

COURSE MODULE OUTLINE

General information

SCHOOL	SCHOOL OF SCIENCE AND TECHNOLOGY		
PROGRAM COURSE	QUALITY MANAGEMENT AND TECHNOLOGY		
LEVEL OF STUDY	POSTGRADUATE		
COURSE UNIT CODE	DIP-51	YEAR OF STUDY	1 st
COURSE TITLE	Quality Planning and Organization		
INDEPENDENT TEACHING ACTIVITIES <i>in case credits are awarded for separate components/parts of the course, e.g. in lectures, laboratory exercises, etc. If credits are awarded for the entire course, give the weekly teaching hours and the total credits</i>		WEEKLY TEACHING HOURS	CREDITS
Weekly teaching hours (28) * 30 weeks = 840		28	30 ECTS
<i>Add rows if necessary. The organization of teaching and the teaching methods used are described in detail under section 4</i>			
COURSE TYPE Compulsory, Optional, Optional mandatory	Compulsory		
PREREQUISITE COURSES:	There are not prerequisite courses		
LANGUAGE OF INSTRUCTION AND EXAMS:	Greek		
THE COURSE IS OFFERED TO ERASMUS STUDENTS	No (due to annual duration of the module)		
COURSE WEBSITE (URL)	https://www.eap.gr/education/postgraduate/annual/quality-management-and-technology/topics/#d51 Each module has its own space in the Learning Management System of EAP (http://study.eap.gr), with controlled access (use of code) for students and teaching staff.		

(2) LEARNING OUTCOMES

Learning Outcomes

The course learning outcomes, specific knowledge, skills and competences of an appropriate (certain) level, which students will acquire upon successful completion of the course, are described in detail. It is necessary to consult:

APPENDIX A

- *Description of the level of learning outcomes for each level of study, in accordance with the European Higher Education Qualifications' Framework.*
- *Descriptive indicators for Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong Learning and*

APPENDIX B

- *Guidelines for writing Learning Outcomes*

Learning Outcomes:

After completing this module, students are expected to be able to:

- understand the term Total Quality Control (TQC), the parameters affecting it, and how it can be applied in practice.
- plan and develop the product / service quality[(including the failure mode and effects analysis (FMEA)], and design the production processes involved.
- have a good background on total quality management (TQM) and the various currently applied Quality Assurance Systems (similarities, differences) and total quality prizes (EU, USA, Japan).
- apply the most commonly used tools and techniques (brainstorming, affinity diagram, tree diagram, cause and effect diagram, benchmarking, control diagram, histogram, Pareto diagram, scatter diagram) for quality improvement.
- 5. have a solid knowledge of two of the most important and successful ISO systems; that is ISO 9001: 2008 and ISO 22000:2005 for product quality and food quality and safety, respectively.
- measure, calculate, analyze and evaluate the quality cost by taking into account the occurrence of various failures of different origin.
- understand and apply the various techniques for optimizing the quality cost (cost reduction in conjunction with quality improvement).
- apply a program toward suppliers' assurance, assessment, and certification.
- 9. understand the importance of product safety and consumer protection within the legislative frame of EU.
- comply with the EU legislative frame for Quality development, CE labeling, and safe food trade (HACCP, ISO 22000).

General Competences

Taking into consideration the general competences that students/graduates must acquire (as those are described in the Diploma Supplement and are mentioned below), at which of the following does the course attendance aim?

<i>Search for, analysis and synthesis of data and information by the use of appropriate technologies,</i>	<i>Project planning and management</i>
<i>Adapting to new situations</i>	<i>Respect for diversity and multiculturalism</i>
<i>Decision-making</i>	<i>Environmental awareness</i>
<i>Individual/Independent work</i>	<i>Social, professional and ethical responsibility and sensitivity to gender issues</i>
<i>Group/Team work</i>	<i>Critical thinking</i>
<i>Working in an international environment</i>	<i>Development of free, creative and inductive thinking</i>
<i>Working in an interdisciplinary environment</i>	<i>.....</i>
<i>Introduction of innovative research</i>	<i>(Other.....citizenship, spiritual freedom, social awareness, altruism etc.)</i>

Search for, analysis and synthesis of data and information by the use of appropriate technologies
Adapting to new situations
Decision-making
Individual/Independent work
Group/Team work
Working in an international environment
Working in an interdisciplinary environment
Introduction of innovative research
Project planning and management
Respect for diversity and multiculturalism
Social, professional and ethical responsibility and sensitivity to gender issues
Critical thinking
Development of free, creative and inductive thinking

(3) COURSE CONTENT

Subjects covered:

- Quality Planning
- Quality Management
- Total Quality
- Supplier - Customer Relationships
- Quality Cost

(4) TEACHING METHODS--ASSESSMENT

MODES OF DELIVERY

Face-to-face, in-class lecturing, distance teaching and distance learning etc.

Distance education with six Group Counseling Meetings (OSS) during the academic year on weekends.

<p>USE OF INFORMATION AND COMMUNICATION TECHNOLOGY</p> <p><i>Use of ICT in teaching, Laboratory Education, Communication with students</i></p>	<p>We use :</p> <p>Remote meetings tools (cisco webex), Presentation software (e.g. power point), Specialized software in the subjects under study (Minitab, etc.).</p> <p>Additionally, the students use office automation tools, web browsers and e-reader for digital books.</p>	
<p>COURSE DESIGN</p> <p><i>Description of teaching techniques, practices and methods: Lectures, seminars, laboratory practice, fieldwork, study and analysis of bibliography, tutorials, Internship, Art Workshop, Interactive teaching, Educational visits, projects, Essay writing, Artistic creativity, etc.</i></p> <p><i>The study hours for each learning activity as well as the hours of selfdirected study are given following the principles of the ECTS.</i></p>	<p>Activity/Method</p>	<p>Annual workload</p>
	<p>6 OSS (* 4 hours)</p>	<p>24</p>
	<p>Preparation of Assignments (5 assignments * 50 hours)</p>	<p>250</p>
	<p>Examination</p>	<p>3</p>
	<p>Individual study</p>	<p>563</p>
	<p>Total module workload (hours)</p>	<p>840</p>
<p>STUDENT PERFORMANCE EVALUATION/ASSESSMENT METHODS</p> <p><i>Detailed description of the evaluation procedures:</i></p> <p><i>Language of evaluation, assessment methods, formative or summative (conclusive), multiple choice tests, short- answer questions, open-ended questions, problem solving, written work, essay/report, oral exam, presentation, laboratory work, other.....etc.</i></p> <p><i>Specifically defined evaluation criteria are stated, as well as if and where they are accessible by the students.</i></p>		

(5) SUGGESTED BIBLIOGRAPHY:

- Suggested bibliography

EAP

- Tsarouhas P. and Deliou K. (2017), Advanced Methods in Quality Management
- Guidelines for the book Tsarouhas P. and Deliou K. (2017), Advanced Methods in Quality Management
- Quality Management, EAP, Patra, 2008.
- European Committee Directive regarding Food Safety Management Systems.
- European Committee Directive regarding the implementation of the EE rules and legislation required for the products
- Quality Standards ΕΛΟΤ EN ISO 9000, ΕΛΟΤ EN ISO 9001, ΕΛΟΤ EN ISO 9004 ,ΕΛΟΤ EN ISO 14001, ΕΛΟΤ EN ISO 14040, ΕΛΟΤ EN ISO 14040 Amd, ΕΛΟΤ EN ISO 14050, ΕΛΟΤ EN ISO 17025, ΕΛΟΤ EN ISO 19011, ΕΛΟΤ EN ISO 22000 (ψηφιακή προσφορά).

Additional literature sources

- Kolarik, W. J. (1995). Creating Quality, concepts, systems, strategies and tools. N.Y.: McGraw Hill International Editions (Chapter 1, pp. 3-19, Chapter 2, pp. 22-35, Chapter 27, pp. 769-797, Chapter 29, pp. 827-854).
- Juran, J. M., & Godfrey, A. B. (1998). Juran's Quality Handbook. N.Y.: McGraw Hill International Editions (Chapter 2, pp. 2.1-2.17, Chapter 7, pp. 7.1-7.30)
- Kinicki, A., & Williams, B. (2017). Διοίκηση Επιχειρήσεων. Θεσσαλονίκη: Εκδόσεις Επίκεντρο (Κεφάλαιο 9, Σελ. 344-390).
- Antony, J., Vinodh, S., & Gijo, E. U. (2016). Lean Six Sigma for small and medium sized enterprises: A practical guide. CRCPress. United Kingdom: TaylorandFrancisGroup. (Chapter 1-9, pp. 1-210).

-Related Scientific Journals:

- The TQM Journal
- International Journal of Quality and Reliability Management
- Total Quality Management and Business Excellence
- International Journal of Productivity and Performance Management
- International Journal of Lean Six Sigma
- International Journal of Quality and Services Science
- Business Process Management Journal
- Benchmarking: An International Journal
- The International Journal of Production Economics
- International Journal of Operations & Production Management
- Journal of Operations Management
- Production Planning and Control
- Food Control
- Food Policy