## Central Academy of Technology and Arts

## Course Description

Chemistry is the study of the structure and properties of matter and the changes it goes through. This is a rigorous course and students must be proficient in Algebra in order to succeed. There is a very strong correlation between students' ability to do well in Algebra and their performance in Chemistry. If you struggled in your math classes, please talk to me so that we can make sure you have the basic skills you need to do well in this class. Chemistry is a 1-semester class, and in order to cover all the material you must be willing to work inside and outside of class.

## Course Materials

Students are expected to bring the following materials to class each day.

- Pencil (better to use than pen when doing calculations) and notebook paper
- Calculator (A graphing calculator is fine if you already have one for math class, but any scientific calculator will do.)
- Completed homework
- Your best effort! Chemistry can be challenging and frustrating at times, so work hard and always try to do your best.


## Instructional Philosophy

The goal of the course is to provide students with a general background in chemistry that will lay the basic foundation for future AP classes or college courses. Instruction will be delivered mainly through lecture, in-class practice problems, and laboratory experiences. Students are expected to practice good note taking, work well with their peers on in-class assignments, and to apply their knowledge in the laboratory while following all safety instructions. Safety in the laboratory is very important and goofing off in lab will result in detention or a discipline referral as well as a zero on the lab assignment. All students will sign a lab safety contract at the beginning of the semester.

## Course Standards

In general, the areas we will cover this year include:

1. Introduction, Safety, and Data Analysis (7 days)
2. States of Matter (8 days)
3. The Atom (6 days)
4. The Periodic Table (6 days)
5. Chemical Bonding (9 days)
6. The Mole (6 days)
7. Chemical Reactions (9 days)
8. Stoichiometry (8 days)
9. Solutions/Acid and Bases (10 days)
10. Thermochemistry (8 days)
11. Equilibrium ( 6 days)
12. Nuclear Chemistry (4 days)

## Honors Differentiation

Chemistry HN is an honors level course. This course is also available in the Program of Studies at the College Preparatory level. Students earning credit for an Honors level course receive an elevated number of Quality Points for their Grade Point Average. Students choosing the Honors level course should be aware that this Honors level course will include:

- Required extension opportunities that are directly related to the Standard Course of Study. This includes additional content beyond that covered in the College Preparatory level.
- More challenging coursework and assessments. Students will be expected to demonstrate higher levels of understanding for grades.
- Projects and presentations will be more in depth.
- Students will have to focus and study regularly to master the content.
- The expectation that students can move through the coursework at an accelerated pace and students experiencing difficulty should quickly seek guidance from their teacher on how they can be more successful.


## Example of Honors Differentiation in Chemistry Honors Level Objective:

Chm 1.1.4: Explain the process of radioactive decay by the use of nuclear equations and half-life.

## College Prep Level Objective:

Chm 1.1.4: Explain the process of radioactive decay by the use of nuclear equations.

## Assignments

Assignments are to be completed by the assigned time on the due date. I do not accept late work!
You will make arrangements for missed work according to the school policy. I accept little responsibility for work that you have missed, since it is your responsibility to get your assignments and make sure they are turned back in to me in a timely manner.

## Assessment and Grading Plan

A variety of assignments contribute to the final six weeks grade in this course. The final letter grade is assigned according to UCPS grading policy. ( $A=100-90 \%, B=89-80 \%, C=79-70 \%, D=69-60 \%, F=59 \%$ or below.)

My grading policy is a percentage system. Each assignment will be scored out of $100 \%$. Homework and classwork will count $40 \%$ towards your grade and quizzes will count $60 \%$.

Homework and class work will be graded for accuracy. Quizzes will take place at the end of each unit to assess understanding and will be announced.

Make sure that you show all your work for every problem, including the formulas used, given information, and units. Partial credit may be awarded if your work shows that you were on the right track but ended up with the wrong answer.

The semester grade will be calculated as follows: $25 \%$ Fist grading period, $25 \%$ Second grading period, $25 \%$ Third grading period, $25 \%$ Final Exam. A grade of 1 in the gradebook indicates an assignment that can be made up and still receive full credit. A grade of 0 in the gradebook indicates an assignment that can no longer be made up for credit.

Students will be able to exempt the Honors Chemistry Final Exam if they meet the following criteria: a 90 average and 2 or less unexcused absences or an 80 average and 1 or less unexcused absences.

## Behavior

Classroom Expectations: (In addition to the UCPS and CATA rules)

- Come to class prepared.
- Always follow directions.
- Show respect for yourself, other students, and the teacher.

Consequences for inappropriate behavior:

1. Warning
2. Repeated warnings will result in referral to administrator OR direct referral if necessary according to Student handbook

## TARDIES TO CLASS

Consequences:
$1^{\text {st }}$ Tardy - Warning
$2^{\text {nd }}$ Tardy - Warning
$3^{\text {rd }}$ Tardy - Phone Call Home
$4^{\text {th }}$ Tardy -1 Day ASD
$5^{\text {th }}$ Tardy -1 Day ASD
$6^{\text {th }}$ Tardy -2 days ASD
$7^{\text {th }}$ Tardy -2 Days ASD
$8^{\text {th }}$ Tardy -3 Days ASD

## Online Learning Platform

Canvas: All assignments will be submitted on Canvas. Assignments can be submitted a variety of ways including, uploading files, typing into text boxes, and sharing Google documents/presentations. Individual assignments will indicate which method of submission on Canvas is expected. If students need a refresher or have questions, they can access the Canvas Student Guide for specific instructions. It is the student's responsibility to ensure assignments are submitted on time and to contact the instructor if there is a problem. The Canvas Learning Platform logs every student log-in on Canvas which provides teachers with a list of when students log-in to Canvas using their user id.

Canvas is used to grade assignments as well, however, the grades in Canvas, while accurate to that assignment, are NOT the teacher's gradebook. The teacher's gradebook includes categories of assignments that may be weighted differently and may include grades for assignments that did not use the Canvas Learning Platform. Therefore, students and parents should always check their child's true average on the Parent Portal on Powerschool.

## Resources

EmpowerED Family Portal - https://www.ucps.k12.nc.us/domain/2917

## Outside Help

As you can see on the syllabus, this class moves fairly quickly. You are encouraged to seek help early and often if you are struggling in this course. I am available before school if you need help. I am also available after school by appointment only.

