

<b>SCHOOL</b>	SCHOOL OF SCIENCE		
<b>ACADEMIC UNIT</b>	COMPUTER SCIENCE		
<b>LEVEL OF STUDIES</b>	UNDERGRADUATE		
<b>COURSE CODE</b>	<b>406SBOB</b>	<b>SEMESTER</b>	4 <sup>th</sup>
<b>COURSE TITLE</b>	ICT IN EDUCATION		
<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	5	
Tutorial Exercises	2		
<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>	-		
<b>LANGUAGE OF INSTRUCTION and EXAMINATIONS:</b>	Greek, English (for erasmus students)		
<b>IS THE COURSE OFFERED TO ERASMUS STUDENTS</b>	Yes		
<b>COURSE WEBSITE (URL)</b>	-		

## 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

The development of Information and Communication Technologies (ICT) in recent years has led to their widespread adoption in the educational process. The impact of the use of ICT is multidimensional and many questions, possibilities and perspectives arise.

The course seeks to present and promote discussion on the concerns of the introduction of ICT in education.

The course aims to present the use of ICT in education and then to systematically study the requirements arising from it, the attitudes of the stakeholders and individuals involved, and the impact of ICT on education and society.

Upon successful completion of the course the student will be able to:

- Understand the impact of ICT on social life and the economy.
- Recognise the interdependence of knowledge and technology.
- Recognise the concerns about the application of ICTs in
- Recognise the importance of the application of ICT in education.
- Get to know the software that exists in most Greek schools.
- Be able to evaluate the main impacts of the use of ICT in education.
- Gain knowledge about the methodology of using ICT in education and be able to apply them.
- Recognise the usefulness of ICT in education and be able to propose appropriate ways of applying them.
- Has sufficient theoretical knowledge of models of ICT use in education.
- Is aware of the social, ethical and legal problems arising from the development and the widespread use of ICTs.
- Discusses critically the spread and use of ICT.
- Argues and proposes solutions focused on solving social, educational, cultural and legal-ethical issues relating to the introduction of ICT in education.
- Understand the issues arising from the use of ICT and Web 2.0 applications in issues related to the use of ICT and Web applications and applications in collaborative learning environments.
- Understands the pedagogical use of ICT in special education.
- Reformulate present curricula and propose solutions with the pedagogical use of ICT in education

### 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

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Others...

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- Search, analysis and synthesis of data and information, using the necessary technologies
- Autonomous Work
- Group work
- Exercise of criticism and self-criticism
- Promotion of free, creative and deductive thinking

## SYLLABUS

<ul style="list-style-type: none"> <li>• Introduction to ICT</li> <li>• Information and Communication Technology.</li> <li>• The spread of ICT and its social and economic impact</li> <li>• The interdependence of knowledge with 'knowledge technology'.</li> <li>• The new social and professional requirements arising from the development of information and communication technology</li> <li>• ICT uses in education</li> <li>• The introduction of computers in schools as a curriculum problem: the computer as an object of instruction.</li> <li>• The computer as a teaching tool</li> <li>• Web 2.0 and collaborative environments in education</li> <li>• Virtual and mixed reality environments in education</li> <li>• The use of mobile and electronic devices in the educational process</li> <li>• Teachers and ICT: attitudes, perceptions, requirements</li> <li>• Learner and ICT: use, attitudes and concerns.</li> <li>• Gender and adoption of new technologies in the past and today.</li> <li>• Social, ethical, legal and political problems arising from the spread of ICT Information and Communication Technology.</li> </ul>
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## TEACHING and LEARNING METHODS - EVALUATION

<b>DELIVERY</b> <i>Face-to-face, Distance learning, etc.</i>	Face-to-face (in class)	
<b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b> <i>Use of ICT in teaching, laboratory education, communication with students</i>	Supporting learning process through the online platform e-class Collaborative docs, AR platfor ARTutor	
<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.  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>
	Lectures	26x2 =52 hours
	Tutorial Exercises	13x2 =26 hours
	Collaborative Projects	30 hours
	Independent study	17 hours
	Course total	<b>125 hours</b>
<b>STUDENT PERFORMANCE EVALUATION</b> <i>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.</i>	Total grade (100%): - Assignments (100%)	

## ATTACHED BIBLIOGRAPHY

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- Τζιμογιάννης, Α. (2017). Ηλεκτρονική Μάθηση: Θεωρητικές Προσεγγίσεις και Εκπαιδευτικοί Σχεδιασμοί. Αθήνα : Κριτική
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- [http://ec.europa.eu/dgs/education\\_culture/repository/education/tools/docs/2015/monitor2015-cyprus\\_el.pdf](http://ec.europa.eu/dgs/education_culture/repository/education/tools/docs/2015/monitor2015-cyprus_el.pdf)
- Proceedings of ETPE conferences «ICT in Education» <https://www.etpe.gr/conferences/>