

S-38.148 Simulation of data networks

Fall 2006

11.9.2006

1

Course personnel

- Lecturer:
 - Pasi Lassila
 - Email: pasi.lassila@tkk.fi
 - Room: E312
 - Consultation hour: Mon 11-12

- Assistants:
 - Tuomas Tirronen
 - email: tuomas@netlab.hut.fi
 - room: E309

 - Jegadish Devadess
 - email: jegadish@nelab.hut.fi
 - room: G319

11.9.2006

2

Course requirements (1)

- Exercises (4):
 - Pass/fail, need 50% of overall points
 - First exercise available Sept 13 (deadline Sept 21, 12:00)
 - To be returned to the locker labelled S-38.3148 outside G-wing in the 2nd floor
 - Exercise classes on Thursdays, 12-14, room S5, first exercise class Sept 21

- 2 (small) project works:
 - Simulation programming exercises
 - Grades: 1, 3 and 5
 - 2 extra exercise classes/project will be arranged to help people get their projects underway (group receptions)
 - CNCL exercise
 - Assignment: October 10
 - Deadline: November 3
 - Exercise classes: weeks 42 and 44
 - Ns2 exercise
 - Assignment: October 17
 - Deadline: November 17
 - Exercise classes: ?

11.9.2006

3

Course requirements (2)

- Exam:
 - 3 exams
 - First exam: October 26, at 9-12, room S4

- Grading
 - Course overall grade based on exam and projects
 - Weights:
 - Exam: 50%
 - CNCL exercise: 25%
 - Ns2 exercise: 25%

11.9.2006

4

Course contents

- Theory
 - Lectures 1-3
 - Lectures held in S5
- CNCL simulation tool
 - Lectures 4 and 5
 - Lectures held in B215
- Ns2 simulation tool
 - Lectures 5 and 6
 - Lectures held in B215

11.9.2006

5

Course material

- Lectures are given in Finnish
- Language:
 - Material for lectures 1-3 (theory) available in Finnish and English
 - Material for lectures 4-6 available in English (only)
 - Self study possible even for non-Finnish people
- Material available from course home page
 - Do we need a “kurssitoimittaja”?
- Material is basically self-contained
- Lectures + overhead material enough to pass course

11.9.2006

6

Literature

- J. Banks, J.S. Carson, B.L. Nelson (4th ed., 2005)
 - Discrete-Event System Simulation
 - Prentice Hall, New Jersey
- A.M. Law and W. D. Kelton (2000, 3rd ed., 2000)
 - Simulation modeling and analysis
 - McGraw-Hill, New York
 - 2nd edition is also OK
- R. Jain, (1991)
 - The Art of Computer System Performance Analysis
 - John Wiley & Sons,
- I. Mitrani (1982)
 - “Simulation techniques for discrete event systems”
 - Cambridge University Press, Cambridge
- Å. Arvidsson, (1988)
 - Simulering (in Swedish)
 - Studentlitteratur, Lund