

COURSE OUTLINE

1. GENERAL

SCHOOL			
DEPARTMENT	DEPARTMENT OF PHYSICS		
LEVEL OF STUDIES	ISCED level 6 – Bachelor's or equivalent level		
COURSE CODE	E408-2023	SEMESTER	4th Semester
COURSE TITLE	Research Methodology		
TEACHING ACTIVITIES If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labs etc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.		TEACHING HOURS PER WEEK	ECTS CREDITS
		3	4.0
COURSE TYPE Background, General Knowledge, Scientific Area, Skill Development	Background		
PREREQUISITES			
TEACHING & EXAMINATION LANGUAGE:	Greek		
COURSE OFFERED TO ERASMUS STUDENTS:	YES		
COURSE URL:	https://eclass.emt.duth.gr/courses/PHYSICS207/		

2. LEARNING OUTCOMES

Learning Outcomes Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.
Upon successful completion of the course, the student will be able to: • Level 1 (Knowledge) To know all types of publications and the rules that govern them. • Level 2 (Comprehension) To write academically, identifying and avoiding all forms of plagiarism. • Level 3 (Application) & Level 4 (Analysis) To review and edit academic texts. To use reference management systems. To check texts for potential plagiarism.

- Level 5 (Synthesis)

To create their own referencing styles or modify existing ones.

- Level 6 (Evaluation)

To assess academic assignments based on the academic criteria of various universities.

General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information,
ICT Use, Adaptation to new situations,
Decision making,
Autonomous work,
Teamwork,
Working in an international environment,
Working in an interdisciplinary environment, Production of new research ideas

Project design and management
Equity and Inclusion
Respect for the natural environment
Sustainability
Demonstration of social, professional and moral responsibility and sensitivity to gender issues
Critical thinking
Promoting free, creative and inductive reasoning

Search, analysis and synthesis of data and information, ICT Use
Teamwork
Working in an interdisciplinary environment
Critical thinking

3. COURSE CONTENT

This course teaches students the principles of scientific writing using modern information technology tools. In addition, it helps students better understand the requirements and guidelines for preparing and critically reviewing a scientific publication. Specifically, the course covers the following topics:

Proper literature review
Types of publications
Scientific electronic libraries
Smart search of scientific publications
Reference management systems
Plagiarism avoidance
Preparation of an article
Preparation of a thesis
Critical review of papers and presentations

4. LEARNING & TEACHING METHODS - EVALUATION

TEACHING METHOD Face to face, Distance learning, etc.	Face to face
USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) Use of ICT in Teaching, in Laboratory Education, in Communication with students	Use of ICT in Teaching Use of ICT in Communication with students

TEACHING ORGANIZATION The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research& analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study / creation, project, creation, project. Etc. The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards	<table border="1"> <thead> <tr> <th>Activity</th><th>Workload/semester</th></tr> </thead> <tbody> <tr> <td>Writing project</td><td>80</td></tr> <tr> <td>Lectures</td><td>40</td></tr> <tr> <td>Total</td><td>120</td></tr> </tbody> </table>	Activity	Workload/semester	Writing project	80	Lectures	40	Total	120
Activity	Workload/semester								
Writing project	80								
Lectures	40								
Total	120								
STUDENT EVALUATION Description of the evaluation process Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others Please indicate all relevant information about the course assessment and how students are informed	Student evaluation languages Greek Method (Formative or Concluding) Formative Student evaluation methods Written Assignment Rate 100								

5. Suggested Bibliography

M. Alley, The Craft of Scientific Writing, Springer, 1998.
R. Day, Scientific English: A Guide for Scientists and Other Professionals, Oryx Pr, 1992.

Eudoxus

E408-2023	"Ερευνητική Μεθοδολογία "	2024	4	Εαρινό	133151372	NAI
122077689	Η Ερευνητική Μεθοδολογία στον Πραγματικό Κόσμο, 5η Έκδοση					Gray David, Δελιάς
Παύλος, Χατζόγλου Πρόδρομος (Επιστ. Επιμέλεια)		9786182210338	Τζιόλα	2023	5η	Σύγγραμμα
Σκληρό εξώφυλλο 21x29 760 56.03 OXI						
E408-2023	"Ερευνητική Μεθοδολογία "	2024	4	Εαρινό	133151373	NAI
59383458	Εφαρμογές μεθοδολογίας επιστημονικής έρευνας					Παράδειγμα: χρονολογική ηλικία και σχολική
επίδοση Δανασσής-Αφεντάκης Αντώνιος, Δελλασούδας Λαυρέντιος		9789608028067				Δελλασούδας Λαυρέντιος 2004
3 Σύγγραμμα Μαλακό εξώφυλλο 14x21 432 12.96 OXI						