

581365-8  
**Computer Organization II**  
 (Tietokoneen rakenne)

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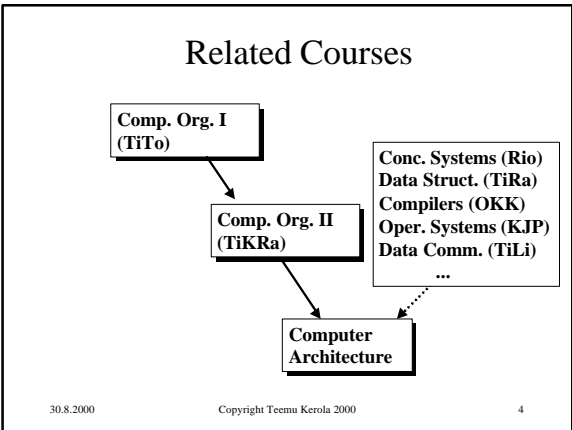
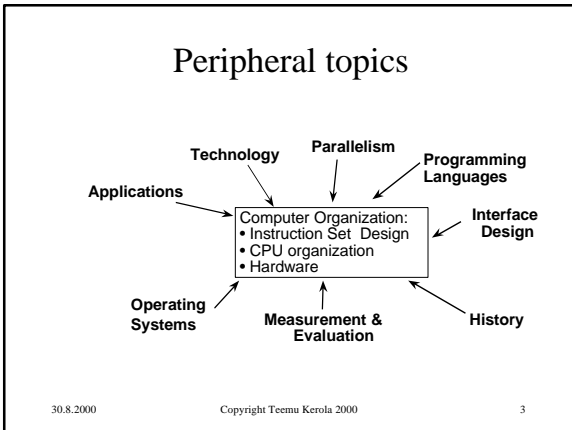
Fall 2000

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**Course Focus**

- Understand basic computer system design from the user (human, OS, compiler) viewpoint as well as from the designer viewpoint.
- Understand how a simple hardware clock signal makes a computer to execute programs.

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**Notice**

- These slides are made to support lectures and to be used with the text book.
- They do NOT include everything that is covered in the lectures.
- They are NOT a replacement for a text book.
- If you need a self-contained presentation, please use the text book.

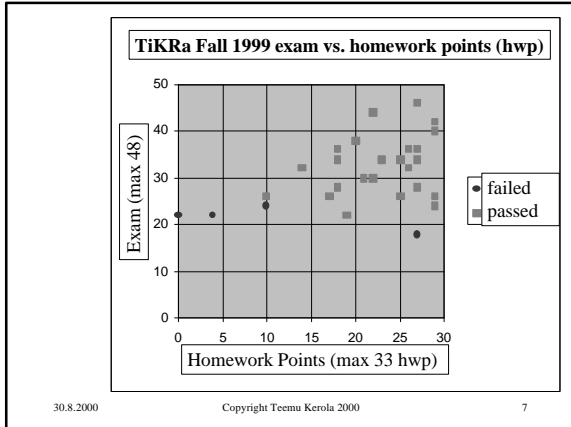
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**Motto**

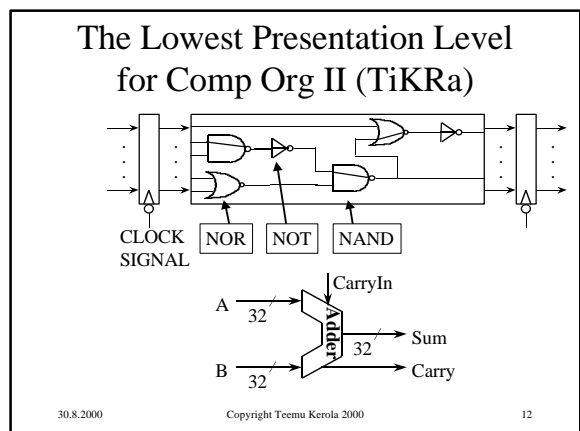
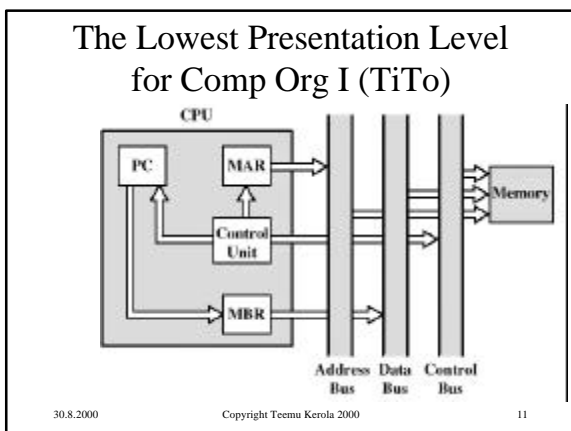
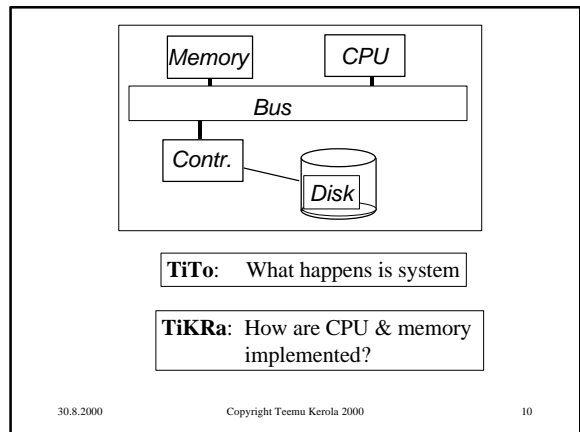
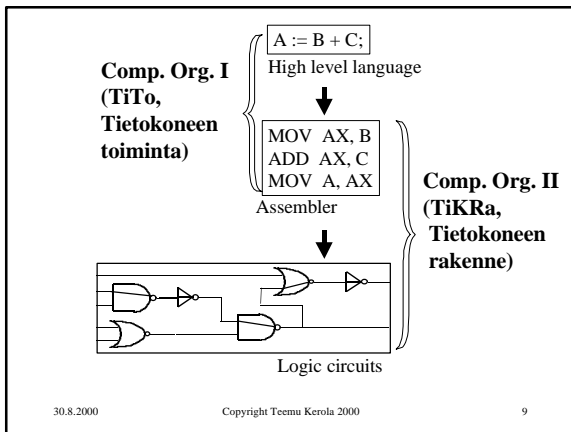
- “It is not good exercise, if you do not sweat”

(“Kunto ei nouse, jos ei tule hiki”)

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- ### WWW Information
- Course home page  
<http://www.cs.helsinki.fi/Teemu.Kerola/tikra/>
  - This semester schedule  
[.../tikra/S2000/aikataulu.html](http://tikra/S2000/aikataulu.html)
  - Lectures  
[.../luennot/](http://luennot/)
  - Homeworks  
[.../laskuharj/](http://laskuharj/)
  - Old exams  
[.../tikra/kokeet/](http://tikra/kokeet/)
  - Newsgroup  
[hy.opiskelu.tkl.tikra](http://hy.opiskelu.tkl.tikra)
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## Contents

- Computer system - overall structure (Ch 1-7)
- System buses (Ch 3)
- Digital logic (App A)
- Memory hierarchy (Ch 4.3, 7.4)
- Computer arithmetic (Ch 8)
- Instruction sets (Ch 9-10)
- CPU structure and function (Ch 11)
- Reduced Instruction Set Computers (Ch 12)
- Instr. level parall. and superscalar proc. (Ch 13)
- Control unit (Ch 14-15)

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