## **Course Program**

# **ETSF10 Internet Protocols**

Internet and internet related protocols have evolved to constitute the common network structure for all data and telephone communication. This course gives an overview over these protocols and a deepening into some of them.

The course is optional for C4, D4, E4, and the Wireless Master Program. It is followed by C2 students as the second part of their ETSF05 course.

#### Literature

In this course we use as textbook

Forouzan, Data Communications and Networking, 4th ed, McGraw-Hill, ISBN 0-07-125442-7.

The study guide found on the course's web page shows which parts of the book are included in the course.

#### **Structure**

The course's content is defined by the textbook study guide as well as the contents of the lectures, exercise seminars and laboratory projects. The course is divided into three parts, each consisting of two lectures, two exercise seminars, and one laboratory project. Included in each part is also a quiz (dugga). This gives in total

- 6 lectures
- 6 exercise seminars
- 3 mandatory laboratory projects
- 3 optional quizzes (duggor)

The course ends with a written exam, which is optional if you have passed the three quizzes and are satisfied with grade 3 on the course. For details on examination and grading see below.

The time frame for the three laboratory projects will overlap vastly, which hopefully gives enough room for adaption to other parallel courses.

#### Laboratory projects

You will have to complete three laboratory projects.

- Routing
- TCP
- DNS

Each project will end with a written laboratory report. The projects can be performed remotely or using your own computer. Supervisors will be available during the projects. Open hourse will be announced on the course home page. To pass a laboratory project the report has to be accepted. Each project will have a time frame of approximately 3 weeks.

Detailed information about the laboratory projects such as tutorials, guides, sample code and report templates will be found on the course home page.

### **Examination and grading**

There will be three quizzes in the course. These are performed via the department's moodle system at <a href="http://moodle.eit.lth.se">http://moodle.eit.lth.se</a>. Each quiz is 2 hours long. The quizzes will be open and available for three days each. During this time window you can start taking the quiz once. Once you have started taking the quiz you have two hours to answer the questions and submit the quiz. This is much like a normal quiz or exam, except for the fact that you can start taking the quiz at any time within the quiz's open time window.

The course ends with a written exam (tenta). This exam is a normal written exam and it is divided into two parts, part A for grade 3 and part B for grade 4-5.

For passing the course with grade 3 you have to

- pass the 3 laboratory projects, AND
- pass all 3 quizzes OR pass the final exam part A with grade 3.

For passing the course with grade 4-5 you have to

- pass the 3 laboratory projects, AND
- pass all 3 quizzes AND pass the final exam part B with grade 4-5 OR pass the final exam part A with grade 3 AND part B with grade 4-5.

Questions for the written exam as well as for the quizzes will mainly be picked from a pool of selected textbook review questions and exercises. Other questions will be added, but they will follow the form of the questions found in the textbook. Therefore there is no need for example exams.

## **Bonus programmes**

In the course there will be two bonus programmes.

For each passed quiz you get 10% of the points needed for pass on the final exam as bonus points.

Example: 2 quizzes passed, final exam passed with 50 points or more
→ bonus points = 2 \* (10% \* 50) = 10 bonus points.

These bonus points do not apply to the part of the final exam covering the extended reading material. (3 passed quizzes makes you pass the course with the grade 3, as stated before).

A well carried out project can give up to 10% of points needed to pass the corresponding quiz. A well carried out project is one that delivers a well structured report in time, a project that discuses the assignments in a way that show that you have understood issue and that you have penetrated it, the report has no or only minor fixes after first review and the group members work well together. The number of visits during office hours is of minor concern, as long as the questions you ask and the problems you discuss shows that you have considered the assignments and are doing all your best to solve them in a well structured manor.

The bonuses only apply to the course instance you are registered on. The project bonus only applies to quizzes given during the course instance that you are registered on. The final exam bonus only applies to the final exam and re-exams given during the course instance that you are registered on.

# Homepage and moodle

The course's home page is found on URL <a href="http://www.eit.lth.se/course/etsf10">http://www.eit.lth.se/course/etsf10</a>. The course also has an instance at the department's model system at URL <a href="http://moodle.eit.lth.se">http://moodle.eit.lth.se</a>. Here you take the quizzes, and there are also forums for laboratory projects questions and answers.

## **Staff**

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### **Disclaimer**

This is a new course. This implies last-minute changes of deadlines and syllabus, which will be kept to a minimum and well communicated. Any comments and suggestions are most welcome, during the course as well as afterwards.