

MASTER OF SCIENCE IN MANAGEMENT OF HEALTH AND SOCIAL CARE SERVICE

1. GENERAL

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| SCHOOL | ADMINISTRATIVE, ECONOMICS AND SOCIAL SCIENCES | | |
| DEPARTMENT | BUSINESS ADMINISTRATION | | |
| DIVISION | MANAGEMENT OF HEALTH AND SOCIAL CARE SERVICES | | |
| LEVEL OF STUDIES | POSTGRADUATE | | |
| COURSE CODE | MDYP 1-3 | TOPIC SEMESTER | 1η Α' |
| COURSE TITLE | APPLIED INFORMATION AND COMMUNICATION TECHNOLOGIES (ICT) IN HEALTH AND WELFARE | | |
| 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 and Research Essay | | 4 | 7.5 |
| <i>Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail at (d).</i> | | | |
| THEORY - LABORATORY | | | 4-0 |
| SEMESTER WORKLOAD | | | 156 |
| COURSE TYPE general background, special background, specialised general knowledge, skills development | SPECIALIZED AREA | | |
| COMPULSORY/ BY CHOICE | COMPULSORY | | |
| PREREQUISITE COURSES: | - | | |
| LANGUAGE OF INSTRUCTION AND EXAMINATIONS: | GREEK | | |
| IS THE COURSE OFFERED TO ERASMUS STUDENTS | NO | | |
| COURSE WEBSITE (URL) | https://healthcare-management.uniwa.gr/ | | |

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 purpose of the course is the acquisition of additional knowledge by the students in order to develop management skills and abilities of the applied Information and Communication Technologies in Health and Welfare that allow them to effectively participate in the operation and decision-making of the Health and Welfare units and in addition the familiarity with the management of the modern information equipment of the health units.

The individual objectives of the course:

- To increase students' knowledge of applied Information and Communication Technologies in Health and Welfare and their complexity.
- To introduce students to the concepts of Health Informatics, theories and tools.
- Familiarization of students with the terminology of the Electronic Health File, the classification, coding and security systems of Health and Telemedicine data.
- The development of critical awareness through the application of theory in practice.
- To contribute to the improvement of the students' written and oral communication skills for the specific topic.

Upon successful completion of the course, students will be able to:

- know extensively and actively discuss the structure and characteristics of Health and Welfare Information and Communication Technologies at the various levels of management hierarchy
- identify the Health IT tools that can support the Health and Welfare units
- recognize information decision-making systems and expert systems in the field of Health and Welfare
- understand and distinguish classification, coding and security systems in Health Information Systems
- develop and organize the administrative content of an Electronic Health Record at the various levels of care and in Telemedicine
- evaluate from a management point of view the level of integration of a Hospital Information System and propose effective solutions.
- analyze and support the management, protection and interoperability processes of the

digital equipment of Health units

- draft and present more clearly.

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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| <i>Search for, analysis and synthesis of data and information, with the use of the necessary technology</i> | <i>Project planning and management</i> |
| <i>Adapting to new situations</i> | <i>Respect for difference and multiculturalism</i> |
| <i>Decision-making</i> | <i>Respect for the natural environment</i> |
| <i>Working independently</i> | <i>Showing social, professional and ethical responsibility and sensitivity to gender issues</i> |
| <i>Team work</i> | <i>Criticism and self-criticism</i> |
| <i>Working in an international environment</i> | <i>Production of free, creative and inductive thinking</i> |
| <i>Working in an interdisciplinary environment</i> | |
| <i>Production of new research ideas</i> | <i>Others...</i> |
| | |

Search, analyze and synthesize data and information using the necessary technologies

- Adaptation to new situations
- Decision making
- Team work
- Work in an international environment
- Work in an interdisciplinary environment
- Generation of new research ideas
- Project planning and management
- Respect for diversity and multiculturalism
- Respect for the natural environment
- Demonstrate social, professional and ethical responsibility and sensitivity to gender issues
- Exercise of criticism and self-criticism-Promotion of free, creative and inductive thinking

3. SYLLABUS

1. Introduction to Health Informatics
2. Applied IT and Communication Technologies in Health and Welfare
3. Information Management and Decision Support
4. Integrated Health Information Systems (IHS) and Hospital Information Systems (HIS)
5. Health Care Records-Levels of Automation
6. Business Intelligence in Health and Welfare Units
7. Telemedicine- -Applications
8. Standards - Health data classification and coding systems
9. Evaluation of Health Information Systems
10. Protection and Security of Health Information Systems
11. Supply and Management of IT Projects in the Health sector
12. Health and Welfare Information Exchange Interoperability and Marketplace
13. Presentation of Team Works

4. TEACHING and LEARNING METHODS - EVALUATION

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| <p style="text-align: center;">DELIVERY</p> <p>Face-to-face, Distance learning, etc.</p> | <p>Face-to-face classroom suitably equipped, Distance learning, Documents and presentations on an asynchronous learning platform</p> | |
| <p style="text-align: center;">USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</p> <p>Use of ICT in teaching, laboratory education, communication with students</p> | <p>Use of ICT in teaching, Communication with students, Learning process support through the e-class asynchronous platform</p> | |
| <p style="text-align: center;">TEACHING METHODS</p> <p>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.</p> <p>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</p> | <i>Activity</i> | <i>Semester workload</i> |
| | Lectures | 39 |
| | Presentation of special issues through inductive approach and analytical discussion | 13 |
| | Field Exercise, Presentation of specific exercises with real data of health and social care organizations | 13 |
| | Interactive teaching presentation of special topics through the inductive and deductive approach and detailed discussion of possible issues of an applied nature. | 13 |
| | Essay | 39 |
| | Independent Study | 39 |
| | Course total (25 Hours of working per ECTS) | 156 |
| <p style="text-align: center;">STUDENT PERFORMANCE EVALUATION</p> <p>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.</p> | <p>Language of Evaluation: Greek</p> <p>I. Written final exam (60%) which includes:</p> <ul style="list-style-type: none"> -Multiple choice questions - Short answer questions - Comparative evaluation of theory elements <p>II. Written Work and Presentation (40%)</p> <p>Students deliver 20 minutes presentations and submit the relevant handouts (PowerPoint slides & written report) to organize presentation folders.</p> <p>The quality of the presentation is the main criterion for the evaluation. The quality results from the good</p> | |

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| | <p>appearance and structure of the material with the corresponding sources, combined with the presentation skills of the team.</p> <p>Presentations require students to research, explain and apply theory to case studies</p> |
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5. ATTACHED BIBLIOGRAPHY

GREEK

2. Tsiridani M. Databases and Multimedia in Health-Distance Education and Telemedicine, BrokenHill Publications, 2012
3. Karanikolas N. Informatics and Health Professions, New Technologies Publications, 2010
4. Mantas I. Health Informatics, BrokenHill Publications, 2007

ENGLISH

5. Mantas J., Hasman A.: Health and Medical Informatics Applications-Educational Aspects, Proceedings of the European Federation of Medical Informatics Special Topic Conference, 2005.
6. Berkowitz, L., McCarthy, C. (Eds.) Innovation with Information Technologies in Healthcare, 2013
7. DeLone, W. H. & E. R. McLean. Measuring e-Commerce Success: Applying the DeLone and McLean Information Systems Success Model. International Journal of Electronic Commerce. 9 (1) pp. 31-4, 2004
8. Mavrogeni S., Tsirintani M., et al: Supervision of Thrombolysis of acute myocardial infarction using Telemedicine. Journal of Telemedicine and Telecare; 6(1):54-58, 2000
9. Moore, A. B., & Brooks, R. Learning Communities and Community Development: Describing the process. International Journal of Adult and Vocational Learning, 2001
10. Tsirintani M. et al: Investigating the Relationships among ERP Systems Success Dimensions in Health Care Industry: 21st International Congress "Decision Making in Health Systems, May 2009 Athens. Hellenic Operational Research Society and Health Management Department of Technological Institute of Athens
11. Tsirintani, M. Strategic Procedures and Revisions for Implementing Telemedicine and Telecare in Greece Journal of Applied Clinical Informatics, Shattauer 2012; 3:14-23
12. Tsirintani M. A Base Plan for Tomorrow's Patient Care Information Systems. XI

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Related Scientific Journals:

- Health Informatics Journal (<http://jhi.sagepub.com/>)
- Journal of the American Medical Informatics Association
- International Journal of Medical Informatics
- Journal of Telemedicine and Telecare
- Implementation Science
- Computer Methods and Programs in Biomedicine