

Physical Science Syllabus

2025-2026

Mr. Endres

I. Course Description and Requirements

Physical Science is designed to serve as a foundation for other high school courses, especially chemistry and physics. Physics units include Newton's 3 laws of motion, forces, scientific definitions of work and power, momentum, conservation and conversions of energy, relationships between electricity and magnetism, and wave phenomena and behavior (including characteristics and calculations) including electromagnetic and sound waves. Chemistry units include composition and classification of matter, history of atomic structure up to present day model, learning the periodic table to include, but not limited to: chemical symbols, patterns, trends and isotopes, chemical bonding, compound naming, and chemical reactions.

Students should be prepared to conduct projects and complete a formal lab report. Instruction centers around inquiry-based learning that is incorporated into class activities. Learning activities include teacher-lead instruction, group work, student seatwork, project-based learning, and lab exercises with both student-choice and teacher-choice grouping.

Students can expect to start each day with a bell ringer assignment followed by learning activities and/or lecture. At times students will work independently from the teacher in order to achieve student autonomy that will be expected of high school students. Classes are structured to utilize every minute for learning and assessing understanding. Real world application is a daily objective. Higher-level thinking will be incorporated into each lesson as well as use of technology when applicable to increase student achievement. Students are expected to participate in all activities and actively engage and ask questions during teacher-led lecture. Students are also expected to review and study the content covered in class outside of school *on a daily basis*.

II. Class Expectations

- Students are expected to **be present** and active members of the classroom each and every day.
- Students are expected to come to class **prepared** with all necessary materials and completed assignments to learn and participate in all lectures and activities.
- Students are expected to **be respectful** of the teacher, the classroom, and their peers.

III. Class Discipline

Students who are not acting present, coming prepared, and being respectful will earn one or more of the following consequences:

- Warning in class
- Teacher/Student conference during or after class
- Parent contact
- Removal from activity or class
- Written disciplinary referral

Any student caught cheating on an assignment will receive a zero and a written referral.

IV. Required Materials

All students must come to class each day with the following materials:

- *A notebook and paper to take notes and complete assignments*
- *Writing and coloring utensils (pen, pencil, colored pencils, highlighter, etc.)*
- *Corded earbuds or headphones for use with school-issued chromebook (no airpods or wireless headphones)*
- **School-issued chromebook.** There will be very few opportunities to charge computers in class, so please make sure your chromebook is fully charged every day when you arrive at school.

V. Assessment and Grading Plan

We will cover nine units over the course of the semester. Each unit will have multiple opportunities for assessment. The number of minor assessments varies per unit. Students will have a daily open-note quiz each day that will add up to a cumulative minor grade. All unit tests are cumulative and may include both multiple choice and open response questions.

Note: *Assignments checked for completion will not be accepted late. Assignments collected and graded for accuracy will be accepted late with a penalty of 10% off every day late.*

*****Under no circumstances will late work be accepted after the completion of the unit the work is from, unless the student had an excused absence, in which case they receive 5 days to turn in the work.***

Minor Assessments

- *Classwork/Informal labs:* Each unit will have engaging activities and practice to help master the content. These assignments range from 15-100 points, depending on the length and depth of the material.
- *Daily quizzes:* At the start of each day the students will complete a small quiz (warm-up or “bell-ringer”) over content covered during the previous class period. Their grade on each day’s quiz will be added up for one weekly warm-up grade at the end of each week.

Major Assessments

Unit 1: Scientific Method <ul style="list-style-type: none">- DA, SN, Metric, Temperature Quiz- Unit 1 Test Unit 2: Motion and Forces <ul style="list-style-type: none">- Motion Quiz- Unit 2 Test Unit 3: Energy <ul style="list-style-type: none">- Conservation of Energy Quiz- Unit 3 Test Unit 4: Electricity and Magnetism <ul style="list-style-type: none">- Electricity Quiz- Unit 4 Test Unit 5: Waves <ul style="list-style-type: none">- Waves Quiz- Unit 5 Test	Unit 6: Matter <ul style="list-style-type: none">- Classification and Properties Quiz- Unit 6 Test Unit 7: Atomic Structure <ul style="list-style-type: none">- Elements Quiz- Unit 7 Test Unit 8: Bonding <ul style="list-style-type: none">- Polyatomic Ion Quiz- Naming Quiz- Unit 8 Test Unit 9: Reactions <ul style="list-style-type: none">- Balancing and Classifying Quiz- Unit 9 Test
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The final semester grade is calculated according to the following percent values:

1st six weeks = 25% of final grade
2nd six weeks = 25% of final grade
3rd six weeks = 25% of final grade
Final exam = 25% of final grade

VI. Communication

I will regularly post on my google classroom updates, announcements, lecture notes, and assignments for students and parents to access. Students and parents are encouraged to contact me via email. The easiest way to schedule a phone call with me is to email me first so we can arrange a time that works for everyone.

Email: sendres@haywood.k12.nc.us