Syllabus for Statistical Physics I – PHYS 663

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Semester:	Spring 2014 (Jan 13th – May 10th)
Lectures:	Tue & Thu 12:30pm – 1:45pm
Location:	Faraday West 227
Office hours:	Tue & Thu, 14:00 – 15:00

Contents

Recommended textbooks

- **Frederick Reif,** *Fundamentals of Statistical and Thermal Physics***,** Waveland Pr Inc (2008)
- **R. Kubo**, *Statistical Mechanics*, North Holland (1990)
- **K. Huang**, *Statistical Mechanics*, John Wiley & Sons, New York (1987)

Additional textbooks

- **L. Landau & I. Lifshitz**, *Statistical Physics, Part 1: Volume 5,* Butterworth-Heinemann (1980)
- **Sommerfeld**, *Thermodynamics and Statistical Mechanics*, Academic press, New York (1956)

Advanced textbooks

- **P. Chaikin and T. Lubensky**, *Principles of Condensed Matter Physics*, Cambridge University Press (1995)
- **R. P. Feynman**, *Statistical Mechanics – A set of lectures*, Frontiers in Physics,
- Benjamin/Cummings, Reading Massachusetts (1982)
- **N. Goldenfeld**, *Lectures on Phase transitions and the Renormalization Group*, Frontiers in Physics, Addison Wesley, Reading Massachusetts (1994)
- **L. Landau & I. Lifshitz,** *Statistical Physics, Part 2: Volume 9*, Butterworth-Heinemann (1980)

Grading

The final grade is determined according to

- 45%: homework percentage
- 10%: lecture attendance percentage
- 20%: midterm exam percentage
- 25%: final exam percentage

This results in a total score between 0 and 1, which is then multiplied by 12, rounded to the closed integer, divided by 3, and finally graded according to* http://www.niu.edu/regrec/grading/gradingfaqs.shtml

Note: To pass this course, you MUST score at least 50% on the homework.

* values below 2 are round to the closed integer.

Accessibility Statement

Northern Illinois University is committed to providing an accessible educational environment in collaboration with the Disability Resource Center (DRC). Any student requiring an academic accommodation due to a disability should let his or her faculty member know as soon as possible. Students who need academic accommodations based on the impact of a disability will be encouraged to contact the DRC if they have not done so already. The DRC is located on the 4th floor of the Health Services Building, and can be reached at 815-753-1303 (V) or drc@niu.edu.