General information

- Mandatory subscription through TOPI
  
  https://webtopi1.hut.fi

- Course homepage
  

- Personnel:
  - Lectures:
    - Pasi Lassila (e-mail: pasi.lassila@hut.fi)
    - Jouni Karvo (e-mail: jouni.karvo@hut.fi)
  - Exercises: Eeva Nyberg (e-mail: eeva.nyberg@hut.fi)
Course material

• Course book:
  – price: £31.95 (Amazon UK), main building’s book shop may also have it
  – 1st ed. is basically OK, but course requirements based on 2nd ed.
  – updated 3rd ed. is also out now, but course is still based on 2nd ed.

• Other material
  – lecture slides delivered as a compendium via Edita
  – lectures also available electronically (via the web pages)
  – NOTE! Printing the material on the university’s printers is strictly forbidden!

Lectures & assignments

• Lectures (2 hours/week):
  – On Mondays between 14 - 16 in hall S1 (13 times)
    • First lecture: January 19, last lecture: April 19
  – Lectures are given in Finnish
    • slides in English

• Homeworks
  – Mandatory!
  – Consists of three parts
  – Done in pairs (pair can not be changed during course)
  – NOTE! Last year’s (or earlier) homeworks are not accepted any more
Homework schedule

- Homework, part 1
  - will appear Thu, February 5
  - must be returned by Wed, March 10
  - delay measurements over Internet, TCP simulation on paper

- Homework, part 2
  - will appear Thu, March 4
  - must be returned by Wed, March 24
  - “guided tour” of ns2 simulation tool featuring TCP congestion control

- Homework, part 3
  - will appear Thu, March 11
  - must be returned by Wed, April 28
  - independent ns2 work on TCP congestion control

Exercise classes

- To be used as “question hours” for doing the homeworks

- Part 1:
  - Wed, February 11 (week 7), at 12-14, hall S5
  - Wed, March 3 (week 10), at 12-14, hall S5

- Part 2:
  - Wed, March 10 (week 11), at 12-14, hall S5
  - Wed, March 17 (week 12), at 12-14, hall S5

- Part 3:
  - Wed, March 24 (week 13), at 12-14, hall S5
  - Wed, March 31 (week 14), at 12-14, hall S5
  - Wed, April 21 (week 17), at 12-14, hall S5
Course completion

- To complete the course, you must
  - Pass the exam
    - 1st exam on Wed, May 12, at 16 - 19, in halls S2 and S4
    - + two retrial examinations (Sep/Oct 2003, Dec/Jan 2004)
  - and make the homeworks

- Grading based both on exam and homeworks

Schedule

| 19.1 | Introduction       |
| 26.1 | Link layer review and LAN technologies |
| 2.2  | Interconnecting nets – Internet |
| 9.2  | Routing in Internet |
| 16.2 | IPv6 and Multicast |
| 23.2 | Transport layer in Internet (UDP, TCP,...) |
| 1.3  | TCP congestion control |
| 8.3  | Name service (DNS) |
| 15.3 | Applications (non-realtime and realtime) |
| 22.3 | Network management (SNMP) |
| 29.3 | Security |
| 5.4  | Mobility (Mobile IP, ad hoc nets, WLAN hot spots) |
| 19.4 | QoS in Internet (IntServ, DiffServ) |