**COURSE OUTLINE**

1. **GENERAL**

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| **SCHOOL** | BUSINESS AND ECONOMICS | | | | |
| **DEPARTMENT** | BUSINESS ADMINISTRATION | | | | |
| **LEVEL OF STUDY** | POSTRGRADUATE MBA | | | | |
| **Course Unit Code** |  | **SEMESTER OF STUDY** | | 2nd | |
| **Course Title** | MANAGEMENT INFORMATION SYSTEMS FOR EDUCATION | | | | |
| **Coursework Breakdown** | | | **TEACHING WEEKLY HOURS** | | **ECTS Credits** |
| Lectures | | | 3 | | 7 |
| Laboratory Exercises | | | 1 | |  |
| WorkShops | | | 1 | |  |
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| **Course Unit Type** | SCIENTIFIC AREA COURSE | | | | |
| **Prerequisites :** |  | | | | |
| **Language of Instruction/Exams:** | GREEK | | | | |
| **COURSE DELIVERED TO ERASMUS STUDENTS** |  | | | | |
| **Module web page (URL)** | http://moodle.teipir.gr/course/info.php?id=447 | | | | |

1. **Learning Outcomes**

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| **Learning Outcomes** | |
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| The course investigates selected topics from the area of Analysis, Design and Development of Management Information Systems with emphasis in Management Information Systems for Education. The aim of the course is for students to understand the technology structure and operation of Management Information Systems, to deepen into issues related to the analysis and design of Information Systems and to apply techniques and methods of this scientific area in real case studies.  Upon successful completion of the course students should be able to:   * explain and analyze the processes involved in the life cycle of an information system * distinguish the characteristics of a Management Information System for Education * compare the different models (system models) used in the development of an information system * analyze functional and non-functional requirements of a management information system for education * construct and analyze the use case model (Use Case Model) of a management information system for education using the design language UML * construct and analyze the relational data model of a management information system for education * compose questions in SQL using a database management system (eg MS Access) * actively participate in working groups and manage problems that arise during the actual implementation of a management information system for education. | |
| **General Skills** |
| - Individual work  - Teamwork  - Adaptation in new situations  - Planning and management of a project | |

1. **Course Contents**

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| The course is organized around topics such as:   * Introduction to Information Systems: Systems Theory, Information Systems, the Role of Information Systems in Management, Information Systems and Functional Reorganization. * Structure and Architecture of Information Systems, Systems Life Cycle, The Management of Development of Information Systems, Management Information Systems for Education * Software Engineering, Basic Concepts and Methodologies of Software Engineering * Requirements Analysis and Management * System Models, the modeling language UML * Design of Information Systems, Object Oriented Software Design * Fundamentals of Database Systems, the relational model. * Conceptual and Logical Design, Entity-Relationship Diagrams, Physical Design * Database Management Systems * Security and Maintenance of Information Systems * Development Environments (MS ACCESS, Visual Studion.NET, SQL Server) * Executive Information Systems and Decision Support Systems * Case Studies |

1. **Teaching Methods - Assessment**

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| **Mode of DeliverY** | In-Class teaching and support (forum, chat, online meetings) through Moodle and MS Teams systems |
| **USE OF INFORMATION AND COMMUNICATION TECHNOLOGY** | UML Diagram Creation Software, Database Management System Software (MS Access or SQL Server), Information System Development Software (Visual Studio.NET), Moodle LMS and MS TEAMS. |
| **TEACHING METHODS** | |  |  | | --- | --- | | ***Method description*** | ***Semester Workload*** | | Lectures | 39 | | Class Work | 13 | | Preparation of Group Projects | 50 | | Workshops | 23 | | Independent and Directed Learning | 60 | | ***TOTAL*** | **185** | |
| **ASSESSMENT METHODS** | **Ι. Final Examination** (30%) (Summative Evaluation) includes:  - Multiple choice questions  - Case Studies  Evaluation Objective: To assess the understanding of the fundamentals of the course.  Evaluation Criteria: Comprehensiveness, accuracy, and critical evaluation of the answers.  **ΙΙ. Group Project** (50%) (Summative Evaluation):  Case Study:  1st Part: Requirements Analysis  2nd Part: Database Development  Evaluation Objective:  To assess the skills developed by the students in the:   * analysis of functional and non-functional requirements of a management information system for education * construction and analysis of the use case model of a management information system for education using the design language UML * construction and analysis of the relational data model of a management information system for education * composition of questions in SQL using a database management system * planning and carried out a project team.   Evaluation Criteria:  The completeness, accuracy and critical evaluation of the proposed solution, the organization and management of teamwork and presentation.  iii. **Participation in Individual Activities** (Formative) (20%) It concerns participation for the purpose of feedback made electronically through activities offered by Moodle/MS Teams Systems such as Tests, Questions, Polls, Video View, etc. Assessment purpose: To check the progress of students in relation to learning objectives, feedback and possible modification of teaching (fine tuning).  Evaluation criteria: Participation in all activities regardless of the performance extent to which they have achieved.  Evaluation criteria are explicitly referred on the site of the course for each learning activity. |

1. **Resources**

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| *-**Recommended Book and Journal Article Resources:*  **Books**:   * McKinney Earl, Kroenke David. (2017). "Εισαγωγή στα Πληροφοριακά Συστήματα Διοίκησης: Διεργασίες, Συστήματα και Πληροφορίες". Έκδοση 2017, ISBN 9789963274055, BROKEN HILL PUBLISHERS LTD. * Patricia Wallace, (2014). *Management Information Systems*, Kritiki Publishing, 2014, ISBN 978-960-218-886-6. * John Gallaugher, (2011). Information Systems: A Manager's Guide to Harnessing Technology, August 2011 eISBN: 978-1-4533-3007-4, Pages: 346 * Roger S. Pressman, “Software Engineering: A Practitioner’s Approach”, Sixth Edition, McGraw Hill * Sommerville, Ι., “Software Engineering”, 6th Edition. * Grady Booch, Robert A. Maksimchuk, Michael W. Engle, Bobbi J. Young, Ph.D., Jim Conallen, Kelli A. Houston, “Object-Oriented Analysis and Design with Applications”, 3rd Edition, Addison Wesley, ISBN 0-201-89551-X * Fowler, M., “UML Distilled”, 3rd Ed., Addison Wesley * Cockbum, A., “Writing Effective Use Cases”, Addison-Wesley |