**Ridgeview High School**

**Mr. Tyler Mullins**

**Room 301**

**Contact Information:**

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* Office Hours: Monday-Friday 9:40 A.M - 11:10 A.M.

\*or by appointment

\*I can also be reached by email outside of normal office hours between 4PM-7PM Monday-Friday

**Course Description:**

* Welcome to the amazing world of chemistry! Chemistry is all around us from the air that we breathe to the water that we drink. This course will explore the study of the composition of matter and the changes that matter undergoes. Students will focus on several foundational concepts such as the periodic table, atomic structure, chemical formulas and names, balanced equations, molar relationships, thermodynamics, and the kinetic theory. Students will be performing laboratory exercises that correlate with the material being focused on during the semester. Students will be quizzed and tested over material on a regular basis during the semester. During the latter part of the course, specific emphasis will be focused on course review for the Virginia Standards of Learning end of course examination. So be prepared to be inquisitive and use your critical thinking skills to become scientific investigators as we embark to study the composition of matter and how manipulation of that matter affects life on Earth.

**Course Objectives (Standards of Learning):**

* CH.1 - The student will demonstrate an understanding of scientific and engineering practices.
* CH.2 - The student will investigate and understand that elements have properties based on their atomic structure. The periodic table is an organizational tool for elements based on these properties.
* CH.3 - The student will investigate and understand that atoms are conserved in chemical reactions. Knowledge of chemical properties of the elements can be used to describe and predict chemical interactions.
* CH.4 - The student will investigate and understand that molar relationships compare and predict chemical quantities.
* CH.5 - The student will investigate and understand that solutions behave in predictable and quantifiable ways.
* CH.6 - The student will investigate and understand that the phases of matter are explained by the kinetic molecular theory.
* CH.7 - The student will investigate and understand that thermodynamics explains the relationship between matter and energy.

**Texts:**

* Sarquis, M., & Sarquis, J. L. (2012). *Modern Chemistry*. Orlando, Florida: Houghton Mifflin Harcourt Publishing Company.
* Various supplemental texts as necessary

**Class Expectations:**

* Be respectful of others
* Give your full attention during class
* Give your best effort every day
* Actively participate during class
* Turn in assignments on time
* Be prepared for class each day
* Take responsibility for yourself and your work
* Keep your cell phone placed in the holder during class
* Bring your Chromebook to class everyday
* Follow all school safety rules and procedures
* Follow all lab safety rules and procedures
* Do not be afraid to ask questions

**Class Procedures:**

* Beginning of class:
  + Use the first 5 minutes to complete the daily bell work assignment posted on the board. This assignment should be completed in your binder and will be graded at regular intervals during the semester.
* Bathroom breaks:
  + One boy and one girl will be allowed to take a bathroom break at a time. When those students return, another boy and girl will then be allowed to leave; students will be given one bathroom break per class; please try to limit bathroom breaks so instruction is not interrupted.
* Class dismissal:
  + Students will remain in their seats until dismissed
  + Students are dismissed from class by the teacher; not by the bell
* Online learning platforms:
  + Students will use online learning platforms (Google Classroom, Mastery Connect) throughout the semester for various assignments as needed, but it will not be used on a daily basis.
  + I will provide instructions as to when we will use an online platform.
  + Please bring your Chromebook to class every day!
  + Please leave your Chromebook turned off and put away unless we are using them for instruction.
* Homework/Daily Assignments:
  + Classwork and homework assignments will be submitted either on Google Classroom or on paper depending on the assignment. I will provide instructions as to how you will submit homework assignments.
  + Assignments must be turned in by the due date to receive full credit unless other arrangements have been made with the teacher
  + Please write the due date for the assignment at the top of the page when you receive it. This will help you remember when your assignments are due.
  + Assignments submitted late will have 5 points deducted for each day late
  + Assignments turned in more than 5 days late will not be accepted, and a zero will be given for the assignment
  + Paper homework assignments should be placed in the “Submitted Homework” folder at the beginning of the class period that it is due.
* Make-up work/Missed class:
  + If students are unable to attend class during the regular class period, they should contact the teacher to develop a plan to make up the lesson. It is the student’s responsibility to contact me about make-up assignments.
  + Paper make-up work assignments will be placed in the “Make-up Work” folder at the front of the class. Please pay attention to the due date shown at the top of the assignment. Make-up work on Google Classroom may be accessed from the class page.
  + Students will have up to 5 days to turn in missed assignments
  + Assignments turned in after 5 days will not be accepted, and a zero will be given for the assignment
* Instructional Time/Note-taking:
  + Students will be given a notes handout for each set of PowerPoint presentations. These handouts will have partially completed notes and students will complete the missing sections as we go through the presentation. These notes will serve as your main study resource for that unit.
  + Please keep up with your notes by placing them in your binder.
  + If you are absent, it is your responsibility to get the notes from someone who was present in class that day. Let me know if you have trouble getting the notes from a classmate.
  + The PowerPoint presentations will not be posted for student access.
* Lab safety precautions:
  + Follow all safety rules and regulations while in the lab area.
  + Students should handle all lab equipment and materials with care.
  + Students should be familiar with the emergency eye wash station and shower and where to locate the first aid kit and fire extinguishers.
  + Food and drinks are strictly forbidden in the lab area.
  + Horseplay is strictly forbidden in the lab area.
  + Always be conscious of what you are doing in the lab and follow all instructions closely!
  + Always clean up the lab area and equipment after completing lab work.

**Electronic Devices Policy:**

* **Cell phones should be turned off and put away during class in the holder at the front of the room without any exception.**
* **Chromebooks should not be used during instructional time unless permitted by the teacher.**
* Students may possess or use personal electronic devices on school property, on school buses, or at school-sponsored events according to the following guidelines:
  + Before school until the beginning of the school day
  + During a student's lunch period
  + During class changes
  + After school
* Cell phones or other personal electronic devices with earphones, ear pods, and headsets must be turned off or silenced and stored out of sight during the entire instructional block in classrooms except where deemed medically necessary by the school administrator.
* Any cell phone or other personal electronic device that rings or vibrates at a prohibited time or location is considered in use and will be considered a violation of this policy.
* Violating the cell phone policy in school policy will result in the following consequences:
  + Classroom- Teacher warning
  + 1st Offense: Office warning
  + 2nd Offense: 1 day ISS \*Phone is left in office
  + 3rd Offense: 2 days ISS \*Phone is left in office
  + 4th Offense: 1 day OSS
  + 5th Offense: Disciplinary Committee
* Personal electronic devices may not be used to cause any disruption in the educational process or for unethical or illegal purposes. Prohibited uses include, but are not limited to:
  + Cheating on assignments and/or tests,
  + Harassing or bullying others,
  + Taking or distributing unauthorized photographs or recordings of other people
  + Personal electronic devices may not be used to access any obscene, threatening or otherwise inappropriate material via any form of electronic communication.
  + Live streaming or social media posting during the school day is not allowed.

**Materials:**

* Pen or pencil
* Notebook dedicated solely to this class
* Large 3 ring binder
* Textbook (as needed; will be provided)

**Attendance:**

* Daily attendance is required and expected. Students are responsible for making up all work that is missed due to an absence. Please refer to the student handbook for the DCPS attendance policy. Students should turn in an excuse for absences. Each unexcused absence will reduce the nine-weeks average by one point. Three unexcused tardies or check-outs will reduce the student’s nine-weeks average by one point.

**Grading:**

* Final grades will be determined as follows:
  + Exams/quizzes: 35% of each grading period
  + Participation: 10% of each grading period
  + Homework: 40% of each grading period
  + Notebook: 15% of each grading period
* Grading scale:
  + 90—100=A
  + 80—89=B
  + 70—79=C
  + 60—69=D
  + 59 or below=F

**Outline of Course Units:**

1. Unit 0-Introduction to Chemistry Lab
2. Unit 1-Introduction to Chemistry
3. Unit 2-Chemistry Calculations and Dimensional Analysis
4. Unit 3-Atomic Structure and Mole
5. Unit 4-Nuclear Chemistry
6. Unit 5-Light and Electron Configuration
7. Unit 6-Periodic Table and Periodic Trends
8. Unit 7-Bonding
9. Unit 8-Nomenclature
10. Unit 9- Percent Composition, Empirical and Molecular Formulas
11. Unit 10-Chemical Reactions
12. Unit 11-Stoichiometry
13. Unit 12-States of Matter
14. Unit 13- Gas Laws
15. Unit 14-Thermochemistry
16. Unit 15-Solutions, Acids/Bases

**Whenever Engaged In A Laboratory Experience:**

* **Do** wear clothing that demonstrates your role as a student of chemistry. When engaged in laboratory activities, tie back long hair, secure loose clothing, and remove dangling jewelry.
* **Do** remove headwear when you enter the room. *(things like hoodies, things that will be a potential combustible)*
* **Do** use correct grammar and appropriate words.
* **Do** leave all food and drink outside of the classroom. **Having food and beverages inside of a classroom-laboratory is a violation of school policy, safety procedures, and Virginia state law.**
* **Do** wear goggles at **ALL** times when engaged in a laboratory experience. This is consistent with safety procedures and Virginia state law. If a student is discovered not wearing goggles during a laboratory experience, he/she will not be allowed to complete the laboratory experience and will receive a grade of zero.

***Remember: It’s all fun and games until someone loses an eye!!!***