**Course Syllabus**

**CHEMISTRY I - Fall 2024**

**Instructor: Coach Caden McGuire**

**Dear Parent/Guardian,**

**I feel fortunate to have your child in my class this semester. Chemistry is my favorite subject! It is an engaging, hands-on course that will challenge your students to learn using modeling, computation, and lab instrumentation. By the end of the course, I know your child will have a greater sense of understanding of the topic and confidence they can succeed in further sciences in high school and beyond. With your child, please read the policies in this document, then fill out and sign the first page of the syllabus. YOUR CHILD WILL THEN TURN IN THIS SHEET TO ME by Wednesday, August 7, 2023. I ask that you will contact me should you have any concerns about the progress of your son/daughter or any aspect of the instruction. I look forward to having a great year!**

**Thank you,**

**Caden R. McGuire**

**My child and I have read and discussed the classroom syllabus and Reviwed the Lab Safety Contract.**

Student Name (Print) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_

Student Signature \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_

Parent/Guardian Name (Print) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_

Parent/Guardian Signature \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_

Email Address(es) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Phone number(s) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Cell Home Work

**Note**: Is there any additional information about your student that might be helpful to know as I strive to serve them well as a teacher this semester? Feel free to share below or send me an email. (I really will read what you say and try to apply it as best I can.) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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**Course Syllabus**

**CHEMISTRY - FALL 2023**

**Instructor: Coach Caden McGuire**

**Course Description:**

This course introduces the fundamental concepts of general chemistry and provides a study of the structural composition and behavior of matter. Focus areas include: scientific measurement and analysis, atomic structure, chemical nomenclature, balancing equations, stoichiometry, gas laws, solutions, and acids and bases. While focusing on these areas, students will also learn basic laboratory skills and how to perform experiments to confirm course concepts. Students should have a strong background in mathematics, as students will learn and utilize mathematical reasoning skills to perform calculations involving chemicals and their reactions. In addition, students should be proficient in solving algebraic equations, graphing, and using mathematical principles in real-world applications.

18 weeks/1 credit

**Prerequisite: Algebra I or Geometry with Data Analysis**

**Corequisite: Algebra I with Probability**

**Course Objectives:**

**Students will:**

* 1. Use the periodic table as a model to predict the structure and properties of atoms and elements.
* 2. Construct explanations of the formation of intramolecular and intermolecular forces and their effects on atomic and molecular interactions.
* 3. Develop and use multiple types of models to represent chemical reactions
* 4. Use stoichiometric ratios to support the claim that atoms, and therefore mass, are conserved during chemical reactions.
* 5. Obtain, evaluate, and communicate information concerning factors that affect solubility and the properties of solutions
* 6. Make qualitative and quantitative claims, based on ion concentration, about the acidic, basic, or neutral characteristics of a solution.
* 7. Plan and carry out investigations to determine how the atomic and molecular motion in chemical and physical processes is related to the kinetic molecular theory.

**Classroom Rules and Expectations:**

**General Expectations:**

1. BE ON TIME. Tardy means that you are not in the room and getting seated when the bell rings. *JCHS policy governs the consequences for tardiness*.

2. BE RESPECTFUL: Practice courtesy and mutual respect. Treat others as you would like to be treated. The classroom and laboratory is to be regarded as a safe and supportive learning environment.

3. BE PREPARED: Mentally focused on reaching your goals and following class expectations; and physically bringing proper materials EVERY DAY.

4. BE RESOURCEFUL: Thoroughly review assignments, videos, textbooks, and notes to answer questions before asking me.

**Accommodations:** Requests for accommodations for this course or any school event are welcomed from students and parents.

**Concerning Laptop Utilization:**

1. Student laptops should not be hard-wired to the network or have print capabilities.
2. Use of discs, flash drives, jump drives, or other USB devices will not be allowed on Madison City computers.
3. Neither the teacher, nor the school is responsible for broken, stolen, or lost laptops.
4. Laptops and other electronic devices will be used at the individual discretion of the teacher.
5. Students are to use their school-issued device, so that activity can be monitored.

**Grading Policy:**

Test grades will account for 70% of the 9-weeks grade, with the remaining 30% being determined by quiz/daily grades. The grading scale is as follows: A (90-100%), B (80-89), C (70-79), D (65-69), and F (below 65). Grades will be a reflection of mastery of the standards. Make sure all absences are excused as class work can be made up and graded for excused absences only. The final exam counts for 20% of the final grade.

**Missed Assignments:** If you are present in class but do not turn in an assignment by the due date, I will put a 0 in the gradebook. You are allowed to turn in assignments late; however, 30% of the grade will be deducted for being late.

**Excused** absences will be granted 3 days to complete and turn in any missed assignments. After 3 days, the assignment will be counted as late unless extenuating circumstances are discussed with me. Assignments missed due to an **unexcused** absence will be given a 0 in accordance to Madison City Schools policy. Please make sure to turn in an excuse for every absence within 3 days!

**Make-Up Work Policy:**

Make-up tests are only allowed for excused absences. Make-up test time is once per week on a day determined by the instructor. Make-up tests will be scheduled during Refuel on a day Coach McGuire does not have duty. Please, plan with Coach McGuire to make up a test. Make-up work for daily assignments can be located on Schoology. It is the student’s responsibility to communicate on make-up work. Students will not be tracked down for make-up work.

**Classroom Management Plan**

* **Verbal reprimand**
* **Conference with student with parent contact**
* **Withdrawal of privilege(s) with parent contact**
* **Other consequences determined to be reasonable and appropriate by the school administration.**

**Cell Phones**

**Cell phones and earbuds/headphones will not be allowed to be used during classroom instruction time. Phones and earbuds/headphones will be put away in a location designated by the teacher and placed in silent mode. In secondary schools, students will have access to their phones and earbuds/headphones outside of classroom instruction time such as between classes and lunch. Failure to follow these procedures will result in a disciplinary referral to the office.**

**The use of Artificial Intelligence (AI) tools to complete assignments without prior disclosure and approval is strictly prohibited. Any undisclosed use of AI tools will be considered academic dishonesty and will result in an automatic grade of zero for the assignment in question.**

**Course Materials:**

* 1” 3 ring binder (for class notes)
* 200 sheets of loose-leaf college ruled paper
* 3-prong folder with pockets (for holding lab reports)
* Black or blue ink pens
* Highlighter
* Pencil
* Scientific calculator or graphing calculator
* Laptop, Chromebook or other smart digital device. Several assignments require the use of Schoology and EdPuzzle which are accessed in class using a device. Please let me know if you do not have any type of device to bring to school.
* (Optional) Nitrile lab gloves in a sandwich bag with your name written on them (NO LATEX)
* (Optional) Loose-leaf graph-ruled paper for lab work

**Course Syllabus**

**CHEMISTRY – FALL 2023**

**Instructor: Coach Caden McGuire**

| **18 - WEEK PLAN\*** | |
| --- | --- |
| **WEEK 1** | **Lab Safety and States of Matter** |
| **WEEK 2** | **Precision, Accuracy, and Confidence in Measurement** |
| **WEEK 3** | **Relating Mass and Volume** |
| **WEEK 4** | **Heat Transfer and Temperature** |
| **WEEK 5** | **Heating Curves and Phase Diagrams** |
| **WEEK 6** | **Gas Laws** |
| **WEEK 7** | **Atoms and Molecular Structure** |
| **WEEK 8** | **Intermolecular Forces** |
| **WEEK 9** | **Isotopes and Electron Configuration** |
| **WEEK 10** | **Periodic Trends and Bonding** |
| **WEEK 11** | **Empirical and Molecular Formulas** |
| **WEEK 12** | **Stoichiometry and Chemical Quantities** |
| **WEEK 13** | **Chemical Quantities** |
| **WEEK 14** | **Molarity and Solutions** |
| **WEEK 15** | **Types of Chemical Reactions and Titrations** |
| **WEEK 16** | **Endothermic and Exothermic Reactions** |
| **WEEK 17** | **Equilibrium Reactions** |
| **WEEK 18** | **Review** |

**\* This syllabus serves as a guide for both the teacher and student; however, during the term it may become necessary to make additions, deletions or substitutions.**

**Agreement:**

**I have read the above safety operating procedures and agree to follow them during any science**

**lab, investigation, or activity. By signing this form, I acknowledge that given the biological,**

**chemical or physical hazards, the science classroom, laboratory, or field can be an unsafe place**

**to learn. The safety-operating procedures are developed to help prevent accidents and to**

**ensure my own safety and the safety of my fellow students. I will follow any additional**

**instructions given by my instructor. I understand that I may ask my instructor at any time about**

**the safety operating procedures if they are not clear to me. My failure to follow these science**

**laboratory operating procedures may result in disciplinary action.**

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**(Student Signature)**

**(Date)**

**I have read and reviewed the lab safety rules with my child.**

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**(Parent/Guardian Signature)**

**(Date)**

**Please keep these pages in the front of the laboratory section of your notebook.**