COURSE OUTLINE

1. GENERAL

SCHOOL	ENGINEERING		
DEPARTMENT	PRODUCT AND SYSTEMS DESIGN ENGINEERING		
LEVEL OF STUDIES	Undergraduate		
COURSE CODE	**2205**	**SEMESTER**	**4th**
COURSE TITLE	**Human-Computer Interaction**		

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	**3**	**6**
Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail at (d).		

COURSE TYPE *general background, special background, specialised general knowledge, skills development*	Special Background
PREREQUISITE COURSES:	NONE
LANGUAGE OF INSTRUCTION and EXAMINATIONS:	GREEK/ENGLISH
COURSE DELIVERED TO ERASMUS STUDENTS	YES
MODULE WEB PAGE (URL)	https://eclass.uowm.gr/

2. LEARNING OUTCOMES

Learning outcomes

The course aims to:

- Create student awareness regarding basic issues such as: cognitive and organizational approaches for understanding the role of the human during interaction, usability, utility, accessibility, aesthetics and user experience.
- Discuss and apply methods and methodologies for design of interactive systems, such as "contextual design" and "the elements of user experience" through case studies and hands-on exercises.
- Discuss and apply methods for evaluation of interactive systems and products with emphasis on user testing and usability inspections, as well as significant issues for usability engineering.

On successful completion of this module the learner will be able to:

1. Be aware of a wide range of human-centred methods of design research, prototyping and evaluation of interactive systems, in which users are at the center of the process both in terms of the incorporation of their requirements as well as through their active participation.
2. Can apply human-centred methods in contemporary design contexts and problems with the participation of clients and end-users
3. Realize the need to approach new design situations for interactive systems through an exploratory and methodological approach that involves research, comprehension, analysis and synthesis of information and knowledge from trustworthy sources, high quality books and scientific papers.

General Skills
Upon successful completion of the program students will: • have the theoretical and practical background on the field of product and systems design engineering and the corresponding profession. • utilize scientific knowledge to understand, analyze and solve problems. • apply a wide range of scientific and technical knowledge concerning the design and development of products and systems.

3. COURSE CONTENTS

Human-Computer Interaction (HCI) is concerned with the design, development and evaluation of interactive products and systems that effectively support humans in everyday activities, and the study of relevant phenomena that stem out of the interaction process.

- Introduction to Human-Computer Interaction (HCI)
- Human centered approach in HCI
- Research and enquiry, literature survey
- Design and prototyping with respect to HCI
- Empirical evaluation of HCI systems

4. TEACHING METHODS - ASSESSMENT

MODE OFDELIVERY	In class, face to face
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY	• Video and slide presentations via projector • Support of teaching process via the electronic platform e-class • Communication with students.
TEACHING METHODS	

Activity	*Semester workload*
Lectures	90
Non-directed study	60
Course total	**150**

ASSESSMENT METHODS	Final written exam which includes: i. Short-answer questions ii. Multiple choice questions iii. Problem solving

5. ATTACHED

- Suggested bibliography:

- Βιβλίο [320310]: Εισαγωγή στην αλληλεπίδραση ανθρώπου-υπολογιστή, ΝΙΚΟΛΑΟΣ ΑΒΟΥΡΗΣ, ΧΡΗΣΤΟΣ ΚΑΤΣΑΝΟΣ, ΝΙΚΟΛΑΟΣ ΤΣΕΛΙΟΣ, ΚΩΝΣΤΑΝΤΙΝΟΣ ΜΟΥΣΤΑΚΑΣ Λεπτομέρειες
- Κουτσαμπάσης, Π. (2011) Αλληλεπίδραση Ανθρώπου-Υπολογιστή: Αρχές, Μέθοδοι και Παραδείγματα. Εκδόσεις Κλειδάριθμος.
- Κουτσαμπάσης, Π. (2015) Αξιολόγηση Διαδραστικών Συστημάτων με Επίκεντρο τον Χρήστη: Ευχρηστία, Προσβασιμότητα, Συνεργατική Εργασία και Εμπειρία του Χρήστη. Ελληνικός Σύνδεσμος Ακαδημαϊκών Βιβλιοθηκών. https://repository.kallipos.gr/handle/11419/2765
- Dix Alan J.,Finlay Janet E.,Abowd Gregory D.,Beale Russell (2007) Επικοινωνία ανθρώπου υπολογιστή, 3ή Έκδοση.
- Shneiderman Ben, Plaisant Cathrerine (2010) Σχεδίαση Διεπαφής Χρήστη, 5η έκδοση.
- *Lecture notes*