# Course syllabus

**Faculty of Arts and Humanities**
Department of Cultural Sciences

## 4DH425 Länkade data och informationsstrukturer, 7,5 högskolepoäng
Linked Data and Information Structures, 7.5 credits

**Main field of study**
Digital Humanities

**Subject Group**
Library and Information Science

**Level of classification**
Second Level

**Progression**
A1N

**Date of Ratification**
Approved by Faculty of Arts and Humanities 2020-05-07
The course syllabus is valid from spring semester 2021

**Prerequisites**
General entry requirements for second level studies and specific entry requirements:
Bachelor of Arts in any discipline or an equivalent degree (180 credits at least).

## Objectives
After completing the course the student should be able to:

- demonstrate in writing in-depth knowledge of selected Semantic Web standards for organising information relevant to the humanities;
- demonstrate practical skills in applying selected current standards;
- critically review the potential and challenges of linked open data and related Semantic Web technologies.

## Content
The course covers linked open data and related Semantic Web technologies, as applied to data sources within the humanities (such as documents and cultural heritage objects), especially those related to cultural heritage institutions. The course gives an overview of the impact of the Semantic Web on the organisation of information and insight into standards such as XML and RDF. The course comprises practical exercises involving selected standards. The course is examined through a related practical project and a written report discussing the potential and challenges of applying said standards to information organisation.

## Type of Instruction
Teaching consists in lectures and practical exercises.

## Examination

The course is assessed with the grades A, B, C, D, E, Fx or F.

The course is examined through a related practical project, including a written report. The grade A constitutes the highest grade on the scale and the remaining grades follow in descending order where the grade E is the lowest passing grade. The grade F means that the student's performance is assessed as fail. Grading criteria for the A–F scale are communicated to the student in a separate document. The student is to be informed about the grading criteria at the start of the course at the latest.

Repeat examination is offered in accordance with Local regulations for courses and examination at the first and second level at Linnaeus University. If the university has decided that a student is entitled to special pedagogical support due to a disability, the examiner has the right to give a customised exam or to have the student conduct the exam in an alternative way.

## Course Evaluation

During or shortly after the course, a course evaluation is conducted. Results and analysis of the course evaluation are promptly communicated to the students who have taken the course. Students who are taking the course when it is offered the next time are informed of the results at the start of the course. The evaluation is anonymous.

## Required Reading and Additional Study Material

Berners-Lee, T., Hendler, J., and Lassila, O. (2001). The Semantic Web. *Scientific American* 284, 5, p. 34-43. (10 p.)

Blaney, Jonathan. (the latest edition). Introduction to the principles of Linked Open Data. In: *Programming Historian*. Available at: https://programminghistorian.org/en/lessons/intro-to-linked-data. (20 p.)

*Euclid: Educational Curriculum for the Usage of Linked Data*. Available at: http://www.euclid-project.eu. (200 p.)

Heath, Tom and Bizer, Christian. (the latest edition). *Linked Data: Evolving the Web into a Global Data Space*. Synthesis Lectures on the Semantic Web: Theory and Technology. San Rafael, Ca.: Morgan & Claypool. (136 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.)

Lincoln, Matthew. (the latest edition). Using SPARQL to access Linked Open Data. In: *Programming Historian*. Available at: https://programminghistorian.org/en/lessons/retired/graph-databases-and-SPARQL. (13 p.)

Malyshev, Stanislav. (the latest edition). Getting the most out of Wikidata: Semantic technology usage in Wikipedia's knowledge graph. In: *ISWC 2018*. Available at: https://iccl.inf.tu-dresden.de/w/images/5/5a/Malyshev-et-al-Wikidata-SPARQL-ISWC-2018.pdf. (16 p.)

Oldman, Dominic, Doerr, Martin and Gradmann, Stefan. (the latest edition). Zen and the art of Linked Data: New strategies for a Semantic Web of humanist knowledge. In: Susan Schreibman, Ray Siemens, and John Unsworth (Eds): *A New Companion to Digital Humanities*, p. 251-273. (22 p.)