

Physics 3371 (Winter 2014): Condensed Matter Physics

- Instructor:** Dr. Mark Gallagher
- Office:** CB 4031 (Ext: 8226)
- Lab:** CB 2015 (Ext. 8782)
- Email:** mark.gallagher@lakeheadu.ca
- Lectures:** Tues. and Thurs. 1:00 PM to 2:30 PM in CB4058 (lecture notes posted on course site 24 hours prior to lecture).
- Office Hours:** Mon. and Wed. 9:30 AM to 10:30 AM.
- Course Site:** access through “*myCourseLink*” using university “*myEmail*” username and password.
- Textbook:** *Introductory Solid State Physics*, Second Edition by H. P. Myers.
- References:** *Introduction to Solid State Physics*, Seventh Edition by C. Kittel.
Solid State Physics, A. J. Dekker.
Introduction to the Physics of Electrons in Solids, Brian K. Tanner.
Solid State Physics, Ibach and Lutz.

Marking Scheme:

Problems (posted on course site)	20%
Midterm Test (Thurs. Feb. 27th)	20%
Final Exam	60%

Topics:	<u>Myers</u>
Crystal Structures & Crystal Binding	Ch. 1, 2
Reciprocal Lattice and Diffraction.....	Ch. 2, 3
Free Electron Fermi Gas	Ch. 6
Energy Bands	Ch. 7-9
Semiconductors.....	Ch. 10
Magnetism.....	Ch. 11