As we get toward the end of the semester I thought it might be helpful to put in writing the schedule for the next two weeks.

**Course Content:**
The week of April 25 we will explore oxidation-reduction reactions and applications such as batteries and corrosion. This is Chapter 8.

*Monday, April 25:* The case study is due in hard copy format. So is Homework #15. Homework #16 will be distributed with a due date of Thursday, April 28, at class time.

*Tuesday-Thursday, April 26 – 28,* continue Chapter 8.

*Monday, May 2,* Test #4 covering Chapters 7 and 8 will be administered.

*Tuesday, May 3,* 8:00 – 10:00 meet. Test #4 returned and questions answered regarding the final.

*Wednesday, May 4,* 8:00 – 10:00 is the final exam. It will cover the entire semester and will be constructed similarly to other quizzes and tests. There will be some multiple choice, short answer, and problem solving sorts of questions.
Topic areas you should be able to handle well for the final include:

- Identifying chemical and physical changes and properties
- Converting within the metric system with the prefixes you will need to know: milli-, centi-, and kilo- as well as other prefixes I may give you
- Use the FLaReS approach to evaluate the viability of a claim
- Recognize the laws of constant mass, definite proportions, and multiple proportions
- Provide an explanation as to why the periodic table is arranged the way it is
- Relate isotopic symbols to the number of protons, neutrons, and electrons in a species
- Identify which of the named groups –alkali, alkaline earth, metals, nonmetals, etc. - elements belong to
- Write formulas for and name binary ionic compounds
- Name binary molecular compounds
- Write formulas for and name compounds containing the five polyatomic ions you know: hydroxide, nitrate, sulfate, ammonium, and phosphate
- Draw Lewis structures for simple compounds
- Interconvert between grams, moles, and molecules
- Balance chemical equations
- Conduct calculations based on chemical equations
- Complete nuclear equations
- Solve half-life problems
- Be able to identify which of the three intermolecular forces are present in a given molecule
- Work with the combined gas law and the ideal gas law – the equations will be given to you
- Identify acids, bases and salts
- Describe the difference between a strong and weak acid and base
- Write the equation for a neutralization reaction
- Identify the key aspects of the pH scale – low is acid, 7 is neutral, and high is basic
- Relate pH to hydrogen concentration and vice versa
- Identify in a given reaction the species that are oxidized and reduced using the three approaches as applicable
- Identify parts of a voltaic cell