#### **COURSE SYLLABUS**

NOTE: The course has not been offered for teaching due to low demand from students. The outline will be updated and completed by the Teacher in Charge at the start of the teaching

# (1) GENERAL

OF HEALTH SCIENCES				
•	15161 5	CENACCTED		
IT-Supported Wellness and Well-Being				
		TEACHING	)	CREDIT
INDEPENDENT TEACHING ACTIVITIES		HOURS		UNITS
		WEEKLY		(ECTS)
		3		7.5
Special background course – Optional mandatory				
-				
Greek				
-				
https://eclass.hmu.gr/courses/SW355/				
	OF ADMINIST  SOCIAL WO  NUTRITION BUSINESS A Graduate/Ma CDDA-B10 IT-Supported NG ACTIVITIES  Special backg - Greek -	SOCIAL WORK NUTRITION AND DIETET BUSINESS ADMINISTRATE Graduate/Master's CDDA-B10 IT-Supported Wellness and NG ACTIVITIES  Special background cours Greek -	OF ADMINISTRATIVE AND ECONOMIC S  SOCIAL WORK  NUTRITION AND DIETETICS SCIENCES BUSINESS ADMINISTRATION AND TO Graduate/Master's  CDDA-B10 SEMESTER  IT-Supported Wellness and Well-Being NG ACTIVITIES HOURS WEEKLY  3  Special background course – Optional of the course	OF ADMINISTRATIVE AND ECONOMIC SCIENCES SOCIAL WORK NUTRITION AND DIETETICS SCIENCES BUSINESS ADMINISTRATION AND TOURIS Graduate/Master's CDDA-B10 SEMESTER B IT-Supported Wellness and Well-Being NG ACTIVITIES TEACHING HOURS WEEKLY 3 Special background course – Optional manual Greek -

#### (2) LEARNING OUTCOMES

#### **Learning Outcomes**

The course explores various concepts related to Information Technologies as determinants of health, but also the role of digital solutions in promoting health and improving quality of life. Students learn to utilize Information Technologies, as well as Artificial Intelligence, to support people with complex health problems and/or disabilities. In parallel, they explore digital platforms, applications and telemedicine solutions to more effectively deliver healthcare in a variety of healthcare environments.

The course is offered at the postgraduate level and the learning outcomes correspond to level 7 of the European Qualifications Framework for Lifelong Learning (EQF). Based on the above, after successful completion of the course, students are expected to have or be able to:

# Knowledge:

- understand the role of Information Technology (IT) in the context of wellness and well-being.
- understand the importance of data security and privacy when using IT.
- understand the fundamental concepts of artificial intelligence (AI).
- know how AI is used in the analysis of big data related to health.
- nderstand the role of TN in tailoring medical treatments for individual patients.
- know the latest ethical guidelines for the responsible application of IT and IT in wellness and health.

## Skills:

- explore the potential benefits and challenges of integrating IT into health and social care
- identify and evaluate various technologies for personal health monitoring.
- describe strategies to mitigate the risks associated with the collection and storage of health data.
- describe practical applications of IT in the diagnosis, treatment and management of health problems.
- describe how AI is used in health risk prediction and disease prevention.

 describe methods for ensuring transparency and interpretability in IT models for health.

#### Abilities:

- analyze the impact of wearable devices and health apps on individual well-being.
- appreciate the role of telehealth and telemedicine in enhancing accessibility to health and social care services.
- critically evaluate the advantages and limitations of remote health assessments.
- assess the impact of AI on precision medicine and personalized healthcare.
- critically analyze through case studies the impact of IT on interdisciplinary health care.
- critically evaluate ethical concerns when using technology to support mental health.
- discuss the challenges and ethical concerns associated with the use of AI in health risk assessment.
- identify emerging technologies with a focus on AI that are shaping the future of chronic disease, aging, and disability management.

# **General Skills**

## The course aims to provide students with the following general skills:

- Demonstrating social, professional and ethical responsibility and sensitivity when using IT and IT
- Promotion of free, creative and inductive thinking
- Search, analysis and synthesis of data and information
- Generating new research ideas
- · Work in an interdisciplinary environment
- Independence and group work
- Exert criticism and self-criticism
- Decision making

# (3) COURSE CONTENT

## The course includes the following thematic sections:

- Introduction to health and wellness informatics
- Technologies for personal health monitoring
- Data security and privacy when using IT
- Telehealth and telemedicine
- IT-supported multidisciplinary team collaboration
- Information Technology and mental health.
- Artificial Intelligence in Healthcare: Basics and Applications
- Artificial intelligence in health data analysis
- Artificial intelligence and personalized medicine
- Artificial intelligence to predict and prevent health risks
- Ethical issues in health care supported by IT and AI
- Case studies in IT-supported health, wellness and well-being

## (4) TEACHING and LEARNING METHODS - EVALUATION

METHOD OF DELIVERY	The teaching includes:		
	Interactive face-to-face (in vivo) and distance		
	learning lectures.		
	Case studies and critical commentary, exercises		
	and group assignments.		
	Presentation of videos / documentaries and		
	reflective discussion.		
USE OF INFORMATION AND	Presentation of PowerPoint slides and videos. Use of		
COMMUNICATION	the e-class electronic platform to access		
	slides/scientific articles. Frequent communication with		

TECHNOLOGIES	students through the same platform and through the			
	teachers.hmu.gr for responding to questions related to			
	the educational process.			
TEACHING ORGANIZATION	Activity	Semester Workload		
	Lectures, Seminars and Interactive teaching	39		
	Study and analysis of articles -	151		
	bibliography - Independent Study			
	Total Course	190		
STUDENT EVALUATION	The course has the following assessment format:			
	Final written exams during the exam period (100% of			
	the final grade).			
	All graded papers are accessible to students			
	Evaluation language: Greek			

### (5) RECOMMENDED-BIBLIOGRAPHY

#### - Suggested Bibliography:

- Ayanwale MA, IT Sanusi, OP Adelana, KD Aruleba, SS Oyelere Teachers' readiness and intention to teach artificial intelligence in schools Comput. Educa. Artif. Intell., 3 (2022), Article 100099
- Bergdahl, J., Latikka, R., Celuch, M., Savolainen, I., Mantere, ES, Savela, N., & Oksanen, A. (2023). Self-determination and attitudes towards artificial intelligence: Cross-national and longitudinal perspectives. Telematics and Informatics, 82, 102013.
- Dai, Y., Chai, CS, Lin, PY, Jong, MSY, Guo, Y., & Qin, J. (2020). Promoting students' well-being by developing their readiness for the artificial intelligence age. Sustainability, 12(16), 6597.
- Labrague, LJ, Aguilar-Rosales, R., Yboa, BC, & Sabio, JB (2023). Factors influencing student nurses' readiness to adopt artificial intelligence (AI) in their studies and their perceived barriers to accessing AI technology: A cross-sectional study. Nurse Education Today, 105945.
- Schepman, A., & Rodway, P. (2020). Initial validation of the general attitudes towards Artificial Intelligence Scale. Computers in human behavior reports, 1, 100014.
- Schepman, A., & Rodway, P. (2022). The General Attitudes towards Artificial Intelligence Scale (GAAIS): Confirmatory validation and associations with personality, corporate distrust, and general trust. International Journal of Human–Computer Interaction, 1-18.
- Suseno, Y., Chang, C., Hudik, M., & Fang, ES (2022). Beliefs, anxiety and change readiness for artificial intelligence adoption among human resource managers: the moderating role of highperformance work systems. The International Journal of human resource management, 33(6), 1209-1236.
- Swan BA Assessing the knowledge and attitudes of registered nurses about artificial intelligence in nursing and health care. Nurs. Econ., 39 (3) (2021), pp. 139-143

## -Related scientific journals:

- Artificial Intelligence in Medicine
- BMC Medical Ethics
- Frontiers in Digital Health
- Health Informatics Journal
- IEEE Journal of Biomedical and Health Informatics
- International Journal of Medical Informatics
- Journal of Medical Internet Research (JMIR)
- Journal of Telemedicine and Telecare