

Course programme – IFI7183 Research and Design of Educational Games

Course code IFI7183	Research and Design of Educational Games		
Volume 4 ECTS	Contact hours: 16	Semester: Autumn	Assessment
Learning objective:	The objective of the course is to gain deeper insights into current research topics of serious and educational games and how this research influences the design of games. The course will introduce students into the use of design patterns that can be used to turn the research results into game design artefacts.		
Short description:	<p>The course will cover the following topics. Each topic will be prepared by a small group of students and presented in the class. Each class that is prepared consists of a short introduction of the main concepts of the research topic, some research results, a small game intervention with other students that illustrates characteristics of the topic and a group exercise to develop game design patterns from presented results.</p> <ul style="list-style-type: none"> • Game Studies and the history of game related research • Cognitive aspects of gameplay • Emotional and Motivational aspects of gameplay, game experience, immersion and flow • Creativity and creative thinking and gameplay • Social and Community aspects of gameplay • Serious games as persuasive technology and behavior change • Cultural and ethical aspects of games and play • Gender issues in games and play 		
Learning outcomes:	<p>Acquiring an understanding of the main theories and concepts in games research</p> <p>Acquiring a basic understanding of game design patterns and how to turn research results into patterns</p> <p>Ability to read, analyse, criticise and present research results and how they were derived to fellow students in an understandable manner</p> <p>Ability to translate research results into design ideas</p>		
Assessment methods:	Assessment – Students will choose one topic from the game research and introduce its concepts or empirical data to the rest of the class.		
Lecturer:	Tobias Ley, Vladimir Tomberg Error! Bookmark not defined.		

Title in Estonian	Õpimängude uurimine ja arendamine
Prerequisite course	IFI7179 Basics of Game Theory and Design
Compulsory literature:	<ul style="list-style-type: none"> • Joost Raessens, Jeffrey Goldstein - Handbook of Computer Game Studies • Karl M. Kapp 2012 - The Gamification of Learning and Instruction: Game-based Methods and Strategies for Training and Education. • Wolf, J. P.; Perron, B. (Eds.) 2003 The Video Game Theory Reader. • Different conference proceedings and collections of scientific articles about game research
Replacement literature:	NA
Subscription to the course and examination	Students have to be present in at least 80% of the contact lessons
Requirements of independent work	<ul style="list-style-type: none"> • Students perform independent research for one topic • Students present the research in class • Students write a report, including a summary of the design patterns developed with other students in the class
Assessment criteria	<p>Pass/fail</p> <p>Pass - the student has submitted all required assignments in time each having at least satisfactory quality and has presented his/her work in the class</p> <p>Fail - the student has not submitted all required works or in a less than satisfactory quality, or he/she has not presented his/her work in the class.</p>
Information about the content of the course	<p>12.10: Introduction of research topics on game-based learning, students choose a topic for research</p> <p>26.10: First presentation of results, design principles, choosing 3 games for analysis</p> <p>02.11: Second presentations of results, introduction of activity systems analysis for game design, game design analysis table</p>

	<p>09.11: Third presentations, introduction of game design patterns</p> <p>16.11: group work on developing theory-based game design patterns</p> <p>23.11: group work on developing theory-based game design patterns</p> <p>14.12: Final presentations of research results</p>
--	---

Academic unit:	School of Digital Technologies
Composed by:	Tobias Ley
Date:	18.09.2015

Date	19.09.2015
Academic coordinator:	Ingrid Sander