HEALTH INFORMATICS

(1) GENERAL

SCHOOL	HEALTH SCIENCES		
ACADEMIC UNIT	SPEECH LANGUAGE THERAPY		
LEVEL OF STUDIES	Undergraduate Programme (Level 6)		
COURSE CODE	**slt – 13**	**SEMESTER**	1
COURSE TITLE	HEALTH INFORMATICS		
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	5
Small Group Discussion		1	
Laboratory Exercises		1	
COURSE TYPE *general background, special background, specialised general knowledge, skills development*	General background		
PREREQUISITE COURSES:			
LANGUAGE OF INSTRUCTION and EXAMINATIONS:	Greek		
IS THE COURSE OFFERED TO ERASMUS STUDENTS	No		
COURSE WEBSITE (URL)	http://moodle.ioa.teiep.gr/course/view.php?id=2		

(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 course is the basic introductory course in scientific and technical concepts of health informatics.

The curriculum of the course aims to familiarise students with basic concepts of health informatics, health data and information and technical standards of information technology and information systems in the health sector. It includes software applications for health units and elements on digital equipment (new technologies/computer) currently used in modern health units.

Upon successful completion of the course the student will be able to:

- recognize and describe key and critical features of the nature and management of Medical Information (Levels 1 & 2: Knowledge/Remembering & Understanding)

- describe coding and classification systems' role in terms of interoperability within information subsystems (Levels 1 & 2: Knowledge/Remembering & Understanding)
- describe databases' role in information management (Levels 1 & 2: Knowledge/Remembering & Understanding)
- express issues related to electronic patient record (Levels 1 & 2: Knowledge/Remembering & Understanding)
- identify issues related to medical imaging (Levels 1 & 2: Knowledge/Remembering & Understanding)
- understand and analyse the modern requirements for distance medical care (Levels 1 & 2: Knowledge/Remembering & Understanding)
- understands and analyse Internet role on distance education in the health sector (Levels 1 & 2: Knowledge/Remembering & Understanding)
- distinguish key elements in Information Technology applications enhancing the educational process, online learning and lifelong learning offering learning opportunities during his/her studies and career in health sector (Levels 1 & 2: Knowledge/Remembering & Understanding)
- formulate health information search skills and Internet use in health education (Level 1 – 3: Knowledge, Skills, Ability)
- demonstrate basic IT skills in processing and presenting information through applications (Level 1 – 3: Knowledge, Skills, Ability)

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

- Search for, analysis and synthesis of data and information, with the use of the necessary technology
- Adapting to new situations
- Working independently
- Team work
- Working in an international environment
- Working in an interdisciplinary environment
- Project planning and management

(3) SYLLABUS

1. Introduction
2. General Information on Health Informatics
3. Healthcare Data and information
4. Technical Standards in Health Informatics
5. Health Information Systems
6. Electronic Patient Record
7. Medical Imaging Systems
8. Digital Technology and Clinical Decision-Making

9. Internet in Healthcare
10. Health Informatics for the public -
11. Patient care systems - Telediadiation - Telepresence
12. Tele-education in the field of health
13. Digital games in healthcare

(4) TEACHING and LEARNING METHODS - EVALUATION

DELIVERY *Face-to-face, Distance learning, etc.*	Face-to-face & blended learning supported with online educational material.
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY *Use of ICT in teaching, laboratory education, communication with students*	• Use of ICT in teaching, laboratory education, • Communication with students via email, messager, facebook, moodle κ.ά • Support with blended learning using the learning management system moodle and a webpage accommodating online educational material for this course • Posting course-grades through the online course management platform of the UOI
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*	
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.*	**I.** Written final exam (50%): - Multiple choice test - Short answer questions - Open-ended questions **II.** Written Essay and presentation (30%) **III.** Laboratory work - (20%) The final exams will be offered in Greek.

Activity	***Semester workload***
Lectures	26
Practice	13
Laboratory	8
Group work in a project	25
Study and analysis of bibliography	15
Personal Study/Evaluation	38
Course total	***125***

(5) ATTACHED BIBLIOGRAPHY

- *Suggested bibliography:*

1. Oachs, P.K., & Watters, A. (2016). *Health Information Management Concepts, Principles, and Practice*.
2. Enrico Coiera (2015). *Guide to Health Informatics (3rd edition)*, CRC Press.
3. Braunstein, M. (2016). *Contemporary Health Informatics*. AHIMA Press.

- *Related academic journals:*

1. Journal of Medical Internet Research, JMIR Publication, https://www.jmir.org/
2. International Journal of Medical Informatics, ELSEVIER
https://www.journals.elsevier.com/international-journal-of-medical-informatics
3. Health Informatics Journal, SAGE, https://journals.sagepub.com/home/jhi