Honors Chemistry
Enloe Magnet High School

August 2021
Volume 1, Issue 1

# Inside Room 2603

## A NOTE FROM YOUR TEACHER

*Dear Students,*

***Congratulations and Welcome to the start of a new school year. I trust that you had a good summer and we are going to have a great and innovative year. I look forward to working with each of you and watching you grow into inspiring young adults. Good Luck and remember that I have an open door policy, if you need help or have any problems, please feel free to share this information with me.***

*ttaylor7@wcpss.net*

http://ttaylorscienceclass.weebly.com/

## HONORS CHEMISTRY

Recommended prerequisite(s): NC Math 3 or concurrent enrollment in NC Math 3 .

Chemistry is the study of the composition and properties of matter. It provides an introduction to the theories concerning the structure of matter and includes mathematical problems that illustrate these theories. Laboratory experiences and demonstrations are integral parts of this course. The concepts and principles of chemistry are presented in greater depth and at a more rapid pace than in Academic Chemistry. Students perform extensive research, independent study, and laboratory work. Theoretical and mathematical relationships in chemistry are studied. This course is designed for the student with superior achievement (A or B) in Math II (H). Abstract thinking, problem solving, and application of facts and principles are emphasized. Honor students are expected to be independent learners who can move through the standard course of study at a faster pace so that some topics can be covered in greater depth. The major goals of this class are to build an understanding of the structure and properties of matter, regularities in chemistry, energy changes, equilibrium and kinetics.

Reference table (https://cdohs.buncombeschools.org/common/pages/UserFile.aspx?fileId=2178708)

## INSIDE THIS ISSUE



## SUPPLY LIST


**Students must bring these materials to class every day.**

- Graphing or scientific calculator
- 3 ring binder or folder
- Loose leaf notebook paper
- Composition notebook (without spiral bind)
- Pencils or pens (blue or black)
- Highlighter

## GRADING

**Class Codes:**

Google Classroom

*mb465fo*

Remind

*@tkjt*

**Assessment Details**

**Work will be assessed in 2 categories:** Summative Assessments and Learning Assignments

- **Summative Assessments:** Unit tests, lab practicals, lab reports, major projects. This will constitute **40%** of the quarter grade. Points for each assessment may vary within this category.

- **Assessments of learning:** Quizzes, short activities, lab sheets, small projects, Canvas assignments. This will constitute **60%** of the quarter grade. Points for each assessment may vary within this category.

**Tests**

Tests will be given at the end of each Unit. Test will cover one to two units at a time. Tests will be cumulative. Students are allowed to use Chemistry Reference Tables and calculators (if needed) for the entire test. Cell phones will be collected during test times and returned at the conclusion of the test. Any student that scores below a 60 on a test will have the opportunity to correctly complete an alternate assignment. If completed correctly the low test grade will be replaced with a new grade of up to a 70. Students will need to communicate with their teacher outside of regular class time to make an appointment. The final exam is a North Carolina state made exam. If a student fails a test; meet with teacher to set up recovery plan.

**Quizzes**

Typically a quiz and/or a test are generally given each week. Quizzes will cover information from the homework, the reading assignments, and example problems from class.

**Homework**

The purpose of homework will generally be to practice concepts learned in class. Homework assignments will be reviewed in class on the day they are due, therefore, except in the case of excused absence, late homework will not receive credit after 2 days. Strategies for problem-solving are stressed to enable students to be successful determining solutions to all problems they may The time required will vary greatly from student to student. Written work will generally require 20 to 40 minutes per night.

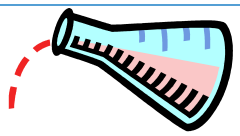
*Class Mantra: Students are expected to strive to reach their highest potential while actively engaging in the learning process*

**Each lab will require:**

- The formation of an hypothesis or hypotheses, based on in-class discussion of the presented problem or focus of each experiment
- Some labs are **open – ended** requiring design and description of an experiment
- A list of materials used
- A procedure describing how the experiment was conducted
- Collection of data and observations including graphs
- Calculations using the collected data
- Conclusions about the hypothesis
- Discussion of variance and error analysis

All of the above elements contained in a written report

## LABS



**A separate section in the student's binder for labs is recommended**.

**Your university may need to see this for future for placement.**

**A Note about academic honesty:**

Most in-class lab work will be done with a group, and students are encouraged to communicate and work within these groups to make sure everyone has the appropriate data and understands how to do the lab. **However: unless specifically assigned as a group project, all lab work is expected to be a student's own personal work. Copying or plagiarizing another student's graphs, calculations, and/or written responses is prohibited and will be considered academic dishonesty which will be addressed according to the student handbook. This includes "sharing" excel graphs and/or calculations typed in a word processing program. Each student should be making their own graphs and typing out their own calculations from scratch. The only "copy/pasting" allowed is for raw data.**

**Part of the lab grade will be student participation. If student is not helping and actively participating in the lab that student's lab grade will be reduced.**

# Course Sequence

**Course Sequence**

Unit 1 Atomic Structure and Electron Configuration
Unit 2 Periodic Properties of the Elements
Unit 3 Basic Concepts of Chemical Bonding
Unit 4 Chemical Nomenclature
Unit 5 Chemical Reactions
Unit 6 The Mole and Stoichiometry
Unit 7 Gases, Kinetic Molecular Theory and Phases
Unit 8 Solutions and Net Ionic Equations
Unit 9 Acids and Bases
Unit 10 Thermochemistry and Energy
Unit 11 Chemical Equilibrium
Unit 12 Nuclear Chemistry

- This course sequence is subject to change.

If you would like a detailed copy of the Essential Standards for Chemistry they can be found at:

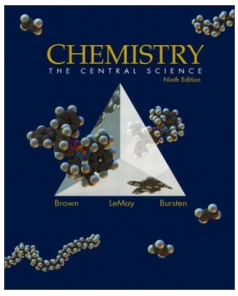
https://www.dpi.nc.gov/media/4055/open

http://www.ncpublicschools.org/docs/acre/standards/support-tools/unpacking/science/chemistry.pdf

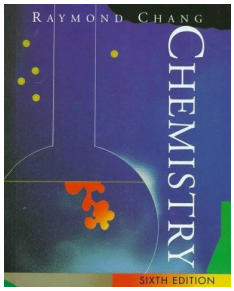
Textbook Resource references

An online textbook pdf version can be found on the class website.

The books below can also be used as a reference; they are available for classroom use.




Brown and LeMay




Chang

**Course Pacing**

Students are to be actively responsible for their learning and to advocate their needs. We will meet approximately 225 hours per week.

**TEXTBOOK**

Online textbook can be accessed from the website. This is a pdf version and can be printed or saved to your laptop/ computer hard drive.

## Grading Scale

| Percent* | Grade |
|---|---|
| 90-100% | A |
| 80-89% | B |
| 70-79% | C |
| 60-69% | D |
| 59% and lower | F |

# Class Work

## Makeup Work Policy

For approved absences (eg field trips, education opportunities, and planned absences) all makeup work must be scheduled with the teacher **before the absence**. For unexpected absences all makeup work must be scheduled with the teacher on their **first day back to school**. This includes any tests, quizzes, or other assignments due during an absence. **Missing work:** Missing work in the gradebook will be represented by 0 until the work in turned in and graded.

## Grade Recovery Contract

If a student is at risk of academic failure they will be put on a contract to meet objective requirements then a grade recovery assignment will be assigned. If a student at risk of failing the student should schedule an appointment with the teacher.

## Late Work Policy

Late work is strongly discouraged. This is an honors class and will be very fast paced at times and failure to stay aligned with assignments can be a detriment to success.

All missing work must be turned in one week prior to the end of the marking period. This is the Late Work Deadline. A grade of zero will be given after the late work deadline. There will be no exceptions to this policy. It is strongly encouraged that all students turn in assignments on time so this is never an issue. Late work (not turned in on time and not due to an absence) or an alternate assignment after the unit assessment should be submitted to the teacher within the specified time each quarter. Those dates are:

- ⇒ Quarter 1:October 18
- ⇒ Quarter 2: January 7
- ⇒ Quarter 3: March 21
- ⇒ Quarter 4: May 27

## Attendance

**Daily attendance is vital to success in chemistry.** Chemistry students are successful when they accept responsibility for their learning. When absent, students should check their calendars for assignments, obtain class notes, and check answers to homework problems with a classmate. The student must make an effort to learn the missed material on his/her own. Missing one class can prevent a student from being able to understand and/or participate in the next day activities.

Students who are not present for lab forfeit participation in the lab activity but are expected to obtain the data from their lab partners and complete the post lab assignment.

## Classroom Expectations

Participate in class activities – lecture/discussions, labs, group work etc. (no sleeping! – no using phone or laptops unless directed to do so.)

Come to class prepared to actively learn

Advocate for your needs (see me if you need help or if you have been absent)

Be respectful of the classroom and everyone in it.

Follow the rules as set forth in the Enloe student handbook.

Safetymatters

LAB SAFETY

Safety in the science classroom is of the utmost importance. Students will be required to read and sign a safety contract before participating in lab activities. Students that do not turn in this agreement will not be allowed to perform labs. Students not following this contract will be subject to disciplinary action and may be removed from the activity.


1. Expo Markers
2. Kleenex
3. Paper Towels
4. Nitrile Gloves
5. Hand Soap
6. Dish detergent
7. Disinfectant wipes
8. Sponges
9. Spray bottles
10. Distilled water
11. Paper towels
12. Plastic Spoons
13. Spray bottle cleaners/ disinfectant

Absence

Excused absence will follow policy listed Student Handbook

**Accommodations:**

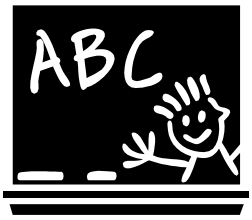
Any student who needs special accommodations during test time or otherwise should talk with me to explain the situation. I will do my best to accommodate each situation. Even if you have an accommodation on file, you should still talk with me, because the list I receive from the school is not always up to date.

## Are you up to P.A.R.?

Show you Professionalism, Positive Attitude and Responsibility by following class and school rules!

This will produce an effective domain conducive of learning. Whether you plan to enroll in higher education or enter the workplace these skills are transferable and beneficial to you!

## EXTRA HELP




Chemistry is a challenging rigorous subject which builds upon itself. Therefore, students are encouraged to seek outside help from other students, online resources or the instructor if they do not understand a concept covered. Students are also encouraged to work together on problem-solving exercises, which means helping each other to UNDERSTAND the problem. Copying another student's work will not help to learn the subject and is considered academic dishonesty.

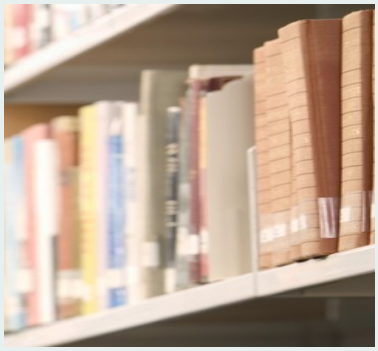
Tutoring is available from chemistry teachers or former students almost every day of the week. See the attached schedule on the reverse side. The only exception is Faculty Meetings on Monday once each month. Please be aware that students that use their class time effectively will be given priority over students that do not. In some cases teachers may refuse to allow students to come to tutoring if they are rarely focused in class.

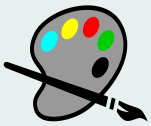
When a student needs help from the teacher, he/she must come with notes and specific questions.

See Science Tutoring Schedule (website, posted in classroom, distributed to students)

## FIRE DRILLS

Class must remain together, orderly and quickly exit the building through nearest exit. Students must locate teacher at meeting location for attendance.

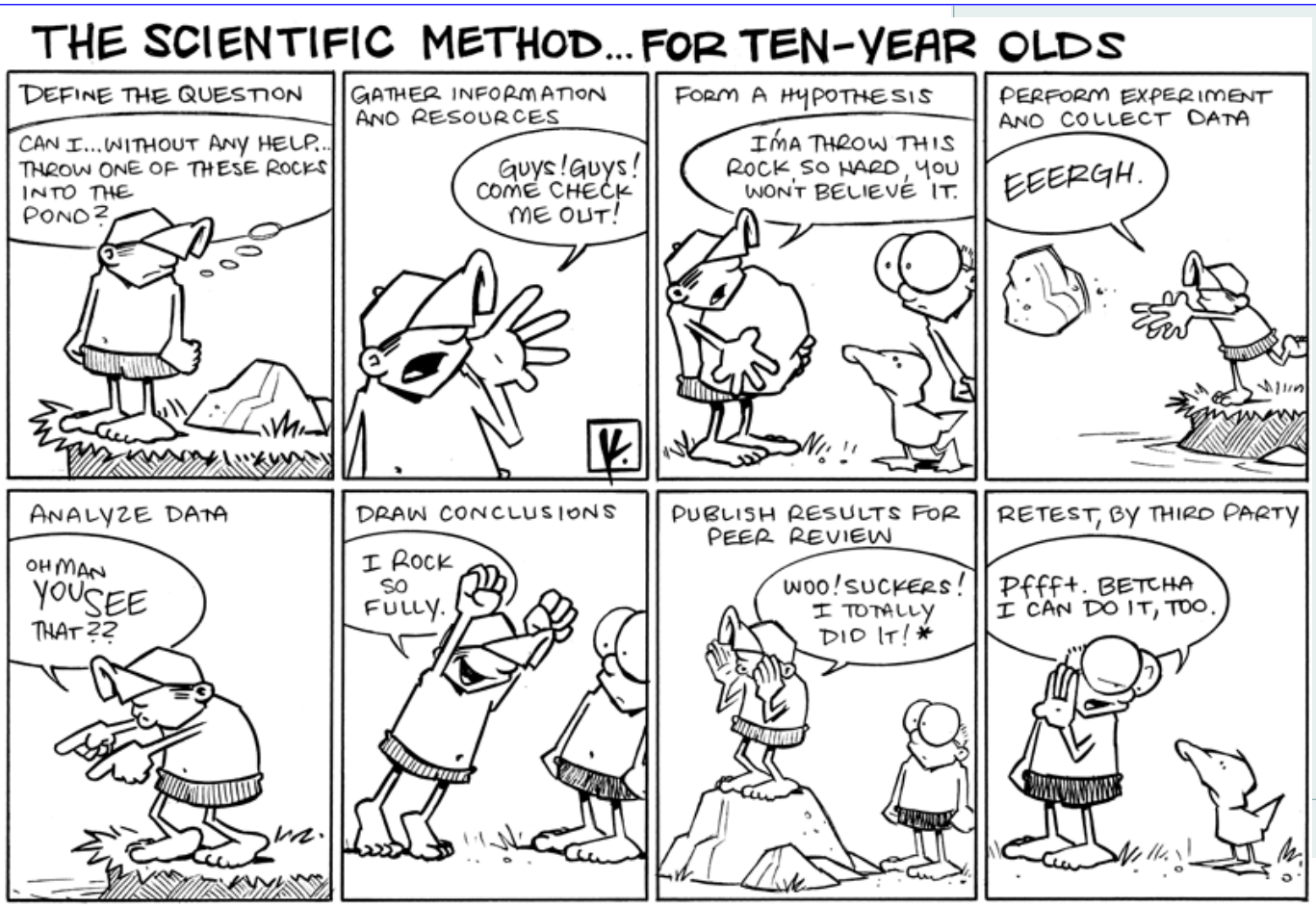




**Am I Blue?**

Student work will only be accepted when written in pencil, blue or black ink.

*Students are responsible for their own learning and to advocate their needs.*



# HOW TO BE SUCCESSFUL IN HONORS CHEMISTRY

**Stay Focused 100% of the time in class.**

As teachers we spend countless hours preparing effective lessons for our 90 (or so) minute periods. When students do not stay focused and do not use their class time effectively, they will start to see negative results in their grade. Before you try any of the interventions below, ask yourself what percentage of the class time you stay focused. Then ask yourself what you need to do to increase this percentage. If you are having trouble answering this question, ask your parents and your teacher for advice.

**Spend more time studying chemistry.**

Read over new notes later that day.

The website has a plethora of information for your use.

Look back over homework, classwork, warm-ups, and quizzes.

Read the section in the book dealing with that subject whether it is required reading or not.

**Develop new study skills.**

Flash card * Flow charts/graphic organizers *Book Markers *Highlight key points in notes *Acronyms

http://www.studygs.net/index.htm - provides suggestions for studying. If this website doesn't help, find another. There are many study skill websites available on the internet, just make sure you use one that is creditable.

www.Quizlet.com – a good website to use to help you make online note cards and study vocabulary terms all right in front of your computer. Its free to join!

**Video Lessons online**

Check out video websites online that can provide tutoring help for specific concepts.

www.khanacademy.org – an online resource providing videos for many subjects. You will have to search for the concept you have questions about but I've heard it is a very helpful website.

http://www.gpb.org/chemistry-physics/students/all# - another great online video website from the state of Georgia. Its content it very relevant to what we teach at Enloe.

www.youtube.com or http://video.google.com – There are some videos on these websites that could be helpful. Again you will have to search for the concept in question. Remember on these websites anyone can post anything so there is a greater chance of re ceiving misinformation.

**Parents**

Ask your parents for advice with study skills. Ask them about some chemistry stuff. You may be surprised at what they remember from their chemistry days!

**Form a study group**

They can be entertaining and academically rewarding. Study groups can be very helpful if everyone remains focused. I would recommend no more than 5 in a group. There is a difference between group work and cheating. If you have any questions about this let me know.

**Hire a tutor**

If nothing else seems to help, hire a tutor to get one-on-one help. Ask me for a list of chemistry teachers in the area for hire or call a local tutoring facility.

Do not panic, stick with it.

## Statement of Understanding

**I HAVE READ MRS. TAYLOR'S NEWSLETTER 'INSIDE ROOM 2603' CONTAINING GRADING CRITERIA, CLASS RULES, REQUIREMENTS AND POLICIES. IF I HAVE ANY QUESTIONS I WILL NOT HESITATE TO CONTACT MS. TAYLOR.**

_____

Print and Sign Student Signature

_____

Parent Signature Phone Number Best time to call

_____

Parent email