Honors Chemistry

Course Description:

Welcome to Honors Chemistry! This is a rigorous, laboratory-based science course that is designed to prepare you for further scientific study in Chemistry. If you are a student who studies daily, completes all assignments and practices skills, and asks clarifying questions, you should be successful in this course. If you are a student who memorizes without trying to understand, you will find this course difficult. Investigation of science concepts will be fun and exciting, so get ready to love chemistry.

Textbook and Supplemental Resources:

- *Required Online Textbook (provided online):*
  Chemistry Matter & Change, McGraw-Hill Education.
- *Supplemental Resources (provided online):*
  Smoot, Robert and Smith, Richard. *Solving Problems in Chemistry*, Charles E. Merrill Publishing.
- ***Website: www.jpsaos.com/pittenger/honorschemistry.htm***

Required Materials:

- 3-ring binder with pockets for storage (2-inch ring diameter or larger recommended) and three dividers to separate class notes/activities, homework, and returned labs
- Spiral notebook for laboratory assignments; ideally a 5-subject, college ruled notebook with perforated sheets.
- Scientific calculator
- Black or blue pens
- Highlighter
- #2 pencils

Class Policies:

- Be sitting in your seat (or logged into class) and working on the assigned "Warm-up" at the start of class.
- Enter the class quietly so that class is not disturbed. Lateness will result in an appropriate consequence.
- Be engaged in your work from the moment you sit in your seat (or logged into class) until your teacher dismisses you.
- In class: Feel comfortable to move about the room to dispose of trash, sharpen a pencil, or grab a tissue. Just do so inconspicuously. Regular lavatory use during class time is a larger disruption to the teaching and learning process. Try to go during lunch, study hall, or in between classes or wait until you are working independently on an assignment so as not to disrupt the flow of class.
- In class: Refrain from bringing food, drink, or gum into the science classroom. It is unsafe to consume anything in a laboratory setting due to the nature of the materials that we use regularly.
- Be considerate of all the other people in the class. Realize that everyone has something valuable to contribute and should be heard. Make sure to raise your hand or type a question into chat and wait until you are called upon before you speak so everyone can participate.

Student Responsibilities:

- Attendance, punctuality, courtesy, and respect are expected and noticed at all times.
- Lab safety is of the utmost importance. Failure to follow safety policies will be treated very seriously.
- In class: Keep a spare pair of sneakers and socks in your locker to have in case you wear open-toed shoes on lab day and must change your footwear.
- Take responsibility for yourself--including your words *and* your actions.
- Take an initiative for your learning. What you get out of it is directly proportional to the effort you put into it.

Cheating Policy:

- Cheating will *not* be tolerated and will be treated in accordance with the policy outlined in the student handbook.
- Cheating includes but is not limited to: copying homework or lab assignments, talking during an exam, looking at someone's paper during an exam, sharing an online document.

Course Policies:

Grading

→Marking period grades will be calculated as follows:

Labs/Activities/HW 30%

- Laboratory experiments can be found online.
- Students are expected to use a piece of carbon paper to pre-lab each experiment before the designated lab day.
- Students who are present for lab but do not have a completed pre-lab, will not be permitted to participate in the lab experiment and will not earn credit for the pre-lab.
- Students will submit a carbonless copy of both their pre-lab and data at the end of the lab period.
- Post-lab reports are due at the beginning of the period on the designated day. Students are expected to put labs in the designated area when they enter the classroom.
- Any daily homework that is submitted late will be subject to a 50% late penalty. Any larger projects that are submitted late will be subject to a 10% penalty per day late.
- Homework will either be randomly collected and graded or quizzed upon. Remember it is in the students' best interest to complete all of the homework questions so you are prepared for the exams and quizzes (announced or unannounced).
- Any work submitted after the due date will result in a lower grade (10% per day). Work submitted more than 5 days (1 week) after the due date will result in a grade no higher than 50%.

Quizzes 20%

- Quizzes can be multiple choice or free response (mathematical or essay)
- Homework quizzes & Lab quizzes may or may not be announced.
- Chapter quizzes will be announced.
- Any online quizzes not completed by the due date, will result in a lower grade (10% per day). Quizzes completed more than 5 days (1 week) after the due date will result in a grade no higher than 50%.

Exams 40%

- Exams will include material from multiple chapters.
- Exams will be similar to quizzes in format and can include multiple choice and free response.
- Exams will be announced.

Quarterly Exam 10%

- Will take place at the end of each marking period.
- Will consist of all multiple choice questions from all the material covered during the respective marking period.

Make up Work

If you know that you will be absent (field trips, doctor appts., etc.) please schedule any make ups with your teacher *before* the day of the scheduled absence. Most lessons will be recorded, so you can watch the lesson at your convenience.

Exams/Quizzes

- Students who are absent must schedule a make up with their teacher at the earliest possible convenience.
- Make ups will be a different version than the original.
- Students who are absent the day before an exam/quiz are still expected to take it as scheduled with the class.

Labs

- Students who are absent for a lab are still expected to have the pre-lab done as scheduled. The actual lab experiment must be performed at a make-up session that is scheduled with the teacher or watched via a link provided by teacher in a timely fashion. In other words, every student is expected to perform every lab--you may not simply "use your partner's data."
- If a lab is missed, it must be made up as soon as possible. All labs must be complete before the chapter exam for that topic takes place. After that, the lab equipment and chemicals for that experiment will be put away and it will no longer be possible for that lab to be made up. Not only will this affect your lab grade, but your lack of exposure to those laboratory techniques and experiences will put you at a disadvantage on assessments.

Tips for Success

- Look over your notes daily.
- Keep up with all reading, homework, and any other assignments.
- Use class time effectively and efficiently.
- Ask clarifying questions when you don't understand something. Schedule time to see your teacher ASAP if there is a concept you are confused about.
- Take advantage of the various resources that are available to you--both in school and at home.

Website: ***www.jpsaos.com/pittenger/honorschemistry.htm***

Looking forward to a moletastic year

Honors Chemistry Curriculum

First Marking Period

- Matter & Measurement (Chapters 1-3; ch 10, sections 1-3)
- Atomic Structure and Models of the Atom (Chapters 4 & 5) & Nuclear Chemistry (Chapter 24)
- Periodic Trends and Properties (Chapter 6)

Second Marking Period

- Bonding (Chapters 8: omit section 2, 12: section 2 only, & 21:section 1 only: IMF's of Organic Molecules)
- Chemical Formula Writing & Organic Nomenclature (Chapters 7; ch 8, section 2; ch 21, sections 2 & 3)
- Chemical Reactions (Chapter 9 & simple REDOX reactions)
- Reaction Stoichiometry (Chapter 10, sections 4-5 &11)

Third Marking Period

- Gas Laws (Chapter 12, section 1 only; chapter 13)
- Liquids and Solids (Chapter 12, section 3-4)
- Solutions (Chapter 14)
- Qualitative Properties of Acids and Bases (Chapter 18)

Fourth Marking Period

- Quantitative Properties of Acids and Bases (Chapter 18)
- Thermochemistry and Kinetics (Chapters 15 &16)
- Equilibrium (Chapter 17)
- Redox Reactions & Electrochemistry (Chapters 19 & 20)