

Syllabus

Physics 321: Thermal Physics

Spring 2025

Section 321 001

Instructor: Dr. Jaan Mannik (Physics)

Office: 406B Nielsen Physics Bldg.

Class Hours: Mon., Wed., Fri. 12:40 - 1:30 PM

Office Hours: Mon., Wed. 2:30 - 3:30 PM (or by appointment)

Phone: 974-6018

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Course GTA: TBA

Email: TBA

Office Hour: TBD

Textbook: An Introduction to Thermal Physics, Daniel V. Schroeder, Addison-Wesley; 1st Ed. ISBN: 0201380277. **Required.**

Learning objectives of the course

- 1) Learn the fundamentals of thermodynamics and statistical mechanics.
- 2) Apply these principles to specific problems in physics and beyond.
- 3) Develop math skills to solve physics problems.

Class preparation and protocol

It is very important to keep up with the work in the class, since the material builds on itself. Before the class, you should review the topic of the previous class and preview the material to be covered. Every lecture will be complemented with homework problems. Do these on a timely manner because they are essential for understanding of the material. Your questions during the lecture are strongly encouraged. Please check immediately that you understand all credits earned on exams, homework and quizzes.

Homework assignments

There will be homework with an average frequency one homework per week. The homework is due **by the class time each Monday**. Exceptions will be noted in class. Homework which is submitted after the deadline does not count. Submit your homework via Canvas as a pdf file.

Quizzes

Quizzes will be given at the beginning of some lectures (10 min) covering the material of the previous lectures.

Exams

Midterm Mar. 28 during regular class hour
Final Exam May 12 10:30 am - 12:45 pm

Grades

Grading scale

| | |
|-------------------|-----------------|
| Quizzes 10% | 90% and above A |
| Mid-term exam 20% | 87% - 89% A- |
| Final Exam 40% | 83% - 86% B+ |
| Homework 30% | 80% - 82% B |
| | 77% - 79% B- |
| | 73% - 76% C+ |
| | 70% - 72% C |
| | 67% - 69% C- |
| | 63% - 66% D+ |
| | 60% - 62% D |
| | 57% - 59% D- |

In some tests/assignments scaling may apply. Scaling will not lower your grade.

Announcements: For announcements check **Canvas** regularly. Announcements will be sent also to your UTK e-mail. Please do not ignore them.

If you need course adaptations or accommodations because of a documented disability, please contact the Office of Disability Services (ODS). This will ensure that you are properly registered for the services provided by ODS.

Disability Services
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