PREREQUISITE: PHYS 301

CONTENT: We will continue from where we stopped in 301 and finish material in Ch.’s 6-8 and cover some material we skipped in earlier chapters. We will also cover some special topics in my research interests of liquid crystals and biophysics to explore applications of thermodynamics. If you have particular interests let me know.

TEXT/MATERIALS: a) Introduction to Thermal Physics, by Schroeder (bookstore); b) Physics 132 level book; c) access to math tables (integrals, special functions, trig identities, etc.); d) access to computer for graphing and calculating (spreadsheet, Matlab, etc.)

GRADING:

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<th>Homework</th>
<th>Projects</th>
<th>Midterm</th>
<th>Final</th>
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Regular class attendance is expected.

HOMEWORK: Working and thoroughly understanding the homework problems is an important part of learning physics; students are urged to begin reading the text, working the examples, and doing the homework when assigned. Homework will be collected and graded.

PROJECTS: Several computational projects will be given during the quarter that will ask you to compute and produce visualizations of concepts learned in class. These will require some knowledge of plotting/computational software (e.g. Excel, Matlab, Mathematica).

MIDTERM: There will be one midterm in class TBA.

FINAL EXAM: Cumulative with emphasis on most recent material. June 4, 10:10 AM-1:00 PM.

GENERAL REQUIREMENTS and LOGISTICS:

- If you will or do miss class, exam, etc. (illness, car trouble, course conflict, game, performance, etc.) let me know as soon as possible and we might be able to make other arrangements.
- Work submitted for credit must be on-time, stapled, neat (esp. no perforations), and readable. Your work should be clearly organized on the page, with explanatory phrases, correct units, and the answer circled or boxed. Late or messy work will receive less than full credit.
- Check the appropriate university documents for details and deadlines concerning academic honesty, adding, dropping, grading, withdrawal, incomplete, etc.
- I encourage you to work with other students (form groups?); however, you must do and turn in your own work.
- Unforeseen circumstances may necessitate changes in this information. Changes will be announced in class.