

Physics 408 Bibliography:

The course text (Schroeder, *An Introduction to Thermal Physics*) provides a good overall introduction to the subject, and includes most of the topics we will cover. Aside from this text there are a number of good sources providing alternative views of the material, or a more in-depth treatment. Here is a short list with a few suggestions:

Reif, *“Statistical and Thermal Physics”*, text which provides an excellent introduction to the statistical concepts that form a foundation for this course. I recommend this one as a good supplement text.

Baierlein *“Thermal Physics”* was used recently for this course; also well written and up to date, provides a treatment rather similar to that of Schroeder.

Kittel and Kroemer *“Thermal Physics”* a well-known and popular text for this course. Strongly tilted toward a statistical view of thermodynamics.

Callen *“Thermodynamics and an Introduction to Thermostatistics”*: Whereas some of the above texts start with a statistical approach, Callen follows the opposite path, providing first a solid basis for the concepts and relationships of macroscopic thermodynamics. This is also one of the oldest text on this list, but provides a well-written foundation for the subject.

Swendsen, *“An Introduction to Statistical Mechanics and Thermodynamics”* is perhaps more of a graduate text but provides a thorough description of the subject, including a nicely developed coverage of the statistical principles used in this course.

Pathria and Beale, *“Statistical Mechanics”*. Now we get into graduate texts. First & second editions are by Pathria alone; I like this text as a comprehensive reference on the subject, and third edition was also relatively recently updated.

Landau and Lifshitz *“Statistical Physics”*. Also in the graduate category, you should be aware of these as well, providing a clearly written and thorough coverage with an amazing wide range of topics. Two volumes, part 1 and part 2.