

## COURSE OUTLINE

### (1) GENERAL

<b>SCHOOL</b>	Science and Technology	
<b>ACADEMIC UNIT</b>	Science and Technology	
<b>PROGRAMME OF STUDIES</b>	MSc in e-Business and Digital Marketing	
<b>LEVEL OF STUDIES</b>	Postgraduate	
<b>COURSE CODE</b>		<b>SEMESTER</b> 2
<b>COURSE TITLE</b>	Human Computer Interaction, Design and User Experience	
<b>COURSE TYPE</b> <i>Elective, compulsory</i>	Elective	
<b>INSTRUCTOR(S)</b>	Dr. Aikaterini Tzafilkou	
<b>INDEPENDENT TEACHING ACTIVITIES</b> <i>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</i>	<b>WEEKLY TEACHING HOURS</b>	<b>CREDITS</b>
	3	6
<i>Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail at (d).</i>		
<b>TEACHING ACTIVITIES BREAKDOWN</b>	<b>WEEKLY HOURS</b>	
Theory	3	
Recitation		
Lab		
<i>Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail at (d).</i>		
<b>COURSE TYPE</b> <i>general background, special background, specialised general knowledge, skills development</i>	Special background	
<b>PREREQUISITE COURSES:</b>	-	
<b>LANGUAGE OF INSTRUCTION and EXAMINATIONS:</b>	English	
<b>IS THE COURSE OFFERED TO ERASMUS STUDENTS</b>	Yes	
<b>COURSE WEBSITE (URL)</b>	<a href="https://www.ihu.gr/ucips/postgraduate-programmes/ebusiness">https://www.ihu.gr/ucips/postgraduate-programmes/ebusiness</a>	

### (2) LEARNING OUTCOMES

<p><b>Learning outcomes</b></p> <p><i>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.</i></p> <p><i>Consult Appendix A</i></p> <ul style="list-style-type: none"> <li>• <i>Description of the level of learning outcomes for each qualifications cycle, according to the Qualifications Framework of the European Higher Education Area</i></li> <li>• <i>Descriptors for Levels 6, 7 &amp; 8 of the European Qualifications Framework for Lifelong Learning and Appendix B</i></li> <li>• <i>Guidelines for writing Learning Outcomes</i></li> </ul> <p>On completing the course, the student will be able to:</p>
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1. Understanding the principles of human cognition, perception, and emotional states
2. Conducting Usability/UX Testing and Reporting
3. Designing static and interactive Prototypes of website and mobile interfaces
4. Collecting implicit user feedback through Face Tracking tools and techniques
5. Conducting User Research through popular UX research methodologies
6. Analyzing qualitative data of user feedback

### 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?*

<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>.....</i>
<i>Production of new research ideas</i>	<i>Others...</i>
	<i>.....</i>

- Search for, analysis and synthesis of data and information, with the use of the necessary technology
- Decision Making
- Teamwork
- Production of free, creative, and inductive thinking

### (3) SYLLABUS

This course aims to teach the fundamentals of Human Computer Interaction and UX Design focusing on:

- human cognitive and psychological aspects that UX designers should be aware of when designing new products;
- user research methodologies to gather and analyze qualitative and/or quantitative data;
- tools and principles to design interactive product/system prototypes.

The topics include:

- Web Accessibility
- UX Elements & Usability Testing/Reporting
- Prototyping for mobile interfaces
- Affective Computing and Neuromarketing
- Face & Eye Tracking Applications
- Qualitative User Research Methods

Students will also be engaged in an academic task on a selected HCI subfield (e.g., Game-Based Learning/ Gamification, VR/AR, FaceTracking, Eye Tracking, etc.) to gain deeper understanding on the topic and develop the academic skills to perform a complete scientific research report.

The course will include open end discussions on today's HCI trends, and hands-on workshops on: i) Prototyping, ii) Face Tracking Research, iii) User research tasks for essential data retrieval (interviews, focus groups, observation, etc.), and iv) Qualitative data analysis.

### (4) TEACHING and LEARNING METHODS - EVALUATION

<b>DELIVERY</b> <i>Face-to-face, Distance learning, etc.</i>	Hybrid: Face to face and synchronous distance learning
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<p align="center"><b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b></p> <p align="center"><i>Use of ICT in teaching, laboratory education, communication with students</i></p>	<p><b>Use of ICT in Teaching</b></p> <p>During the educational process, various tools and platforms are used, along with the material available at the e-learning platform.</p> <p>The hybrid teaching method involves synchronous learning with the support of the videoconferencing tool Zoom.</p> <p>Students are taught a variety of tools related to the course content and material.</p> <p><b>Use of ICT in Communication with students</b></p> <ul style="list-style-type: none"> <li>• The course material (slides, scientific articles, exercises, etc.) is posted on the course page at the e-learn platform (Moodle).</li> <li>• Use of Moodle Forums announcements.</li> <li>• Live video meetings via Zoom/Teams.</li> <li>• Contact via email.</li> </ul>																							
<p align="center"><b>TEACHING METHODS</b></p> <p><i>The manner and methods of teaching are described in detail.</i></p> <p><i>Lectures, recitation, 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.</i></p> <p><i>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</i></p>	<table border="1"> <thead> <tr> <th align="center"><i>Activity</i></th> <th align="center"><i>Semester workload</i></th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td align="center">30 hrs.</td> </tr> <tr> <td>Recitation</td> <td></td> </tr> <tr> <td>Lab</td> <td></td> </tr> <tr> <td>Project</td> <td align="center">18 hrs.</td> </tr> <tr> <td>Exams</td> <td align="center">2 hrs.</td> </tr> <tr> <td>Non-Directed Study</td> <td align="center">80 hrs.</td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td><b>Course total</b></td> <td align="center"><b>130 hrs.</b></td> </tr> </tbody> </table>		<i>Activity</i>	<i>Semester workload</i>	Lectures	30 hrs.	Recitation		Lab		Project	18 hrs.	Exams	2 hrs.	Non-Directed Study	80 hrs.							<b>Course total</b>	<b>130 hrs.</b>
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<p align="center"><b>STUDENT PERFORMANCE EVALUATION</b></p> <p><i>Description of the evaluation procedure</i></p> <p><i>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</i></p> <p><i>Specifically-defined evaluation criteria are given, and if and where they are accessible to students</i></p>	<p>Language of Evaluation: English</p> <p>Evaluation Procedure:</p> <ul style="list-style-type: none"> <li>• Written Exams (70%). Methods of evaluation: <ul style="list-style-type: none"> <li>○ Open-ended questions</li> <li>○ Case studies</li> <li>○ Multiple choice questions (on lab material)</li> </ul> </li> <li>• Group project (30%):</li> </ul> <p>Conducting a complete UX Experimental Research on a Prototype Mobile App /Educational Mobile App/ SM Campaign</p> <p>The evaluation procedure is announced to the students during the first lecture and is also accessible at the e-learn platform throughout the entire semester.</p>																							
<p align="center"><b>STUDENT OBLIGATIONS</b></p> <p><i>Compulsory attendance of lectures, labs, recitations, compulsory participation in midterms,</i></p>	<ul style="list-style-type: none"> <li>• Compulsory attendance of lectures</li> <li>• Compulsory participation in the exams</li> </ul>																							

exams, compulsory delivery of homework, projects, etc.

- Compulsory delivery of project

## (5) ATTACHED BIBLIOGRAPHY

### - *Suggested Textbooks*

- Interaction Design: Beyond Human-Computer Interaction – 2019 by Helen Sharp (Author), Jennifer Preece (Author), Yvonne Rogers (Author)
- Human Computer Interaction – 2007 by Prof Alan Dix (Author), Janet E. Finlay (Author), Gregory D. Abowd (Author), Russell Beale (Author)
- UX Methods: A Quick Guide to User Experience Research Methods – 2017 by James Pannafino (Author), Patrick McNeil (Author)