COURSE OUTLINE

(1) GENERAL

SCHOOL	Social Sciences		
ACADEMIC UNIT	Cultural Technology and Communication		
LEVEL OF STUDIES	Undergraduate		
COURSE CODE	**PLR 104**	**SEMESTER**	**2nd**
COURSE TITLE	Internet Technologies		

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	2	3
Laboratories	2	3
Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail at (d).	4	6

COURSE TYPE *general background, special background, specialised general knowledge, skills development*	Compulsory/General Background
PREREQUISITE COURSES:	None
LANGUAGE OF INSTRUCTION and EXAMINATIONS:	Greek
IS THE COURSE OFFERED TO ERASMUS STUDENTS	yes
COURSE WEBSITE (URL)	https://eclass.aegean.gr/courses/131309/

(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*

At the end of this course, the students will have knowledge of:

- Basic principles and functionalities of Internet
- The most important Internet services
- The Client-Server model
- HTML5 markup language and CSS3 cascading style sheet language
- Responsive και Parallax design techniques for Web pages
- Methods for organizing, managing, designing and developing websites (best practices)
- JavaScript language (introduction)

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
Project planning and management
Respect for difference and multiculturalism
Respect for the natural environment
Showing social, professional and ethical responsibility and

Working independently	*sensitivity to gender issues*
Team work	*Criticism and self-criticism*
Working in an international environment	*Production of free, creative and inductive thinking*
Working in an interdisciplinary environment	*……*
Production of new research ideas	*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
- Transfer of know-how in other environments
- Working in an interdisciplinary environment
- Practice Critical Thinking

(3) SYLLABUS

The course introduces the basic concepts of Internet technologies and the basic problems in the design and development of web pages and websites. Initially, an introduction in the basic concepts and principles of computer networks, of the Internet and of the WWW. Different ways of organizing concept in the Web are presented, as well as tools for the check of correctness and performance of websites. The HTML5 language is then presented in detail, for the web page development, as well as the CSS3 technology for the common formatting/styling of documents in the Web. The course is also providing knowledge on principles and techniques of good practices in the design of websites. In the lab, students are getting familiar with the syntax and coding of HTML5/CSS3 languages, as well as with tools and techniques for the development and publication of websites.

1. Introduction
2. Technologies, networks, tools, etc.
3. HTML-1: markup languages, HTML, structure, tags, heading, comments, etc.
4. HTML-2: links, attributes, images, - Search Engines
5. HTML-3: lists, tables, audio, video
6. HTML-4: id, internal links, iFrame, forms
7. CSS-1: introduction, style, colors
8. CSS-2: DOM, inheritance, selectors, borders, box
9. CSS-3: Fonts, text, pseudo-elements/classes
10. FTP, Hosting
11. JavaScript (introduction)
12. HTML5 Semantics, HTML Layouts, Responsive and Parallax design, XHTML
13. Web dev best-practices – site design

(4) TEACHING and LEARNING 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*	Use of open source software for laboratory education or software with free license for Universities. Use ICT in teaching and communication with students. Also, the practice with W3Schools tutorials is proposed and demonstrated (https://www.w3schools.com/).
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*	

Activity	***Semester workload***
Lectures	13 *2 hours =26 hours
Lectures' study	13*3 hours = 52 hours
Laboratory Practice	13*2 = 26 hours
Laboratory Preparation and semester assignment	54 hours
Course total	***158 hours***

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.*	Interim project (20%). Final project (50%). Online test, exam (multiple-choice questions) (30%). Students are familiar with the evaluation criteria from the first course lecture. All notes are stored in the course's area in University e-class platform (eclass.aegean.gr).

(5) ATTACHED BIBLIOGRAPHY

- Suggested bibliography:

- Deitel & Deitel, Προγραμματισμός Internet & World Wide Web (4η έκδ), Α. Γκιούρδα & ΣΙΑ ΟΕ, 2011, ISBN: 978-960-512-612-4.
- Lemay Laura, Colburn Rafe, Πλήρες Εγχειρίδιο της HTML 5 & CSS, 6ή Έκδοση, Α. Γκιούρδα & ΣΙΑ ΟΕ, 2011, ISBN: 978-960-512-6193.
- Julie C. Meloni, Μάθετε HTML 5, CSS και JavaScript Όλα σε Ένα (2η έκδοση), Χ. ΓΚΙΟΥΡΔΑ & ΣΙΑ ΕΕ, 2015, 978-960-512-6858.

- Related academic journals:

- International Journal of Web Engineering and Technology
- Journal of Web Engineering, ACM
- IEEE Internet Computing
- Journal of Internet Services and Applications
- International Journal of Internet Science
- Internet Research