# COURSE OUTLINE

## (1) GENERAL

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|---|---|---|---|
| **SCHOOL** | SOCIAL SCIENCES | | |
| **ACADEMIC UNIT** | DEPARTMENT OF CULTURAL TECHNOLOGY AND COMMUNICATION | | |
| **LEVEL OF STUDIES** | UNDERGRADUATE | | |
| **COURSE CODE** | **PLR 108** | **SEMESTER** | **8** |
| **COURSE TITLE** | INFORMATION SYSTEMS | | |

| **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 |
| Laboratory exercises | 1 | 2 |
| | 3 | 5 |
| *Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail at (d).* | | |

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|---|---|
| **COURSE TYPE** *general background, special background, specialised general knowledge, skills development* | Elective / Special 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/131201/ |

## (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*

Upon completion of this course, participants will be able to:

- recognize the different types of information systems and their role in business organizations
- describe the technologies that form the IS infrastructure
- understand and critically contrast the basic IS development methodologies
- use information management tools in order to develop simple ISs
- describe the social and ethical issues stemming from the use of ISs

**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?*

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|---|---|
| *Search for, analysis and synthesis of data and information, with the use of the necessary technology* | *Project planning and management* |
| *Adapting to new situations* | *Respect for difference and multiculturalism* |
| *Decision-making* | *Respect for the natural environment* |
| *Working independently* | *Showing social, professional and ethical responsibility and 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
- Team work
- Project planning and management
- Showing social, professional and ethical responsibility to information handling issues

**(3) SYLLABUS**

The objective of this course is the introduction to the basic issues related to the design and development of Information Systems (IS) and their use in business organisations. It is organized in the following sections: IS categories, organisation and IS, social and moral issues (systems quality, systems privacy, intellectual property rights), technology infrastructure (hardware, databases, communication networks), IS development issues (methodologies and tools).

| Διαλέξεις | |
|---|---|
| 1. | Introduction – Course Objectives |
| 2. | Information Systems – Basic Concepts |
| 3. | Decision Support Systems – Data Analytics |
| 4. | Technological Infrastructure of Information Systems |
| 5. | Data Management |
| 6. | Case Study I – Collection Management Systems |
| 7. | Information Systems Development |
| 8. | Enterprise Resource Planning (ERP) Systems |
| 9. | Case Study II – Enterprise IS Development |
| 10. | Strategic Planning – Cost / Benefit Analysis |
| 11. | Social and Ethical Issues of Information Systems |

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|---|---|
| 12. | Presentation of Students' Assignments |
| 13. | Review |

## (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 in laboratory education |
| **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* | |
| **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.* | Students have the option to be evaluated either through a written examination or through elaboration and public presentation a team project.<br><br>The written exam includes multiple choice questions as well as open ended questions based on both the theoretical part (lectures) and the practical part as it is presented and monitored in the laboratory of the course.<br><br>Projects concern the analysis of a real problem (report) and the implementation of a system with the use of tools presented during the course labs. The assessment of the project is based on the written report (40%), the system implementation (40%) and the public presentation (20%).<br><br>The evaluation criteria are given during the first lecture and are explicitly stated in the course eclass. |

| ***Activity*** | ***Semester workload*** |
|---|---|
| Lectures | 13 *2 hours =26 hours |
| Study of lectures' material | 13*5 hours = 65 hours |
| Laboratory practice | 13*1 hour = 13 hours |
| Project | 30 hours |
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| Course total | 134 hours |

## (5) ATTACHED BIBLIOGRAPHY

*- Suggested bibliography:*


- Management Information Systems, 11th ed., LAUDON K., LAUDON J., Kleidarithmos 2014, ISBN: 978-960-461-623-7
- Management Information Systems, Patricia Wallace, Kritiki, 2014, ISBN: 978-960-218-886-6
- Management Information Systems: Moving business forward, K. Rainer & H. Watson, Giourdas 2013, ISBN: 978-960-512-6407


*- Related academic journals:*

- Management Information Systems, MIS Quarterly
- Communications of the ACM
- ACM Transactions on Information Systems, ACM
- ACM Transactions on Management Information Systems, ACM
- IEEE Transactions on Software Engineering, IEEE Society
- Journal of Intelligent Information Systems, Springer
- Information Systems Journal, Elsevier
- Journal of the Association for Information Science and Technology, Wiley
- Information Systems Management, Taylor & Francis