

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 of a few suggestions:

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

Kittel and Kroemer "*Thermal Physics*" is a well-known and popular text for this course, if a bit out of date. Strongly tilted toward a statistical view of thermodynamics.

Reif, "*Statistical and Thermal Physics*" venerable text also strongly concentrated on the statistical mechanics fundamentals. I really like this text and it provides an excellent introduction to the statistical concepts that form a foundation for this course.

Callen "*Thermodynamics and an Introduction to Thermostatistics*": Whereas the above texts start with a statistical approach, Callen follows the other approach typically used for this course, by developing first the concepts and relationships of macroscopic thermodynamics. This is also one of the oldest text on this list, but provides a well-written foundation to 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 purely graduate texts. First & second editions by Pathria alone; I like this text as a comprehensive reference on the subject, and third edition is 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.