensory Evaluation of Foods. The primary objective of the course is to promote understanding and adoption of the correct quality philosophy, emphasizing the integration of quality into products from the earliest stages of development (built-in quality).

The theoretical component of the course is complemented by practical exercises aimed at reinforcing core principles of quality control and sensory evaluation. Key tools for quality assessment and improvement, as well as methods for sensory evaluation, are presented.

Accordingly, the course content aims to introduce students to:

(a) the fundamental concepts of food quality and sensory evaluation;

(b) approaches to identifying and solving quality-related problems through the application of statistical quality control; and

(c) the principles, methods, and data analysis techniques used in sensory evaluation.

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

- Understand the importance and benefits of quality, recognizing that quality is primarily a matter of prevention rather than inspection or auditing.
- Comprehend the role of specifications, customer requirements, and variability in defining quality, as well as their relationship to quality-related problems.
- Recognize the key dimensions of quality that contribute to the overall quality of a product.
- Integrate statistical methods with quality concepts to prevent, solve, and improve quality-related issues.
- Understand and apply problem-solving and quality management tools.
- Appreciate the necessity of continuous quality improvement.
- Understand the concepts and methodologies of sensory evaluation.
- Demonstrate familiarity with the analysis and interpretation of sensory evaluation data.

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?

<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>Teamwork</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, analysis, and synthesis of data and information, using appropriate technologies
- Decision-making
- Independent work
- Teamwork
- Ability to work in an international environment
- Ability to work in an interdisciplinary environment
- Generation of new research ideas

3. SYLLABUS

- Introduction to the principles of food quality control
- Quality theories
- Food quality attributes and quality factors
- Introduction to statistical quality control of foods
- Data analysis and sampling – food sampling plans
- Statistical process control (SPS) of foods using control charts
- Process capability analysis in food production
- Problem solving in food quality control and quality improvement
- Introduction to sensory evaluation of foods
- Methods of sensory evaluation of foods
- Analysis of sensory evaluation data

4. TEACHING and LEARNING METHODS - EVALUATION

DELIVERY <i>Face-to-face, Distance learning, etc.</i>	Class and laboratory	
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY <i>Use of ICT in teaching, laboratory education, communication with students</i>	Projector and white board	
TEACHING METHODS <i>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.</i> <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>	Activity	Semester workload
		29
		10
		26
		12
		48
	Course total	125
STUDENT PERFORMANCE EVALUATION <i>Description of the evaluation procedure</i> <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> <i>Specifically defined evaluation criteria are given, and if and where they are accessible to students.</i>		

5. ATTACHED BIBLIOGRAPHY

- Suggested bibliography:

- Related academic journals:

Τσάκνης Ιωάννης. 2021. Ποιότητα και Ασφάλεια Τροφίμων. Εκδόσεις Τζιόλα.

Δώρα Γεωργακή, Κατερίνα Κουρούπη, Σταύρος Πολίτης, Δημήτριος Ρέκκας. 2010. Διαχείριση Ολικής Ποιότητας. Εκδόσεις Ι. ΣΙΔΕΡΗΣ.

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.