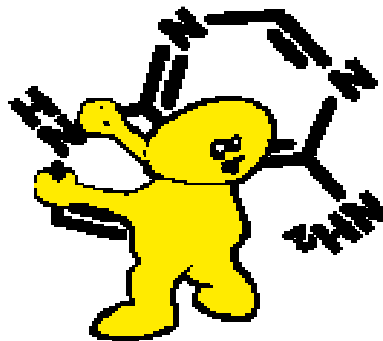


CHEMISTRY I



Instructor: Mrs. Young

Prerequisites: Biology I and Algebra I

Course Scope-

Successful completion of this two-semester study of chemistry will fulfill 1 credit of the science requirements for graduation and qualifies for college entrance as a laboratory science. Topics to be studied include: atomic theory and structure, stoichiometry, nuclear chemistry, periodic law, elements-compounds-mixtures, bonding, balancing equations, the mole concept, kinetic theory of solids, liquids, and gases, acids-bases-salts, oxidation and reduction, behavior of particles in solutions, and organic chemistry.

Course Goals

1. To be thoroughly familiar with safe, efficient, and effective laboratory rules and procedures.
2. To develop the basic skill of using the scientific method of problem solving.
3. To develop basic laboratory techniques and skills in using laboratory equipment.
4. To develop skill using symbols, terms, equations, and units of measurement.
5. To develop skill in the use of mathematical calculations to express chemical processes.
6. To develop an understanding of the differences among elements, compounds, and mixtures.
7. To develop an understanding that the periodic table is based upon atomic structures.
8. To develop an understanding of how the periodic table is used for formula writing.
9. To develop an understanding of and skill in writing and naming chemical formulas.
10. To develop an understanding of chemical bonding.
11. To recognize and balance various types of chemical equations.
12. To develop understanding and use of the factor-label method to problem solving.
13. To develop an understanding of qualitative and quantitative similarities and differences among gases, liquids, and solids.
14. To develop an understanding of the solution process.
15. To recognize the major differences among acids, bases, and salts.
16. To develop a basic understanding of chemical equilibrium.
17. To develop a basic background on kinetics.
18. To develop a basic understanding of electrochemistry.
19. To introduce the thermochemistry process.
20. To develop a basic understanding of chemical equilibrium.
21. To introduce basic nuclear chemistry.
22. To develop an understanding of basic organic chemistry.
23. To relate principals of chemistry to current societal items of concern.
24. To have an awareness of the vocational opportunities in areas related to chemistry.

Course Structure-

1st Quarter: laboratory procedures, elements, compounds, mixtures, atomic structure.

2nd Quarter: periodicity, chemical bonding, nomenclature.

3rd Quarter: chemical equations, stoichiometry, gases.

4th Quarter: liquids, equilibrium, solids, solutions, acids, bases, and salts.

Materials required-

The following materials are REQUIRED to participate in the class: Pen/pencil, a three-ring notebook/binder with a section used only for Chemistry, a planner, a **scientific calculator**, and paper.

Grading Policy/Evaluation-

Your average will be determined by dividing total points achieved by the total number of possible points. The following scale will be used. A = 89.5-100%, B = 79.5-89.4%, C = 69.5-79.4%, D = 59.5-69.4 %, F = < 59.4%. Your final semester grades will be based on the following criteria:

$$45\% \text{ 1}^{\text{st}} \text{ Quarter} + 45\% \text{ 2}^{\text{nd}} \text{ Quarter} + 10\% \text{ Semester Exam}$$

Grade Distribution:

TESTS: Tests and quizzes will be administered throughout the course to determine the students' individual progress. Tests will account for 40% of each quarter's grade and quizzes will account for 10%. Tests will be given at the end of each unit of study. A final exam will be given at the end of each semester. The final will count for 10% of your semester grade.

LABORATORIES: Lab activities will be completed throughout the course of the year to reinforce learning. Labs will emphasize hands on learning in a cooperative environment. Lab activities will account for 20% of each quarter's grade.

ASSIGNMENTS/HOMEWORK: Students are expected to complete all assignments to the best of their abilities. Assignments will be completed in class or at home as homework. You are expected to turn in all work on time. You are also expected to show all work on assignments.

Homework will be assigned 3 to 4 times per week.

Assignments and homework will account for 20% of each quarter's grade.

NOTEBOOK: You are required to have a notebook with paper, pencils, black or blue pens, highlighter, and a **calculator** (preferably one that will perform exponential functions). You will be expected to maintain one section in your notebook for this class only.

Notebook Guidelines:

1. You must show work on all assignments in your notebooks for any credit.
2. There will be notebook checks administered periodically so keep your notebook neat, orderly, and compliant with notebook procedures outlined in class.
3. Notes taken in class will be fill- in the blank format. You must rewrite these notes in outline form for your notebook.
4. Notebooks will count for 10% of each quarter's grade.

Make-up Work: It is your responsibility to find out what assignments were missed in your absence.

Make-up work procedure:

1. Refer to the calendar online to determine what materials you missed before coming in to class.
2. When you enter class, write objectives and class activities in your planner as found on the P.A.S.S. calendar.
3. Handouts and assignment sheets will be in a numbered folder in the crate by the front door. Obtain those that you are missing.
4. See me to schedule a time (before or after school) to make up any tests. Tests must be made up within three days of an absence.
See a friend or come in before or after school to obtain notes and QOD's missed.

Make-up work must be labeled as such and placed in the wire basket by the door. You will have 3 days from the time you return to complete tests and assignments. If class time is available on the day you return you will be expected to make up any tests or quizzes. Make sure to refer to the online calendar!

Help Session Hours: Chemistry Advanced Placement will have free chemistry tutoring sessions weekly. Days and times will be announced. Please come and see me if you need any help with this course.

Attendance: As a student it is your responsibility to be in class every day. You are expected to be on time every day. Students who exceed 10 unapproved absences in a semester will automatically lose credit for the class.

Tardy Policy: All students must adhere to the school-wide tardy policy. If a student is tardy, he/she must report to the tardy table to obtain an entrance slip.

Student Code of Behavior:

If you act sensibly, responsibly, respectfully, and maturely, you will do fine. The following are guidelines to insure a safe and productive year. Failure to adhere to the code of behavior will result in disciplinary action.

*Enter the room quietly and take your seat. Begin working on the Q.O.D.

1. Have all required materials ready at the beginning of class.
(notebooks, requested materials, homework turned in)
2. Treat everyone in the class in a respectful manner.
-practice patience and compassion.
-use no offensive language.
-allow others the opportunity to speak.
-think before you speak.
3. Respect the property of others.
-school and personal

Respect for people and property is very important and will be stressed in this class!

4. Remain seated in your designated seat until dismissed by me.
5. Listen and follow directions for all activities.
6. Mandatory compliance of all school rules.

Disciplinary Actions Taken by Teacher:

1. Verbal warning

2. Loss of participation and privileges.
3. 30 minute detention after school.
4. Phone call to parent or guardian.
5. Habitual problems will be referred to the Dean.

Citizenship:

Citizenship grades will be earned by the student for their actions during each of the four nine week grading periods.

O = A student that demonstrates exemplary behavior or citizenship. This would include a student that assists other students in being successful. As a student you promote a positive learning environment.

S = A student that demonstrates the proper motivation to be successful. Does not hinder the success of other students in the class.

N = A student that creates an environment that makes learning difficult for themselves as well as others.

You can receive a N for the following reasons.

1. Dishonesty (cheating on tests or assignments, includes copying)
2. Disrespectful of students, teachers, or substitutes.
3. Four or more tardies.

Citizenship will be awarded based on absences, number of tardies, and overall adherence to school and classroom rules.

The guidelines for this class will be used for the entire year. The expectations established in this outline are designed to make this a productive, enjoyable, and safe year. As a student you agree to meet, to the best of your abilities, all of the expectations established in this outline. As a parent or guardian you agree to support the expectations in this outline, with the understanding that they are meant to enhance the learning environment of the classroom. These expectations will be kept in the science section of your notebook at all times throughout the year, and should be used as a reference when questions arise. By signing below, you agree to support everything stated in this course outline, and you now know what to expect from this course. I promise this will be a great year!