

NAME OF THE COURSE		Interaction Design Methodology				
Code	PMIH40	Year of study	GU-1 UGU-3			
Course teacher	prof.dr. sc. Andrina Granić	Credits (ECTS)	5,0			
Associate teachers	doc.dr. sc. Nikola Marangunić	Type of instruction (number of hours)	L	S	E	F
			30		30	
Status of the course	elective	Percentage of application of e-learning	25			
COURSE DESCRIPTION						
Course objectives	Acquisition of fundamental knowledge related to the interdisciplinary field of Interaction Design (ID) defined as the design of interactive products to support people in their everyday and working lives, including psychological and social aspects of users, interaction styles, user requirements, up-to-date design approaches, usability and evaluation, traditional and future interface paradigms.					
Course enrolment requirements and entry competences required for the course	No formal prerequisites, but it would be preferable if students have already acquired basic knowledge from the course Human-Computer Interaction I: Fundamental Principles.					
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	<ol style="list-style-type: none"> <li>1. Name and explain fundamental terminology and concepts from the Interaction Design (ID) field.</li> <li>2. Decide on and critically evaluate selection of adequate methods for the design of user-centred interactive products (different phases of information collection, planning, prototyping and evaluation).</li> <li>3. Critically evaluate positive and negative aspects of different design methods from the HCI field to be used in interactive product development.</li> <li>4. Compare and decide on adequate methodology for interactive product evaluation.</li> <li>5. Argue on the role of available HCI methods in system development.</li> <li>6. Use case: critically evaluate reasons for the development of interactive system /product; identify context of use and collect all relevant information in relation to the goal; produce personas, scenarios of use and low fidelity prototypes; apply adequate user-centred design methods; produce high fidelity prototypes; decide on and employ adequate evaluation approach.</li> </ol>					
Course content broken down in detail by weekly class schedule (syllabus)	<p>Lectures:</p> <ol style="list-style-type: none"> <li>1. Interaction Design (ID): definitions and fundamental principles (2h)</li> <li>2. Short chronology on interaction design (2h)</li> <li>3. Usability, user experience, quality in use (2h)</li> <li>4. Designing for user experience (2h)</li> <li>5. Research methods: visualization of information, interfaces and interactions (2h)</li> <li>6. Invited lecture (2h)</li> <li>7. Interaction Design model: user-centred design, prototyping, evaluation, implementation (4h)</li> <li>8. Personas and scenarios (2h)</li> <li>9. Sketching, low and high fidelity prototypes (2h)</li> <li>10. Participatory design (2h)</li> <li>11. Methods and approaches to interaction evaluation (4h)</li> <li>12. The future of Interaction Design (4h)</li> </ol> <p>Exercises:</p>					

	<p>1. Introduction to course exercises – generally about structure of exercises; gained knowledge and skills; topics which will be covered; work flow; individual and group tasks; grading.</p> <p>2. Introduction to interaction design – digital artefacts design; new technologies; new interfaces; 1. individual task for students (analysis of 3 interaction design examples).</p> <p>3. Presentations of the 1. individual student tasks – analysis and discussion.</p> <p>4. Accessibility – design for all and universal accessibility; accessibility and usability; disability categories and examples of accessible interaction design; 2. individual task for students (analysis of interactive interfaces designed for disabilities categories).</p> <p>5. Presentations of the 2. individual student tasks – analysis and discussion.</p> <p>6. Understanding users – emotional aspects; emotional interfaces; persuasive technologies; anthropomorphism; virtual agents and characters; virtual learning assistants.</p> <p>7. User experience design – 5 design levels; user needs; creation of the “personas”.</p> <p>8. Introduction to group project – design, evaluation and implementation of interactive object interface; analysis of current examples.</p> <p>9. Selection of the concept for interactive object – group work.</p> <p>10. Making a prototype of the interactive object interface – group work.</p> <p>11. Evaluation of the interactive object interface – group work.</p> <p>12. Group presentations of conducted evaluation – analysis and discussion.</p> <p>13. Defining necessary changes on interactive object interfaces – group work.</p> <p>14. Implementation of necessary changes on interactive object interfaces – group work.</p> <p>15. Group projects – final presentations of student projects</p>					
Format of instruction	<input checked="" type="checkbox"/> lectures <input checked="" type="checkbox"/> seminars and workshops <input checked="" type="checkbox"/> exercises <input type="checkbox"/> on line in entirety <input type="checkbox"/> partial e-learning <input type="checkbox"/> field work		<input checked="" type="checkbox"/> independent assignments <input type="checkbox"/> multimedia <input checked="" type="checkbox"/> laboratory <input type="checkbox"/> work with mentor <input type="checkbox"/> homework assignments			
Student responsibilities	Active participation in all activities: lectures, consultations, searching the literature, individual work in the assigned project and given use case; final oral exam					
Screening student work <i>(name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)</i>	Name	Ects	Name	Ects	Name	Ects
	Class attendance	1	Research		Experimental work	
	Oral exam	1	Report		Homework assignments	
	Seminar essay		Essay			
	Tests		Practical training	2		
	Written exam	1	Project			

Grading and evaluating student work in class and at the final exam			
Required literature (available in the library and via other media)	<b>Title</b>	<b>Number of copies in the library</b>	<b>Availability via other media</b>
	J. Preece, Y. Rogers, H. Sharp: Interaction Design: Beyond Human-Computer Interaction, John Wiley & Sons, 4th Edition, 2015.	2	
	D. Saffer: Designing for Interaction, Second Edition: Creating Innovative Applications and Devices, New Riders, 2010.	0	da
Optional literature (at the time of submission of study programme proposal)	1. D. Norman: Emotional Design: Why We Love (or Hate) Everyday Things, Basic Books, 2005. 2. B. Shneiderman: Human Needs and the New Computing Technologies, MIT Press, 2003. Svi nastavni materijali dostupni on-line, uključujući i dodatnu znanstvenu literaturu		
Quality assurance methods that ensure the acquisition of exit competences	student discussion, anonymous student evaluation questionnaire, student success rate, self-assessment		
Other (as the proposer wishes to add)			