

Study programmes: PhD studies - Informatics				
Course name: P479 - Information Retrieval and Web Searching				
Lecturers: Predrag Janičić and other lecturers of the Department for Computer Science				
Status: Optional				
ECTS: 9				
Attendance prerequisites: No prerequisite				
Course aims: Acquiring knowledge about efficient information retrieval in case of information explosion and about tasks of storing information that enable their easier retrieval.				
Course outcome: After the course, the student is able to efficiently solve problems of information organization and retrieval.				
Course content: The problem of information retrieval; inverted indexes; vector and boolean queries using inverted indexes and query expansions; optimization of operations over inverted indexes; recall, precision, and other measures; parallel and distributed information retrieval; search by pattern matching; indexing - goals and sorts; automated indexing of individual terms; computing term weight factors; establishing links between terms - classification, phrase terms, building and using thesaurus; information retrieval with relevance; terms acquisition; language acquisition vs cross-language acquisition; power and limitations of widely known search engines (Google).				
Literature:				
1. Marie-Francine Moens, Automatic Indexing and Abstracting of Document Texts, Kluwer Academic Publishers, 2000				
2. Ricardo Baeza-Yates, Berthier Ribeiro-Neto, Modern Information Retrieval, Addison-Wesley, 1999				
3. G. Kowalski, M.T. Maybury: Information Storage and Retrieval Systems. Springer, 2005				
4. Christopher D. Manning, et al: Introduction to Information Retrieval, Cambridge University Press. 2007. (the lecturer can choose another appropriate literature)				
Number of hours: 10	Lectures: 4	Tutorials: -	Laboratory: -	Research: 6
Teaching and learning methods: Frontal/Lectures/Exercises				
Assessment (maximal 100 points)				
Course assignments	points	Final exam		points
Lectures	-	Written exam		50
Exercises / Tutorials	-	Oral exam		-
Colloquia	-	Written-oral exam		-
Essay / Project	50			