

**Honors Chemistry**  
**Lower Merion High School**  
**Mr. McAfoos**

**Purpose:** Honors Chemistry is an introductory course in chemistry. It is designed for the college bound student who expects to major in or has a strong affinity for the sciences and will have a strong emphasis on the laboratory program and on problem solving. Although problem-solving strategies will be discussed in class, it is not a substitute for a solid background in the basics of algebra.

**Text:** Introductory Chemistry, A Foundation, 4<sup>th</sup> Ed; Zumdahl. Houghton Mifflin, Boston, Massachusetts.

**Course Topics:** This course will introduce you to a variety of topics including, but not necessarily limited to, science foundations, matter, scientific notation and problem solving, the mole concept, chemical reactions, the states of matter, atomic structure, the periodic table, bonding, elemental properties and groups, solutions, thermodynamics, kinetics, equilibrium, acids and bases, electrochemistry

**Class Syllabus:** Every few weeks you will receive a schedule that will include class topics, laboratory exercises, homework assignments, and dates for exams and quizzes. Each schedule will encompass a time periods of two to six weeks. It is your responsibility to be aware of upcoming assignments, quizzes and exams. **THESE MAY NOT BE ANNOUNCED IN CLASS.** In addition, if I feel it is necessary, unscheduled quizzes may be given. I reserve the right to give such a quiz to any or all classes on a single day. It is therefore **NOT** helpful to know if another class had such a quiz.

**Laboratory:** The laboratory program is designed to allow each student an opportunity to experience first hand the topics that will be covered in the lecture portion of the course. The program will focus on the study of chemistry using the scientific method. To this end, students will be required at times to develop their own experimental procedures to investigate certain systems.

If your lab period conflicts with your lunch, you will be expected to bring lunch with you on lab days. You will not be excused to go to the cafeteria.

Instructions for all labs are on the web and can be accessed through my site, either by going to the lab section of the site, or by going to the calendar for your class and clicking on the lab. To ensure that students come to lab prepared to work efficiently and effectively you must outline the lab procedure in your lab notebook before coming to class the day of the lab. You will **NOT** be allowed to participate in the lab if you do not have this outline prepared before you come in. This outline should include the steps that you will follow and prepared space for any data that you will record during the lab.

Lab Write-Ups will be due one week from the day the class completes the lab. This means that if you must make up the lab you must do so within that week. Lab write-ups will be typed and free of grammatical and spelling errors. Labs that are not typed will not be graded. Points will be deducted for grammatical and spelling errors.

When lab write-ups are done by groups, I am NOT responsible for dividing the assignment into individual pieces. When the assignment is due I expect a complete assignment. How that happens is up to you. As far as I am concerned each person is responsible, and I will not give different credit to people in the same lab group. If you divide up the work and one of the partners does not do their portion of the lab it is always to your benefit to turn in an incomplete assignment rather than no assignment at all. Partial credit is always better than a zero.

**Grades:** Final grades will be assigned based on the percentage of total possible points that each student earns. Approximately 65% of your grade will be tests and quizzes, the remainder will be homework, primarily labs. Tests will each be worth approximately 100 points, and quizzes approximately 70 points. Laboratory write-ups will be worth 10-50 points depending on the particular lab. Worksheet problems assigned for homework will not be collected or graded. You will have a number of problem sets through WebAssign which will be required and which will be counted as part of your grade. I do not believe in extra credit, nor do I give points or round grades. Everyone receives the grade they earn.

**What I Require:** Each of you **MUST** have:

- A notebook for class notes. This does not need to be separate from your other subjects, although I recommend this for your own sanity. It should be of reasonable size. Chemistry is a very involved subject and we will be dealing with a great deal of material during the course of the year.
- A laboratory notebook. This must be separate from all other subjects including your class notes! The lab notebook must be bound (I recommend either a single subject spiral bound notebook or a composition notebook) We will discuss the use of this notebook in greater detail as we begin laboratory work.
- A writing implement every day. On days when lab work is to be performed it must be a pen.

**What I Expect:**

- I expect rational adult behavior at all times in the classroom.
  - I expect student to be on time to class;
  - I expect students to be attentive;
  - I expect students to respect each other;
  - I expect students to ask questions when they don't understand something.
- Assignments are due as assigned, **work will not be accepted late** (this includes later the same day). Work may be handed in at the beginning of class (or earlier), mailed to

the school (post-marked on the due date), e-mailed to me (by class time on the day the assignment is due), or faxed (by class time).

- If you e-mail an assignment to me, it should be sent as an attachment, NOT in the body of the message. The subject line of the e-mail should include the assignment name and the body of the message should include your name(s) and the format of the assignment (RTF, Word Document, etc.) and the platform (PC or Mac). If your e-mail address does not include your name, include it in the subject line of the message.
- If you are sick, or out of class with a valid written excuse, on the day of a quiz or exam you will be expected to take that quiz or exam upon your return. If you are absent for an extended period of time I expect you to arrange, on the day you return, to make up all missed work.
- Although the laboratory program is designed to promote the highest level of safety, the nature of chemistry is such that accidents can happen. To prevent accidents and to lessen the severity of accidents that do happen, the following rules will be strictly enforced:
  - Goggles and lab aprons are to be worn by all students at all times during laboratory work.
  - There will be no unauthorized experimentation in the lab.
  - There will be no running in the lab.
  - Students are to treat equipment with respect, and equipment and supplies are to be used only as instructed.

**I reserve the right to eject any student from the laboratory whose actions are endangering the safety of fellow students.** If a student is ejected during laboratory for safety reasons, they will not be allowed to participate in further laboratory exercises until a parent/student/teacher conference can be held.

### **What You May Expect:**

#### **I will:**

- teach you chemistry.
- diligently try to make what can be a tricky subject less confusing.
- encourage questions.
- not make you feel stupid for asking any question.
- listen to your questions and try to answer them to the best of my ability. If you ask a question I am unsure of, I will tell you. If you stump me, I will do what I can to find the answer for you.
- make myself available for individualized help.
- treat everyone equally.
- always grade fairly and honestly.

#### **I will not:**

- spoon-feed you the material.
- let you simply memorize the notes.
- let you sleep/talk/stare blankly into space/etc. during class.