

## COURSE OUTLINE

### (1) GENERAL

<b>SCHOOL</b>	HUMANITIES		
<b>ACADEMIC UNIT</b>	DEPARTMENT OF MEDITERRANEAN STUDIES		
<b>LEVEL OF STUDIES</b>	UNDERGRADUATE		
<b>COURSE CODE</b>	AYE-32	<b>SEMESTER</b>	5
<b>COURSE TITLE</b>	GEOARCHAEOLOGY: INTERDISCIPLINARY APPROACHES IN MARITIME, COASTAL, INLAND ARCHAEOENVIRONMENT		
<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>
		3	5
<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>	Specialized general knowledge		
<b>PREREQUISITE COURSES:</b>	No		
<b>LANGUAGE OF INSTRUCTION and EXAMINATIONS:</b>	Greek		
<b>IS THE COURSE OFFERED TO ERASMUS STUDENTS</b>	No		
<b>COURSE WEBSITE (URL)</b>	<a href="https://eclass.aegean.gr/courses/TMS248/">https://eclass.aegean.gr/courses/TMS248/</a>		

### (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*

With the successful completion of the course students should be able:

- to assess the relationship between archeology and environment and assess their interaction over the maritime, coastal & inland archaeology
- collect materials from the archaeological environment to reconstruct the archaeoenvironment and the coastal areas, managing the remnants of the ancient world

with the appropriate approach

- relate residues (animal, floral, geological, anthropogenic) according to their environmental background, identifying settlement landscape morphology
- to interpret geoarchaeological background by means of disposed tools (digital imaging, design, material remains analysis, destruction causes of settlements, the cultural development level evaluation, cultural phase, etc.)
- to connect and classify their findings with each other comparing to other similar sites, to express and argument a risk assessment from natural phenomena and global climate change
- to know the approach of locating shipwrecks, their hauling, maintenance and residue studies of underwater archeology (ancient shipwrecks submersion of coastal towns, ancient natural disasters, show up of underwater archaeological resources, marine ecosystems) by using geoarchaeological techniques.
- to be aware of the direct relationship between archeology and environment that is essential for the identification of cultural phases, mainly regarding changes in sea level, extreme natural events, volcanoes, earthquakes, floods, tsunamis, explaining these in simple way with the theory of physics of chaos.

**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>Team work</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 for, analysis and synthesis of data and information, with the use of the necessary technology  
 Decision-making  
 Working in an interdisciplinary environment  
 Production of new research ideas

**(3) SYLLABUS**

The study of environment in ancient times includes several parameters related directly or indirectly to ancient man. Particularly those parameters associated with 1) the marine environment/underwater archaeology (shipwrecks, submerged settlements), coastal and island settlements, 2) archaeology of natural disasters, 3) volcanic eruptions, earthquakes as causes of disasters, sinking, extinct cities, settlements, 4) elements of geomorphology in relation to natural disasters, myths interpretation based on geological incidents, 5) geomorphology, paleoclimatology. Related chapters taught develop basic methodological notions and promote scientific skills relating interdisciplinary fields, as interpretive background, conducting to the geoarchaeological survey basics and basic geological methodological fields, as mineralogy, petrology, sedimentology, geomorphology, climatology, seismology, tectonics. In particular, in the course are examined the causes the consequences of the

eustatic movements, the climatic changes on the Quaternary, with emphasis on Holocene. It is discussed, using additional scientific data related to paleoastronomy, the causes of origin of Earth's orbital changes, which are further related to the periodicity of climatic changes (Milankovich theory of ice ages), and especially those related to the phenomena of succession of glacial-interglacial periods that affected the evolution of life on Earth and especially the human life over the course of geological-archaeological time.

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

<p><b>DELIVERY</b> <i>Face-to-face, Distance learning, etc.</i></p>	Face to face	
<p><b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b> <i>Use of ICT in teaching, laboratory education, communication with students</i></p>	PowerPoint presentations	
<p><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.</i></p> <p><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></p>	<p><b>Activity</b></p>	<p><b>Semester workload</b></p>
	Lectures	39 hrs (1.56 ECTS)
	Personal study	83 hrs (3.32 ECTS)
	End of semester exam	3 hrs (0.12 ECTS)
	Course total	125 hrs (5 ECTS)
<p><b>STUDENT PERFORMANCE EVALUATION</b> <i>Description of the evaluation procedure</i></p> <p><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></p> <p><i>Specifically-defined evaluation criteria are given, and if and</i></p>	Written or oral exams	

<i>where they are accessible to students.</i>	
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#### **(5) ATTACHED BIBLIOGRAPHY**

##### **Greek language**

Καραλή Λίλιαν (2005) Περιβαλλοντική Αρχαιολογία, Εκδ. Καρδαμίτσα, Αθήνα

Λυριτζής Ιωάννης (2005) Αρχαιολογία και περιβάλλον, Εκδ Καρδαμίτσα, Αθήνα

Renfrew, C & Bahn, P (2001) Αρχαιολογία: Θεωρίες, μεθοδολογία και πρακτικές εφαρμογές. (μτφρ. Ι. Καραλή-Γιαννακοπούλου) Εκδ. Καρδαμίτσα

##### **Foreign language**

Branch, Nick et al, 2005, Environmental Archaeology, Theoretical and Practical Approaches Oxford University Press, Oxford & New York.