COURSE OUTLINE

1. GENERAL INFORMATION

SCHOOL	MARITIME AND INDUSTRIAL STUDIES				
DEPARTMENT	INDUSTRIAL MANAGEMENT AND TECHNOLOGY				
LEVEL OF STUDY	UNDERGRADUATE				
COURSE UNIT CODE	ΤΕΠΛΗ01	SEMESTER OF STUDY 1 st			
COURSE TITLE	INTRODUCTION TO COMPUTERS				
INDEPENDENT TEAC	INDEPENDENT TEACHING ACTIVITIES				
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			WEEKLY TEACHING HOU	JRS	CREDITS
Lectures, Lab	Lectures, Laboratory Exercises and Project				5.5
Add rows if necessary. The organization of teaching and the					
teaching methods used are described in detail at section 4.					
COURSE TYPE general background, special background, specialized general knowledge, skills development	General backg	round			
PREREQUISITE COURSES:	None				
LANGUAGE OF INSTRUCTION	Greek				
and					
EXAMINATION/ASSESSMENT:					
THE COURSE IS OFFERED TO	No				
ERASMUS STUDENTS					
COURSE WEBSITE (URL)	https://eclass.unipi.gr/courses/BDT234/				

2. LEARNING OUTCOMES

LEARNING OUTCOMES

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:

APPENDIX A

- 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

The course is an introduction to current computer sciences, with emphasis on networks, the internet and the worldwide web, the markup languages for websites, and the use of basic computing tools (excel) for data analysis and presentation.

Upon successful completion of the course, the students will be able to:

- Demonstrate knowledge on basic computer architectures
- Demonstrate an understanding on the basic concepts of the internet and the worldwide web
- Design a webpage using HTML
- Interpret and represent data on various numerical systems
- Understand and execute logical and numerical operations
- Use Excel capabilities to group, analyze, and visualize data
- Demonstrate basic knowledge on algorithms, understand and monitor or/and develop simple algorithms in pseudo-code

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

- 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
- Respect for difference and multiculturalism
- Social, professional and ethical responsibility and sensitivity to gender issues
- Development of free, creative and inductive thinking

2. COURSE CONTENT

The course will cover the following topics:

- 1. Networks Internet Worldwide Web
- 1.1. Networks Computer networks
- 1.2. The Internet
- 1.3. Worldwide web
- 2. HTML
- 2.1. Creation of webpages
- 2.2. Hypertext
- 2.3. HTML HyperText Mark-up Language
- 2.3.1. Code writing
- 2.3.2. Markup languages
- 2.3.3. HTML file definition markers
- 2.3.4. Character formatting (sequences)
- 2.3.5. Text collation marks
- 2.3.6. Web site audio / visual formatting labels
- 2.3.7. Basic tags for creating and formatting lists
- 2.3.8. Basic tags for creating and formulating tables
- 2.3.9. Basic hyperlinks
- 2.3.10. Basic map maker marks
- 2.3.11. Basic frame creation marks
- 2.3.12. Basic field fill marks
- 2.4. Hypertext creation steps
- 2.5. Final markups
- 3. EXCEL
- 3.1. Explanation of the capabilities and introduction into the vocabulary and the basic functions
- 3.2. Data input and formatting, accuracy (display and encoding), operations and priority of operations
- 3.3. organization of data in rows and columns, field change and automatic change of relevant data
- 3.4. Embedded functions
- 3.5. Basic capabilities of functions and automatic field change
- 3.6. Workbooks and worksheets
- 3.7. Creation of tables

3.8. Basic graphics capabilities (charts, map-creation markers)

Students also attend a laboratory training program in the Laboratory of Production Management Information Systems in order to develop an intuitive and hands-on understanding of the concepts presented in the lectures. The software used is MS EXCEL or equivalent (Open Office, etc.). Students are trained in workshops with a rotation system. The workshop program is posted on the course website and eclass at the beginning of the semester.

In addition, articles, audiovisual lecture material, web addresses. useful information, exercises and software are posted at eclass.

3. TEACHING METHODS - ASSESSMENT

TEACHING MODE Face-to-face, in-class lecturing, on distance teaching and distance learning etc.	In-class lecturing / Laboratory teaching				
USE OF INFORMATION AND	Teaching: Lectures with audiovisual media, support of the				
COMMUNICATION TECHNOLOGY	learning process through the eclass platform				
Use of ICT in Teaching, Laboratory Education,	Laboratory Education: Use of	open access software for			
Communication with students	laboratory exercises	•			
	Communication with students	: face-to-face at office hours.			
	email, eclass	,			
COURSE DESIGN	Activity / Method	Semester Workload			
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.	Lectures 26				
	Laboratory exercises 26				
	Project	41			
	Self-study of lecture and 43				
	lab material				
	Counselling	0.5			
	Exams (written)	1			
The study have far and large a stilling	Course Total	137.5			
well as the hours of non- directed study are aiven according to the principles of the ECTS					
STUDENT PERFORMANCE	Language of exams: Greek				
EVALUATION/ASSESSMENT					
METHODS	Assessment Methods: After	the last lecture, the exam			
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	material is posted at eclass. The final course grade is formed by the optional project (30%) and by the written exams taken in the examination period of the winter semester and, in case of failure, in the September resits.				
work, Essay/report, oral exam, public presentation, laboratory work, art interpretation, otheretc	The written examination includes problem solving / exercises and short answer questions. It is conducted with closed books.				
Evaluation criteria are specifically defined and given as well as if and where they are reported and accessible to students.	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.				
	Notification of the Assessm criteria are made known dur clearly stated on the cours answers to the exam questions exam date. Students have the	ent Criteria: The evaluation ing the first lecture and are e website and e-class. The s are posted at eclass after the e opportunity to discuss their			

exam paper with the course instructor (at the posted office hours) after the announcement of the course grades.

4. SUGGESTED BIBLIOGRAPHY

-Suggested Bibliography :

• Book [68407011]: Technologies and Programming in the Worldwide Web [in Greek], C. Douligeris, R. Mavropodi, E. Kopanaki, A. Karalis

-Scientific Journals: not applicable

-Lecture Notes

-Laboratory workbook