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# Course Introduction

Computer Systems Administration  
TE2003



# Practical Information

- 7.5hp freestanding course
  - Mandatory course in the Network Design and Computer Management programme 60 hp
  - Mandatory course in the IT-Forensics programme 120hp
- Examiner
  - Magnus Jonsson ([magnus.jonsson@hh.se](mailto:magnus.jonsson@hh.se))
- Course responsible
  - **Mattias Wecksten** ([mattias.wecksten@hh.se](mailto:mattias.wecksten@hh.se))
- Other faculty
  - Mattias Enervall (Lab assistant swedish group)
  - Zain Ul-Abdin (Lab assistant english group)
  - **Wagner Ourique de Morais** ([wagner.demorais@hh.se](mailto:wagner.demorais@hh.se))

# Practical Information

- Course webpage
  - <http://www.hh.se/te2003>
  - **Course Material**
  - **Lab System**
    - **Register for Lab exercises and project topics**
- Course literature
  - **[IT Essentials: PC Hardware and Software Companion Guide \(4th Edition\)](#)**
    - ISBN-10: 1-58713-263-X
- Supplementary material
  - **[Professor Messer's CompTIA A+ Training Course](#)**
  - **Mike Meyers CompTIA A+ guide to managing and troubleshooting PCs**

# Course overview

# Main Topics

- Computing basics – an historical viewpoint
- Computer Hardware
  - Low level building blocks
    - CPU, power supply, RAM, BIOS, bus systems, storage...
  - Computer components and peripherals
    - General input/output, video, audio, networking, ...
- Computer Software
  - Operating system basics
    - Installing/ Upgrading MS Windows
    - System Administration & Maintenance
    - Troubleshooting
    - Security

# After finishing the course

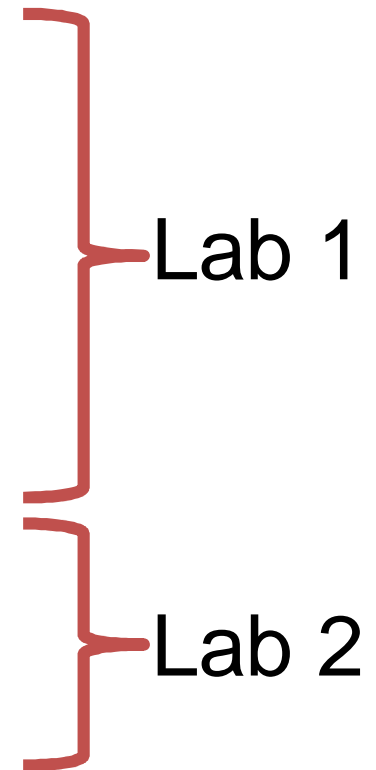
- Declarative knowledge
  - Briefly
    - EXPLAIN the functionality of the main hardware components in a computer
    - DISCUSS typical system administrative tasks
- Functioning knowledge
  - Independently
    - PERFORM:
      - Installation of hardware components in a computer
      - Installation of an operating system
      - Basic administrative tasks in an operating system
      - Identification and isolation of problems
    - SOLVE problems in faulty systems

# Teaching and Learning Activities

- 12 Lectures
- 5 compulsory lab exercises
- Each student will elaborate 2 Multiple Choice Questions, including the answers, for each book chapter
  - Swedish group: [mattias.wecksten@hh.se](mailto:mattias.wecksten@hh.se)
  - English group: [wagner.demorais@hh.se](mailto:wagner.demorais@hh.se)
- 1 mandatory seminar
  - Oral presentation and written report
- Written exam

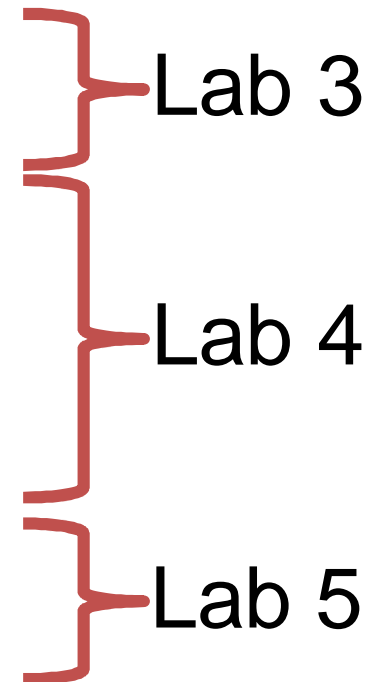
# Lectures

- Lecture 1
  - Course introduction
  - Introduction to the PC (Ch. 1)
- Lecture 2
  - Safe lab procedures and tools use (Ch.2)
  - Computer assembly – Step by step (Ch. 3)
- Lecture 3 and 4
  - Advances Personal Computers (Ch. 11)
  - Hardware troubleshooting (Ch. 4)



# Lectures

- Lecture 5 and 6
  - Operating systems (Ch. 5)
- Lecture 7
  - Computer Networks (Ch. 8)
- Lecture 8
  - Computer Security (Ch. 9)
- Lecture 9 and 10
  - Advanced Operating Systems (Ch. 12)



# Lectures

- Lecture 11
  - Laptops and Portable Devices (Ch. 13)
  - Printers and scanners (Ch. 14)
- Lecture 12
  - Advanced Network (Ch. 15)
  - Advanced Security (Ch. 16)

# Lab exercises

- Lab 1 - Computer assembling
  - Disassemble and assemble a PC
  - Identify and describe hardware components
- Lab 2 - Hardware maintenance and troubleshooting
  - Identify faulty components and fix hardware problems
- Lab 3 - Operating system
  - Install and configure MS Windows
- Lab 4 - Software troubleshooting and advanced configuration
  - Configure a network
  - Protect the system
- Lab 5 - Advanced operating system
  - Update, Optimize, CLI, Troubleshooting

# Grading Criteria

- Lab exercises: **Pass or Fail**
- Hand-ins: **Bonus for the written exam**
- Seminar presentation and written report: **U (fail), 3, 4 or 5**
- Written exam: **U (fail), 3, 4 or 5**
- Final grade: **U (fail), 3, 4 or 5**
  - Grades combination
- Minimal requirements to PASS, i.e., final grade  $\geq 3$ :
  - **All five** lab exercises: PASS
  - Written assignment and presentation: 3
  - Written Exam: 3

# Advice for students

- Show up in time
  - Lectures
  - Lab exercises
- Read the course material
- Watch Professor Messer's Training Course videos

***Please, switch  
you mobile to  
SILENT MODE***

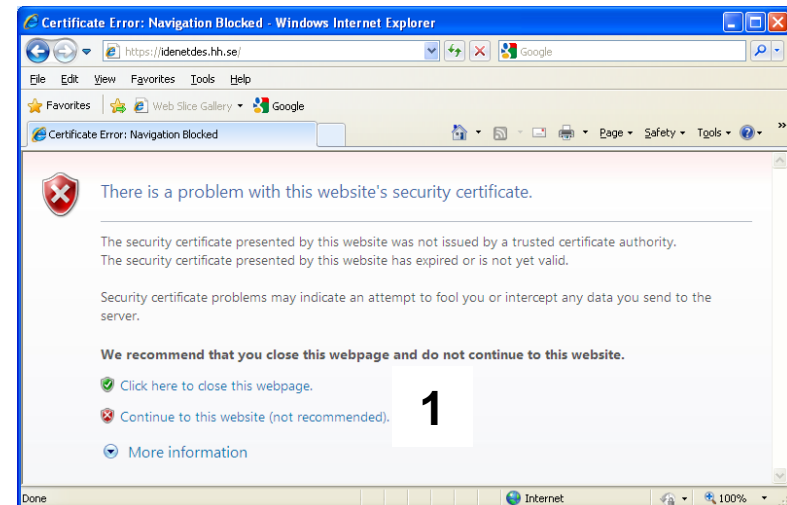
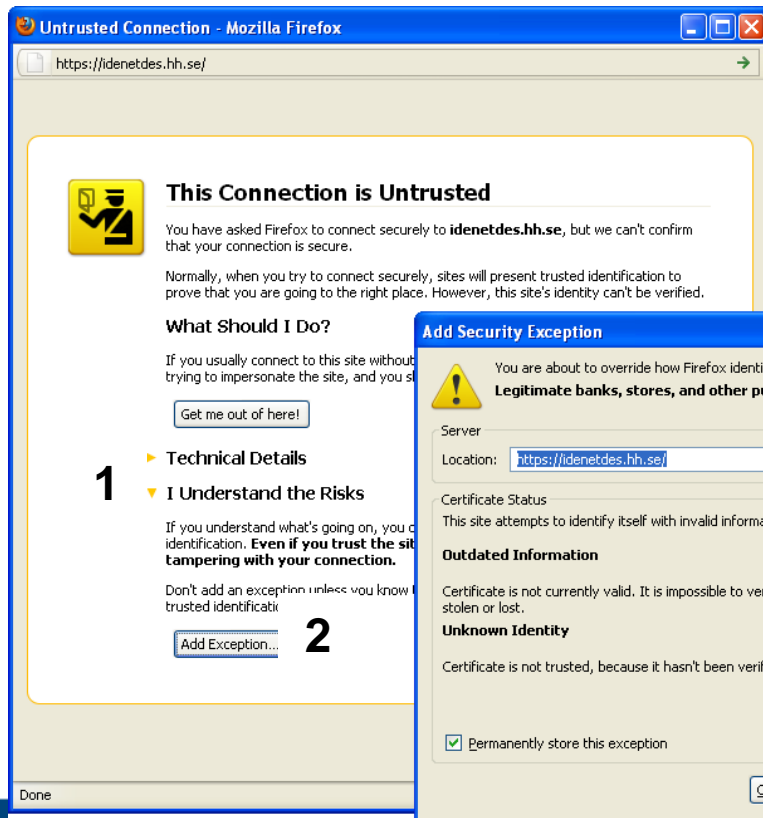
*“Students must be the ones who perform activities to make learning happen. These activities will produce knowledge, enrich skills, change attitudes and make them acquire value”*

# “I missed or failed examination”

- Written exam is given three times at given dates
- Project supervision: written report
- Project exam is given three times at given dates
- More info at the Course Description

# How do I sign in for the Labs, project topics and project supervision?

- Step 1: <https://idenetdes.hh.se/>



# How do I sign in for the Labs and project topics?

- Step 2
  - First Time

*For security reasons,  
a code will be given  
to you instead*

here to create a username and password' and 'Forgotten your password? Click [here](#)'."/>

TE2003 - Mozilla Firefox  
hh.se https://idenetdes.hh.se/  
TE2003  
Login  
Email address:  
Password:  
1  
Login  
First time here? Click [here](#) to create a username and password  
Forgotten your password? Click [here](#)

hh.se https://idenetdes.hh.se/validate1  
TE2003  
Check your registration  
Before creating your username and password please provide the following information to verify that you are registered for this course.  
Personal identity number: 2  
(YYMMDDNNNN)  
Continue  
If you have registered recently it may take some time for this to show up in the system.  
[Back](#)

# How do I sign in for the Labs?

- Step 3
  - Login, choose session and register

The left screenshot shows the main dashboard of the TE2003 application. It displays the user's login status as 'test\_student@student.hh.se' and provides links for 'Logout' and 'Choose a seminar group'. Below this, there are sections for 'Messages' (No messages) and 'Exercises'. Three exercises are listed, each with a 'NOT REGISTERED' status:

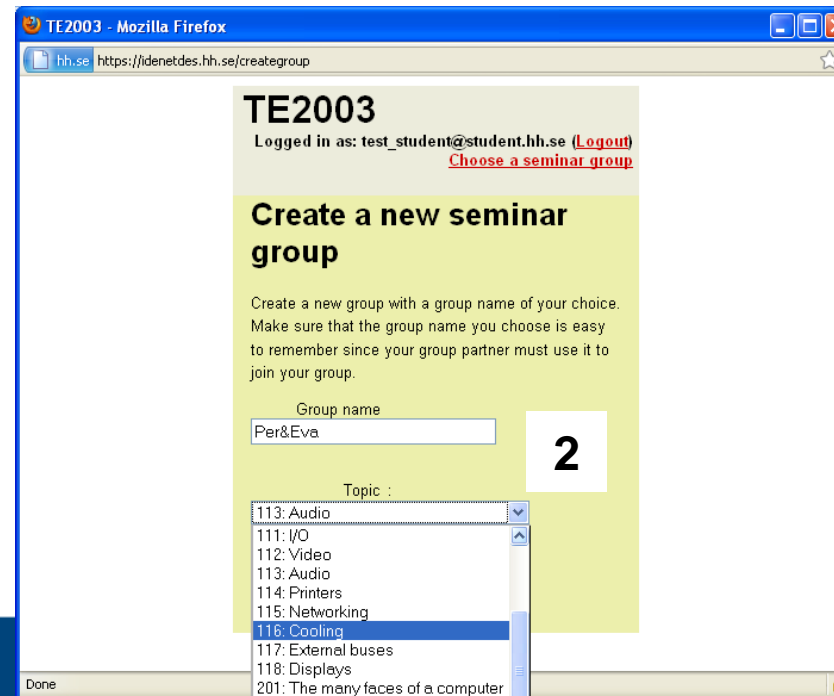
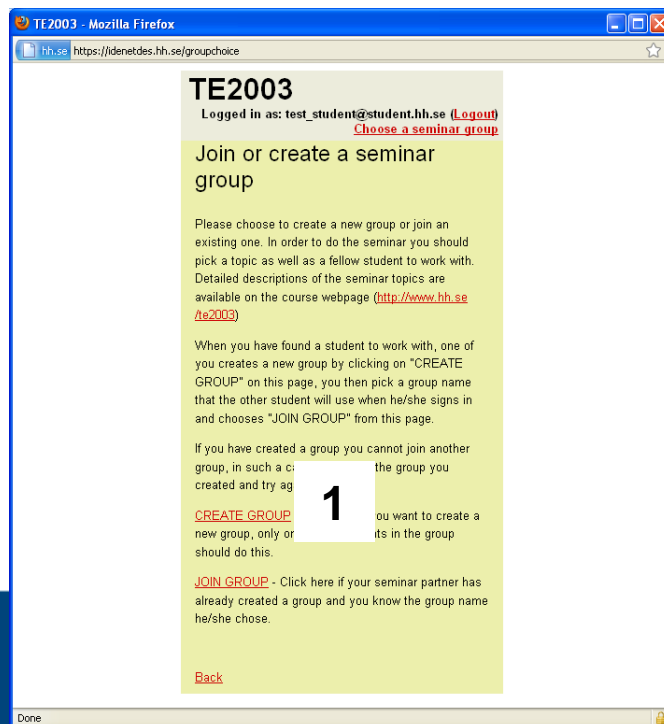
- Exercise 1**: NOT REGISTERED. Description: In this first exercise you will, based on your knowledge so far, assemble a PC from its parts, identifying the various components and their use as you go along. [View sessions](#) **1**
- Exercise 2**: NOT REGISTERED. Description: In this exercise you will experiment with the basic components on the mother board, learning about how to identify the components and how to evaluate their performance. [View sessions](#)
- Exercise 3**: NOT REGISTERED. Description: In this exercise you will work with different types of...

The right screenshot shows the 'Sessions for exercise 1' page. It includes a 'Back' link and a table of session times:

Time	Place	Free places		
Wed Sep 08, 13:15	D513	18	OPEN	<a href="#">Register</a>
Thu Sep 09, 13:15	D513	18	LOCKED	

# How do I sign in for a project topic?

- Step 1: A group member creates a group and informs a topic
  - 101 to 118 for the English group



# How do I sign in for a project topic?

- Step 2: Another group member joins a group
  - Informs the Group name



The screenshot shows a Mozilla Firefox browser window titled 'TE2003 - Mozilla Firefox'. The address bar displays 'hh.se https://idenetdes.hh.se/joingroup'. The page content includes the text 'TE2003', 'Logged in as: test\_student@student.hh.se', and a '(Logout)' link. Below this is a red link 'Choose a seminar group'. The main heading is 'Join a seminar group', followed by instructions: 'Enter the name of the group you want to join below. You must enter the group name **exactly** as it was given by the group creator'. A text input field contains 'Per&eva' and is marked with a red '1'. A 'Continue' button is positioned below the input field. A red 'Back' link is at the bottom left of the form area. The browser's status bar at the bottom shows 'Done' and a lock icon.

