

CHEMISTRY

Course Outline, Introduction, and Suggestions for Success

Luann Lee, Instructor

home phone 394-2703 (6:00AM-11:00PM)

email: luann@chemistar.com

<http://www.chemistar.com> for assignments and updates**TEXT:** Tzimopoulos, Metcalfe, Williams, Castka. *Modern Chemistry*, Second Edition. 1993**CONTENT:** Following are the topics we will be investigating/mastering/applying to life:

1. Basic Skills - SI measurement, lab safety and techniques, problem solving, computer skills
2. The structure of atoms and atomic theory
3. Development and use of the periodic table
4. Chemical formulas, reactions, and their equations
5. Stoichiometry - the quantitative part of chemical composition and reactions
6. Kinetic Theory
7. Phases of matter and heat
8. Chemical and physical behavior of gases
9. Solutions, mixtures, colloids, gels and their behavior
10. Chemistry of acids and bases
11. Basic organic chemistry

MATERIALS NEEDED:

three-ring binder (2-3 inch) and 8 tabbed dividers

bound theme book (college ruled is better)

scientific calculator – an inexpensive one is fine

12-inch ruler that is also marked in centimeters/millimeters

notebook paper, blue or black pens, pencils, hi-liter

a zippered pencil pouch that fits in your binder to keep everything in

EXPECTATIONS: Simply sitting through this class will guarantee you neither learning nor credit. To succeed, you will become an active learner. As a college-bound student, you will learn to take responsibility for the material presented in class. Presenting you with the information you need or the resources to find the information and showing you the skills you need is my responsibility. Learning to use your resources, practicing the skills until they are second nature, and sharpening your thinking is your responsibility.

ATTENDANCE: When you miss a chemistry class, you miss an activity that cannot be made up by reading about it or xeroxing someone's notes. Do not miss class unless it's absolutely necessary. It's difficult for both you and I to make up lab work. While you're gone, your partner must work alone. If you do miss class, refer to your syllabus for assignments while you're gone, and get materials from me ASAP or get them online from the syllabus on the class website <http://www.chemistar.com>. Feel free to call me at home or e-mail me with questions. You may have the number of days you missed school plus one to turn in or make up work, including labs. For example, if you miss 2 days of school, you have 2 days + 1 day (by 3:30 PM) to make up your work. After this time, work is considered late. Lab make-ups take place at 7:00 AM within 2 days of your return. Consideration may be given to unusual circumstances. See your student handbook for district attendance policies.

NOTEBOOK: Required for success in this course. You will need to refer back to work, so you will need the entire notebook with you every day. It will become very reassuring to know that all of your Chemistry stuff is in one place when a test day is approaching. The notebook itself will be scored and will count as one test grade each nine weeks. Refer to the notebook handout for setup.

CLASS NOTES: Successful notetaking is not just the process of copying down information found on a blackboard or overhead screen. Notes are not a rerun of information you will find in your textbook. Notes consist of messages you make to yourself to help you remember or understand information, and are not always copied from the board. Excellent notes, studied and/or rewritten until you understand them, are imperative if you wish to pass this class. Date and number all pages. This is enormously helpful in knowing what to study for a given test, or when lending notes to a friend.

STUDYING: Plan to spend 15 minutes – 1 hour each day figuring out what you should know. Do this by reviewing objectives, your notes, and the reading, working problems, or explaining the concept - to yourself on paper, or to someone else. By keeping current and mastering one day at a time, you will eliminate lengthy pre-test cram sessions. Ask about anything that confused you right away.

ASSIGNMENTS, ASSESSMENTS, AND GETTING HELP: Place your homework in the problem-solving section of your notebook. It will be examined and scored at my discretion.

On assignments, place your name, the date, the assignment prompt (page number, problem number, for example.) Correct problem-solving form must be followed. **If you need help at any time, please ask!** Remember, you're welcome to contact me at home or come by the classroom whenever you want. I'm at school between 7 AM and 4 PM most every day.

Periodically, optional group review sessions may be held before school or after school. Plan to attend these sessions if at any time you want extra help or just want to review.

CALCULATORS: Any non-programmable model that says "scientific" will be fine. **Be sure to save the manual.** You don't need an expensive model.

LABORATORY: You will learn much more working through a lab activity out with the opportunity to discuss your questions as you work than from reading or being lectured to, and besides, they are more fun. (Yes, we will blow stuff up.) Labs are the most fun when a thorough understanding of what you are doing lets you appreciate the sights, sounds (and smells) of chemical reactions. Along with the fun comes the responsibility of being prepared and businesslike. The lab is potentially a very dangerous place, and any attempt on your part (no matter how small) to deviate from the course safety rules will result in the suspension or **termination** of your lab privileges. Memorize the rules of conduct in your lab safety handouts and in the text, and **follow them. IF IN DOUBT, ASK!**

** If your lab notebook is unprepared when you arrive for lab, your preparation grade is zero.

A test of laboratory safety, procedures, and equipment must be taken and passed with a score of 100% before you will be permitted to begin any lab work. You may take the test as many times as necessary to pass, but remember that the longer it takes you to pass, the more lab work you will have to make up. Make-ups are before or after school, by appointment.

*If you miss a lab for any reason, it must be made up before school at 7:AM within 2 days of your return.

* If you have study hall during periods 2,3,5b,6,7, you may ask permission to attend that section also. This is helpful if you miss a lecture or need to hear something a second time.