

## Technologies of Digital Libraries 1

### Teknik för digitala bibliotek 1

7.5 credits

7.5 högskolepoäng

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**Ladok Code:** C3LTD1

**Version:** 1.0

**Established by:** Education Committee 2015-06-10

**Valid from:** Autumn 2015

**Education Cycle:** First cycle

**Main Field of Study (Progressive Specialisation):** Informatics (G1N), Library and Information Science (G1N), Information Architecture (G1N)

**Disciplinary Domain:** Natural sciences

**Prerequisites:** There are no explicit prerequisites.

**Subject Area:** Informatics/Computer and Systems Sciences

**Grading Scale:** Seven-degree grading scale (A-F)

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### Content

This course provides basic knowledge and skills in the use of XML-related technologies for widely different applications, both for the development of collections as well as on the development of services. Related technologies covered are (X)HTML, CSS, DTD, XML Schema and XSLT. In addition to this, common models for database design are introduced.

- Using XML to represent documents and data structures.
- (X)HTML and CSS for electronic publishing
- Database theory and the relational model
- SQL

### Learning Outcomes

After passing the course the student should:

#### *concerning knowledge and understanding*

- be able to understand and explain the differences between standardized and proprietary technologies, as well as its implications for the development and maintenance of digital services and collections
- be able to describe the database relational model and relate this to the development of a digital library infrastructure

#### *concerning skills and abilities*

- be able to define and apply a small XML-application
- be able to use XHTML and CSS, formally valid for publishing

### Forms of Teaching

Tuition is conducted through written assignments, seminars, lectures, practical demonstrations, exercises and project work.

The language of instruction is English.

### Forms of Examination

The course is examined through written assignments and project work.

In the event of changes in course plans students who wish to complete courses can be examined on the basis of the most recent version of the course plan. For courses that are no longer running, students who wish to complete such courses can read all or part of an equivalent course.

(This is in accordance with the Director's decision, Dnr 516-13, 11th June, 2013)

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

### **Literature and Other Teaching Materials**

Churcher, C. (2007). Beginning database design. New York; Berkeley, CA: Apress.

Ray, E. T. (2003). Learning XML. Cambridge, Mass; Sebastopol; Beijing: O'Reilly.

Duckett, J. (2011). HTML & CSS: Design and build web sites. Chichester; Indianapolis, IN: Wiley

### **Student Influence and Evaluation**

Students assessments of courses will be systematically collected in written and/or oral form and reported back to students. Assessments will form the basis of the future development of courses. See further the University's policy for course evaluation: dnr 56-02-10, the University College of Borås, 7th June 2005.

### **Miscellaneous**

The course is part of Master's programme: Library and Information Science, Digital Library and Information Services.