

# Information retrieval for digital libraries 1 Informationsåtervinning för digitala bibliotek 1

7.5 credits7.5 högskolepoäng

Ladok Code: NLID12

Version: 5.0

Established by: The Teaching Committee 2011-06-14

Valid from: Autumn 2011

Education Cycle: First cycle

Main Field of Study (Progressive Specialisation): Informatics (G2F), Library and Information Science (G2F)

Disciplinary Domain: Natural sciences

Prerequisites: There are no explicit prerequisites.

Subject Area: Informatics/Computer and Systems Sciences

**Grading Scale:** ECTS-credits

### Content

The course consists of the following parts:

- Main issues and problems in the IR area (content representation, relevance)
- Formal representation of the documents contents and search queries (logical and mathematical models),
- Basic principles and methods of evaluation,
- IR applications for digital libraries,
- XML applications for data and document structures,
- Introduction to metadata.

# **Learning Outcomes**

After finishing the course students will be able to:

- explain the problems treated within IR,
- understand and use concepts from other subject areas related to IR,
- relate the IR principles to the development and applications on the WWW,
- conduct evaluation of search strategies and IR-systems

## Forms of Teaching

Tuition is conducted through written assignments, seminars, lectures, demonstrations, practices, project works, independent studies and group projects.

Tuition is normally conducted in English.

## **Forms of Examination**

The course is examined through written examinations and reports.

The student have the rights to five (5) occassions for examination of which at least three (3) should be offered within one year.

Student rights and obligations at examination are in accordance with guidelines and rules for the University of Borås.

## **Literature and Other Teaching Materials**

Arms, William Y. (2000). Digital Libraries. Cambridge, MA.: MIT Press, 2000. (pp. 22-38, 144-243; [Tillgänglig som e-bok]

Baeza-Yates, R. and Ribeiro-Neto, B. (2011) Modern Information Retrieval: The Concepts and Technology behind Search (2nd Edition) Harlow: Addison-Wesley. Kap. 1, 2, 3.1, 3.2, 4, 5, 6, 7, 11, 12, 16, 17. (381 s.)

Belew, R.K. (2000). Finding Out About. A Cognitive Perspective on Search Engine Technology and the WWW. Cambridge: Cambridge University Press. (pp. 1-147, 167-173)

Berners-Lee, T., Hendler, J. and Lassila, O. (2001). The Semantic Web - A new form of Web content that is meaningful to computers will unleash a revolution of new possibilities. Scientific American Magazine, May. (pp. 1-7)

Saracevic, T. (2007). Relevance: A Review of the Literature and a Framework for Thinking on the Notion in Information Science. Part II: Nature and Manifestations of Relevance. Journal of the American Society for Information Science and Technology, 58(13), 1915 -1933.

## **Student Influence and Evaluation**

Students shall be involved in further development of the course and are therefore given the possibility to assess the course in a systematical way by written or oral means. How this assessment falls out and how it affects further development will be reported back to the students.

For course evaluation, the standard University College of Borås rules as of 7 June 2005 apply, dnr 56-02-10.

### **Miscellaneous**

The course is part of the Master's Programme Library and Information Science: Digital Library and Information Services and is a free standing course.