NOTES FOR THE SECOND HOUR EXAM

The second hour exam will be given on Thursday, 21 Nov. As usual, it will be a closed book, closed note, no calculator/other electronics exam.

You should study all of Chapter 3, section 5.1, all of Chapter 6 and the sections of Chapter 7 that we cover by the end of class next T (I suspect at least 7.1 and 7.2 and perhaps some of 7.3). All material in these sections will be fair game for the exam. Additionally, the work we have done on techniques of integration (Gaussian integrals and differentiation with respect to parameter) will also be covered by the exam.

As on the first hour exam, a significant portion of the test will ask you to manipulate and derive expressions (like, but not limited to) the thermodynamic identities for U, G, H and F that you have encountered in Chs. 3, 5 and 6. You should also expect one or more ' thought' questions where you apply your knowledge of thermal physics to new situations to explain an observation or predict what would occur in the circumstances. There will be no calculations required, although I might ask you to derive and/or set up equations which when solved will yield a result. There will be no Mathematica based questions on the exam.

  I will post last year' s second hour exam. Keep in mind that I have changed the order of the course somewhat, so we have not yet done material related to heat engines (Ch. 4), which was covered last year on this exam.