

Course Outline

1	Code and title	LTAT.05.007 <i>Inimise ja arvuti interaktsioon</i> <i>Human Computer Interaction</i>
2	Institute	Arvutiteaduse instituut / Institute of Computer Science
3	ECTS	6 ECTS
4	Number of semesters	1 Semester
6	Assessment methods	Differentiated
7	Level	Masters level
8	ÕPPEAINE ÜLDEESMÄRGID GENERAL OBJECTIVES OF THE SUBJECT	Eesti keeles: <i>Aines tutvustatakse tudengitele inimese ja arvuti interaktsiooni põhialuseid keskendudes kasutajaliideste ja kasutajakogemuse kavandamise, arenduse ja hindamise meetodite tutvustamisele ja rakendamisele.</i> English: <i>This course will introduce students to the fundamentals of Human Computer Interaction with a focus on identifying and deploying methods for interface and experience design, development and evaluation.</i>
9	ÕPPEAINE ÕPIEESMÄRGID (ÕPIVÄLJUNDID EHK OMANDATAVAD/ ARENDAVAD/ERIALASED TEADMISED JA OSKUSED, ÜLDPÄDEVUSED JMS) LEARNING OUTCOMES OF THE SUBJECT (speciality related skills and knowledge to be acquired; generic skills)	Eesti keeles: <i>Kursuse eduka läbimise järel on tudengid võimelised:</i> <ol style="list-style-type: none"><i>1. mõistma inimese taju, mälu ja informatsiooni töötlemise põhitõdesid;</i><i>2. mõistma arvuti sisend- ja väljundspetsiifikaid lähtuvalt kasutajaliideste ja kasutajakogemuse disaini põhimõtetest;</i><i>3. leidma ja rakendama sobivaid meetodeid kasutajate vajaduste kindlakstegemiseks ja nende teisendamiseks kasutajaliidese kontseptsiooniks;</i><i>4. looma kontseptsiooni põhjal kasutajaliidese prototüüpe;</i><i>5. leidma ja rakendama kasutajaliideste hindamiseks sobivaid meetodeid ning iteratiivselt parandusi-täiendusi tegema.</i> Inglise keeles: <i>On successful completion of this course, students will be able to:</i> <ol style="list-style-type: none"><i>1. Understand the basics of human perception, memory and information processing.</i><i>2. Understand the basics of computer input and output devices along principles of UI and UX design.</i><i>3. Identify and deploy suitable methods to identify user needs and turn them into interface concepts</i><i>4. Turn concepts into prototypes.</i><i>5. Identify and deploy suitable methods to evaluate user interfaces and iteratively improve them.</i>
10	CONTENT OF THE SUBJECT (THEMES TO BE COVERED), BRIEF DESCRIPTION	Eesti keeles: <i>Kursus hõlmab järgmisi teemasid: Inimese taju, mälu ja töötlemine; sisend- ja väljundseadmed ja -kontrollid; kasutajaliidese põhitõed; kasutajaliideste ja kasutajakogemuse disaini- ja hindamisprotsessid; kasutajaliideste ja kasutajakogemuse disaini meetodid; kasutajaliideste ja</i>

		<p><i>kasutajakogemuse hindamise meetodid; disainmõtlemine ja loovus; prototüüpimine.</i></p> <p>Inglise keeles: <i>Topics covered by the course include: Human perception, memory and processing; input and output devices and controls; user interface basics; UI and UX design and evaluation processes; methods of UI and UX design; methods of UI and UX evaluation; design thinking and creativity; prototyping.</i></p>
11	<p>ÕPPEAINE LÄBIMISE EELTINGIMUSED (KOHUSTUSLIKUD JA SOOVITUSLIKUD EELDUSAINED, EELNEVALT OMANDATUD KVALIFIKATSIOON JMS), ÕPPEAINES OSALEMISE PIIRANGUD (OSALEJATE PIIRARV JMS)</p>	<p>Compulsory prerequisite:</p> <p>Soovituslikud (kood nimetus-eeesti):</p>

AINEKAVA (eesti keeles, inglise keeles vajalik täita ainult aine toimumise korral selles keeles)

Year and semester	2020/2021, Autumn Block mode study
Language of instruction	English
Study time (Lectures, Practicals, Seminars)	L: 32 P: 0 S: 0 I: 96
Teaching staff	Alexander Nolte
Assessment methods and method for determining final grade	<p>The grading will be based on the following items:</p> <ul style="list-style-type: none"> • Individual assignments during the first 4 weeks (2 sessions, 20 points) • Team project (80 points) <ul style="list-style-type: none"> ○ Continuous reports (55 points) ○ Introductory presentation video (10 points) ○ Final presentation video (15 points) <p>The resulting score (out of 100) will be mapped to the following grades:</p> <ul style="list-style-type: none"> • A: 100 - 91 • B: 90 - 81 • C: 80 - 71 • D: 70 - 61 • E: 60 - 51 • F: 50 - 0 <p>A grade higher than F (more than 50 points), participation in both project presentations and the submission of the final report are required to pass the course. There is no option for a retake examination nor to submit project deliverables at a later date.</p> <p>Course material and assignments will be distributed via Moodle.</p>
Schedule	The course will be entirely held online.

	<p>Lectures: The first lecture will be streamed live via Zoom. The link will be announced in Moodle. A recording of the lecture will be available afterwards. For the remainder of the course, we will provide shorter instructional videos and additional readings about methods and concepts you will use during the course here on Moodle. The topics we will cover are:</p> <ul style="list-style-type: none"> • Foundations of HCI • User interface elements and design • UI design – data gathering • UI design – data analysis • Prototyping and design • Evaluation methods – expert evaluation • Evaluation methods – user testing <p>Workshops: All workshops will be streamed live via Zoom. Zoom links will be available here in Moodle. During the workshops we will announce upcoming assignments, provide feedback for previous assignments and you will have the opportunity to ask questions. All workshops will be recorded and will be available afterwards.</p> <p>Consultation sessions: Individual consultation sessions will be available for each team after the submission of first presentation video and before the submission of the final prototype. Exact times and dates will be fixed via Doodle. Participation is highly encouraged but it is not mandatory for teams to attend in full.</p> <p>We will also open a discussion forum each week for you to ask questions and discuss lecture content and assignments. For further questions you can also reach us via email or private message.</p>
References	<p>Textbooks:</p> <ul style="list-style-type: none"> • Alan Dix, Janet Finlay, Gregory D. Abowd, Russell Beale. Human Computer Interaction (Third Edition), 2013. • Julie A. Jacko. Human computer interaction handbook: Fundamentals, evolving technologies, and emerging applications (Third Edition), 2012. <p>Additional useful readings:</p> <ul style="list-style-type: none"> • Donald A. Norman. The Design of Everyday Things (Second Edition), 2013. • Rex Hartson, Pardha S. Pyla. The UX Book: Process and Guidelines for Ensuring a Quality User Experience, 2012. • Mauricio Vianna, Ysmar Vianna, Isabel K. Adler, Brenda Lucena, Beatriz Russo. Design Thinking – Business Innovation, 2012.