

Internet

Techniques and Applications

2012

EITF25, 6 credits

The course *Internet–Techniques and Applications (EITF25)* is intended to give the basic knowledge in data communication networks and how they are used. It will give insights of how the network is structured, including the different logical levels and how applications work. The physical communication describes how data is transmitted from one point to another. Then several such links are connected using protocols to a network. To form the basis of the Internet several such networks are interconnected into larger networks. The communication will also be seen from a user perspective, where the applications and user behavior come in focus. Different applications like search engines will be described, as well as security issues on the Internet.

Schedule There are scheduled eleven lectures and three laboratory exercises in the course. There will also be two hand in occasions during the study period, one after week 2 and one after week 4.

Registration All students must be registered in Ladok. A list will be circulated where you can register.

Web Course home page www.eit.lth.se/course/eitf25.

Literature One of the following

- ▶ M. Kihl, J.A. Andersson, *Internet*
- ▶ B.A. Forouzan, *Data Communications and Networking*

The literature is sold by KFS.

Exam Formally the examination consists of three parts:

- ▶ Three laboratory exercises
- ▶ Two hand in problems
- ▶ Home exam

The credits from the hand in problems and the home exam will be summarized to calculate the grade of the course. Both the hand in problems and the exam will be uploaded to the web page.

Scheduled lectures The following is a preliminary plan of the lectures. All lectures are scheduled in E:2311 and all laboratory exercises in E:2429.

Date	Topic
30/10 13-15	Introduction
2/11 10-12	Physical layer
6/11 13-15	Data link
9/11 10-12	Network access
13/11 13-15	Wide Area Networks
16/11 10-12	Routing
20/11 13-15	Application
23/11 10-12	Network management alt. Mobile networks
27/11 13-15	Web search
4/12 13-15	Network security
11/12 13-15	Repetition/Reserve

Selected problems can be found on the web page.