Contact the Instructor

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Course Synopsis

This course comprises a mathematically intense introduction to chemistry. The mathematical emphasis of the course will be on stoichiometric relationships and their use in predicting outcomes in chemistry. About 60% of the course content will cover mathematical relationships while the remaining 40% will deal with theoretical and philosophical aspects of the science. Explaining chemistry is easy.

This course is intended as an inquiry-based instruction course. This means that the majority of the time (during applicable units), students will be designing and carrying out experiments designed to teach them concepts rather than sitting and listening to an instructor. While I will still lecture from time to time, my role will principally be that of a facilitator—I listen and direct the discussion of what students have observed and wonder about in order to have them develop their own understanding of the concepts. To support this I have enlarged the course guide to provide more reading materials, and supplemental information will be provided through the class web site.

Course Requirements

1. A scientific calculator. A TI-83+ is the preferred instrument, although any of the TI graphing calculators will work. The calculator you choose should have trig, log, and exponential functions. If it can solve quadratic equations, that’s great too.
2. A lab notebook. The lab notebook must be **bound.** No spiral notebooks, binders, folders, or “neatbooks.” This type of notebook (your choice) should be of the “composition book” variety, meaning that the pages are sewn in and can’t be removed easily. The reasoning behind this will be explained in the course. If you can find an 8½” x 11” sewn binding notebook you will be the subject of great legends told around campfires for ages to come.
3. A 3-ring binder to use as a class notebook. Homework is usually in the form of handouts; you don’t want to lose them. Put paper in it, too.

Bring your class notebook and calculator to class each day. Lab notebooks will be left in the room.

Lab Work

There is a large laboratory component to Enriched Chemistry. As a result, I expect you to be prepared to enter the lab and work independently and carefully. Lab materials may be available for after school work if experiments must be re-done, but because of class constraints, labs cannot be left set up overnight. If you miss a lab, you must make it up. Labs can be made up on the Wednesday afternoon following the lab. Adjust your schedule accordingly. Labs will be graded, and some will require group presentations.

Testing

The format of tests in chemistry is unique. You will choose which problems you want to answer. This gives you complete control of the difficulty level of each problem, the length of the test, and the grade you may earn. A large amount of extra credit will be offered on tests, thus it is possible to earn grades greater than 100%. This is not easy. Your score on the test will directly reflect the effort you put into preparing for them. My goal is
to determine what you know and allow you to build your grade on that rather than what you do not know. However, if you know everything, you will always be prepared. Test make up times are 8am daily before school or Wednesdays after school; lunch by appointment.

**Grading Scheme**

- Tests: 40%
- Lab Work: 30%
- Homework: 15%
- Quizzes: 15%

Grades will be regularly posted in class and on the course web site. Progress reports are also available by e-mail.

**Homework Policy**

- Homework assignments will be graded. Once an assignment is issued you have two days to complete it. Late work may sometimes be accepted on an individual basis, but no assignment later than one week will be accepted. The rationale here is that if you are working on old assignments you are not only working on an assignment that isn’t currently helping you but you are also taking your concentration away from the topic at hand. The intent here is that you will attempt, and hopefully complete, the assignment the first night. However, you might realize you have difficulty or questions, so I provide the second day. Homework is due without exception by the second day.
- Assignments will be checked at the beginning of the class period following the issuing of the assignment.

**Make-Up Policy**

Tests, quizzes, labs, or other assignments that are missed must be made up on the **Tuesday following the assignment**. Once this date has passed, you will receive a zero for any missed work. If you cannot make this date because of some extreme circumstances, you must schedule an appointment with Mr. Grunden. Please adjust your schedules accordingly. This includes extracurricular obligations. I am not strict, but I do have a child coming home from school, so my time is limited as well as yours.