COURSE OUTLINE

(1) GENERAL

SCHOOL	Science and Technology		
ACADEMIC UNIT	Science and Technology		
PROGRAMME OF STUDIES	MSc in e-Business and Digital Marketing		
LEVEL OF STUDIES	Postgraduate		
COURSE CODE	EBC09	SEMESTER	1
COURSE TITLE	ICT Essentials		
COURSE TYPE *Elective, compulsory*	Compulsory		
INSTRUCTOR(S)	Prof. C. Tjortjis , Dr D. Karapiperis, and Dr. P. Koukaras		

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
Theory	3	6
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*	General background
PREREQUISITE COURSES:	-
LANGUAGE OF INSTRUCTION and EXAMINATIONS:	English
IS THE COURSE OFFERED TO ERASMUS STUDENTS	Yes
COURSE WEBSITE (URL)	https://www.ihu.gr/ucips/course-information/ict-essentials

(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*

The overall goal is not to turn managers into computer specialists but to provide them with the technological background that will allow them to:

- make informed business decisions based on the utilization of technology
- effectively interact with the technical staff

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
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

Working in an international environment *Working in an interdisciplinary environment* *Production of new research ideas*	*Production of free, creative and inductive thinking* *……* *Others…* *…….*

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

(3) SYLLABUS

This course is intended for students with little or no background in computer technology. It offers a broad coverage of modern technology concepts, outlining the basic principles of computing. ICT Essentials is an introduction to a variety of technologies and their applications, such as:

- Computer Systems Architecture
- Operating Systems
- Software Architecture and Information Systems
- Databases and Storage Systems
- Computer Networks, the Internet & the World Wide Web
- Mobile Computing
- Data Science and Business Analytics
- Big Data and Cloud Computing
- Information and Network Security

(4) TEACHING and LEARNING METHODS - EVALUATION

DELIVERY *Face-to-face, Distance learning, etc.*	Hybrid: Face to face and synchronous distance learning
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY *Use of ICT in teaching, laboratory education, communication with students*	**Use of ICT in Teaching** During the educational process, various machine learning and programming tools are used, along with the material available at the e-learning platform. The hybrid teaching method involves synchronous learning with the support of the videoconferencing tool Zoom. Students are taught a variety of tools related to the course content and material. **Use of ICT in Communication with students** • The course material (slides, scientific articles, exercises, etc.) is posted on the course page at the e-learn platform (Moodle). • Use of Moodle Forums announcements. • Live video meetings via Zoom/Teams. • Contact via email.
TEACHING METHODS *The manner and methods of teaching are described in detail.* *Lectures, recitation, 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*	

Activity	*Semester workload*
Lectures	30 hrs.
Projects	20 hrs.
Exams	2 hrs.
Non-Directed Study	98 hrs.
Course total	***150 hrs.***

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*	Language of Evaluation: English Evaluation Procedure: ● Written Exams (70%). Methods of evaluation: ○ Open-ended questions ○ Problem solving ○ Multiple choice questions (on lab material) ● Projects (30%): ○ The students should achieve a passing grade to participate in the written exams. The evaluation procedure is announced to the students during the first lecture and is also accessible at the e-learn platform throughout the entire semester.
STUDENT OBLIGATIONS *Compulsory attendance of lectures, labs, recitations, compulsory participation in midterms, exams, compulsory delivery of homework, projects, etc.*	● Compulsory attendance of lectures ● Compulsory participation in the exams ● Compulsory delivery of projects

(5) ATTACHED BIBLIOGRAPHY

- Brian Williams and Stacey Sawyer, Using Information Technology, 11th Ed., 2015, McGraw Hill
- R. Kelly Rainer, Brad Prince, Casey G. Cegielski, Introduction to Information Systems, 5th Ed. Int'l Student Version, 2014, Wiley.
- Carol V. Brown, Daniel W. DeHayes, Jeffrey A. Hoffer, Wainright E. Martin, William C. Perkins, Managing Information Technology, 7/E, 2012, Pearson.
- Preston Gralla, "How the Internet works", 8th edition, Que Publishing.
- John Petersen, "Absolute beginner's guide to databases", Que Publishing.
- V. Anton Spraul, "How software works: the magic behind encryption, CGI, search engines and other everyday technologies", No Starch Press.