Materials Physics II, fall 2004

http://www.phys.jyu.fi/homepages/hakkinen/opetus/mafy2_2004

Prerequisites: FYS232, FYS242, FYS320

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Lectures: Tuesdays and Thursdays 10-12, FYS2, 7.9.-2.12.

Discussion on weekly homework assignment in 2 groups:
Wednesdays 10-12, FYS2.
Thursdays 8:30 – 10, YN121 (the new Nanoscience building)
Remember to return your solutions to Kimmo by Tuesdays at 14:00.
The problems will yield varying points depending on the level of difficulty.

Exams: Intermediate exams (välikokeet) 29.10. and 10.12. 12-15.

Exams: max 2 x 30 = 60 points

Homework assignment: max 40 points (← 80% of max assignment points)

Minimum (grade=1) for passing the course is 50 total points **(including** 15 points from each intermediate exam). 90 total points give the maximum grade (=3).

MOTTO / SYNOPSIS

To REALLY understand solid state phenomena and properties, such as

- **Magnetism**
- **Superconductivity**
- **Optical properties**
- **Transport properties**
- **Metal-insulator transition**

and systems like

- **Nanostructures**
- **Nanoparticles**

one has to first understand the electronic structure and electron-electron interaction.