General:
Solid state physics forms the basis of many modern topics in research and development, from detectors in particle physics and astronomy to applications like hard disks in computers. The exercise classes are a fundamental part of the lectures and are used to discuss and deepen the content of the lectures, but also to investigate additional topics. Most of today's solid state physics research deals with low-dimensional and nanometer scaled systems and we are happy to weave-in topics suggested by students.

When and where:
The first class takes place on 17. September, the last on 17. December. We provide four tutorial classes at the following locations and times:
Sitzungszimmer 2.04, Tuesdays from 12:15 to 14:00   (Peter Rickhaus, in German)
Sitzungszimmer 1.09, Tuesdays from 12:15 to 14:00   (Peter Makk, in English)
Sitzungszimmer 1.09, Tuesdays from 10:15 to 12:00   (Wangyang Fu, in English)
Sitzungszimmer 1.09, Wednesdays from 8:15 to 10:00   (Cornelia Nef, in German)

Language: We provide two tutorial classes in English (more on demand) and two in German. The problem sheets are in English. We encourage all students to learn English since nowadays it is the only relevant language in science.

Credit points:
To obtain the six credit points of the lectures, the exercise classes are mandatory and solutions to the problems have to be handed in. On each of the 12 problem sheets some problems are labelled by an asterisk. Solutions to these problems will be marked with points ranging from 0 to 6. To obtain the credit points a total of 37 points have to be reached.

Procedure:
A new problem sheet is uploaded every week to the ADAM repository (Workspaces » Philosophisch-Naturwissenschaftliche Fakultät » Departement Physik » Schoenenberger public » Kondensierte Materie). The problems should be solved at home and the solutions handed in every Monday before 11am for grading. Please deposit your solutions to the marked folder in front of Prof Schönenberger's office (1.16b). The problems will be discussed in the tutorial classes the following Tuesday – pdf files of example solutions can be downloaded the days after the tutorial classes from ADAM. We encourage the student to take an active part in this discussion to hone their scientific communication skills!

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Script and problem sheets:
ADAM or http://www.nanoelectronics.ch/education/KOMA/koma.php

More information:
http://vorlesungsverzeichnis.unibas.ch, look for "Kondensierte Materie"