This course provides an introduction to condensed matter physics, with an emphasis on the central phenomena observed experimentally and utilized in modern technology. Theoretical explanations are given in terms of fundamental theorems and illustrated with simple models based on quantum mechanics and statistical physics. The topics covered correspond to Chapters 1-10 and 18 in Kittel (8th Ed.).

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Office hours: Wed. 1:30–3:30pm (tentative)

Lectures: TR 3:30–4:45pm, PAS 412

Grading:

The course is graded based on the cumulative score. The minimum cumulative percentages necessary to obtain the following letter grades will be approximately (but not greater than):  
- $A \geq 85\%$,  
- $B \geq 70\%$,  
- $C \geq 55\%$,  
- $D \geq 40\%$.  
The cumulative score will be determined as follows:

- Homework: 15\%  
- Midterm 1 (Oct. 3): 25\%  
- Midterm 2 (Nov. 7): 25\%  
- Final Exam (take home): 35\%  

No excuses accepted for missed homework, but the lowest hw score will be dropped. A missed exam due to an excused absence or a planned absence that is documented ahead of time by the student and approved by the instructor will be substituted with a make-up exam or an alternative arrangement at the discretion of the instructor.

All work to be considered for a regrade must be submitted at most one week after its due date.

Required Text:


Additional References

M. Marder, “Condensed Matter Physics” (Wiley, 2000)


Disabilities:

Students requiring accommodation in testing or note taking must notify the instructor and provide a letter from the Disability Resource Center by September 6, 2013.

Academic integrity:

Students are expected to follow the University code of academic integrity and the code of student conduct. These codes can be found at http://deanofstudents.arizona.edu/policiesandcodes.