**Foundations of Chemistry**

**Clayton High School**

**2022-2023**

**Instructor: Mrs. Sarah Falkoff**

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**Course Description, Requirements, Expectations, Grading**

***I.  Course Overview***

What is the nature of matter? How does matter change? Why does matter change? How do changes in the world around us affect our lives? How does one system affect another? Students will investigate these questions and others through various “hands-on” and written experiences as they explore how science is relevant to daily life. Students will develop an awareness of the potential and limitations of science and technology. Activities include reading, writing, discussion, laboratory activities, laboratory reports, and student projects. Students will frequently work together in teams. Critical thinking (the ability to carry out systematic thought processes in making decisions and solving problems), inquiry (solving problems through scientific investigation), science ethics, and the nature of science are stressed in this class.

***II.  Materials Needed***

1. You must have a google drive folder designated for chemistry and organized by topic. If you prefer a spiral notebook for our notes, that is fine. Many days, you will be asked to take handwritten notes. Please, no composition books.
2. Safety goggles will be checked out to you at the beginning of the school year. Please bring them every day to class!
3. Your CHS Chromebook. You must bring this **charged** every day to class to access google classroom.
4. Writing utensils -- #2 pencils, a good eraser, a ruler, and pens (at least 1 blue and 1 black ink pen).
5. Scientific electronic calculator and batteries (if needed) (graphing calculators are fine)

\**See student supply list for a more detailed list of supplies*

***III.  Course Outline***

The following is a brief outline of this course: (the order of topics is subject to change)

1. **Introduction to Matter & Energy & The Metric System of Units**
2. **Atomic Structure**
3. **The Mole**
4. **Names and Formulas of Chemical Compounds**
5. **Chemical Reactions**
6. **Stoichiometry**
7. **The States of Matter**
8. **Gases and Their Behavior**
9. **Thermochemistry and Changes of State – Qualitative & Quantitative Considerations**
10. **Electron Configuration and The Usefulness of the Periodic Table**
11. **Chemical Bonding, Molecular Geometry, & Molecular Polarity**
12. **Introduction to Organic Chemistry & Polymers**
13. **Equilibrium, Solutions, Acids, Bases, & pH**

## ***IV.  Grading***

**A.  Grading Scale:** Each student's semester grade will be determined according to the following

grading scale.

**A+: 98%-100% A: 93%-97%  A-: 90%-92%**

**B+: 87%-89% B: 83%-86%  B-: 80%-82%**

**C+: 77%-79% C: 73%-76%  C-: 70%-72%**

**D+: 67%-69% D: 63%-66%  D-: 60%-62%**

**F: 50%-59%**

**M: 49% Missing and CAN be made up**

**FM: 48% Missing and can no longer be turned in**

**INS: 0% Insufficient evidence provided to enter a grade**

**P or ✔: Pending, grades have not been entered yet by the teacher**

These grades will be based on scores received on lab reports, projects, quizzes, tests, and

the final exam.

**B.  Description of Grading Procedures:**

*1.  Grade Opportunities:* All assignments in PowerSchool will be labeled as summative or formative assessments. In order to receive credit for the course, a student must complete **all** unit assessments and 5 lab reports.

Summative Assessments: Tests, quizzes, and/or projects will be given at the end of each unit.  Quizzes, both announced and unannounced, will be given periodically.  Each semester will conclude with a cumulative final exam.  Some projects may be placed in this category depending on the complexity of the project. Students will always have the option to complete a test or quiz retake or test corrections after a discussion has occurred with the teacher.

Lab Reports: One of the most important aspects of this course is the lab portion of the course. You will learn a proper lab report format and will use this format to write your own lab reports on google docs and submit them on google classroom or write them by hand and submit them in person. Your reports will be graded for format, organization, accuracy, and neatness. Just as with tests, quizzes, and projects, students will be able to resubmit lab reports to demonstrate their mastery of the task and knowledge of the subject matter.

1. Formative Assessments (Classwork/Homework): This is to provide practice for the summative assessments. All assignments will be due on the assigned due date.  Each student should maintain a planner or calendar in order to keep up with assignment due dates.  Some projects may be placed in this category depending on the complexity of the project. Keep in mind that the purpose of homework and other similar assignments is to practice as you prepare for the major evaluation (test).  It will be looked at for completion and will be discussed during class time but will not be part of the course grade.
2. *Absences:* If you are absent, it is ***your*** responsibility to obtain missed notes and assignments, make up the work you missed, and get caught up. You can check the absent sheet by the door and check the extra papers folder for missed in-class assignments or work. Get notes that you missed from others in your class. After you have read through them, ask me if any clarification is needed.
3. *A final note on grading:* Please note that all summative assessments will be graded not only for completeness and accuracy, but also for spelling, punctuation, grammar, and neatness.  Please take pride in your work and check it over with spell check and Grammarly. All assignments must be completed in pencil or black/blue ink, or typed and submitted on Google Classroom. All assignments will be entered in PowerSchool and grades are constantly updated throughout the school year.

**\*\*\*You and your child can view your child’s progress online through PowerSchool or on your phone through the PowerSchool app. Anytime that you would like a progress report or grade update, feel free to email or call me and I will be happy to send you one!\*\*\***

***V.  Classroom Behavior Expectations***

The purpose of school is to receive an education.  Anything that interferes with that purpose cannot and will not be tolerated in this class.  The following rules have been drawn up because all students need to know what their boundaries are, and what the consequences of exceeding those boundaries are.  As your instructor, I have the right and the authority to discipline whenever necessary in a fair, firm, and consistent manner. Please note that all rules outlined in the student handbook will be observed in this classroom.

*\*If at any time for any reason we become a virtual classroom, I will still expect you to attend and be prepared for class when it is held and still follow all behavior and classroom expectations.*

**A.  Classroom Rules**

* 1. *Be respectful of yourself, others, and property. I will do the same!*
     1. Express yourself positively.
     2. No cruel teasing or put-downs, no rude noises or gestures, no foul or abusive language.  Respect one another.
     3. I will do my best to respect each of you.  I fully expect you to respect my position as your instructor.  If you have a problem with a decision I have made, please approach me before or after class.  Do not make a scene.
     4. When involved with a small group or whole-class discussion, pay attention to whoever has the floor.
     5. Follow the teacher's instructions.
     6. There are no dumb questions: if you have a question, ask me!
     7. Do your best to maintain a positive attitude and a sense of humor.
     8. Students who choose to detract from the learning environment of others will be addressed swiftly. We all must respect each person’s right to learn!
  2. *Make every effort to be on time, prepared, involved, and always do your best.*
     1. Bring required materials to class every day: notebook, textbook, calculator, pencil, and pen.
     2. Work hard from the start to finish of each class.
     3. You are dismissed from class only when I have dismissed you.
     4. You have 3 "free" bathroom breaks each quarter, to use at your discretion.  *Each* excess bathroom break will result in a tardy.

\*Note: Coming to class early and placing your book bag on your desk so that you can run to the bathroom, does not excuse your tardiness.

* + 1. No make-up work will be given for unexcused absences.
  1. *Be safe and healthy.*
     1. Follow the teacher's instructions while in the laboratory.  Ignoring the teacher's guidelines can result in injury to yourself or others.
     2. Eat healthy foods, and get enough sleep.  Do not try to catch up on your sleep in this class.  Sleeping in class will not be tolerated. In my class, you may feel free to drink bottled water (the bottle must have a lid and may not be brought back into the lab area, but no food or other drinks please (this includes gum and candy)!
  2. *NO cell phones, iPods, or other portable electronic devices while I am teaching!!!!!*
     1. Cell phones must be put away in a backpack or purse and out of sight throughout the class period. They must also either be turned off or on silent mode during class.
     2. If there are circumstances or situations in which you will be expecting a very important call, please let me know and we will work something out.
     3. Don’t use iPods, MP3 players, or CD players while I’m teaching! Put them away and out of sight before the bell rings!
        1. There will be times where you will be allowed to listen to the music of your choice at a reasonable volume during classwork/study time, so make sure you have headphones, earbuds, AirPods, etc. with you.
  3. *Sharpening Pencils: NEVER GET UP WHILE MRS. FALKOFF IS TALKING!*
  4. *Trash: NEVER GET UP WHILE MRS. FALKOFF IS TALKING!*
  5. *Nurse’s passes: SEE ME IF YOU ARE NOT FEELING WELL, AND I WILL GIVE YOU A PASS TO THE NURSE.* Please do not abuse this privilege.

1. **Assertive Discipline Plan** -- If a student chooses to break a classroom rule:

Step 1 (first violation): warning (written or verbal)

Step 2 (second violation): detention, parents contacted

Step 3 (third violation) referral to principal's office,

parent conference

Step 4 (fourth and repeated violations) removal from class

***VI. IMPORTANT INFORMATION FOR STUDENTS AND PARENTS:***

Mrs. Falkoff sends out occasional class work reminders, test reminders, and other class updates via PowerSchools. Please verify that your email address is correct in PowerSchools. Mrs. Falkoff uses Google Classroom to post assignments, notes, reviews, etc. Please make sure that you have joined the correct Google Classroom for your class period.