University of Maryland Department of Physics

Fall 2015 Pr

Prof. Ian Appelbaum

Physics 404

Title: PHYS404 "Introduction to Statistical Thermodynamics"

Introduction to basic concepts in thermodynamics and statistical

mechanics. 3 credits.

Prerequisites: PHYS273 "Waves"

Instructor: Prof. Ian Appelbaum, Physical Sciences Center, Rm 2154.

Phone: x5-0890 / e-mail: appelbaum@physics.umd.edu

Please arrange a meeting time via email to discuss grades or other personal situations. Questions about the course material should be directed to the Q&A board on the course webpage at

https://piazza.com/umd/fall2015/phys404.

TA: TBD

Course Web Site: All course materials, including this syllabus, homework assignments, solutions, lecture notes, etc. will be posted to the <u>Piazza page</u>.

Schedule: Two meetings weekly in <u>PHY</u> 1402: Tuesday and Thursday 12:30pm- 1:45pm

Recommended Text: Kittel and Kroemer, <u>Thermal Physics</u>, 2nd edition. The lectures will **not** follow the book verbatim, so if you prefer any of the many other statistical mechanics texts available, feel free to use them. I recommend F. Reif, "Fundamentals of Statistical and Thermal Physics" (Waveland Press, 2009) ISBN 1478610050, 9781478610052.

Homework: Homework is assigned approximately every week via the Piazza page and will be due in class *before lecture begins*. Late homework will not be accepted and will receive a grade of 0.

Grading: Your course (letter) grade is determined by your numerical scores on homeworks (30%), one midterm (30%), and one final (40%).

Dropping the Course: Note: the last day to drop the course is Nov. 10.

A Special Request: Please do not use your cellphones during lecture.