

## COURSE OUTLINE

### (1) GENERAL

<b>SCHOOL</b>	SCHOOL OF APPLIED ARTS & CULTURE		
<b>ACADEMIC UNIT</b>	DEPARTMENT OF GRAPHIC AND VISUAL COMMUNICATION DESIGN		
<b>LEVEL OF STUDIES</b>	Undergraduate		
<b>COURSE CODE</b>	N1-1060	<b>SEMESTER</b>	<b>1</b>
<b>COURSE TITLE</b>	<b>INFORMATICS</b>		
<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>
Lectures		2	
Laboratory Exercises		2	
<i>Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail at (d).</i>		4	5
<b>COURSE TYPE</b> <i>general background, special background, specialised general knowledge, skills development</i>	General Background Courses		
<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>			

### (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 aim of the course is to acquire the knowledge of students in specialized subjects of information technology and communication and computer science that are applied in graphic arts.</p> <p>Upon successful completion of the course the student will be able to:</p> <ul style="list-style-type: none"> <li>• Manage various operating systems (Windows, MacOS, Linux)</li> <li>• Manage basic word processing and image editing programs</li> <li>• Meet the needs of basic planning</li> <li>• Use open source software</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*  
*Adapting to new situations*  
*Decision-making*  
*Working independently*  
*Team work*  
*Working in an international environment*  
*Working in an interdisciplinary environment*  
*Production of new research ideas*

*Project planning and management*  
*Respect for difference and multiculturalism*  
*Respect for the natural environment*  
*Showing social, professional and ethical responsibility and sensitivity to gender issues*  
*Criticism and self-criticism*  
*Production of free, creative and inductive thinking*  
.....  
*Others...*  
.....

- Project design and management
- Respect for diversity and multiculturalism
- Respect for the natural environment
- Demonstrate social, professional and moral responsibility and sensitivity to gender issues
- Exercise criticism and self-criticism
- Promotion of free, creative and deductive thinking

### (3) SYLLABUS

#### COURSE DESCRIPTION

##### Theoretical part

- Definition of PC, explanation of basic concepts (data, data processing, information), basic components of PC, PC applications.
- Historical development. From mechanical constructions to automatic ones (emphasis on natural laws). Generations of computers (emphasis on technologies). Categories of PC.
- The computer system (hardware). Central unit. Main memory. Auxiliary memories. Input-output devices.
- The software. Algorithms and programs. Numerical systems (binary, octal). Boolean algebra (basic propositional logic). Programming languages. Modern programming environments. Program development process. The user's position.
- The data. Codification. Data files. Databases.
- Operating systems. Basic terms. Graphic environments.
- Office Automation. Convergence of information and communication technologies. Software packages. General characteristics and categories.
- Computer networks. Generally. Services and benefits. Ways and process of connection. Email. The Internet.
- Security of computer systems. Dangers. Harmful programs.
- The Information Society. Peculiarities of Technologies

##### Laboratorial part

- Special applications of Informatics in Graphic Arts Special software, computer color, screens and screen adjustment.
- Programming applications, spreadsheets and networking.

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

<b>DELIVERY</b> <i>Face-to-face, Distance learning, etc.</i>	In the classroom (face-to-face)	
<b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b> <i>Use of ICT in teaching, laboratory education, communication with students</i>	ICT are used in Teaching and Laboratory Education.	
<b>TEACHING METHODS</b> <i>The manner and methods of teaching are described in detail.</i> <i>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>  <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>	<b>Activity</b>	<b>Semester workload</b>
<b>STUDENT PERFORMANCE EVALUATION</b> <i>Description of the evaluation procedure</i>  <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>  <i>Specifically-defined evaluation criteria are given, and if and where they are accessible to students.</i>	<b>Course total</b> <span style="margin-left: 150px;"><b>125</b></span>  <b>Written examination, Delivery of laboratory exercises, Oral examination.</b>	

#### (5) ATTACHED BIBLIOGRAPHY

Suggested bibliography:

- Τσουροπλής-Κλημόπουλος (2000), Εισαγωγή στην Πληροφορική, Εκδόσεις Νέων Τεχνολογιών, Αθήνα.
- Adobe publications, XML, open source code.
- Elliotte Rusty Harold (2004). *XML 1.1 Bible, Third Edition*, Indianapolis, Wiley Publishing, Inc.
- Raghu Ramakrishnan, Johannes Gehrke (2000). *Database Management Systems, Second Edition*, The MCGraw-Hill Companies Inc.
- S. Sumathi, S. Esakkirajan, (2007). *Fundamentals of Relational Database Management*, Springer Berlin Heidelberg, New York.