

### Preview Sheet for Test 3

Thermodynamics (Internal Energy, Enthalpy, Entropy and Free Energy)  
Chapters 6 and 7; Lectures from 10/25 through 11/15; Problem Sets 7 and 8

The test will be on Thursday, November 18, in our normal classroom (Olin-Rice 370.) It will start at 9:00 a.m. and end at 11:00 a.m.

#### Studying strategies:

- Do extra problems at the ends of the chapters. If you do not have access to the solution for a given problem, please come talk with me to check your work.
- Focus on your lecture notes and homework. You are responsible for whatever Rob or I said in class.
- You also should be familiar with the organization of your textbook, since you will be allowed to use it on the exam. Note that there will be no page of reference data in the exam booklet.
- The format will be rather different from Tests 1 and 2. There will be no multiple-choice questions nor a long essay of your choice. Instead, expect a mixture of calculations and (mandatory) short essay questions.
- If a topic was not covered in homework or in lecture, you are not responsible for it!
- Please remember to bring a calculator to the exam!

#### Instructions before starting the test:

1. Your exam booklet should have **six** pages total, with questions on pages 2-6. Check to see you have six pages now. If you do not, ask for another copy of the exam.
2. Write your name in the space above and on the backs of the other pages.
3. You are allowed (and required!) to use your textbook during this exam.
4. For numerical problems, please present your method of calculation clearly, including units. (Rob and I both hate it when numbers are bereft of their units!)
5. You have **120 minutes** to work on this exam.