

COURSE OUTLINE

1. GENERAL INFORMATION

SCHOOL	MARITIME AND INDUSTRIAL STUDIES		
DEPARTMENT	INDUSTRIAL MANAGEMENT AND TECHNOLOGY		
LEVEL OF STUDY	POSTGRADUATE		
COURSE UNIT CODE	Δ-ΔΠΚ201	SEMESTER OF STUDY	2 ^ο
COURSE TITLE	Quality and Risk Management		
INDEPENDENT TEACHING ACTIVITIES <i>in case in which credits are awarded for separate components/parts of the course, e.g. in lectures, laboratory exercises, etc. If credits are awarded for the whole of the course, give the weekly teaching hours and the total credits</i>	WEEKLY TEACHING HOURS	CREDITS	
	3	6	
<i>Add rows if necessary. The organization of teaching and the teaching methods used are described in detail at section 4.</i>			
COURSE TYPE <i>general background, special background, specialized general knowledge, skills development</i>	Specialized		
PREREQUISITE COURSES:	No prerequisites Basic knowledge on Project Management and Statistics is necessary		
LANGUAGE OF INSTRUCTION and EXAMINATION/ASSESSMENT:	Greek		
THE COURSE IS OFFERED TO ERASMUS STUDENTS	No		
COURSE WEBSITE (URL)			

2. LEARNING OUTCOMES

<p>LEARNING OUTCOMES</p> <p><i>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:</i></p> <p>APPENDIX A</p> <ul style="list-style-type: none"> • Description of the level of learning outcomes for each qualifications' cycle, according to the European Higher Education Area's Qualification Framework. • Descriptors for Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong Learning and APPENDIX B • Guidelines for writing Learning Outcomes
<p>The course evolves in two parts:</p> <p>The 1st part of the course aims at introducing postgraduate students in the field of project risk management for the complete lifecycle of small, medium and large-scale projects. Furthermore, it provides students with in-depth understanding of fundamental methodologies and IT tools which support decision-making in the areas of project risk identification, evaluation, planning and monitoring.</p> <p>The 2nd part of the course aims at introducing postgraduate students in the field of quality management of projects for their complete lifecycle. It introduces students in the concept of quality and the basic management processes (quality planning, assurance and control). For each of them, provides students with in-depth understanding of IT tools and techniques according to widely accepted and used methodologies.</p>

The material is aligned with globally applied methodologies and techniques as defined by Project Management Institute (PMI).

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 aims

Search for, analysis and synthesis of data and information, by the use of technologies that are necessary according the case

Adapting to new situations

Decision-making

Independent work

Team work

Working in an international environment

Working in an interdisciplinary environment

Introduction of innovative research

Project planning and management

Respect for difference and multiculturalism

Environmental awareness

Social, professional and ethical responsibility and sensitivity to gender issues

Critical consciousness, criticism and self-criticism

Development of free, creative and inductive thinking

The objective of the course is to provide fundamental and advanced knowledge in methodologies and tools. After the successful completion of the course participants are expected to be able to:

- Understand the importance of risk management in projects
- Realize their role as members of project teams and the mechanisms of working in groups
- Identify potential internal and external risks in projects
- Evaluate risks and potential consequences based on qualitative and quantitative methods
- Develop risk management plans for projects
- Making decisions to cope with risks in projects
- Understand the importance of quality management in a project
- Implement basic quality management processes (planning, assurance, control)
- Develop quality plans for projects
- Use statistical quality management methods

3. COURSE CONTENT

The course covers the following sections:

- A. Project Risk Management
 - Theoretic background in project risk management – concepts and definitions
 - Organizational design of risk management
 - Risk identification methods and tools
 - Qualitative and quantitative risk evaluation methods
 - Project monitoring / dealing with risk (risk registry)
 - Workshop: development of a complete project risk plan
- B. Project Quality Management
 - Theoretic background of quality management emphasizing on project managements
 - Quality planning, assurance and control
 - Methods and tools for quality management
 - Workshop: development of a complete project quality plan

4. TEACHING METHODS - ASSESSMENT

TEACHING MODE

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

The course evolves in ten 3-hour sessions. Each session consists of formal lecture (presentation of theoretic content) followed by active discussion on the interrelationship between theory and practice. Additionally, the instructor presents basic IT applications related to the theory and then

	<p>participants are expected to use these applications in relevant case studies provided by the instructor. Participants are expected to devote twice this amount of time in private and group study, assignments and preparation for final exams.</p> <p>Combined use of instruction and educational methods applies, aiming at the active participation of students and practical application of the knowledge acquired for each topic.</p> <ul style="list-style-type: none"> - Lectures using multimedia, analysis and discussion on scientific articles and case studies - Hands-on training on SW applications related to quantitative analysis, qualitative analysis, modeling and decision making - Students are also required to work in 4-5 person groups and develop 2 large scale studies (Project Risk Plan, Project Quality Plan), which will be presented in 2 workshops - 														
<p style="text-align: center;">USE OF INFORMATION AND COMMUNICATION TECHNOLOGY <i>Use of ICT in Teaching, Laboratory Education, Communication with students</i></p>	<p>Teaching: Lectures with audiovisual media, support of the learning process through the eclass platform.</p> <p>Laboratory Education: Hands-on laboratory training on freeware/demo versions of relevant SW tools, used also during the elaboration of large-scale studies:</p> <ul style="list-style-type: none"> - Mindmapping - Business process modeling (BPMN) - Group Decision Making (Nominal Group Technique) - Decision Trees - Monte Carlo Simulation - Statistical Tools - Statistical Process Control <p>Course E-class: Eclass will be used to upload articles, multimedia material, course material, links, case studies and other support material which enhances learning experience and efficiency.</p> <p>Communication with students: Face-to-face at office hours, email, eclass</p>														
<p style="text-align: center;">COURSE DESIGN <i>Description of teaching techniques, practices and methods: Lectures, seminars, laboratory practice, fieldwork, study and analysis of bibliography, tutorials, clinical practice, Art Workshop, Interactive teaching, Educational visits, project, Essay writing, Artistic creativity, etc.</i></p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;"><i>Activity / Method</i></th> <th style="text-align: center;"><i>Semester Workload</i></th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td style="text-align: center;">30</td> </tr> <tr> <td>Laboratory lectures and hands-on</td> <td style="text-align: center;">10</td> </tr> <tr> <td>Project</td> <td style="text-align: center;">50</td> </tr> <tr> <td>Self-study of lecture material</td> <td style="text-align: center;">50</td> </tr> <tr> <td>Exams (written)</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Counselling</td> <td style="text-align: center;">8</td> </tr> </tbody> </table>	<i>Activity / Method</i>	<i>Semester Workload</i>	Lectures	30	Laboratory lectures and hands-on	10	Project	50	Self-study of lecture material	50	Exams (written)	2	Counselling	8
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<p><i>The study hours for each learning activity as well as the hours of non- directed study are given according to the principles of the ECTS</i></p>	<p>Course Total</p>	<p>150</p>
<p>STUDENT PERFORMANCE EVALUATION/ASSESSMENT METHODS</p> <p><i>Detailed description of the evaluation procedures: Language of evaluation, assessment methods, formative or summative (conclusive), multiple choice questionnaires, short- answer questions, open-ended questions, problem solving, written work, Essay/report, oral exam, public presentation, laboratory work, art interpretation, other.....etc</i></p> <p><i>Evaluation criteria are specifically defined and given as well as if and where they are reported and accessible to students.</i></p>	<p>Language of exams:</p> <p>Assessment Methods: Course material is posted at eclass during the semester. The final grade of the course is as follows:</p> <ul style="list-style-type: none"> • 40%: the study deliverables (Project Quality Plan, Project Risk Plan) and workshop presentation • 60%: final exam <p>The written examination includes problem solving / exercises. It is conducted with open books.</p> <p>Project topics and evaluation criteria are posted on eclass at the beginning of the semester.</p> <p>Study groups consist of 4-5 students. Each assignment requires research and study of up-to-date literature, writing a text of 8000-10000 words (in total), a 20-minute presentation and 10-minute Q&A</p> <p>In case of failure, students can participate in the September re-sits,</p> <p>The evaluation of students with special learning difficulties in writing and reading (as certified and qualified by a competent institution) is performed according to the relevant procedure decided by the Department Assembly.</p> <p>Notification of the Assessment Criteria: The evaluation criteria are made known during the first lecture and are clearly stated on the course website and/or eclass. Students have the opportunity to receive explanations about the grade they received.</p>	

5. SUGGESTED BIBLIOGRAPHY

<p><i>- Bibliography</i></p> <ul style="list-style-type: none"> • Pritchard, C.L. (2015) Risk Management: Concepts and Guidance, 5th edition, Boca Raton, CRC Press, Taylor and Francis Group • Chapman, C., Ward, S. (2003) Project Risk Management: Processes, Techniques and Insights, 2nd edition, West Sussex, John Wiley and Sons • Montgomery, D.C. (2009) Introduction to Statistical Quality Control, John Wiley and Sons • Kerzner, H., (2009) Project Management: A Systems Approach to Planning, Scheduling and Controlling, Hoboken, NJ, John Wiley and Sons • A Guide to the Project Management Body of Knowledge, PMI <p><i>-Journals:</i></p> <ul style="list-style-type: none"> • International Journal of Managing Projects in Business • International Journal of Project Management • Project Management Journal • Engineering management journal

-Lecture notes

Lecturer's slides and notes will be provided in electronic format in e-class

-Workshop material

Workshops' presentations will be available in e-class