

## COURSE OUTLINE

### 1. GENERAL

<b>SCHOOL</b>	SCHOOL OF AGRICULTURAL SCIENCES		
<b>ACADEMIC UNIT</b>	DEPARTMENT OF FOOD SCIENCE & TECHNOLOGY		
<b>LEVEL OF STUDIES</b>	UNDERGRADUATE		
<b>COURSE CODE</b>	<b>FST_104</b>	<b>SEMESTER</b>	1 <sup>st</sup>
<b>COURSE TITLE</b>	INFORMATICS I		
<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		
Exercises	2		
	<b>4</b>	<b>5</b>	
<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>	<i>general background skills development</i>		
<b>PREREQUISITE COURSES:</b>	No prerequisite courses		
<b>LANGUAGE OF INSTRUCTION and EXAMINATIONS:</b>	Greek		
<b>IS THE COURSE OFFERED TO ERASMUS STUDENTS</b>	No		
<b>COURSE WEBSITE (URL)</b>			

### 2. LEARNING OUTCOMES

<p><b>Learning outcomes</b>  <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.  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 this course is to give students the basic knowledge in the field of computer science as well as the software used and the basic principles of programming.</p> <p>Upon completion of this course, students will be able to:</p> <ul style="list-style-type: none"> <li>• understand the departments and principles of a computer</li> <li>• understand the capabilities of operating systems</li> <li>• understand the concepts of programming</li> <li>• understand the capabilities of basic software applications</li> <li>• develop skills in organizing and processing information in databases</li> <li>• determine how the information is organized and processed</li> <li>• explore and locate accurate information and corresponding educational material in international and Greek literature.</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?*

<i>Search for, analysis and synthesis of data and information, with the use of the necessary technology</i>	<i>Project planning and management</i>
<i>Adapting to new situations</i>	<i>Respect for difference and multiculturalism</i>
<i>Decision-making</i>	<i>Respect for the natural environment</i>
<i>Working independently</i>	<i>Showing social, professional and ethical responsibility and sensitivity to gender issues</i>
<i>Team work</i>	<i>Criticism and self-criticism</i>
<i>Working in an international environment</i>	<i>Production of free, creative and inductive thinking</i>
<i>Working in an interdisciplinary environment</i>	<i>.....</i>
<i>Production of new research ideas</i>	<i>Others...</i>
	<i>.....</i>

*Search for, analysis and synthesis of data and information, with the use of the necessary technology*  
*Adapting to new situations*  
*Decision-making*  
*Working independently*

**3. SYLLABUS**

The course content includes the following:

1. Digital Information - Binary Logic
2. Computer Parts
3. Operating Systems
4. Algorithms
5. Programming (1/2)
6. Programming (2/2)
7. Databases (1/2)
8. Databases (2/2)
9. Basic Software (1/2)
10. Basic software (2/2)
11. Internet Technologies (1/2)
12. Internet Technologies (2/2)
13. Material overview

**4. TEACHING and LEARNING METHODS - EVALUATION**

<b>DELIVERY</b> <i>Face-to-face, Distance learning, etc.</i>	<i>Face-to-face, Hands-on experience with ICT</i>	
<b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b> <i>Use of ICT in teaching, laboratory education, communication with students</i>	<i>Lectures using Power Point presentations, suspension of educational material in eclass</i>	
<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</i>	<b>Activity</b>	<b>Semester workload</b>
	Lectures	26
	Exercises	26
	Study and analysis of bibliography	40
	Essay production	33

<i>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>		
	Course total	<b>125</b>
<p align="center"><b>STUDENT PERFORMANCE EVALUATION</b></p> <p><i>Description of the evaluation procedure</i></p> <p><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></p> <p><i>Specifically-defined evaluation criteria are given, and if and where they are accessible to students.</i></p>	<p>It will be based on the following criteria (combined or not) depending on the number of students participating in the course.</p> <ul style="list-style-type: none"> <li>• Written exam at the end of the semester with development questions, short answer questions and / or multiple-choice questions, or a combination of the above</li> <li>• Project evaluation</li> </ul>	

#### 5. ATTACHED BIBLIOGRAPHY

- Βιβλίο [18548737]: Εισαγωγή στους Υπολογιστές, Norton Peter
- Βιβλίο [50656335]: ΕΙΣΑΓΩΓΗ ΣΤΗΝ ΕΠΙΣΤΗΜΗ ΤΩΝ ΥΠΟΛΟΓΙΣΤΩΝ, ΒΕΗΡΟΥΖ FOROUZAN
- Βιβλίο [50657158]: 9 ΑΛΓΟΡΙΘΜΟΙ ΠΟΥ ΑΛΛΑΞΑΝ ΤΟ ΜΕΛΛΟΝ, JOHN MacCORMICK
- Βιβλίο [68369726]: Αλγόριθμοι, 2η Έκδοση, Μποζάνης Παναγιώτης
- Βιβλίο [50656340]: ΕΙΣΑΓΩΓΗ ΣΤΗΝ JAVA, ΓΙΩΡΓΟΣ ΛΙΑΚΕΑΣ
- Βιβλίο [77109703]: Java, Farrell Joyce
- Βιβλίο [12186]: Θεμελιώδεις αρχές συστημάτων βάσεων δεδομένων, Elmasri Ramez, Navathe Shamkant B.
- Βιβλίο [13619]: ΒΑΣΙΚΕΣ ΑΡΧΕΣ ΓΙΑ ΤΑ ΣΥΣΤΗΜΑΤΑ ΒΑΣΕΩΝ ΔΕΔΟΜΕΝΩΝ, JEFFREY D. ULLMAN, JENNIFER W
- Βιβλίο [12543770]: Προγραμματισμός Internet & World Wide Web 4η Έκδοση, Deitel & Deitel