SCHOOL	ENVIRONMENT		
ACADEMIC UNIT	FOOD SCIENCE AND TECHNOLOGY		
LEVEL OF STUDIES	UNDERGRADUATE		
COURSE CODE	**FST933**	**SEMESTER**	7
COURSE TITLE	**FOOD QUALITY CONTROL AND SENSORY EVALUATION**		

INDEPENDENT TEACHING ACTIVITIES *if credits are awarded for separate components of the course, e.g. lectures, laboratory exercise, etc. If the credits are awarded for the whole of the course, give the weekly teaching hours and the total credits*	**WEEKLY TEACHING HOURS**	**CREDITS**
Lectures	3	5
Laboratory		
Total	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, special background, specialised general knowledge, skills development*	Specialised general knowledge
PREREQUISITE COURSES:	
LANGUAGE OF INSTRUCTION and EXAMINATIONS:	Greek
IS THE COURSE OFFERED TO ERASMUS STUDENTS	Yes (in Greek)
COURSE WEBSITE (URL)	

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*

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

- know the principles and methods of quality control of food and beverages.
- understand the general dimensions of quality that help determine the specific quality of a product.
- realize the need for continuous quality improvement.
- perceive the importance of quality and its benefit and that it is a matter of prevention and not inspection.
- recognize the potential food hazards along production processes and minimize food safety issues.
- be familiar with the methods of organoleptic examination.
- be familiar with the data analysis of the organoleptic evaluation.
- be familiar with modern methods applied in food quality control.

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* *Production of new research ideas*	*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...* *.....*

1. Adaptation to new situations.
2. Decision making.
3. Autonomous work.
4. Teamwork
5. Work in an international environment.
6. Exercise criticism and self-criticism.
7. Promote creative and inductive thinking.
8. Analyze and synthesize of data and information in order to apply the theory in practice.

SYLLABUS

The course focuses on teaching the basic principles of quality control and organoleptic evaluation of food. Course's target is to enable students to apply methods and systems necessary for the assurance of food quality and quality improvement, through the right approach into different food systems. Furthermore, the course aims to enable the student to understand the concept and the philosophy of quality control regarding food and beverage companies.

Basic tools for quality assessment through organoleptic evaluation are also presented. Modern technologies and applications for the detection of bacteria, fungi and toxins are being analyzed. Moreover, analysis of molecular techniques applied in food quality systems (i.g quantitative gene expression) is also introduced as an approach to assess quality within food production processes.

The course material aims to introduce students a) to the basic concepts of quality and organoleptic examination of food, b) how to deal with quality control systems, and c) to understand the methods and analysis of evaluation data.

The subjects of the course include chemical hazard analysis (i.g chemical residues and pesticides) and biological hazards related to food hygiene.

Factors that affect quality, safety, nutritional value and composition of food are also analyzed.

- Introduction to the principles of food quality control
- Quality theories: Food quality characteristics - Quality factors
- Solutions for quality control problems and quality improvement assays
- Introduction to food organoleptic evaluation
- Analysis of organoleptic food evaluation data
- Quality control - Methods of organoleptic control, organization of organoleptic tests
- Concept and Principles of the HACCP system

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 video projector and computer, Internet use
TEACHING METHODS *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*	
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.*	Final written examination in matters of graded difficulty, which include - development questions - multiple choice questions

Activity	***Semester workload***
Lectures	117
Laboratory	0
Total contact hours and training	***117***

ATTACHED BIBLIOGRAPHY

1. TSaknis I., Quality and safety of food and beverages. Tziola Publications 2018, ISBN: 9789604187812 *(in Greek).*
2. Tzia, K., Tsiapouris, A., Critical Control Point Hazard Analysis (HACCP) in the food industry, Papasotiriou Publications 1996, ISBN: 9789607510358 *(in Greek).*
3. Arvanitogiannis I., Barzakas T.X., Tzifa K., Food quality control. Stamoulis Publications 2008, ISBN: 9789603517443 *(in Greek).*
4. Karaoulanis G.D., Laboratory analysis and quality control in food Industries. Stamoulis Publications 2005, ISBN: 9789603516217 *(in Greek).*
5. Stevenson, K.E., Bernard, T., HACCP: A systematic approach to food safety. CTI
Publications 1999.
6. Early, R., Guide to Quality Management Systems for the Food Industry. Blackie Academic & Professional, Chapman & Hall, Glasgow 1995.
7. Codex Alimentarius Commission, Principles and Guidelines for the conduct of microbial risk assessment. CAC/GL-30 1999.

Related Literature:

- 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.