

Google Classroom Code: _____

Chemistry 101

Course Description:

Chemistry is a college-prep, laboratory-based science class designed for **10th- 11th grade high school students taking a Regents Exam in June**. This course emphasizes chemical principles, which are deduced from experiments performed by the student. The principles include: energy, rate and equilibrium, characteristics, chemical periodicity, and chemical bonding in gases, liquids, and solids. Additional topics may include: the history of chemistry, biochemistry, qualitative chemistry, and research projects. Knowledge will be gained through reading, homework, in-class instruction, models, and internet research. The students will apply their understanding of scientific theories to laboratory experiments and projects to demonstrate higher-level thinking. This course fulfills graduation requirements and qualifies for college entrance requirements for laboratory science.

Course Goals

1. Demonstrate proficiency and fluency in communication to meet the literacy demands of the global community.
2. Use technology effectively and responsibly.
3. Apply effective and efficient strategies for gathering information and materials, thinking critically, and solving problems.
4. Demonstrate respect for one's self, and strive to contribute to the success of others.
5. Demonstrate the ability to work on homework and laboratory assignments independently.
6. Demonstrate the ability to meet homework and lab report deadlines.
7. Demonstrate good homework habits by working on new material covered on a nightly basis.
8. Apply chemistry concepts and synthesize connections among concepts

Required Class Materials

1. Science notebook
2. Binder
3. Pens
4. Pencils
5. Calculator

Classroom Guidelines

- 1) Be in your assigned seat and work on Do Now
- 2) Have all required materials every single day.
- 3) Treat your classmates and teacher with dignity and respect.
- 4) Follow directions the first time they are given.
- 5) Follow all rules and procedures mandated by MECA.
- 6) Complete the Exit ticket at the end of the period

Attendance and Absences:

Attendance will be taken daily and all scholars are expected to attend every class and lab. If you miss class or lab **you are responsible for what you missed**. Make-up homework will be due the day after a scholar returns from an absence.

Grading

Tests and Quizzes (35%)

Due to this course's termination resulting in a regent's examination, a heavy emphasis has been placed on exams and quizzes.

Scholars will complete their assessment silently. All questions will be directed to Ms. Danowska. A failure to do so may result in the loss of full or partial credit.

- ❖ Make-up quizzes are available to all scholars.

Lab (20%)

The lab component of Chemistry is mandated by the state of New York. Scholars are obligated to complete 1200 minutes of lab work to be considered eligible to sit for the regent's exam in June.

- ☞ If a scholar does not complete 1200 minutes of lab work during the year a failing grade will result and that scholar must attend summer school.
- ☞ A separate pass/fail lab grade will also appear on each report card.
- ☞ If a scholar misses lab due to an excused absence they must make lab up the same week to receive credit.

Classwork/Participation/Attendance (30%)

Official Grading Policy: In Chemistry, scholars should strive to achieve a grade that shows their Mastery/Proficiency on or Test. If scholars get grades in the Developing/Undeveloped categories then Retake Mini-Assessments will be available to them.

Mastery	90 – 100%
Proficient	80 – 89%
Developing	75 – 79 %
Undeveloped	0 – 74%

Homework (10%)

If you are having trouble with a homework assignment, you can do 3 things in the following order:

- 1) Receive after/before school support.
- 2) Call or text at least 3 friends from class.
- 3) E-mail Ms. Danowska at pdanowska@meca-nyc.org

Honesty:

Plagiarizing and copying assignments (including labs and homework), or cheating on tests and quizzes will not be tolerated. All work is to be done individually. Failure to do so will result in a parent call or conference and a “zero” on the assignment. Repeated offenses will result in failure of the course.

Unit and Lab Snapshot*

*Labs are due to change due to the availability of materials and time in class. Labs may take a day or weeks. Units will stay in this order unless changes are needed.

Units	Topics
Atomic Structure and Properties	<ul style="list-style-type: none">- Atomic Model of Matter- Identifying Elements- Components of Atoms- Identifying Ions and Molecules- Lewis Dot Structures- Valance Electrons
Compound Structure and Properties	<ul style="list-style-type: none">- Ionic Bonds- Covalent Bonds- Intramolecular Forces- Lewis Dot Structures- Writing and Naming Chemical Formulas
Properties of Substances and Mixtures	<ul style="list-style-type: none">- Periodic Trends- Polarity- Intermolecular Forces- Resonance Structure- Molecule Shape and VSPER
Stoichiometry - Longest Unit	<ul style="list-style-type: none">- Balancing Chemical Equations- Formula Mass of Substances- Moles and Molar Mass- Conversions- Percent Yield- Limiting Reactions
Acid and Bases Reactions	<ul style="list-style-type: none">- Definitions of Acid and Bases- Titration- pH and pOH- Conjugated Acid - Base Pairs- Neutralization- Hydrolysis
Reduction and Oxidation Reactions	<ul style="list-style-type: none">- Defining Reduction and Oxidation- Redox Reactions- Electrochemical Cells- Balancing Reactions- Electroplating
Kinetics and Equilibrium	<ul style="list-style-type: none">- Chemical Kinetics- Rate of Reactions- Types of Equilibrium- Le Chatelier Principles

I, _____ will accept nothing less than my and my classes absolute B.E.S.T. I have reviewed the Chemistry classroom policies, procedures, and expectations and agree to uphold them to the best of my ability. I will not waste this opportunity to attain an excellent education and take a major step towards graduating from college.

Scholar Signature

Date