

<b>Subject code:</b> IFI7172	<b>Subject name:</b> Human-Centered Computing		
<b>Study load:</b> 4 (EAP/ECTS)	<b>Load of contact hours:</b> 45	<b>Study semester:</b> Fall	<b>Assessment/Exam</b> Graded
<b>Objectives:</b>	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.		
<b>Course outline:</b>	This course comprises 4 modules: <ol style="list-style-type: none"> <li>1. Introduction to Human-Centered Computing</li> <li>2. Sociotechnical system</li> <li>3. Technology acceptance</li> <li>4. Innovation diffusion</li> </ol>		
<b>Learning Outcomes:</b>	Having successfully completed the course, students will be able to understand how humans relate to computational technology. Namely, students will be able to: <ul style="list-style-type: none"> <li>• Situate computational technologies as sociotechnical systems</li> <li>• Explain and foresee technology acceptance</li> <li>• Explain and foresee innovation diffusion</li> </ul>		
<b>Assessment Methods:</b>	Exam based upon: <ul style="list-style-type: none"> <li>• Participation in class activities (10%)</li> <li>• Individual reading assignments (20%)</li> <li>• Discussion activities (20%)</li> <li>• Case study assignments (30%)</li> <li>• Report and presentation (20%)</li> </ul>		
<b>Teacher(s):</b>	Sónia Sousa, Ph.D.		
<b>Subject name in Estonian:</b>	Kasutajakesksed tarkvaralahendused		
<b>Prerequisite subject(s):</b>	None.		
<b>Compulsory Literature:</b>	<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., &amp; 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., &amp; 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>		
<b>Replacement Literature:</b>	To be discussed with teacher.		

<b><i>Participation and Exam requirements:</i></b>	Students are required to participate in 20% out of the foreseen contact hours.	
<b><i>Independent work:</i></b>	Discussion activities and reading assignments	
<b><i>Grading criteria scale or the minimal level necessary for passing the subject:</i></b>	<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>	
<b><i>Information about the course:</i></b>	<b><i>Date and time</i></b>	<b><i>Form of study and course content by topic</i></b>
	05.09 (08.30 – 11.30)	Introduction to Human-Centered Computing
	03.10 (08.30 – 11.30)	Sociotechnical systems
	17.10 (08.30 – 11.30)	Sociotechnical systems
	30.10 (08.30 – 11.30)	Sociotechnical systems
	31.10 (08.30 – 11.30)	Technology acceptance
	13.11 (08.30 – 11.30)	Technology acceptance
	14.11 (08.30 – 11.30)	Technology acceptance
	27.11 (08.30 – 11.30)	Innovation diffusion
	28.11 (08.30 – 11.30)	Innovation diffusion
	11.12 (08.30 – 11.30)	Innovation diffusion
	12.12 (08.30 – 11.30)	Presentations

## **Course programme**