KM131-INTRODUCTION TO COMPUTING

1. GENERAL

SCHOOL	School of Technology		
DEPARTMENT	Department of Forestry, Wood Sciences, and Design		
LEVEL	*Undergraduate*		
CODE	**KM131**	**STUDENT SEMESTER**	1st
COURSE TITLE	Introduction to Computing		

ACTIVITIES	WEEKLY HRS	ECTS
Lectures and Laboratory Sessions	3	5

TYPE OF COURSE	Scientific area
PREREQUISITES:	None
LANGUAGE TEACHING AND EXAMINATION:	Greek
THE COURSE OFFERED TO STUDENTS ERASMUS	No
WEBPAGES COURSE (URL)	https://eclass.uth.gr/courses/FWSD_U_103/

2. LEARNING OUTCOMES

Learning Outcomes

The aim of the course is to provide basic knowledge concerning computer architecture, programming, communication, programming, and use, as well as, Internet services.

At the end of the course students will be able to:

- Know the basic concepts of Informatics and Internet Technologies

- Know the main computer parts and the main classes of Informatics and Telecommunications software applications

- Configure and use common office automation software

- Design and implement a web site

- Understand and apply the main programming principles

- Know the basic data base concepts

- Have an understanding about Web application development and operation

General Skills

Upon successful completion of the course, the students will be able to develop and cultivate basic professional and social skills:

- Search, analysis and synthesis of data and information, using the necessary technologies
- Adaptation to new situations

- Decision making
- Autonomous work
- Teamwork
- Demonstration of social, professional and moral responsibility and sensitivity to gender issues
- Exercise criticism and self-criticism
- Promoting free, creative and inductive thinking

3. COURSE CONTENT

In the theoretic part the the following topics are explained:

Basic Informatics Concepts, Hardware and Computer main parts. Operating Systems. Software Applications. Algorithms and programming languages. Pseudocode and flow diagrams. Networks and Communications. The World Wide Web. The HTML language. The Javascript language. Basic javascript program components. Matrices and subroutines. Basic database concepts. ER-diagrams. Database table design. The SQL language. E-commerce, E-mail and Web Applications. Internet marketing. Environmental Applications.

The laboratory part is taught 1 hour every week and focuses on practical application of the theoretic concepts through targeted exercises, group sessions and targeted assignments.

The final semester assignment requires submission of the assignment materials as well as a 10 minute oral presentation at week 12. The semester assignment counts for 20% of the total course assessment and the remaining 80% is obtained through written examination.

4. TEACHING AND LEARNING METHODS - EVALUATION

DELIVERY METHOD	Face to face
USE OF INFORMATION AND COMMUNICATION TECHNOLOGIES	Use of a course website on the e-class platform for posting (a) notes, (b) internet links, (c) announcements, search tools and social networks Furthermore, use of equipment such as as video projector, interactive board, and use of server and terminal stations at the laboratory room.

TEACHING ORGANISATION		
	Activity	*Semester Workload*
	Interactive Teaching – Lectures	26
	Laboratory exercises	13
	Semester assignments	35
	Self-study	51
	Course Total	*125*

STUDENT EVALUATION	
	Both intermediate and final evaluation is applied. The evaluation of the theoretical part is carried out by: 1. Optional intermediate written examination 2. Semester assignment 3. Final written exam The evaluation of the laboratory part is carried out by:

	1. Two short written exams on 4th and 8th semester week which involve multiple choice questions
	2. Laboratory assignments delivered on a weekly basis
	3. Final exam carried out on week 14

5. RECOMMENDED-BIBLIOGRAPHY

- Recommended literature:

- Evans A., Kendall M., and M. A. Poatsy (2018). Εισαγωγή στην Πληροφορική, Κωδ. Εύδοξου 77109607, Εκδόσεις Κριτική Α.Ε., ISBN: 978-960-586-236-7. (in Greek)
- Δαγδιλέλης Β., Ευαγγελίδης Γ., Σατρατζέμη Μ., Ν. Φαχαντίδης (2015). Εισαγωγή στην Χρήση των Η/Υ. Κωδ. Εύδοξου 50656000, Εκδόσεις Τζιόλα και Υιοί, ISBN: 978-960-418-544-3. (in Greek)
- Καρολίδης, Δ. και Κ. Ξαρχάκος (2016). Microsoft Excel 2016: Θεωρία - Συναρτήσεις - Προγραμματισμός με VBA - Εφαρμογές, σελ. 592, κωδ. Εύδοξου 68369508, Εκδόσεις Άβακας, Αθήνα. (in Greek)
- Ξαρχάκος, Κ., Δ. Σμαραγδής και Ι. Ξαρχάκος (2014). Μαθαίνετε εύκολα WordPress 4.x. σελ. 288, κωδ. Εύδοξου 68369382, Εκδόσεις Άβακας, Αθήνα. (in Greek)
- Κουτσιαρής, Α. (2017). Εφαρμογές Πληροφορικής και Στατιστικής με τα Windows 10 και Office 2016. σελ. 278, κωδ. Εύδοξου 68376442, Εκδόσεις Bookstars-Free Publishing, Αθήνα. (in Greek)
- Ομάδα Συγγραφέων (2017). 7+1: WINDOWS 10, OFFICE 2016. σελ. 968, κωδ. Εύδοξου 68386185, Εκδόσεις Κλειδάριθμος, Αθήνα. (in Greek)
- Μποζάνης Π. (2016). Εισαγωγή στην πληροφορική και τους υπολογιστές, σελ. 584, κωδ. Εύδοξου 50656007, Εκδόσεις Τζιόλα, Αθήνα. (in Greek)
- Βερύκιος, Β. (2014). Μαθήματα Βάσεων Δεδομένων. κωδ. Εύδοξου 33094772, Θεσσαλονίκη, Εκδόσεις Τζιόλα. (in Greek)
- Shao, G. and K. M. Reynolds, Eds. (2006). Computer Applications in Sustainable Forest Management. Amsterdam, pp 295, Springer Netherlands.

- Relevant scientific journals:

- Communications of the ACM
- IEEE Computer