Physical Science Syllabus
Coach Bronson

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: all chemical symbols, patterns, trends and isotopes, chemical bonding, compound naming, and chemical reactions.

Because experimentation is the basis of science, laboratory demonstrations and investigations are an integral part of this course. Honors students are expected to have a firm foundation in Algebra in order to be successful in this course. Students should be prepared to conduct projects quarterly and write 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.

Students can expect to start each day with a daily open-note quiz followed by learning activities and/or lecture. Honors students will regularly work independently from the teacher in order to achieve student autonomy that will be expected of upper 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. Honors students are expected to be caught up when they return from absences. 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 meeting class expectations will earn one of the following consequences:
- Warning in class
- Removal from class activity AND parent contact
- Teacher/Student conference during or after class AND parent contact
- After school detention AND parent contact
- Written referral and removal from class AND parent contact

Any student caught cheating on an assignment will receive a zero and referred to the Principal.

IV. Required Materials
All students must come to class each day with the following materials:
- A 2-inch three-ringed binder with dividers, paper and EACH UNIT PACKET!!!
- Pencil
- Calculator

V. Assessment and Grading Plan
We will cover nine units over the course of the year. Each unit consists of 1-4 major assessments. The amount of minor assessments varies per unit. Students will have a daily open-note quiz each day that will add up to a weekly minor grade. All unit tests 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 absolutely 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 only 5 days to turn in the work.*

Minor Assessments - **40%**

- *Classwork/Informal labs:* Each unit is packed with engaging activities and practice to help master the content. These assignments range from 15-100 points, depending on the length and depth of material.
- *Daily quizzes*: At the start of each day the students will complete a small quiz over content covered during the previous class period. Students who were absent the previous class period will not be expected to complete the Prime Time the day they return, if it is over content they missed. Their grade on each day's quiz will be added up for one weekly Prime Time grade of 25 points each week.
- *Homework*: Students will be given practice problems to complete at home to assist in mastery of content. Students will often be given time at the end of class to begin working on homework.

Major Assessments – **60%**

1st Semester	2nd Semester
Unit 1: Scientific Method - DA, SN, Metric, Temperature Quiz (25 pts) - Unit 1 Test (100 pts) **Unit 2: Motion and Forces** - Unit 2a Test: Motion (100 pts) - Forces Quiz (25 pts) - Unit 2b Test: Forces (100 pts) - Newton's Laws Project (100 pts) **Unit 3: Energy** - Conservation of Energy Quiz (25 pts) - Unit 3 Test: Energy (100 pts) **Unit 4: Electricity and Magnetism** - Electricity Quiz (25 pts) - Unit 4 Test: Electricity and Magnetism (100 pts) ***Unit 5: Waves*** - *Waves Quiz (25 pts)* - *Unit 5 Test (100 pts)*	**Unit 6: Matter** - Classification and Properties Quiz (25 pts) - Unit 6 Test (100 pts) **Unit 7: Atomic Structure** - Elements quizzes (30-50 pts) - Unit 7 Test (100 pts) **Unit 8: Bonding** - Polyatomic Ion Quiz (25 pts) - Quiz (25 pts) - Unit 8 Test (100 pts) **Unit 9: Reactions** - Balancing and Classifying Quiz (25 pts) - Unit 9 Test: Reactions (100 pts) - Acids, Bases, and Nuclear Chemistry Quiz (25 pts)

The final grade is calculated according to the following percent values:

1st quarter grade = 50% of final grade

2nd quarter grade = 50 % of final grade

VI. Communication

I will regularly post on my Canvas page updates, announcements, lecture notes, and assignments for students and parents to access. If you ever want to know something, check the Canvas page first! Students and parents are also encouraged to contact me via email. I will respond to all emails within 24 hours during the school week, and can respond in much more detail and speed than if you attempt to call. Students are also strongly encouraged to attend after school tutoring from 3-3:30 if they ever need help!

Email: **bronsoc@gcsnc.com**

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Please sign and return the bottom portion by _____.

Parent Signature: _____

Preferred Contact Information: _____