

SCHOOL OF HEALTH SCIENCES			
SCHOOL	SCHOOL OF HEALTH SCIENCES		
DEPARTMENT	NURSING DEPARTMENT		
EDUCATION LEVEL	UNDERGRADUATE – (bachelor’s degree)		
LESSON CODE	0805.4.007.0	SEMESTER	4rd
LESSON TITLE	Integrated Health Information Systems		
SELF-ENDED TEACHING ACTIVITIES			
SELF-ENDED TEACHING ACTIVITIES	TEACHING HOURS/WEEK	CREDITS	
Theory	2	3	
Tutoring			
Practical Workshop			
Clinical Placement			
Total	2		
Total	ELECTIVE COMPULSORY		
PREREQUISITE COURSES	NO		
LANGUAGE (S) OF INSTRUCTION/ EXAMINATION	GREEK		
THE COURSE IS OFFERED TO ERASMUS STUDENTS	NO		
ELECTRONIC COURSE PAGE	https://eclass.hmu.gr/courses/YN102/		
Learning Outcomes			
<p>Upon successful completion of the course, the student will be able to:</p> <ul style="list-style-type: none"> • Understand the structure, organization, and operations of Integrated Health Information Systems (IHS), their technical characteristics, and the way of organizing and managing medical information in the hospital environment, at a regional and national level. Familiarize and understand the structure of the Electronic Health Records and their contribution to the improvement of health services quality and the management of hospital resources. • Recognize the most common protocols for coding, taxonomy and classification of medical information (eg ICD-10 etc.) and their application in electronic prescribing, in the creation of the digital medical file and in the data statistics. • Understands the organization, the usefulness, and the necessity of developing IHISs in a national environment and familiarize with the management of their basic functions. 			

General Skills	
Decision making, Autonomous work. Adapting to new environment, generating new research ideas, exercising criticism and self-criticism, promoting free, creative, and inductive thinking.	
Course Content	
1 st Week	Concept and definition of IHIS. Basic principles. Health Systems. Advantages disadvantages.
2 nd Week	Structure of the IHIS. Prerequisites of application of IHIS. The need to code and standardize medical information.
3 rd Week	The importance of information handling in medical error management. Representative examples from the literature. Case studies.
4 th Week	Advantages and disadvantages of using IHIS. Application problems. Health unit administrative structure and approaches.
5 th Week	IHIS architecture, structure, and subsystems. MIS, LIS, RIS, PACS, HIS, etc.
6 th Week	The principles of IHIS interconnectivity and interoperability.
7 th Week	Standards and protocols for information interchange. Medical systems communication. HL7, DICOM, CORBA standards
8 th Week	The Electronic Medical Records as a basic structural element of OPSY. Architecture, management, categories
9 th Week	Medical Information Coding. International coding systems ICD10, NDC, CPT-ICPM, DRG, ICPC2, GMDN, EDMA.
10 th Week	The acceptance and use of IHIS by health professionals. Problems and interventions. Technology acceptance barriers. International environment.
11 th Week	Telemedicine. Purpose, advantages - disadvantages, results. Telemedicine Applications and Prospects. Organization requirements and principles.
12 th Week	IHIS design and implementation at regional and national level. Digital transformation in Health Sector. IHIS in Greece and challenges in the international environment. The future of IHIS.
13 th Week	Results from the use of IHIS. Personal data and legal issues. IHIS security.
TEACHING and LEARNING METHODS – EVALUATION	
PROVIDING COURSE METHODS	<ul style="list-style-type: none"> • Lecturer presentation using Power Point • Demonstration of examples • Case studies
USE OF INFORMATION AND COMMUNICATION TECHNOLOGY	<ul style="list-style-type: none"> • Use of the e-class electronic platform to store presentations in digital format for easy access by the students. • Demonstration of an IHIS with pilot data.
TEACHING ORGANIZATION	Material organization in sections, use of slides, commenting, discussion of concerns.

STUDENT EVALUATION	Final evaluation
RECOMMENDED BIBLIOGRAPHY	
<ul style="list-style-type: none"> • Book [59365773]: The contribution of IT to Health, Dimitris G. Kapopoulos • ● Book [68402892]: HEALTH IN THE DIGITAL AGE - VOLUME A, LAZAKIDOU ATHINA • ● Book [59395216]: Health information systems, Apostolakis Ioannis, Varlamis Iraklis • ● Telemedicine, Smart Cards, Electronic Health Services, Electronic Health Record. Book Code in Evdoxos: 166170, Authors: PANTELIS ANGELIDIS, ISBN 978-960-6706-43-1, Publications "sofia" Publications. • ● Medical informatics and telemedicine services, Disigma Publications, ISBN10: 9609495311, ISBN13: 9789609495318, January 2014. 	