**Physical Science Spring 2025 Course Syllabus**

**Welcome & Course Description**

Hello and welcome to Physical Science for this Spring 2025 semester. This course introduces the fundamental concepts of chemistry and physics. Focus areas include scientific measurement and analysis, atomic structure, properties of the periodic table, balancing equations, chemical bonding, gas laws, acids and bases, motion, Newton’s Laws, energy, and waves. While focusing on these areas, students will also learn basic laboratory skills and how to perform experiments to confirm course concepts.

Please review the information involving class policies and materials, unit topics and more. There will also be many opportunities for extra credit over the semester including here in this packet.

**Course Objectives**

Students will:

* Predict properties and trends of essential elements and their valence electrons
* Identify the relationship among pressure, volume, density, and temperature of substances
* Determine the role of electrons in chemical bonding and interpret chemical equations
* Develop models to illustrate the concept of half-life for radioactive decay
* Analyze basic motion graphs to study displacement, velocity, and acceleration
* Discuss the motion of a system by applying Newton’s Laws

**Classroom Rules and Expectations**

1. Be on time. JCHS policy governs the consequences for tardiness.
2. Be respectful. Treat others as you would like to be treated. The classroom is to be regarded as a safe and supportive learning environment.
3. Be prepared. Review unit syllabi at least once a week to stay up to date with the course. Please have materials and assignments completed and ready to turn in.
4. Be resourceful. Please refer to materials given physically and on Schoology. Email me with questions or schedule an afterschool time to meet on Calendly.

**Accommodations & Madison City Schools Laptop Utilization**

* Course accommodations may be requested through email or a scheduled meeting.
* Madison City Schools provided laptops should:
  + Not be hard-wired to the network or have print capabilities
  + Not be used with discs, flash drives, jump drives, or other USB devices
* *Neither the teacher, nor the school is responsible for broken, stolen, or lost laptops. Laptops and other electronic devices will be used at the individual discretion of the teacher. Students are responsible for charging their laptops and bringing their laptop charger.*

**Grading Policy**

* Test and project grades will account for 70% of the 9-weeks grade, with the remaining 30% being determined by daily grades.
* Grading Scale: A (90-100%), B (80-89), C (70-79), D (65-69), and F (below 65).
* The final exam counts for 20% of the final grade.

**Absences & Assignments**

* Missing assignments will be entered as a 0 on PowerSchool until submitted.
* Late work will receive 5 points off for each day until submitted.
* In the case of absences, assignments may be completed without penalty.
* ***Makeup tests will need to be scheduled with me.***

**Course Materials**

* 1 inch binder with the following dividers: *Unit 0, Unit 1, Unit 2, Unit 3, Unit 4*
* Writing utensils and accessories (ex: erasers, lead, etc.)
* Madison City Schools supplied laptop and charger

**Course Communications & Platforms**

The course will be relying on three platforms for assignments and communication.

* Schoology
  + Schoology will be used to house online resources, announcements and some assignments such as Bellringers and projects.
* Calendly
  + Calendly will be used to schedule meeting times for make up work, tutoring, etc. as needed. Please note that there will be a cut off point to how late appointments can be scheduled. Availability cannot be guaranteed, but I will do my best!
    - Link to schedule: [calendly.com/kmdubyk](https://calendly.com/kmdubyk)
* Remind
  + Remind will be used to share course announcements and other messages. Please find the class code in the list below to join based on your schedule:
    - Block 1: 2g63gk
    - Block 2: fa27d6
    - Block 4: 2e976a4
* Extra Credit Opportunity!
  + Once joined on Remind, please message me there with your favorite ice cream flavor. 🙂

**18 Week Plan**

| *Week 1* | Course & Unit Introductions |
| --- | --- |
| *Week 2* | Lab Safety & Scientific Skills |
| *Week 3* | Matter & Interactions |
| *Week 4* | Atomic Structures |
| *Week 5* | Chemical Reactions |
| *Week 6* | Chemical Reactions Continued |
| *Week 7* | Acids, Bases & Solutions |
| *Week 8* | Chemistry of Common, Essential Solutions |
| *Week 9* | Nuclear Energy |
| *Week 10* | Kinematics |
| *Week 11* | Forces & Newton's Laws |
| *Week 12* | Newton’s Laws Continued |
| *Week 13* | Types of Energy & Usages |
| *Week 14* | Energy Usages Continued |
| *Week 15* | Circuits |
| *Week 16* | Waves & Electromagnetism |
| *Week 17* | Electromagnetism Continued |
| *Week 18* | Course Closing |

* *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.*