

Subject code	Credits
INF3037	6

Course title in Lithuanian

INFORMACIJOS MODELIAVIMAS

Course title in English

INFORMATION MODELLING

Short course annotation in Lithuanian (up to 500 characters)

Kurse aptariama informacijos modeliavimo ir paieškos teorija ir taikymai. Pristatomos klasikinės informacijos modeliavimo teorijos, bei jų taikymas paieškai. Pradedama nuo bazinių žinių, ir baigiama naujausiais iššūkiais.

Short course annotation in English (up to 500 characters)

The course aims to study the theories and techniques used in modelling of information and text based retrieval. It discusses classical and modern techniques of knowledge modelling and their application for information retrieval. Students start from the basic notions and concepts, and finish with the newest challenges in the field.

Prerequisites for entering the course

Basic knowledge of statistics, set theory, logics, algebra and software development.

Course aim

Learn to build IR system

Content

No	Content (topics)
1.	Introduction to Information Retrieval
2.	Preprocessing.
3.	Indexing.
4.	Boolean IR model.
5.	Vector IR model.
6.	Evaluation.
7.	Multimedia IR
8.	User interaction (user interface) in IR
9.	Search in WWW: scanning, processing, PageRank.
10.	Tools and frameworks.

Distribution of workload for students (contact and independent work hours)

Lectures	45 hours
Group work	5 hours
Laboratory work	10 hours
Individual students work	100 hours
Total:	160 hours

Structure of cumulative score and value of its constituent parts

Final written exam (50%), mid-term written exam (17%), and assessments of laboratory (practical) work (33%).

Recommended reference materials

No.	Publication year	Authors of publication and title	Publishing house	Number of copies in		
				University library	Self-study rooms	Other libraries
<i>Basic materials</i>						
1.	2008	C. D. Manning, P. Raghavan, H. Schütze. Introduction to Information Retrieval.	Cambridge University Press			On-line book: http://www-csli.stanford.edu/~hinrich/information-retrieval-book.html .
2.	1979	C. J. Van Rijsberge. Information Retrieval.	Butterworths			http://www.dcs.gla.ac.uk/Keith/Preface.html
3.	2015	W. Bruce Croft Donald Metzler Trevor Strohman. Search Engines Information Retrieval in	Pearson			http://ciir.cs.umass.edu/downloads/SEIRiP.pdf

		Practice			
<i>Supplementary materials</i>					
		<i>Mi Islita</i>		http://www.miislita.com/	
		<i>www.google.com</i>		<i>www.google.com</i>	
Course programme designed by					
Prof. Tomas Krilavičius					