

Chemistry Syllabus 2022-2023



Instructor	Room	Email	Tutorial
Mr. Qing Jie	N217	Qing.Jie@houstonisd.org	Wednesdays-11:30-12:00 Fridays-12:00-12:30
Mrs. Sonia Rodriguez	N126	Srodrig6@houstonisd.org	Mondays and Tuesdays 12:03-12:33
Mr. John Sim	N226	John.sim@houstonisd.org	Wednesday-3:25-4:00 Thursday-12:30-12:33
Mrs. Destini Texada-Jackson	N129	Distini.Texada@houstonisd.org	Tuesday and Wednesday 11:30-12:00

Required Supplies

- ✓ Notebook
- ✓ Pocket folder
- ✓ Pencils/Pens
- ✓ Scientific Calculator (TI-30X/Casio FX-115ESPLUS or higher)

Students will NOT be allowed to:

- ✓ Use their cell phones as calculators.
- ✓ Share calculators with another student during quizzes and tests.

Test Days: Science classes test on Mondays or Wednesday/Thursday block days.

Grades

Major Grades (70%): Tests, selected labs, projects, and other assignments as designated. There are generally 3 major grades given each cycle.

Minor Grades (30%): Daily grades, quizzes, homework, selected labs, etc. 5-10 Minor grades are taken each cycle.

Retake Policy

 If a student scores higher on his/her retake, the retake grade will replace the original test grade (capped at 70).

Academy Honesty

If a student violates the Honor Code, he/she will receive a "0" for the schoolwork, a "U" in conduct, and disciplinary action (including loss of Off Campus and Extracurricular Activity privileges.) In addition, this conduct is considered a Level II violation o the Code of Conduct. No retake will be offered.

Course Policies O&A

How important is attendance to success in Chemistry? Many of the topics taught in chemistry build upon each other, so it is important that all students attend class regularly. It is your responsibility to check PowerSchool and to ask for missing assignments if you are absent.

What if I'm absent the day of a major grade assignment? You will take the quiz or test on the day you return. Also, you will return any assignment that was due on the day you return. If you have been absent several days prior to an exam, it is YOUR responsibility to come see me on the day you return about a new test date/time.

What about homework? All assignments must be turned in at the beginning of class on the day they are due. LATE ASSIGNEMNTS WILL BE ONLY ACCEPTED the following day it was due OR after attending a tutorial section (see list above) to do and finish the work in the tutorial. In BOTH cases, the work will receive a 20 points penalty In the event of a missed assignment due to an absence, 1 day per absence will be provided to turn in missed work.

Do you have tutorials? Feel free to visit <u>any</u> Chemistry Teacher for help. Chemistry Tutorial schedules are posted in each chemistry teacher's classroom.

What do you expect in terms of student conduct? Students are expected to follow laboratory safety rules, HISD's code of student conduct, and any conduct rules established in class. This includes a strict "no cell phone" policy during class time unless special permission is granted by the teacher.

Course Objectives

I. Safety and Scientific Measurement

Lab safety

II. Structure of Matter

- Physical and chemical changes and properties
- Extensive and intensive properties
- Solids, liquids and gases
- Classification of matter

III. Atomic and Nuclear Chemistry

- Modern atomic theory
- Electromagnetic spectrum
- Average atomic mass
- Electron configurations

IV. The Periodic Table

- History
- Families
- Periodic trends

V. Chemical Bonding and Molecular Geometry

- Naming ionic compounds
- Writing chemical formulas
- Lewis structure
- Metallic bonding and properties
- Molecular geometry (VSEPR)

VI. Chemical Reactions & Stoichiometry

- Mole
- Percent composition
- Empirical and Molecular formulas
- Law of conservation of mass
- Balance chemical equations
- Limiting reagents and percent yield

VII. Solutions

- Solubility rules
- Electrolytes
- Factors affecting solubility
- Molarity

VIII. Acids and Bases

- Properties of acids and bases
- Neutralization reactions
- Precipitation reactions
- pH and pOH

IX. Gases

- Kinetic Molecular Theory
- Boyle's Law
- Charles' Law
- Avogadro's Law
- Dalton's Law of partial pressures
- Ideal Gas Law