

First Assignment; Chapter 26.

Students should be able to tackle these problems by the end of the second week, January 18 (Lecture #6). Unfortunately, we are 2 lectures off pace (already!!!). One of the lost lectures was by design (Professor's prerogative!), because we are buffered by make-up lecture #12, but the second lost lecture was unexpected due to the tougher than expected lecture material.

Chapter 26 is a very long chapter, and covers a lot of stuff, all based on extent of reaction (ζ , squiggle), and free energy. Some of the questions assigned to you here are long and involved, but there are some really benign ones as well. From your experience from Chem 440, the simple questions posed to you in this chapter invariably make their way into your final exam (since we are not holding in-class exams 1 & 2; but instead have to resort to the 'dreaded' take-home exams).

Rule of thumb: if there is any problem assigned to you here which you can do bang-bang in 5 or so minutes; then it is the type that can be posed to you within the confines of a 110-minute final exam. Sure as rain, I will pluck one or two questions from this assignment; not necessarily taken verbatim, but being of the same ilk and maybe with different data.

Let's roll:

Attempt the following questions; pp 1087 – 1099.

Problems 1, 2, 3 (I particularly like this type of problem), 4, 5 (these are follow-ups to 3), 6, 8, 10, 11, 13, 14 (do not be scared, it is not that challenging!).

Problems 16, 17 (can these can be worked backwards through Hess law?), 18 (quite time consuming, but well worth your while to go through the whole problem), 19 (same with this one [so you know it will not be in the final exam!!!!]), 20, 21, 22, 24 (this is right at the cusp for a question that can be posed to you in a final exam), 26, 27, 28, 30 (semantics might trip you up here: what does it really mean to be 0.53% dissociated? Figure it out... you might need this later), 31, 32, 33 (should be fun!), 36, 39, 41 (these last 2 questions are excellent take-home exam type questions).

Problems [notice that we are skipping most of the problems that involve JANAF tables], 56, 57, 58, 59, 60 (just give this your best shot), 61, 62, 63, 64, 65.