



## Course syllabus

Faculty of Arts and Humanities

Department of Cultural Sciences

1BO525 Kunskapsorganisation IV: nätverksbaserad kunskapsorganisation, 7,5 högskolepoäng

Knowledge organisation IV: network based knowledge organisation, 7.5 credits

### **Main field of study**

Library and Information Science

### **Subject Group**

Library and Information Science

### **Level of classification**

First Level

### **Progression**

G1F

### **Date of Ratification**

Approved 2018-09-19

Revised 2019-02-26 by Faculty of Arts and Humanities.

The course syllabus is valid from spring semester 2020

### **Prerequisites**

60 credits Library and Information Studies, including the courses

1BO420 Knowledge Organisation II: Cataloguing and Metadata, 7.5 credits,

1BO425 Knowledge organisation III: subject analysis, classification, indexing, 7.5 credits,

or the equivalent.

## Objectives

After completing the course, the student should be able to:

- explain the conditions for reaching metadata compatibility in web-scale discovery systems,
- explain the conditions for reaching metadata compatibility through semantic web standards,
- describe and discuss large semantic web data standards and linked data standards,
- explain the most important aspects of XML,
- create basic XML posts.

## Content

The semantic web is an important vision trying to manage the challenges of organisation and recovery in today's vast amounts of information. Libraries and cultural heritage institutions make their metadata available as open linked data to make them more visible and searchable. In this course students develop knowledge of important issues concerning this goal, including meta compatibility between systems as web-scale discovery services. Standards for converting library metadata to linked data for the semantic web are discussed. To support students' understanding of the semantic web infrastructure, XML is studied from a practical perspective as an important underlying format for metadata in global environments. Participation in seminars is compulsory.

## Type of Instruction

Teaching is delivered in the form of lectures, seminars and laboratory sessions.

Parts of the teaching may be conducted in English or other Scandinavian languages than Swedish.

## Examination

The course is assessed with the grades Fail (U), Pass (G) or Pass with Distinction (VG).

The course is examined through oral and written tests and presentations of compulsory assignments. Supplementary examination of compulsory seminar exercises is carried out in the form of a seminar or a written assignment.

In order to receive the grade of Pass, the student must achieve the objectives. Grading criteria for the grade of Pass with Distinction will be specified when the course starts. For students who do not pass the first examinations, retake examinations are provided in accordance with local regulations at the university.

## Course Evaluation

At the end of the course, a course evaluation is conducted. Results and analysis of the course evaluation are communicated to the students who have taken the course and the students who are taking the course when it is offered the next time. The evaluation is anonymous. The course evaluation is filed according to departmental regulations.

## Required Reading and Additional Study Material

Digisam. (the latest edition). *Vägledande principer för arbetet med digitalt kulturarv*. 10 p. [http://www.digisam.se/wp-content/uploads/2013/02/Vagledande\\_principer\\_for\\_arbetet\\_med\\_digitalt\\_kulturarv.pdf](http://www.digisam.se/wp-content/uploads/2013/02/Vagledande_principer_for_arbetet_med_digitalt_kulturarv.pdf)

Golub, Koraljka. (the latest edition). *Subject access to information: An interdisciplinary approach*. Santa Barbara, CA: Libraries Unlimited, An Imprint of ABC-CLIO, pp. 67–98.

Mitchell, Erik. (the latest edition). "Library linked data: Early activity and development". *Library Technology Reports*. 37 p. <https://journals.ala.org/index.php/ltr/issue/viewIssue/534/290>

Spiteri, Louise F. (the latest edition). *Managing metadata in web-scale discovery systems*. London: Facet. 188 p.

W3Schools. XML Tutorial. 50 p. <https://www.w3schools.com/Xml/default.asp>

Willer, Mirna, & Dunsire, Gordon. (the latest edition). *Bibliographic information organization in the Semantic Web*. Oxford: Chandos Publishing. 350 p.

Zeng, Marcia Lei, & Mayr, Philipp. (the latest edition). "Knowledge Organization Systems (KOS) in the Semantic Web: A Multi-Dimensional Review". 31 p. <https://arxiv.org/abs/1801.04479>

**Additional study material**

Cole, Timothy. W. & Han, Myung-Ja K. (the latest edition). *XML for catalogers and metadata librarians*. Santa Barbara: Libraries Unlimited. 385 p.

Goldberg, K. H. (the latest edition). *XML: Visual quickstart guide*. 2nd ed. Berkeley, Peachpit, London: Pearson Education. 269 p.

Hooland, Seth van, & Verborgh, Ru. (the latest edition). *Linked Data for libraries, archives and museums: How to clean, link and publish your metadata*. London: Facet Publishing. 254 p.

Hyvönen, Eero. (the latest edition). *Publishing and using cultural heritage linked data on the Semantic Web. Synthesis Lectures on the Semantic Web: Theory and Technology, 2, 1*. San Rafael: Morgan & Claypool. 159 p.