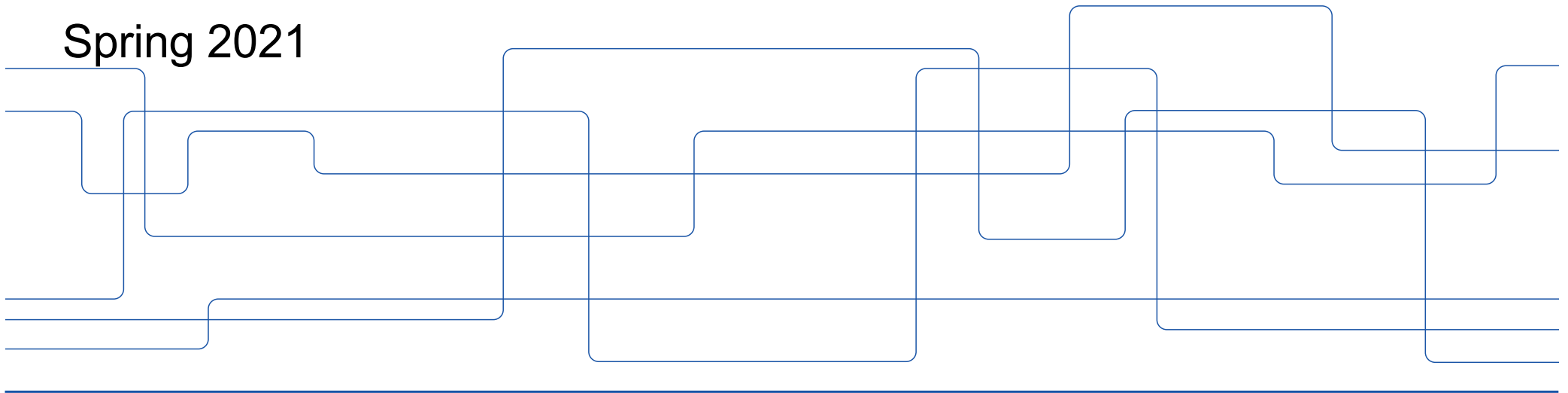# IK1203 Nätverk och Kommunikation

IK1203 Networks and Communication

Spring 2021

Staff

- **Course Responsible** Peter Sjödin

- **Lectures** Markus Hidell and Peter Sjödin

- **Exercises** Markus Hidell, Peter Sjödin and Anders Västberg

- **Teaching assistants** Zahra Alimadadi, Anders Enqvist, Seba Varghese, Voravit Tanyingong, and more

- Contact info in Canvas

In a Nutshell

- Ten lectures

- Four home assignments, plus one

- Four exercises ("Övningar")

  – Supervision sessions for questions and discussions

- Three lab assignments

- One project assignment

- Written exam in three parts

  – Two partial exams ("Kontrollskrivning" in schedule)
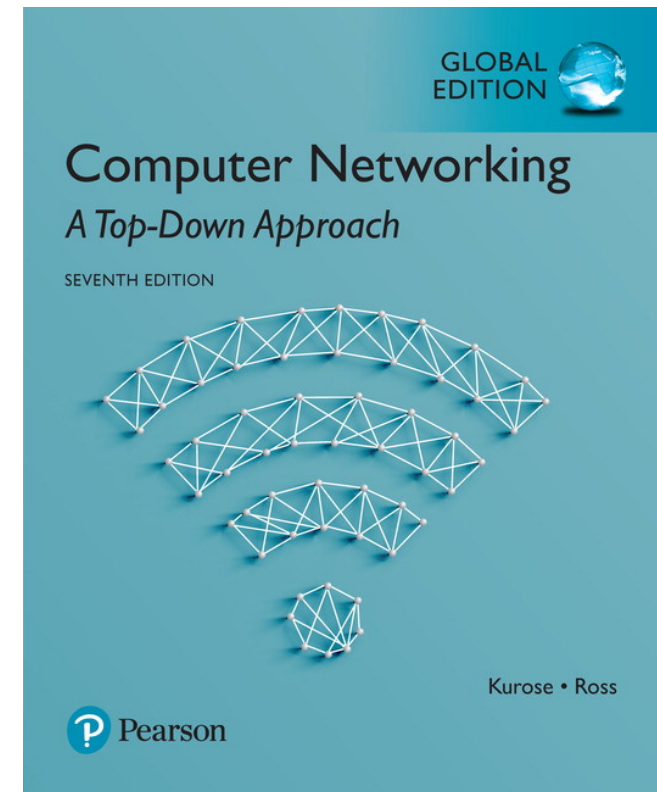
  – Final exam

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
  - Exercise supervision
    - > *One session in English and one in Swedish*
  - Labs in English
  - Course material in English
    - > *Slides, course web, textbook, assignment instructions, …*
  - Exam in 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 – Contents

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

URL: https://kth.instructure.com/courses/21519
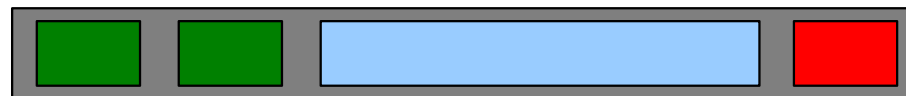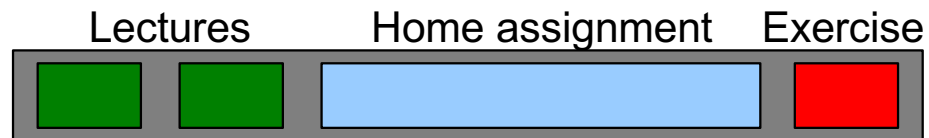
Course Information and Communication

- We use Canvas for communication about the course

- Announcements, schedule changes, etc are communicated through Canvas
  - This is the only communication channel
  - We expect all students to read information posted in Canvas

- It is your responsibility to keep yourself updated
  - Tip: subscribe to notifications by email
    - > *Your account -> Notifications*

Course Organization

- Four blocks consisting of:
  - Lectures
  - Home assignments
  - Exercise (Övning)

- Three lab assignments

- One project assignment

Lectures   Home assignment   Exercise

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

- Deadlines are strict
  - If you do not submit by the deadline, you fail
    - > *No exceptions*

- You can submit as many attempts as you like!
  - It is the last attempt that counts

The first Home Assignment opens Tuesday Jan 19!

Grading of Home Assignments

- Automatic grading
  - Some problems have special instructions for how to format the solutions
  - 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 points to pass*

Exercises (Recitations)

- Related to home assignments
  - One for each home assignment
  - (Except for the fifth)

- Problems online
  - Pre-recorded walkthroughs
  - Work through the problems yourself
  - Then participate in online supervision
    - *Questions and discussions*
    - *Sign up mandatory*

- Sign up for supervision in Canvas
  - One session in English, one in Swedish

Lab Assignments (I)

- Three assignments in total

- The first two are digital only
  - Lab 1: Web and email
  - Lab 2: Basic Network Services

- Do them on your own computer

- Supervision and guidance
  > *Canvas discussions*
  > *Zoom sessions*

- Submission in Canvas
  - Deadlines are strict
  - If you do not submit by the deadline, you fail
    > *No exceptions*
  - You can submit many times
    > *It is the last attempt that counts*

Lab Assignments (II)

- The third is in lab room
  - Lab 3: Network Addressing and Routing
- Come well prepared
- Study the instruction *before* the lab assignment
- Set of preparatory questions
  - Online quiz in Canvas
    - > *Solve them before the lab*
- Builds upon lab 2
- Completing preparatory questions and lab 2 are requirements before doing this lab
  - Otherwise you need to come back some other time
  - The teaching assistants will check

Project Assignment

- 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
  - In Zoom

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

Project Submissions

- Solutions submitted in Canvas
  - Automatic evaluation (partly)
  - Follow instructions carefully for what you should submit
    - > *Otherwise your submission will not be recognized and graded*

- Deadlines are strict
  - If you do not submit by the deadline, you fail
    - > *No exceptions*
  - You can submit many times
    - > *It is the last attempt that counts*

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

Written Exam

- Part A
  - Two partial exams ("Kontrollskrivning")
  - Each is a one-hour online exam
    1. *Applications and transport-layer protocols*
    2. *The network layer, the data link layer, and wireless communication*
  - Part A is requirement in order to pass the course
  - Can give up to grade D

- Part B
  - Final exam
  - Two-hour online exam
  - For grade "D" or higher
  - Requirement for participation: grade "D" on part A

Written exam is examination part: TENA (3 hp)

Sign Up for Exam

- You have to sign up for all three parts of the exam

- Teachers or administrative staff cannot do it for you

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
  - Exercises
  - Lab assignments
  - Project
- Keep track of the deadlines!
  - Late submissions are not accepted
  - Use the possibility to submit multiple times
- Come well-prepared for lab
  - We will check before you start
- Remember to sign up for the exam