

IMT4501 XML and Web Technologies - 2009-2010

Course code:

IMT4501

Course name:

XML and Web Technologies

Course level:

Master (syklus 2)

ECTS Credits:

5

Duration:

Autumn

Language of instruction:

English

Expected learning outcomes:

After completing the course, the students shall have in-depth knowledge of XML and XML-related technologies and be able to develop and analyze applications based on XML technology. The students shall have a thorough understanding of XML-based publishing systems and information systems, and knowledge of relevant web technologies.

Topic(s):

The course covers XML and the most relevant XML-related technologies, being focused on electronic publishing and parallel publishing. Topics that will be covered:

- information modelling with XML
- hierarchical data structures
- constraints: DTD and XML Schema
- querying XML structures: XPath and XQuery
- transformations between XML vocabularies: XSLT
- layout: CSS and XML Formatting Objects
- programming language bindings: DOM og SAX
- XML applications for electronic publishing
- Web Services: WSDL, SOAP
- Ajax

Teaching Methods:

Lectures

Group works

Net Support Learning

Exercises

Project work

Teaching Methods (additional text):

The course will be offered both as an ordinary campus course and as a course that is offered in a flexible way to off-campus students. Lecture notes, e-lectures and other types of e-learning material will be offered through an LMS. Communication between the teachers and the students, and among the students, will be facilitated by the LMS.

Form(s) of Assessment:

Written exam, 4 hours
Evaluation of Project(s)

Form(s) of Assessment (additional text):

Written Exam, 4 hours (counts 60%, evaluated by lecturer and an examiner)
Evaluation of Project (counts 40%, evaluated by lecturer)
Each part must be individually approved of.

Grading Scale:

Alphabetical Scale, A(best) – F (fail)

External/internal examiner:

Written exam: external and internal examiner; project: internal examiner

Re-sit examination:

Written exam: ordinary re-sit examination

Tillatte hjelpemidler:**Examination support:**

English dictionary

Academic responsibility:

Faculty of Computer Science and Media Technology

Course responsibility:

Professor Rune Hjelsvold

Teaching Materials:

Textbooks:

- XML In A Nutshell, E.R.Harald/W.S.Means, O'Reilly, 3rd edition, utgave 2002 (ISBN: 9780596007645)
- An Introduction to XML and Web Technologies, Anders Møller and Michael Schwartzbach, Addison-Wesley, 2006 (ISBN: 0321269667)

Other

- Handouts

Replacement course for:

IMT4391 XML for Publishing

Publish:

Yes

