

IFI7131	Towards a Better Understanding of HCI		
Study load: 3 (ECTS/EAP)	Load of contact hours: 20	Study semester: Spring 2012	Exam
Objectives:	To create opportunities for acquiring a better understanding about some foundational issues related to cognition and Human-Computer Interaction (HCI)		
Course outline:	<p>The course will be devoted to illustrating some foundational issues related to cognition and Human-Computer Interaction. The topics that will be treated during the course include: distributed cognition, cognitive niche construction, affordance, lens model, abduction and HCI, the evolution of HCI, distributed morality and HCI.</p> <p>A seminar (2 hours) on the topic “Violence and technology” will be organized at the end of the course. During the seminar students will be asked to share their experience about the emergence of violence as unexpected outcome in Human-Computer Interaction.</p> <p>Compulsory reading for the seminar: E. Bardone (2011). Intended Affordances as Violent Mediators: Technologically Enriched Human Niches. <i>International Journal of Technoethics</i>, 4(2).</p>		
Learning Outcomes:	<p>Learner has acquired knowledge on foundational issues in the field of cognition and Human-Computer Interaction</p> <p>Learner has acquired the skills to discuss topics related to cognition and Human-Computer Interaction</p> <p>Learner has acquired skills to combine different concepts related to foundational issues in cognition and Human-Computer Interaction</p> <p>Learner has acquired skills of written expression.</p> <p>Learner is familiar with the major foundational issues related to cognition and Human-Computer Interaction.</p>		
Assessment Methods:	Exam(graded). Written assessment, 3000 words long essay on one of the topics treated during the course.		
Teacher(s):	Emanuele Bardone, Post-doc		
Subject name in Estonian:	Inimese ja arvuti vahelise interaktsiooni alused		
Prerequisite subjekt(s):	None		
Compulsory Literature:	<p>Bardone, E., <i>Seeking Chances: From Biased Rationality to Distributed Cognition</i>. Springer, Berlin, 2011: Chapters 3, 4, 5, 6</p> <p>Brunswik, E., Organismic achievement and environmental probability. <i>Psychological Review</i>, Vol 50(3), 1943, 255-272.</p> <p>Magnani, L. & E. Bardone, Seeking chances through interface design: the role of abduction, <i>SMC'09 Proceedings of the 2009 IEEE international conference on Systems, Man and Cybernetics</i>, 2009.</p>		

	<p>Clark, A., Soft selves and ecological control. In Ross et al. (eds), <i>Distributed Cognition and the Will</i>, MIT Press, Cambridge, 2007.</p> <p>Kirsch, D. and P. Maglio, On Distinguishing Epistemic from Pragmatic Action, <i>Cognitive science</i>, 18(4), 1994.</p> <p>Gibson, J. J. <i>The ecological approach to visual perception</i>. Boston: Houghton Mifflin, 1979: Chapter 8.</p>
Replacement Literature:	<p>Hutchins, E. (1995). <i>Cognition in the Wild</i>. MIT Press.</p> <p>Perry, M., Distributed Cognition". In J.M. Carroll (Ed.) <i>HCI Models, Theories, and Frameworks: Toward an Interdisciplinary Science</i>, Morgan Kaufmann, 2003: 193-223.</p> <p>Dror, I.E. & Harridan S., Offloading cognition onto cognitive technology. In Dror, I.E. & S. Harridan, <i>Cognition Distributed. How cognitive technology extends our minds</i>, John Benjamins, New York, 2007.</p>
Participation and Exam requirements:	Requirements that should be fulfilled in order for student to be admitted to exam: participation in the seminar.
Independent work:	Compiling a written work, a 3000 words essay, reading compulsory literature
Grading criteria scale or the minimal level necessary for passing the subject:	<p>Grading criteria:</p> <p>A - the arguments presented are clear and well-organized and excellent comprehension of material is displayed. The essay displays original thought in integrating different concepts.</p> <p>B - the arguments presented are well-discussed throughout the essay, good comprehension of material. The personal contribution is not quite original</p> <p>C - the discussion is competent, and arguments presented display a decent comprehension of material. No original thoughts, though a decent effort is made.</p> <p>D - The organization of the essay is loosely, and clarity in argumentation is not successfully achieved. Low comprehension concerning material is displayed.</p> <p>E - Comprehension of material not displayed. Little effort made.</p> <p>F- Fail: more work is required before the credit can be awarded.</p>
Information about the course:	<p>Weekly schedules. Deadlines for tests, independent work, exams and final grading.</p> <p>Relevant dates: The essay should be submitted no later than May the 31st.</p> <p>Final grades will be set by the end of the Spring Semester.</p> <p>See separate table below!</p>

Schedule and program of the course

March 27, 2012 4:15pm – 7:45pm	Distributed Cognition. Cognitive Science meets HCI.
March 28, 2012 4:15pm – 7:45pm	Abduction and HCI. Epistemology meets HCI
April 4, 2012 4:15pm – 7:45pm	Ecological Psychology 1: The notion of affordance. Ecological Psychology 2: The lens model.
April 17, 2012 4:15pm – 7:45pm	Technology and evolution 1: what is this thing called evolution? Technology and evolution 2: the theory of cognitive niche construction and its application to HCI.
April 24, 2012 4:15pm – 7:45pm	Morality, Philosophy, and HCI. Violence and HCI.