

## CHAPTER OVERVIEW

### 1: Review of Thermodynamics

This chapter starts from a brief discussion of the subject of statistical physics and thermodynamics, and the relation between these two disciplines. Then I proceed to a review of the basic notions and relations of thermodynamics. Most of this material is supposed to be known to the reader from their undergraduate studies,<sup>1</sup> so the discussion is rather brief.

- [1.1: Introduction - Statistical physics and thermodynamics](#)
- [1.2: The 2nd law of thermodynamics, entropy, and temperature](#)
- [1.3: The 1st and 3rd laws of thermodynamics, and heat capacity](#)
- [1.4: Thermodynamic potentials](#)
- [1.5: Systems with a variable number of particles](#)
- [1.6: Thermal machines](#)
- [1.7: Exercise problems](#)

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