Chemistry Syllabus Central Academy of Technology and Arts

Mr. Daniels Fall 2017

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. Let me know if you need to borrow a calculator.)
- 3-ring binder for recording lecture notes
- 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. The Atom (6 days)
- 3. The Periodic Table (6 days)
- 4. Chemical Bonding (9 days)
- 5. The Mole (6 days)
- 6. Chemical Reactions (9 days)
- 7. Stoichiometry (8 days)

- 8. States of Matter (8 days)
- 9. Solutions/Acid and Bases (10 days)
- 10. Thermochemistry (8 days)
- 11. Equilibrium (6 days)
- 12. Nuclear Chemistry (4 days)

Further information on the course standards can be found at the web address below: http://www.ncpublicschools.org/docs/acre/standards/new-standards/science/chemistry.pdf

Assignments

Assignments are to be completed by the beginning of the block 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 and tests will count 60%.

Homework and class work may be collected and graded either for completion or accuracy. At times, these assignments will not be graded, but we will go over the answers in class. Quizzes will take place periodically to assess understanding and may be announced or unannounced. Tests will be scheduled at the end of every other unit.

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

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

Online Learning Platform

<u>Canvas</u>: Some assignments will be submitted on our new "learning platform," 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 <u>Canvas Student Guide</u> 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 here by 7:30 AM Monday – Thursday if you need help. I am also available after school by appointment only.