COURSE OUTLINE

(1) GENERAL

SCHOOL	HUMANITIES		
ACADEMIC UNIT	DEPARTMENT OF MEDITERRANEAN STUDIES		
LEVEL OF STUDIES	UNDERGRADUATE		
COURSE CODE	AYE-35	**SEMESTER**	8
COURSE TITLE	NEW TECHNOLOGIES IN ARCHAEOGNOSTIC SCIENCES		

INDEPENDENT TEACHING ACTIVITIES *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 hrs and the total credits*	**WEEKLY TEACHING HRS**	**CREDITS**
	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:	No
LANGUAGE OF INSTRUCTION and EXAMINATIONS:	Greek
IS THE COURSE OFFERED TO ERASMUS STUDENTS	No
COURSE WEBSITE (URL)	https://eclass.aegean.gr/courses/TMS238/

(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:

- evaluate and define the boundaries of antiquarian science (literature, linguistics, archeology, history and art history) from which new technologies can highlight elements that cannot be seen with theoretical studies only,
- to manage a problem of archaeological content applying the appropriate method and synthesize interdisciplinary approaches to solve it,
- to compare methods together when solving an archaeological issue eg.. provenance

studies in archeology recognition of non readable texts, identify authors and / or artists and learn to synthesize and analyze a topic they are asked to write up in the form of working essay at home,
- to adopt the appropriate technology and interpret archaeognostic sciences with measurement and digital representation,
- be able to explain and distinguish the archaeological problem sought, with many exemplary cases, as opposed to unilateral historical/ philological comparative approach,
- to be equipped with information to allow them to plan, select, and implement in collaboration, specialized techniques for their contribution to further progress of the field that the course is delt with.

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…*
	…….

Search for, analysis and synthesis of data and information, with the use of the necessary technology
Decision-making
Working in an interdisciplinary environment

(3) SYLLABUS

The new technologies used to assist archaeognostic sciences (philology, linguistics, archaeology, history and art history) are presented on case studies. Deciphering non readable texts in marble, parchment, palimpsest, etc by IR, UV light, techniques of dating and analysis/ provenance in archaeology, recognizing authorship of anonymous texts by statistical indexes, GIS in archaeology, treatment of paper and susceptible objects for preservation, virtual reality and 3D in archaeology and archaeoastronomy, geophysical and satellite prospection, photogrametry.
In particular, the topics of the course include:
1) Introduction: New Technologies in Archaeognostic Sciences. Faceted synergy with prospects
2) Geographic Information Systems
3) Photogrammetry in Archaeology
4) Virtual reality & 3D in Archaeology
5) Dating protocols
6) Methods of reading inconspicuous/erased texts, natural methods of reading texts
7) Museums, Museology, Preventive conservation
8) Informatics in Archaeology (groupings, identifying writers and artists).
9) Data Bases in Culture
10) Multimedia Technologies
11) Examples of locating buried / underwater antiquities

(4) TEACHING and LEARNING METHODS - EVALUATION

<table>
<tr><td>DELIVERY
Face-to-face, Distance learning, etc.</td><td>Face to face</td></tr>
<tr><td>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY
Use of ICT in teaching, laboratory education, communication with students</td><td>PowerPoint presentations</td></tr>
<tr><td>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 hrs for each learning activity are given as well as the hrs of non-directed study according to the principles of the ECTS</td><td>
<table>
<tr><th>Activity</th><th>Semester workload</th></tr>
<tr><td>Lectures</td><td>39 hrs (1.56 ECTS)</td></tr>
<tr><td>Personal study</td><td>83 hrs (3.32 ECTS)</td></tr>
<tr><td>End of semester exam</td><td>3 hrs (0.12 ECTS)</td></tr>
<tr><td></td><td></td></tr>
<tr><td>Course total</td><td>125 hrs (5 ECTS)</td></tr>
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<tr><td>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.</td><td>Written or oral exams at the end of the semester</td></tr>
</table>

(5) ATTACHED BIBLIOGRAPHY

Greek language

Λυριτζής, Ι (επιμελ.) (2008) Νέες Τεχνολογίες στις Αρχαιογνωστικές Επιστήμες, Εκδ. Gutenberg, Αθηνα.

Foreign language

Adcock, E.P (1998) Principles for the care and handling of Library materials. Inter. Federation of Library Assoc & Institutions (IFLA).

CIE (2003) Control of damage to museum objects by optical radiation., TC, Vienna, 3-22.
Weymouth J.W & Higgins, R (1986) Geophysical surveying of archaeological sites. In Rapp, G Jr, & Gifford, J.A (eds) Archaeological Geology, 191-235.

Dickman, K Fotakis C & Asmus J.F (eds) (2005) Lasers in the conservation of artworks. LACONA V Proceedings, Springer Proceedings in Physics, Vol.100.

Macdonald, L & Windsor, B (1987) Databases in education and training: Concerns for the educational technologist. In Rushby, N (ed) Technology based learning. Selected readings, Kogan Page, London/Nichols Publishing Co., London, 215-221.