The Midterm Examination will be held on Friday, 26 July

- Covering:
  - Chapters 1-4 in Tinoco and 1-5 in Atkins.
  - Lectures 1-10
  - All Problems in Homework Assignments 1-4

- Bring
  - Calculator (any type, but no lap tops.)
  - Pencil/Pen
  - Straight Edge (for drawing graphs)
  - Blue/Green Book
  - 1 page of notes

- Format:
  - Closed Book.
  - Open Notes.
    - One page, double-sided,
    - Attached to or entered into the blue/green book
    - Turned in with the exam blue/green book

- Grading: Grading of the examination will be based on the standards stated in the Chemistry 452/456 course syllabus. Please review the standards section of the syllabus. Important points to keep in mind:
  - Partial credit is USUALLY given in units of 3-5 points.
  - Obtaining the correct numerical answer is counted in partial credit grading. An answer that is within 10% of the correct answer will be fully credited.
  - Calculations must include physical units and a proper dimensional analysis must be included in the calculation.
  - Students are expected to understand how to use their calculators properly. Students will NOT be forgiven for mistakes resulting from calculator errors.
  - When you are asked to explain an answer or are asked to define a term, a worded statement in complete sentences is required.
  - If you are given the option to choose from a list of problems (e.g. answer three of the following five questions) you will NOT be credited for answering more than the requested number. For example, if you are allowed to select three problems out of five for answering… and you answer all five… the graders will NOT credit you for the highest three scoring problems out of five. The first three problems presented on the blue book will be graded.
Examination Outline

- Part 1: Definition and Discussion Questions You have to answer 3 out of 5-6 choices. Worth 18 points. Limit answers to about 200 words.

- Part 2. This part consists of 4-5 questions that test your knowledge of thermodynamic concepts. Calculations are not expected…but may be used to illustrate a point. You are usually required to answer 2 out of 4 or 5 questions. Only answer the requested number of questions. If you answer all the questions I will not correct them all. This part is worth 20 points and should NOT require more than 10 minutes of your time. Limit answers to around 200 words.

- Parts 3. Short Calculations and Graphing Problems: This part gives you 5-6 short problems that can usually be answered with a single calculation or a few simple lines of math. Again you chose 2-3 problems to answer. This part is also worth 20 points. You should try to get through this part in 10-15 minutes.

- Part 4. A multi-step calculation must be performed. Two choices are given. They usually have 4-5 steps. The problem counts for 32 points.