COURSE OUTLINE

1. GENERAL

SCHOOL	**School of Sciences**
ACADEMIC UNIT	**Department of Computer Science**
LEVEL OF STUDIES	**Graduate**

COURSE CODE	301SBOB	**SEMESTER**	3º

COURSE TITLE	Object Oriented Programming

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 hours and the total credits*	**WEEKLY TEACHING HOURS**	**CREDITS**
Lectures	2h	
Tutorials	1h	6
Laboratory	1h	
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:	
LANGUAGE OF INSTRUCTION and EXAMINATIONS:	Greek-English
IS THE COURSE OFFERED TO ERASMUS STUDENTS	Yes
COURSE WEBSITE (URL)	https://moodle.cs.duth.gr/course/view.php?id=7

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*
Upon successful completion of the course, students should be able to: • design, implement, document, test and debug source codes by making use of all relevant concepts included in the course material. • identify, interpret, and combine source code to solve realistic problems.
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...* *......*

- Search for, analysis and synthesis of data and information, with the use of the necessary technology
- Working independently
- Production of free, creative and inductive thinking

3. COURSE CONTENT

The Object Oriented model, Introduction to classes, Enumerated classes, Abstract Classes, Interfaces, Generics, Iterators, Comparators, Inheritance, Polymorphism, Exceptions

4. LEARNING & TEACHING METHODS - EVALUATION

DELIVERY *Face-to-face, Distance learning, etc.*	Face-to-face
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY *Use of ICT in teaching, laboratory education, communication with students*	The Integrated Development Environment) NetBeans. The e-learning platform moodle. The Web Service DropBox.
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 hours for each learning activity are given as well as the hours of non-directed study according to the principles of the ECTS*	*see table below*

Δραστηριότητα	*Φόρτος Εργασίας Εξαμήνου*
Lectures	13x2=26
Tutorials	13x1=13
Laboratory	*13x1=13*
study and analysis of bibliography	250:5=50
Exam preparation	120x0.2=24
Course total	*126*

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.*	• Written final Exam

5. SUGGESTED BIBLIOGRAPHY

- Suggested bibliography:
- Related academic journals:

- Paul Deitel, Harvey Deitel, Java SE 8 Οδηγός για Προγραμματιστές, Τρίτη Έκδοση, Μ. Γκιούρδας, ISBN: 978-960-512-6827
- Liang Y. D, Εισαγωγή στον Προγραμματισμό Java, 10η Έκδοση, 2015, Εκδόσεις Τζιόλα, ISBN: 978-960-418-500-9
- The Java Tutorials, Oracle, https://docs.oracle.com/javase/tutorial/