

Course Programme

IFI7116	LOCATIVE TECHNOLOGIES	
3 EAP/ECTS	Load of contact hours: lectures: 4 h, workshops/ seminars 16 h	Study semester: Autumn 1, 2010
Objectives:	To give an overview of the potentials and applications of the geographic information systems and locative content with the focus on participatory concepts and content sharing communities.	
Course outline:	An overview of geographic information systems and locative content, based on current projects. Basic technologies, such as Google Maps APIs are introduced and applied in exercises. Practical design or implementation assignments are given.	
Learning outcomes:	The student is capable of designing concepts and applications based on emergent technology.	
Assessment methods:	Pass/fail assessment, based on homework and participation in seminars.	
Lecturer(s):	Jaagup Kippar, Lecturer, MSc.	
Language of instruction:	English	
Subject title in Estonian:	<i>Positsioneerimistehnoloogiad</i>	
Prerequisite subject(s):	-	
Compulsory literature:	http://code.google.com/apis/ajax/playground/ (Google maps, Google Earth)	
Replacement literature:	http://code.google.com/apis/ajax/playground/ (Google maps, Google Earth) Any textbook in cartography	
Requirements for participation and admission to exam or pass/fail assessment:	No participation will be checked, but assessment includes materials used in lectures.	
Requirements for independent study:	Description of one existing location-based service, an analysis of its probable users. Known problems, opportunities for further development. Design of one location-based service and creation of the prototype, if necessary, based on samples developed during the course. Development of an illustrated in-depth description of possible extensions for the created service prototype. Preparing for seminars based on	

	materials referred to or presented during lectures.	
Exam evaluation criteria or minimum level required for pass/fail assessment:	<p>Criterion: is aware of the existing location-based services Assessment: Is able to name many location-based services currently available, and analyse some of them in more detail from technological, as well as from the user's needs and usability point of view.</p> <p>Criterion: is aware of locative technologies Assessment: is able to name technologies used for positioning, compare their accuracy, cost, speed and other properties.</p> <p>Criterion: is able to participate in the development of an application based on locative technologies Assessment: during the course has created a working and usable location-aware application, as a result of an individual or group-work</p>	
Content of studies and schedule:	<i>Date, time, lecturer's name, if more than one:</i>	<i>Form of contact studies, content of studies:</i>
	04.10.2010	Locative technologies – possibilities, solutions
	04.10.2010	Locative projects in TLU
	11.10.2010	Google maps basic examples
	11.10.2010	Using Javascript in Google maps
	18.10.2010	Responding user events in Google maps
	18.10.2010	Cartography basic background
	19.10.2010	Multidimensional scaling in map applications
	25.10.2010	Map solutions in Estonian governmental sites
	25.10.2010	Mobile-based locative solutions and technologies
	26.10.2010	GPS-solutions, ending seminar

Institute responsible for the course:	Institute of Informatics
Name of the lecturer:	Jaagup Kippar
Signature:	
Date:	

Confirmed

<i>Date:</i>	01.09.2010
<i>Name of the academic coordinator:</i>	Hanna-Liisa Pender
<i>Signature:</i>	