

## COURSE OUTLINE

### (1) GENERAL

<b>SCHOOL</b>	ENGINEERING		
<b>ACADEMIC UNIT</b>	MINERAL RESOURCES ENGINEERING		
<b>LEVEL OF STUDIES</b>	UNDERGRADUATE		
<b>COURSE CODE</b>	MRE504	<b>SEMESTER</b>	5
<b>COURSE TITLE</b>	ADMINISTRATION AND MANAGEMENT OF MINING PROJECTS		
<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>CREDITS</b>
COURSES		3	3
EXERCISES		1	1
TOTAL		4	4
<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>	SPECIAL BACKGROUND		
<b>PREREQUISITE COURSES:</b>			
<b>LANGUAGE OF INSTRUCTION and EXAMINATIONS:</b>	GREEK		
<b>IS THE COURSE OFFERED TO ERASMUS STUDENTS</b>	YES		
<b>COURSE WEBSITE (URL)</b>	<a href="https://eclass.uowm.gr/courses/MRE142/">https://eclass.uowm.gr/courses/MRE142/</a>		

### (2) LEARNING OUTCOMES

<p><b>Learning outcomes</b></p> <p><i>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.</i></p> <p><i>Consult Appendix A</i></p> <ul style="list-style-type: none"> <li>• <i>Description of the level of learning outcomes for each qualifications cycle, according to the Qualifications Framework of the European Higher Education Area</i></li> <li>• <i>Descriptors for Levels 6, 7 &amp; 8 of the European Qualifications Framework for Lifelong Learning and Appendix B</i></li> <li>• <i>Guidelines for writing Learning Outcomes</i></li> </ul>
<p>The course aims at the transmission of specialized knowledge of organization and management of mining projects in order to enable students to:</p> <ul style="list-style-type: none"> <li>• Develop the implementation phases of a mining project</li> <li>• Distinguish and describe the individual activities of a mining project</li> <li>• Develop the production program of a mining project</li> <li>• Organize mining construction sites</li> <li>• Prepare feasibility studies of mining projects</li> <li>• Manage a mining project</li> </ul>

### 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	Project planning and management
Adapting to new situations	Respect for difference and multiculturalism
Decision-making	Respect for the natural environment
Working independently	Showing social, professional and ethical responsibility and sensitivity to gender issues
Team work	Criticism and self-criticism
Working in an international environment	Production of free, creative and inductive thinking
Working in an interdisciplinary environment	.....
Production of new research ideas	Others...
	.....

1. Search, analysis and synthesis of data and information, using the necessary technologies
2. Adaptation of new situations
3. Decision-making
4. Independent work
5. Teamwork
6. Working in an international environment
7. Working in an interdisciplinary environment
8. Generating new research ideas
9. Project planning and management

### (3) SYLLABUS

Introduction to project planning, administration, and management.

Special issues of mining projects management.

Planning and controlling projects with the Critical Path Method (CPM).

The problem of planning (analysis of a project in individual tasks or activities, time constraints, quantitative restrictions), Visualization of the problem with a network, network solution (Critical Path, dates of earlier and later start of an activity, margin of activity, project calendar), planning of the available means of project implementation, economic aspects of projects (preliminary feasibility study, feasibility study, project financing, preparation of tenders), the GANTT diagram, compilation of the cash-flow table, Uncertainty in duration estimates of project phases.

Program Evaluation and Review Technique (PERT).

Use of PCs in solving project scheduling problems.

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

<b>DELIVERY</b> <i>Face-to-face, Distance learning, etc.</i>	Face-to-face lectures, webinars, laboratory exercises on PC, using special software, and in the classroom.	
<b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b> <i>Use of ICT in teaching, laboratory education, communication with students</i>	Use of a projection system and special software installed in the PCs of a laboratory, organization and scheduling of the course and the communication with students using the asynchronous e-learning platform 'open eclass'.	
<b>TEACHING METHODS</b> <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.  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>	<b>Activity</b>	<b>Semester workload</b>
	Lectures	42
	Study on lectures	30
	Exercises	14
	Writing assignments	34
	<b>Total course</b>	<b>120</b>
<b>STUDENT PERFORMANCE EVALUATION</b> <i>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.</i>	Final written examination of theory and exercises (60% of the total grade of the course), weekly exercises and assignments (40%). The evaluation criteria are given on the relevant page of the course on the asynchronous e-learning platform 'open e-class' and are analyzed to the students at the beginning of the semester.	

#### (5) SUGGESTED BIBLIOGRAPHY

<p>- <i>Suggested bibliography:</i></p> <p>Burke, R., 2002, <i>Project management – Planning and control techniques</i>, Kritiki Publications, 528p.  Dimitriadis, A., 2019, <i>Project Administration – Management</i>, New Technologies Publications, 490p.  Hickson, R.J., Owen, T.L., 2015, <i>Project Management for Mining: Handbook for Delivering Project Success</i>, Society for Mining, Metallurgy, and Exploration, 816p.  Pantouvakis, P.M., 2019, <i>Technical projects management</i>, Klidarithmos Publications, 272p.  Polyzos, S., 2018, <i>Project administration and management – Methods and techniques</i>, Kritiki publications, 696p.</p> <p>- <i>Related academic journals:</i></p> <p><i>International Journal of Project Management</i>, Elsevier  <i>Project Management Journal</i>, Wiley</p>
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