VIDZEMES AUGSTSKOLA

FACULTY OF ENGINEERING
STUDY COURSE DESCRIPTION

Course Title:	**Human Factors and Human-computer Interaction**					
Course code (LAIS):	**DatZ1024**					
Study programme:	**Virtual Reality and Smart Technologies**					
Level of Study programme:	☐	1st level professional higher education				
	☐	Professional Bachelor				
	☒	Professional Master				
	☐	PhD level				
Type of Study programme:	☒	Compulsory course (Part A)				
	☐	Professional specialization courses (Part B, compulsory)				
	☐	Professional specialization optional courses (Part B, optional)				
	☐	Elective courses (Part C)				
Course Workload:	**Credits**	**ECTS**	**Academic hours**	**Contact hours**	**Independent work hours**	
	2	3	80	24	56	
Course Author/ Tutor:	**Linda Lancere**					
	Dr.sc.ing.					
	linda.lancere@gmail.com					
	Consultation: according to the schedule for each semester					
Course Form:	Full time					
Study year, semester:	1st year, 1st semester					
Language:	Latvian, English					
Prerequisites for the Course:	-					
Course Summary:	The aim of this course is to give practical and theoretical knowledge in the latest tendencies in human factors and human-computer interaction technologies. In frames of this course are introduced with interaction design, problem space and conceptual models. During practical workshops and independent tasks, students are given the opportunity to understand the process of data analysis, interpretation and presentation.					
Course Methods:	Lectures, practical activities, workshops, theory tests, final assessment etc.					
Assessment:	Examination					
Requirements for Credits:	1. Theoretical study performed 2. Passed each lecture's practical activity Final examination consists of oral questions and practical activity. If all requirements are not met on time, student is not allowed to pass the exam. For delayed exam requirements, max score is decreased.					
Course Contents:	Interaction design. Understanding and conceptualizing interaction. Problem space and conceptual models. Cognitive aspects and cognitive frameworks. Social and emotional interaction. Persuasive technologies and behavioural change. Interfaces and data gathering. Data analysis, interpretation and presentation. The process of interaction design and establishing requirements. Prototyping, construction and evaluation.					
Learning Outcomes; the evaluation methods and criteria	**Learning Outcomes**			**The evaluation methods and criteria**		
	Knowledge					
	Knowledge on nowadays human factors and human-computer interaction technologies			Theoretical study performed		
	Knowledge on interaction design.			Theoretical study performed		
	Knowledge on problem space and conceptual			Theoretical study performed		

	models.	
	Knowledge on persuasive technologies and behavioural change.	Theoretical study performed
	Skills	
	Skills to create idea and it's evaluation	Filled and uploaded workshop protocol.
	Shows ability to understand and conceptualize interaction.	Filled and uploaded workshop protocol.
	Realizes cognitive aspects and cognitive frameworks.	Filled and uploaded workshop protocol.
	Competency	
	Shows ability to critically analyse social and emotional interaction.	Individual exam with oral questions and practical assessment.
	Independently realizes interfaces and data gathering. Data analysis, interpretation and presentation.	Individual exam with oral questions and practical assessment.
	Shows ability to process interaction design and establishing requirements. Prototyping, construction and evaluation.	Individual exam with oral questions and practical assessment.
Course Compulsory literature:	Helen Sharp, Yvonne Rogers. Interaction Design: Beyond Human-Computer Interaction 4th Edition. 2015. 584 lpp.	
Course additional literature:	Solis Tech. Human-Computer Interaction: The Fundamentals Made Easy. 2016	
Course confirmation date:	08.12.2017.	
Date of course description update:		

Study Course Plan:

Date	Theme	Academic hours		Study Form
		Contact hours	**Independent work hours**	
	Interaction design. Understanding and conceptualizing interaction.	3	9	Theoretical lecture. Practical activity.
	Problem space and conceptual models. Cognitive aspects and cognitive frameworks.	3	9	Theoretical lecture. Practical activity.
	Social and emotional interaction. Persuasive technologies and behavioural change.	3	9	Theoretical lecture. Practical activity.
	Interfaces and data gathering. Data analysis, interpretation and presentation.	3	9	Theoretical lecture. Practical activity.
	The process of interaction design and establishing requirements.	3	9	Theoretical lecture. Practical activity. Theoretical test
	Prototyping, construction and evaluation.	4	11	Theoretical lecture. Practical activity.
	Final examination	5	-	Final examination with oral questions and practical activity.
	Total:	***24***	***56***	