

Syllabus
School of Physics and Astronomy
PHYS-440 Thermal and Statistical Physics
Fall Semester, 2025

Instructor: Michael S. Pierce

Office Gosnell 08-3218

Lab Gosnell 08-3231

E-mail: mssp@rit.edu

Phone 475-2089

Office Hours: I will host bi-weekly office hours. These will be in person, but we can also meet via Zoom (<https://rit.zoom.us/j/mssp>) if you let me know in advance. They will be twice a week at TBD times

TA / Grader : TBD

Class: Tu-Th 12:30-1:45 pm Gosnell (GOS, Bldg 7) 1300, however room location may change.

Hour Exams: There will be two intermediate exams during the semester. Exact dates *TBD*.

Make-up exams are provided only in unusual circumstances. A request for a make-up exam must be submitted via email or in writing to the *School of Physics and Astronomy* and copied to your instructor. Submission of the request is in no way a guarantee that it will be approved. All requests are considered by the School Head on a case-by-case basis. Whenever possible, you must allow sufficient and reasonable lead time for a considered response to your request.

Final Exam: TBD

Only simple calculators may be used in exams. No smart phones, graphing calculators, watches etc... may be used (nothing with extensive memory or the ability to communicate).

Textbook: Schroeder, *An Introduction to Thermal Physics* (required)

Attendance and illness: If you are feeling at all ill, please do not come to class. We should be able to broadcast things over Zoom if I have sufficient warning about absences. I will try to offer you the same reasonable flexibility with regards to issues that may come up. We do not have mandatory attendance, however there are participation points for things. You will get at least 2 free participation grades dropped automatically.

If you are not attending or are failing the course, please drop or withdraw by the appropriate date.

Communication and Difficulties: The academic demands in this course and your other classes can be understandably difficult. It is normal to feel anxious about your academic ability, especially when unexpected life events emerge. I want to invite you to connect with me about any difficulties you have in this course as soon as possible. Your success is important. I want you to get the additional assistance needed before the challenges become too much. In addition, you should feel encouraged to directly contact other people that can provide support. Likewise, you should feel empowered to seek assistance from other sources such as Ayushma Basnet (CAPS embedded therapist for CoS), Lindsay Cohen (academic advisor), Ombuds Office (conflict resolution/confidential discussions), and more.

Personal Notebook:

I am providing each of you a single, medium notebook that you are welcome to record any information relevant (or not) to the course. You will be able to use this notebook for exams (including the final), as well as the in-class quizzes. Put whatever information you wish into it (you don't need to include a table of integrals, I will provide those if needed). You get one, so be judicious and do not over-fill it as

we go (you won't be able to record everything in it). I will occasionally ask to see the notebooks, though that's not part of your grade (not what you include/don't or how much you use it).

Said differently, you should be taking notes elsewhere and then transferring them in to this little notebook.

Grading: Your course grade will be determined by an assessment of the quality and quantity of your work. The following proportions will be used:

Hour Exam 1	20%
Hour Exam 2	20%
Final Exam	20%
In-class Quizzes	20%
Term Project	5%
Homework	10%
Participation in the course	5%

Initial cutoffs are 90, 80, 70, 60% for A, B, C, D. They will not be lowered by much, if at all. Assignment of + and – modifiers is at the discretion of the instructor.

Most grades will appear in MyCourses within a reasonable timeframe. If you have questions about your performance during the course, please contact me and we can discuss your progress.

Homework problems:

Homework will be assigned on a semi-weekly and consist of the 5 – 10 problems related to the material just discussed in class. Assignments will be due at the beginning of class after one week, unless otherwise specified. Late assignments will be penalized one full letter grade (10%) and will not be accepted after one week past the due date.

Term Project:

We will discuss what this means, but I have a pretty good idea. At the very least you will be picking a topic from the course and then prepare for some kind of discussion on it. Approval (by me) is required for each topic. Things will be shared periodically during the course of the semester. We will utilize MyCourses to help identify topics and to provide a forum for discussion on things.

Graded Work: You have up to a week after the return of graded work to ask for it to be re-graded. Items subjected to re-grading may be given greater scrutiny.

Plagiarism and Cheating:

When you work on assignments cooperatively but turn them in individually (such as activity sheets or short lab reports) you may share data, equations, graphs, calculations and drawings. However, all written work must be expressed in your own words. Thus, you may not copy (even with some modification) things like abstracts, summaries, descriptions, discussions or conclusions. If there is reasonable evidence of copying, it will be construed as an act of plagiarism and each student involved will receive a failing grade on that assignment. Since part of your grade will depend on the work of your team members, it is important for you to work cooperatively with them and help them understand the course material. At the same time, you should check that their written work is different from yours.

If you cheat on an exam, you will automatically fail the course and I will take you directly to the Dean of the College of Science and Provost to see if further punishment is possible. The university will be formally notified, your other instructors (present and past) informed, and if there is any evidence you have cheated in another course you will very likely be expelled from the university. I have zero tolerance for cheating. It is not worth the risk.

Several of the online solutions for problems. This includes the solution manual for our book. Copying an online solution, complete with certain mistakes, is a good indication of cheating.

Extra Help: Do not hesitate to come to my office during office hours or by appointment to discuss coursework, a homework problem, or any aspect of the course. You may work with other students on homework and other things, but things need to be your own work.

Harassment and Discrimination: All members of the RIT community are expected to be respectful to contribute to a positive learning environment. Full details of the RIT policy prohibiting discrimination and harassment can be found at: <https://www.rit.edu/academicaffairs/policiesmanual/c060> .

Be understanding, respectful, and empathetic with each other. Please come to me or any other faculty member if there are any issues. You can also use the Ombuds office as a confidential resource to discuss matters: <https://www.rit.edu/ombuds/>