

Physical Science - Course Syllabus

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Parent/Student Resources:

If you want INSTANT ACCESS TO THE LATEST GRADES & ATTENDANCE, login to Synergy at http://vue.district6.org/. Physical Science grades are updated frequently and are always current by 9 AM on Monday. Synergy also has linked assignment resources that can be used to MAKEUP MISSING WORK as well as upcoming assignments, due dates, and much more.

Course Overview:

Physical Science is a lab-based introduction to the non-life sciences such as chemistry and physics as well as earth and space science. Areas of study include: scientific inquiry and the discoveries of famous physical scientists; matter, chemical reactions and the periodic table; energy, forces, and the electromagnetic spectrum; plate tectonics and natural disasters; as well as our solar system and the universe. Second trimester culminates with the GIZMO project, in which groups of students research and explore specific physical science topics through the design and construction of hands-on, interactive displays that teach selected science concepts to visiting elementary students.

Course Learning Targets: (for more info., see "Selected Standards and Benchmarks" handout)

- 1) Scientific Inquiry Students will demonstrate understanding of:
 - The steps of the scientific method
 - Design and implementation of a scientific investigation
 - Analysis of scientific data (including data collection and graphing)
 - Forming conclusions based on evidence and analysis of data
- **2) Chemistry Basics -** Students will demonstrate understanding of:
 - Chemical and physical properties of atoms, elements, compounds, and molecules
 - Element groups and the organization of the periodic table
 - Phase changes, chemical reactions, and bonding
- **3) Astronomy** Students will demonstrate understanding of:
 - The 21st century vision of the structure of our solar system, galaxy, and universe
 - Types of celestial objects inside and outside of our solar system
 - How the universe, galaxies, stars, and planets change over time
- **4) Earth Science -** Students will demonstrate understanding of:
 - The structure and composition of the layers of earth's interior, surface, and atmosphere
 - Plate tectonics and how it creates the features and processes on earth's surface
 - Geology of the Cascades and Rogue Valley
 - Global climate change and its effects on human beings and the planet
- **5) Physics Topics -** Students will demonstrate understanding of:
 - Newton's laws of motion
 - Forces and how they affect the motion of objects

- **6) GIZMO Project -** Students will be able to:
 - Work collaboratively to create a hands-on, interactive Gizmo that teaches a science concept
 - Use the engineering design standards to solve problems and refine work products
 - Analyze the structure of the relationships among key terms and concepts in a scientific text

7) Reading and Writing like a Scientist - Students will be able to:

- Read closely and find explicit information in science texts
- Precisely follow a complex multi-step procedure when carrying out experiments, taking measurements, recording data, etc.
- Analyze the structure of the relationships among key terms and concepts in a scientific text
- Identify quantitative information in a text when expressed visually (tables, charts, graphs) and in words

Grading: Grades will be regularly posted online using Synergy to allow students and parents to monitor progress towards mastery of learning targets.

50% of Grade (weighted)- "Application of	50% of Grade (weighted) - "Mastery of
Learning" as demonstrated by:	Learning Targets" as demonstrated by:
Targeted Assignments ("Practice Work" that	Unit Tests
helps build skills and knowledge"	
Labs / Performance Tasks (assignments that	Quizzes or Check-ins
help demonstrate student's current level of	
understanding and progress towards mastery	
of learning targets)	
Other Activities that show student's ability to	Essential Assignments (must earn a "C" or
apply their new knowledge	better to pass class)

A = 90% and above

B = 80%-89% C= 70%-79%

D= 60%-69%

F= 59% and below

LEARNING BEHAVIORS: In addition to academic grading, your student will be evaluated on four behavioral categories:

1) Teamwork

3) Critical Thinking

2) Personal Management

4) Communication

Students will be assessed on whether they "meet" or "do not meet" these criteria. No letter grade is associated with assessment of the learning behaviors.

Class Procedures:

Interactive Notebooks (INBs):

All students are required to keep an interactive notebook and have it available for use in class daily. INB entries will be made 1-2 times per week and graded near the end of each unit. Most students like to keep their INB entries in a three-ring binder, a pocket folder, or some other format. INB entries focus on the major learning targets in Physical Science. They give students the opportunity to develop an understanding of these topics and then apply these ideas to the real world.

Electronic Devices:

Electronic devices such as smart phones and ipods can be essential leaning tools. They can also be a serious distraction from learning. Electronic devices are allowed in class WITH PERMISSION ONLY on CERTAIN DAYS AND TIMES. Please refrain from using your device for texting, playing games, and other non-class related activities.

Absences:

It is the responsibility of the student to obtain and <u>complete all work missed regardless of the reason for the absence</u>. Students should get all missing assignments on the day that they return. These assignments should be completed, labeled "**Absent Work**", and turned in promptly. If you miss a lab, please make arrangements with the teacher to come in to make-up the lab in a timely manner. Many labs have consumable supplies that are only available for a short period of time. Tests and quizzes are always announced well in advance; so students are expected to take them on the day that they return as well.

Tardies:

Students are expected to be in class on time, ready to learn. Plan your schedule to use passing time between classes efficiently. Students should report to class and then get permission to go to the bathroom if it might make them late. Students with repeated unexcused tardies will receive consequences as outlined in the CAHPS Tardy Policy.

Late Work:

All work is expected to be submitted in class on the day that it is due. Work turned in one day late will still receive full credit, but be marked late. Each student is allowed three of these lates per quarter. Work turned in two or more days late will receive half-credit, but some credit is better than no credit.

Final Exam:

There will be a final exam at the end of the second trimester covering all material studied. Organized & complete interactive notebooks, class folders, and binders will be a definite bonus in being prepared for the final. Students who come to class, stay caught up, complete their assignments, and don't copy answers during assignments, usually pass the final exam.

Copying:

Copying work for this and any other class is completely unacceptable. If you care about yourself and your friends, do not copy. Learn the material, study together, discuss information, and teach others, but do not copy assignments or cheat on tests. Students who come to class, stay caught up, complete their assignments, and don't copy answers during assignments, usually pass the course and are prepared to act in the case of a medical emergency.

Class Rules:

- 1) Be Safe Listen carefully and <u>follow all safety instructions</u>, especially during lab activities. No pushing or roughhousing in the classroom. Report any potentially dangerous situations to the teacher immediately.
- **2) Be Respectful** Stay quiet and attentive during teacher-led activities such as opening announcements and assignment instructions. Set a good example by staying in your seat, talking only when appropriate, and focusing on the lesson. Take care of classroom property and equipment.
- **3) Be Responsible** Complete all assignments to the best of your abilities. Make up <u>all</u> missed work. It is the responsibility of the student to obtain and complete all work missed regardless of the reason for the absence.
- **4) Communicate Positively** Be supportive and understanding of others. Use words and compromise to resolve conflicts. Be a good team player.
- **5) Have Integrity** Do the right thing, even when no one else is watching. Take care of yourself and others. Do everything that you do with respect and care.

Consequences:

If you choose not to adhere to the rules, you will face these consequences. Severe violations will bypass steps 1 & 2.

Step 1: ====> Warning **Step 3:** ====> Phone Call to Parents

Step 2: ====> Lunch Detention **Step 4:** ====> Referral to the Principal

PARENTS / CELL PHONES:

If you need to contact your student for an emergency or other reason during the school day, PLEASE call the school phone number (541) 494-6312 and your student will be contacted. Please do **not** call or text your student's cell number during class because it causes disruption to your and other student's learning.

PHYSICAL SCIENCE SYLLABUS ACKNOWLEDGEMENT FORM

Note: Please read this syllabus carefully and sign it, have your parents/guardians read it and sign it,

and return this portion to me. Check Synergy regularly to check student grades and progress towards mastery of the learning targets. I have read and understand the course expectations and policies: *Print Student Name (Please print neatly)* Student Signature You, your daughter/son, and I are partners in your students' education. You can help him/her succeed by checking with them as often as possible about their progress and looking with them at their assignment completion and/or needs. Please plan on attending fall and spring parent/student teacher conferences. Also, please be aware, we will be using the P-13 film "Gravity" during our physics unit; please contact Mr. Kenner with any questions or objections. Parent/Guardian Signature Parent/Guardian Email - please print neatly Best Phone Number(s) to reach you First preference: Second option (if available): It is often easiest to call during the day. Is it okay to call you at work if there is something I would like or need to talk to you about your student? Circle one Yes No If yes, work number: