

Physics 152a, Winter 2006

TENTATIVE COURSE SCHEDULE

Week	Topics	Chapter(s) in Kittel
1:	Crystal structure	Ch. 1
2:	Reciprocal lattice, diffraction	Ch. 2
3:	Bonding mechanisms	Ch. 3
4:	Lattice vibrations	Ch. 4
5:	Phonons, thermal properties	Ch. 5
6:	Free electrons	Ch. 6
	Midterm	Chapters 1-6
7:	Energy bands	Ch. 7
8:	Semiconductors and metals	Ch. 8, 9
9:	Transport theory	Appendix F
10:	Review	
Final	Chapters 1-9, Appendix F	

There will be one Midterm (which will count 30%) and one Final Exam (which will count 50%) towards the final score. In addition, you will be asked to choose a topic from a given list to write a term paper on (due on the week before Final Exam week) which will count 20%.

Homework problems will be posted on this Website followed by their solutions, as exercises for the students. These will not be graded.