COURSE DISCRIPTION

1. GENERAL

SCHOOL	ENVIRONMENT, GEOGRAPHY AND APPLIED ECONOMICS		
DEPARTMENT	GEOGRAPHY		
LEVEL OF COURSE	Undergraduate		
COURSE CODE		**SEMESTER**	1A
COURSE TITLE	INTRODUCTION TO INFORMATICS		

STRUCTURE OF TEACHING ACTIVITIES	**TEACHING HOURS PER WEEK**	**NUMBER OF CREDITS ALLOCATED (ECTS)**
Lectures and Laboratory Classes	3	5

TYPE OF COURSE	Compulsory
PREREQUISITES	-
LANGUAGE OF INSTRUCTION	GREEK
COURSE OFFERED TO ERASMUS STUDENTS	YES (in English if required)
(URL)	

2. EXPECTED LEARNING OUTCOMES

Learning outcomes *Describe the objectives of the course as well as the expected learning outcomes*
Students are introduced to fundamental topics for developing a basic understanding of Information Science. At the end of the course the student is expected to be able to understand the computer architecture and structure. It is also expected to build up its skill in programming through designing and developing source code. The practical sessions provide “hands on” applications while the laboratory sessions of the course are essential for the learner in order to demonstrate its skills on developing programs and debugging them through various compiler tools.

3. COURSE CONTENTS

1. Theory

Computer History, Numerical systems, computer architecture, Operating systems, Compilers, algorithms, flowcharts, Basic concepts of Procedural and Object Oriented Programming, Introduction to Programming Language Python, Applications and exercises in Python

2. Lab classes

Lab practical 1-5: Applications in Open Office/ Libre Office software, Open Office Writer, Open Office Calc

Lab practical 6-11: Python programming language is taught and along with

exercises in order to develop programming skills in Python

4. TEACHING AND ASSESSMENT METHODS

<table>
<tr><td>TYPE OF LECTURES</td><td>In class lectures
Laboratory Lectures and Practice</td></tr>
<tr><td>ICT USE</td><td>ICT use and e-class</td></tr>
<tr><td>TEACHING STRUCTURE</td><td>
<table>
<tr><th>Activity</th><th>Hours per semester</th></tr>
<tr><td>Lectures</td><td>26</td></tr>
<tr><td>Laboratory</td><td>13</td></tr>
<tr><td>Weekly assignments</td><td>26</td></tr>
<tr><td>Studying</td><td>65</td></tr>
<tr><td>TOTAL</td><td>130</td></tr>
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<tr><td>ASSESSMENT METHODS</td><td>Assessment Language: Greek

The basic assessment type of the course is the written examination at the end of the semester (3 hours) providing the 60% of the final grade. It is combined with a final practice test in Python programming language (30 minutes) contributing to the rest 40% of the final grade.
On weekly basis there is also a laboratory work in the form of application in Python language which is submitted up to the day of each practice and it is based on the contents of the previous work.</td></tr>
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5. RECOMMENDED READING

- Behrouz Forouzan, Firouz Mosharraf, 2010, "Introduction to Computer Science", Kleidarithmos Publications, Athens, Greece.
- Avouris N., Sgarmpas K., B. Paliouras, Koukias M., 2013, Introduction to Computers with language Python, Property Development and Management Company of the University of Patras, Patras, Greece.