

# IMT4002 Recent Advances in Web Technology - 2010-2011

#### **Course code:**

IMT4002

#### **Course name:**

Recent Advances in Web Technology

#### **Course level:**

Master (syklus 2)

#### **ECTS Credits:**

10

#### **Duration:**

Vår

# Language of instruction:

English

#### On the basis of:

IMT4892 Digital Workflow

# **Expected learning outcomes:**

After successful completion, the students will be capable of:

- Explaining and discussing the challenges and issues faced in the development of the next generation web the semantic, service-oriented, mobile, and social web
- Discussing the principles, technologies, and standards being used to build the next generation web
- Developing applications for the next generation web

# **Topic(s):**

- The next generation web
- Semantic web fundamentals
- Introduction to semantic web technologies
- Principles of service-oriented computing
- Service and knowledge modeling and representation
- Transactions and service processes
- Social web fundamentals
- Mobile web fundamentals
- Next generation web standards
- Opportunities and challenges for businesses, users, and society
- Developing next generation web applications

#### **Teaching Methods:**

Lectures Group works Net Support Learning Project work



#### **Teaching Methods (additional text):**

The project work will be performed in groups consisting of 2-3 students each.

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, 5 hours Evaluation of Project(s)

# Form(s) of Assessment (additional text):

- Exam counts for 60%
- Project counts for 40%
- Both parts must be passed individually

# **Grading Scale:**

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

# **External/internal examiner:**

Internal and external examiner for the written exam.

Internal examiner for the project work.

#### **Re-sit examination:**

Ordinary re-sit examination is offered for the written exam.

# Tillatte hjelpemidler:

# **Examination support:**

English translation dictionary.

# **Coursework Requirements:**

Three status reports must be submitted according to a plan which will be presented at the start of the course.

# **Academic responsibility:**

Faculty of Computer Science and Media Technology

# **Course responsibility:**

Professor Rune Hjelsvold



# **Teaching Materials:**

Textbook:

 M. Singh and M.N. Huhns, Service-Oriented Computing, Wiley Blackwell, 2004, ISBN-10: 0470091487

# Other:

• Note handouts and research papers

# **Replacement course for:**

Parts of IMT4501 XML og Web Technologies

# **Publish:**

Yes