# COURSE OUTLINE

## (1) GENERAL

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|---|---|---|---|
| **SCHOOL** | Social Sciences | | |
| **ACADEMIC UNIT** | Cultural Technology and Communication | | |
| **LEVEL OF STUDIES** | Undergraduate | | |
| **COURSE CODE** | **PLR 106** | **SEMESTER** | **3rd** |
| **COURSE TITLE** | Design and Development of Websites and Web Applications | | |

| **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 |

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| **COURSE TYPE** *general background, special background, specialised general knowledge, skills development* | Optional/General Background |
| **PREREQUISITE COURSES:** | Internet Technologies |
| **LANGUAGE OF INSTRUCTION and EXAMINATIONS:** | Greek |
| **IS THE COURSE OFFERED TO ERASMUS STUDENTS** | Yes |
| **COURSE WEBSITE (URL)** | https://eclass.aegean.gr/courses/131328/ |

## (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 should be able to:

- Be familiar with fundamental concepts, principles, functionalities and services of the Internet (e.g., Http, DNS, FTP).
- Understand concepts related to the management of content in the Web.
- To manage and use website development platforms and content management (CMS) such as Wix and WordPress.
- To implement/develop websites using proper technology.
- To develop web applications (e.g., e-shop, chatbot, forum, blog) on top of WordPress CMS.

**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*
*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*

| | |
|---|---|
| *Team work*<br>*Working in an international environment*<br>*Working in an interdisciplinary environment*<br>*Production of new research ideas* | *Criticism and self-criticism*<br>*Production of free, creative and inductive thinking*<br>*……*<br>*Others…*<br>*……..* |

- 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 focuses on the Internet and WWW technologies, emphasizing the content management systems (CMS) and the programming/development of Web applications using CMS WordPress. An initial overview of technologies related to computer networks, Internet, WWW, CMS, etc. is provided. Later, the distinction between simple tools for the development of websites and the CMS. The emphasis is given in both, presenting, and working with Bootstrap framework as well as with Wix/WordPress CMS respectively. Finally, Web applications are developed using WordPress CMS (forms, forums, blogs, databases, etc.).

Lectures/Lab structure:

1: HTML/CSS, CMS, WYSIWYG HTML/CSS editors (Intro)
2: BlueGriffon WYSIWYG content editor
3: Mobirise4 Bootstrap Website Builder
4: Google Sites
5-6: Wix CMS
7-10: WordPress CMS, Blogs, Wikis.
11-12: WordPress for Web Apps (e.g. forms, forums, newsletters, lists, 360/3d photo viewer, galleries)
13: Revision

## (4) TEACHING and LEARNING METHODS - EVALUATION

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|---|---|
| **DELIVERY**<br>*Face-to-face, Distance learning, etc.* | Face-to-face |
| **USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY**<br>*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/) and WordPress tutorial (https://learn.wordpress.com/). |
| **TEACHING METHODS**<br>*The manner and methods of teaching are described in detail.*<br>*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.*<br><br>*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*5 hours = 65 hours |
| Laboratory Practice | 13*2 = 26 hours |
| Laboratory Preparation and semester assignment | 40 hours |
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| | Course total | ***157 hours*** |
| **STUDENT PERFORMANCE EVALUATION**<br>*Description of the evaluation procedure*<br><br>*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*<br><br>*Specifically-defined evaluation criteria are given, and if and where they are accessible to students.* | The evaluation of students' performance is conducted during and at the end of the semester with assignments weighted a percentage of 100%.<br><br>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:*

| | | | | | | |
|---|---|---|---|---|---|---|
| WordPress for Web Developers | Stephanie Leary | Apress | 2013 | HEAL-Link Springer ebooks | 9781430258674 | **73261091** |
| Οπτικός Οδηγός του WordPress | Patrice-Anne Rutledge | Α. Γκιούρδα & ΣΙΑ | 2014 | Αθήνα | 978-960-512-673-5 | **41955177** |

*- Related academic journals:*

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