

Course code: IFI7172.DT	HUMAN-CENTERED COMPUTING		
ECTS credits: 4 (ECTS)	Amount of contact lessons: 22h	Teaching semester: Fall	Assessment form: Exam
Course objectives:	The goal of the course is to lay the foundations for understanding the ways humans, both as individuals and in social groups, adopt, adapt, and organize their lives around computational technologies.		
Brief description of course content: (including the description of the independent work)	<p>This course comprises 3 main parts:</p> <ul style="list-style-type: none"> • The mindset - Appreciate the role of human factors in the design of Human centered information systems. • The process - Develop an understanding of basic concepts to create innovative, effective, and sustainable solutions for social change. • The methods - Be able to apply those basic concepts in the design of Human centered information systems. <p>Topics covered also cover an introduction to a wide range of theories such as:</p> <ul style="list-style-type: none"> • Situate computational technologies such as sociotechnical systems • Explain and foresee technology acceptance • Explain and foresee innovation diffusion <p>All students taking this course are expected to participate actively. This includes asking and responding to questions; and perform the reading assignments.</p>		
Learning Outcomes:	<p>Having successfully completed the course, students will be able to understand how humans relate to computational technology. Namely, students will be able to:</p> <ul style="list-style-type: none"> • Situate the role of humans (as individuals and in social groups) and how they adopt, adapt, and organize their lives around computational technologies. • Apply those basic concepts in the design of Human centered information systems. 		
Assessment Methods:	<p>Exam based upon:</p> <ul style="list-style-type: none"> • Assignments (20%) • Participation in class discussion (10%) • Present the case study plan (10%) • Case study report (30%) • Paper Reviews (10%) • Present the design solution (20%) 		
Teacher(s):	Sónia Sousa, Ph.D.		
Subject name in Estonian:	Kasutajakesksed tarkvaralahendused		
Prerequisite subject(s):	None.		
Compulsory Literature:	There is no required literature in the sense of a physical book. A list of reading materials will be assigned by the teachers and provided on		

	the course blog.	
Replacement Literature:	<p>To be discussed with teacher.</p> <p>Brown, T., & Wyatt, J. (2010) Design Thinking for Social Innovation.</p> <p>Eason, K. (2008). Sociotechnical systems theory in the 21st Century: another half-filled glass. <i>Sense in social science: A collection of essays in honour of Dr. Lisl Klein</i>, 123-134.</p> <p>Davis, M. C., Challenger, R., Jayewardene, D. N., & Clegg, C. W. (2014). Advancing socio-technical systems thinking: A call for bravery. <i>Applied ergonomics</i>, 45(2), 171-180.</p> <p>Davis, F. D. (1985). A technology acceptance model for empirically testing new end-user information systems: Theory and results (Doctoral dissertation, Massachusetts Institute of Technology).</p> <p>Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of the technology acceptance model: four longitudinal field studies. <i>Management science</i>, 46(2), 186-204.</p> <p>Rogers, E. M. (1976). New product adoption and diffusion. <i>Journal of consumer Research</i>, 290-301.</p> <p>Rogers, E. M. (2010). <i>Diffusion of innovations</i>. Simon and Schuster.</p>	
Participation and Exam requirements:	Students are required to participate in 70% out of the foreseen contact hours.	
Independent work:	Participate in the discussion activities and perform the assignments.	
Grading criteria scale or the minimum level necessary for passing the subject:	<p>Grading criteria:</p> <p>A - 90-100% of the work is done - excellent: outstanding work with only few minor errors.</p> <p>B - 80-90% of the work is done - very good: above average work but with some minor errors.</p> <p>C - 70-80% of the work is done - good: generally good work with a number of notable errors.</p> <p>D - 60-70% of the work is done - satisfactory: reasonable work but with significant shortcomings.</p> <p>E - 50-60% of the work is done - sufficient: passable performance meeting the minimum criteria.</p> <p>F- less than 50% of the work is done - fail: more work is required before the credit can be awarded.</p>	
Information about the course: (Topics by contact session, deadlines of independent works and exams/assessments times)	<i>Date and time</i>	<i>Form of study and course content by topic</i>
	23.09 (12:00 – 16.00)	The role of HCC in HCI [4h]
	06.10 (12.00 – 16.00)	Socio-technical systems [4h]
	21.10 (12.00 – 14.00)	The design challenge [4h]
	03.11 (12.00 – 14.00)	Technology acceptance & Innovation diffusion [2h]

	18.11 (12.00 – 16.00)	The design challenge [4h]
	01.12 (12.00 – 14.00)	Ethics and Policy concepts [2h]
	16.12 (12.00 – 14.00)	In-Class Presentations and Demos [2h]

Teaching Unit in charge:	School of Digital Technologies
Course programme is prepared by:	Sónia Sousa
Date:	14.08.16