IFI7128	User Modeling and Recommender Systems		
Study load: 4 (EAP/ECTS)	*Load of contact hours: 16*	*Study semester: Autumn*	*Exam*
Objectives:	The course will provide the students with the conceptual knowledge enabling the design of an adaptive recommender system in various domains.		
Course outline:	User modeling is a cross-disciplinary research field that attempts to construct models of human behavior within a specific computer environment. The goal is not to imitate human behavior but to make the machine able to understand what the expectations, goals, knowledge, information needs, and desires of a user are in terms of a specific computing environment. Recommendations utilize the information stored in a user model. Simple examples of a recommendation system are e-commerce sites which make use of the user's previous purchasing and browsing behavior to recommend new products or personalized news recommendation based on the user's previous news articles read. In this class the focus is on obtaining a general understanding of state of the art user modeling techniques and recommendation mechanisms. The student will learn to critically discuss relevant topics and apply the mechanisms to different domains. They will do a course project where students design a system that explicitly provide recommendations to its users about a specific domain. Students will learn about the techniques through presentations; reading/discussing seminal papers; analyzing well-known recommender systems; developing a project; and peer-reviewing their colleagues work. Independent work: Students are require to critically analyze a well-known recommender system and to design a system that explicitly provide recommendations to its users about a specific domain. Further, students will be required to peer-review the work done by other students. More details of the course content and the way it is structured in each lecture can be looked up at http://htk.tlu.ee/recommendersystems/index.php/Course_Plan		
Learning Outcomes:	The student is able to: • make concepts of user models and recommender systems for different application fields. • identify an applicable configuration of methods for a given domain. Students are also expected to acquire conceptual knowledge enabling the design of user models and recommender systems; and to develop an understanding of the limitations, drawbacks and benefits of the technologies to discuss these issues.		
Assessment Methods:	The evaluation will be based on the projects done and the feed-back provided to other students. The percentages are as follow:		

	- Case Exercises: 20%
	      o Case Exercise done: 12%
	      o Presentation: 5%
	      o Feed-back provided: 3%
	
	 - Final Project: 80%
	      o Final Project done: 50%
	      o Presentation: 15%
	      o Feed-back provided: 15%

Teacher(s):	Adolfo Ruiz Calleja
Subject name in Estonian:	Kasutaja modelleerimine ja soovitussüsteemid
Prerequisite subject(s):	-
Compulsory Literature:	Readings will be from current literature; they will be uploaded to the course Wiki: http://htk.tlu.ee/recommendersystems/index.php/Resources
Replacement Literature:	Relevant documents can be found in the course Wiki: http://htk.tlu.ee/recommendersystems/index.php/Resources Students are expected to contribute by obtaining and sharing relevant resources for the course.
Participation and Exam requirements:	Students should write and orally present a case study in groups and a final project individually in order to be evaluated. Students are also required to attend the face-to-face lessons.
Independent work:	Practical exercises and peer-reviews
Grading criteria scale or the minimal level necessary for passing the subject:	The students are required to be able to apply the knowledge related to user modelling and recommender systems acquired during the course. Every student will write and present a case study and a project, which will be later on evaluated, taking into account both the content and the way they are presented. Further, students will also be required to peer-review the work of their colleagues and the feedback they provide will also be evaluated. Details can be looked up at: http://htk.tlu.ee/recommendersystems/index.php/Evaluation
Information about the course:	More details of the course content and the way it is structured in each lecture can be looked up at http://htk.tlu.ee/recommendersystems/index.php/Course_Plan