

## High School Chemistry - Course Syllabus

**Course Title:** Chemistry, 4321/4322, Full year course, 1 credit

**Instructor:** Jaime Keena [jaime.keena@matsuk12.us](mailto:jaime.keena@matsuk12.us), (907) 352-7312

**Course Dates:** September 11th - December 11<sup>th</sup>, January 22-May 6

IF YOU KNOW YOU WILL BE MISSING SEVERAL CLASSES, PLEASE RESCHEDULE TO TAKE THIS COURSE IN A DIFFERENT YEAR.

**Class Schedule:** Every Monday, 1:00-2:3 at Twindly-additional weekly work to be completed at home.

**Teacher's role is to:** Deliver a quality curriculum in an engaging format with clear expectations and learning outcomes, be prepared for class, communicate assignments and information clearly using Google classroom, and email grades to advisors within one week of semester's end.

**Parent's role is to:** Check your child's grades regularly on google classroom, know what assignments are due and when, assist your students as needed, oversee student's learning, collect work samples for grade conferences, and give a semester grade using the teacher's input.

**Student's role is to:** Respect the teacher and classmates, complete all homework, know their grade in the course, and come to class every week, on time and prepared. The student is responsible for getting help, asking questions, and scheduling tutoring when needed.

**Course Description:** In Chemistry, students will study the composition of matter including reaction of common elements, atomic structure, chemical bonding, and theories. Students will develop skills in problem solving, safe laboratory techniques, and report writing.

**Course Objectives:** By the end of this course, students will be able to:

1. Demonstrate a comprehensive understanding of atomic structure.
2. Successfully perform complex mathematical equations involving formula weights, empirical formulas, and chemical reactions.
3. Define the basic tenants of Chemistry including: elements, molecules, mass, moles, bonding, and ionization.
4. Using scientific inquiry, properly design and perform labs and experiments.
5. Communicate effectively about Chemistry concepts through written and verbal means.

### Required Materials:

1. Friendly Chemistry textbook
2. Friendly Chemistry student workbook
3. Friendly Chemistry solutions manual
4. Chromebook (there are some on-site if you do not own a personal device)
5. Notebook
6. Homework assignments
7. Open mind and enthusiasm for learning!

### **Optional Materials:**

There is an audiobook option available. There was great success for students that used the audiobook in conjunction with the textbook.

Go to the following webpage: <https://friendlychemistry.com/order-videos.html>. Scroll to mid-page. Save your receipt for reimbursement.

### **Class Rules:**

1. Be punctual and prepared for each class, including completing prior week's assignments.
2. Use Chromebooks responsibly and for class-related activities only.
3. Participate actively in class discussions and activities.
4. Respect classmates' opinions and ideas.
5. Follow all school policies and classroom rules.

### **Grading Policy:**

- 33% homework
- 33% tests
- 34% weekly classroom labs

### **Course Schedule:**

#### **Quarter 1: Meet Chemistry**

- Atoms & Mass
- Arrangement of electrons
- Applying quantum mechanics
- Electron Configuration
- State of Matter
- Electron Dot Notation

#### **Quarter 2: Reactivity**

- Reactivity in the periodic table
- Ionization
- Conductivity of ion solutions
- Charges of ions
- Compounds from ions

#### **Quarter 3: Formulas**

- The Mole
- Formula Weights

- Percent composition
- Empirical Formulas
- Putting compounds into reactions
- Chemical reactions

#### **Quarter 4: Stoichiometry**

- Mixing compounds with water
- Molarity and stoichiometry
- Properties of gases
- How temperature affects a gas
- How pressure affects a gas

#### **Assessment:**

- Weekly homework assignments
- Weekly in-person lab/classwork assignments
- Weekly tests on each chapter

#### **Communication:**

- Google Classroom will be used for announcements, assignments, and resources.
- Google Classroom Codes: First Semester: **ed53ko3** & Second Semester: **o6phwn2**
- Office hours T-TH from 9:30-3:30 for questions and additional support.

\*Please note that this syllabus is a general framework and may be subject to adjustments throughout the course. Your engagement, active participation, and commitment to learning will greatly contribute to your success in Chemistry.

Looking forward to an exciting year of exploring the wonders of chemistry!

Parent signature: \_\_\_\_\_

Student signature: \_\_\_\_\_