

IK1203 Nätverk och Kommunikation



ROYAL INSTITUTE
OF TECHNOLOGY

IK1203 Networks and Communication

VT2019

Course Responsible Peter Sjödin

Lecturers Markus Hidell, Peter Sjödin

Teaching assistants Jimmy Fjällid, Istiak Hossain

In a Nutshell

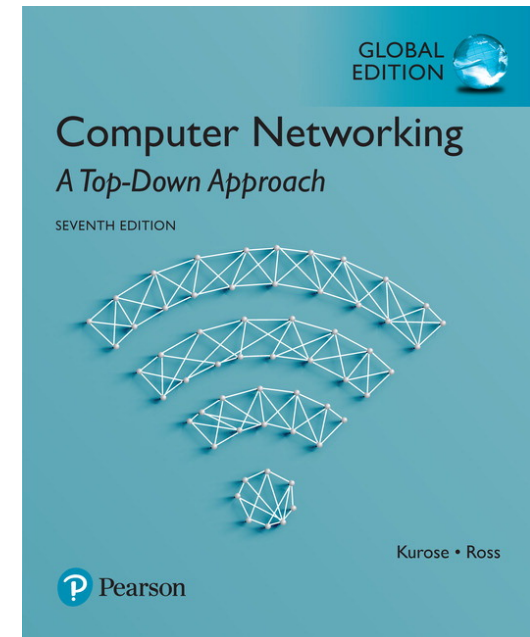
- Ten lectures
- Four home assignments plus one
- Four exercises (“Övningar”)
 - Group-wise
 - Three to four groups in Swedish, one in English
- Three lab assignments
- One project assignment
- Written exam

Language of Instruction

- English and Swedish
 - Double set of lectures
 - One set in Swedish, one in English (for TCOMK)
 - Questions in any language
 - Teacher will translate, if needed
 - One recitation group in English
 - Labs in English
 - Course material in English
 - Slides, course web, textbook, assignment instructions, ...
 - Exam in Swedish and English

Course Textbook

- Chapter 1–6 core of the course
- Chapter 7 Wireless Networks
- Chapter 8 and 9 not included



*Computer Networking:
A Top Down Approach,
Global Edition, 7/E. Jim
Kurose, Keith Ross.
Pearson, Nov 2016.*

Course Homepage

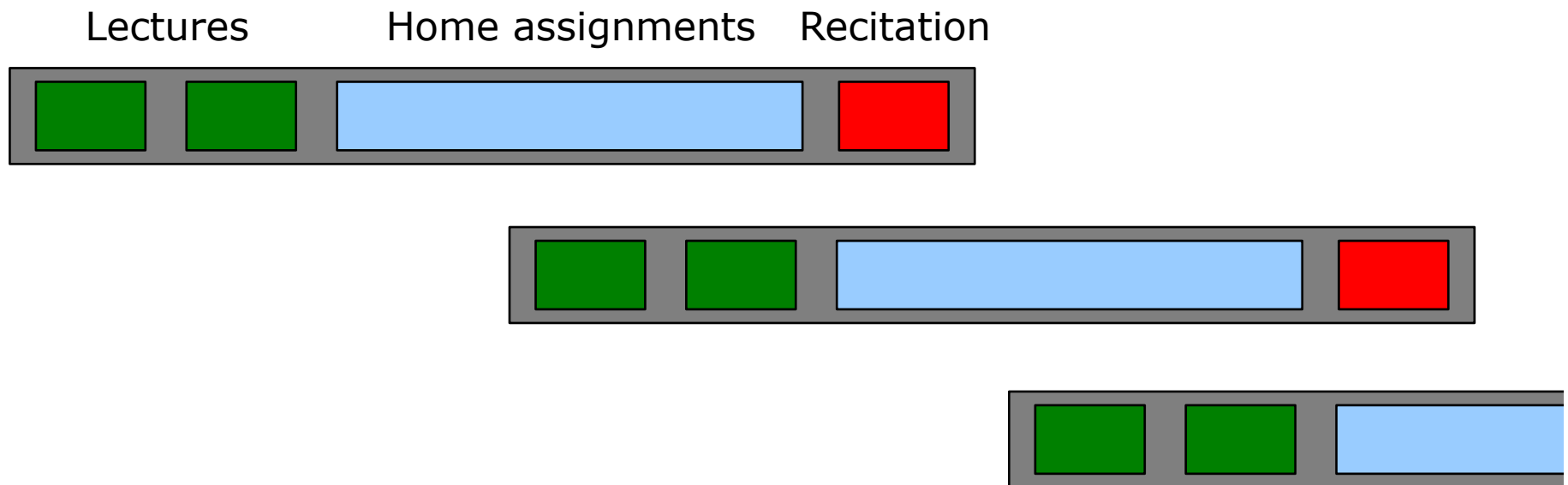
- Canvas
 - Open software Learning Management System (LMS)
 - www.instructure.com
- URL: <https://kth.instructure.com/courses/7683>
- When you are registered for the course, you receive an invitation to join the course in Canvas

Course Homepage – Contents

- Course material
 - Lecture slides
 - Reading instructions
- Lab instructions
- Home assignments
 - Online assignments – “quizzes”
- Project instructions
- Problems for recitations
- Discussion forums
 - Help each other
 - Discussions about content
 - Teacher contacts
 - Only for the purposes of discussing course content, course organization and assignments.

Course Organization

- Blocks consisting of
 - Lectures
 - Home assignments
 - Recitation (Övning)
- Lab assignments



Lectures

- Overview
 - Complements course literature
- Follows the organization of the textbook

Home Assignments

- 4+1 home assignments
 - Introduced one by one, as the course proceeds
 - About one week to complete each assignment
 - Last home assignment is make up opportunity
- Online assignments – Canvas quizzes
- Pass/Fail
 - 72 points total
 - 44 points for pass
 - At least one point on each of four assignments
 - In other words, you need to score on four of five

Home assignments is examination part: UPG1 (1.5 hp)

Submitting Home Assignments

- Electronic submissions
 - System closes at “due date” – sharp deadline
 - We don't accept submissions any other way
- You can submit as many attempts as you like!
 - It is the last attempt that counts

The first Home Assignment opens today!

Grading of Home Assignments

- Automatic grading
 - Some problems have special instructions for formatting the solution
 - Follow the instructions carefully!
- We can do manual grading and grade adjustments
 - We will only do that if absolutely necessary
 - After the fifth assignment
 - For borderline cases
 - Only if you need the extra marks to pass

Exercises (Recitations)

- Related to home assignments
 - One recitation for each home assignment
 - (Except for the last)
- Recitation groups
 - Walk through of the home assignment
 - Additional problems in the current subject area
- Group selection in Canvas
 - Three to four groups in Swedish
 - One group in English – reserved for TCOMK students

Lab Assignments

- In lab classroom
 - Come well prepared. Study the instruction *before* the lab assignment.
 - Each assignment has a set of preparatory questions.
 - Online quiz in Canvas
 - Solve them before the lab
 - **This is a requirement before you can do a lab**
 - The teaching assistants will check
- Lab 1: Network testing and debugging with Wireshark
- Lab 2: Configure a simple network – servers
- Lab 3: Configure a simple network – routers

Labs + project is examination part: LABA (3 hp)

Project Assignments

- Programming assignments in Java
 - Design and write applications that communicate
- Individual assignment
 - You may collaborate and discuss with others
 - But submit your own solution
- Supervision in relation to labs
 - Teaching staff available for discussions and support
- Solutions submitted in Canvas
 - Automatic evaluation (partly)
 - Follow instructions carefully for what you should submit
 - Otherwise your submission will not be recognized and graded.

Labs + project is examination part: LABA (3 hp)

Final Exam

- Written exam
- Four hours
- Two parts: A and B
 - Part A: multiple choice – can give D-F
 - Scanned and graded automatically
 - Optical mark recognition – follow the instructions carefully for how to fill in the solutions sheet
 - Part B: written solutions – for higher grade
 - Minimum score on part A in order for part B to be graded

Written exam is examination part: TENA (3 hp)

Sign Up for Exam

- You have to sign up for the exam
- My Pages
- Late sign-ups are not permitted
- Teachers or administrative staff cannot do it for you
- If you do not sign up on time:
 - You are not guaranteed a seat
 - At the exam, you have to wait to see if there is a vacant seat

Course Committee

- Please help improve the course by joining the course committee
- Typically meet once during the course
- Course evaluation
- Contact Peter <psj@kth.se>

Summary

- Five course components
 - Lectures
 - Home assignments
 - Recitations
 - Lab assignments
 - Project
- Late submissions are not accepted
 - Use the possibility to submit multiple times!
- Come well-prepared for the labs
 - We will check before you start
- Remember to sign up for the exam