

Northside Christian School Chemistry

GOALS:

1. To understand God's design of His complex atoms as related to their compositions, structure, properties, and the changes that matter undergoes.
2. Develop the skills necessary for laboratory techniques and procedures related to chemistry
3. Relate chemistry to everyday life, matter, and experiences
4. Master the math skills necessary for an accurate, qualitative and quantitative understanding of chemistry

TEXT: Chemistry, 3rd edition, Bob Jones University Press, 2009

CLASS NEEDS:

1. Separate spiral notebook for notes
2. Folder for handouts
3. TI Graphic Calculator (TI 83, 83 Plus, 83 Silver edition and graph link cable (now included with the calculators)
4. Bring your text book to every class

REQUIREMENTS AND GRADING:

1. Your grade for each nine weeks will be based upon a total point system from the activities above. Test grades will always be figured as a percent and will be worth 100 points. Because the activities and assignments offered during a grading period will vary, the breakdown and total points for a grading period will vary.
2. **If you are absent, it becomes your responsibility to:**
 - a. Get the missed notes from a fellow student/s as soon as you return – **you must ask. This is the number one problem of most students.** *After you copy the notes please don't hesitate to come to see the teacher for further explanation and understanding.*
 - b. Obtain any missed handouts, worksheets from the teacher – **you must ask**
 - c. Obtain an understanding for any assignments that were given while you were absent – **you must ask.**
 - d. **You must** make up and turn in any homework, quizzes, labs, worksheets, projects, test and quizzes
3. It is not my standard policy to have individual students retake test and quizzes because of a low test grade.
4. Students and parents can check your present grade using *Headmaster* online
5. I am always willing to help those who are seeking help. (Knock and it shall be opened unto you).
6. NOTE – Chemistry is the only course where the final exam is over the entire year. It becomes devastating if you get yourself behind.

STANDARD MAKE-UP POLICY: Adopted by NCS MS and HS fall 2008

1. The new grading program can provide a weekly report of missed assignments. This list will be posted in each class on **Mondays** showing students and assignments that must be made up. **More details to follow.**
2. **You must** turn in all homework, assignments, lab reports and make up quizzes, test, and lab experiment in the event of absence.
3. If you have a planned absence, you are required to fill out a planned absence form at least one week prior to the absence dates. You may obtain these forms from the office.
3. Added note – **Just do your work, please** – Yes, I can give HW notices, call Dad or Mom, give detentions, and talk to you concerning your lack of Christian character that is displayed by not doing your work or making up your work when you are required to do so. I want you to be successful in science and in your Christian life.

LABORATORY REPORTS – A lab report will be equivalent to 25 to 30 points. Typically lab reports are due several days after the completion of the experiment. A lab report is to be submitted by every student and should reflect the personal ability of each writer.

Grading will consist of:

- a. An appropriate title page (clarify your name, title, experiment, date, and list your partner's name),
- b. Neatness – if you can't write neat – type it. Use a ruler whenever possible.
- c. Evaluation the organization of the data
- d. Correctness of: math, labeling data, graphs, and units
- e. Accuracy of the results.
- f. In some cases, there are post-lab questions or additional exercises.
- g. When writing is necessary, it is graded as a writing assignment. (just like English)

PLEASE NOTE - Students helping another student to understand can be a great benefit, but copying another student's answers and calculations from ANY ASSIGNMENT is Biblically cheating, lying, and stealing and will dealt with accordingly. You always have the wonderful privilege of asking help from the instructor.

CHEMISTRY CONTENT

- **FOUNDATIONS OF CHEMISTRY**
 - **What is Chemistry**
- **MATTER**
 - **Classifications, Energy, and States**
- **MATH REVIEW AND MEASURING**
- **ATOMIC STRUCTURE**
 - **Historical Perspective, Electron Structure, Notations**
- **PERIODIC ELEMENTS AND TRENDS**
- **CHEMICAL BONDING**
 - **Bonding Theories, Types, Molecular Geometry**
- **CHEMICAL COMPOSITIONS AND REACTIONS**
- **STOICHIOMETRY**
- **GASES**
 - **Properties, Gas Laws**
- **SOLID AND LIQUIDS**

- **SOLUTIONS**
 - Dissolving Processes, Concentrations
- **CHEMICAL THERMODYNAMICS**
- **CHEMICAL KINETICS**
- **CHEMICAL EQUILIBRIUM**
- **ACIDS, BASES, AND SALTS**
 - Comparative properties, Equilibria, Neutralization
- **OXIDATION – REDUCTION**
 - Redox, Electrochemical
- **ORGANIC CHEMISTRY AND BIOCHEMISTRY**
- **MODERN MATERIALS**
- **NUCLEAR CHEMISTRY**

*For the invisible things of him from creation of the world are clearly seen, being understood by the things that are made, even his eternal power and Godhead; so that they are without excuse.
Romans 1:20*

. Please don't hesitate to call me or email me if you have any questions. For emailing, go to the Northside website at: <http://www.ncslions.org/faculty.asp> and click on my name.