# Physical Science Fall 2011 Mr. Bradley

Email: James.Bradley@gcssk12.net

Website: http://mrbradleyscience.weebly.com/

<u>Description</u>: This is an EOCT course which covers physics and chemistry.

<u>Standards</u>:

SPS1. Students will investigate our current understanding of the atom.

SPS2. Students will explore the nature of matter, its classifications, and its system for naming types of matter.

SPS3. Students will distinguish the characteristics and components of radioactivity.

SPS4. Students will investigate the arrangement of the Periodic Table.

SPS5. Students will compare and contrast the phases of matter as they relate to atomic and molecular motion.

SPS6. Students will investigate the properties of solutions.

SPS7. Students will relate transformations and flow of energy within a system.

SPS8. Students will determine relationships among force, mass, and motion.

SPS9. Students will investigate the properties of waves.

SPS10. Students will investigate the properties of electricity and magnetism.

Topics of Study:

Unit 1 – Motion 2 weeks Chapter 2 – Motion

Chapter 3 – Forces and Laws of Motion Chapter 5 – Work, Power and Machines

Unit 2 – Energy 2 weeks

Chapter 4 – Energy

Chapter 6 – Thermal Energy

Unit 3 - Waves 2 weeks

Chapter 11 – Waves Chapter 12 – Sound

Chapter 13 – Electromagnetic Waves

Chapter 14 – Light

Unit 4 – Electromagnetism 2 weeks

Chapter 7 – Electricity Chapter 8 – Magnetism

End of 1st 9 weeks

Unit 5 – Matter and Solutions 1 week

Chapter 17 – Classification of Matter

Chapter 23 - Solutions Chapter 25 - Acids and Bases

Unit 6 – Atom 1.5 weeks

Chapter 18 – Properties of Atoms

Chapter 9 – Radioactivity

Unit 7 - Periodicity 2 weeks

Chapter 18 – Properties of Atoms Chapter 19- Chemical Bonds

Chapter 20 – The Elements and Atomic Theory Chapter 24 – Types of Chemical Reactions

Unit 8 – Interactions of Matter 1.5 weeks

Chapter 19 – Binary compounds (587-591) Chapter 24 – Types of reactions (746-749)

Unit 9 – States of Matter and Gas Laws

Chapter 16 – Solids, liquids, and gases 1 week

Materials: 3 ring binder (2 inch), colored pencils, small stapler, ruler, writing utensil, calculator,

2 pencils, 2 pens, lab fee \$5.00

Grading: Daily Grades: 35% for all students.

Tests, Projects: 45% for incoming freshman; 50% for all other students EOCT/Final: 20% for incoming freshman; 15% for all other students

School Rules: Respect, Restraint, Responsibility

Respect: Treat yourself and others with respect in all regards.

Restraint: Restrain yourself to be self-controlled at all times.

Responsibility: Take responsibility for making your own choices and accepting the consequences of those choices.

## Additional Rules:

- 1. IDs must be worn at ALL times, including class time.
- 2. Cell phones and electronic devices are NOT permitted during class time.
- 3. NO hats are to be worn in the building at any time.

#### Class Rules/Procedures

- 1. Be Prepared (Bring all materials to class, be in your seat when the bell rings)
- 2. Be Respectful (respect peers, do not speak while I am speaking)
- 3. Be Productive (follow all directions, stay on task, do your work during class)
- 4. Be Safe (follow all directions during labs, follow all lab safety rules, no horseplay in the classroom)

If you break any of the above class rules, the following sequences of actions will be taken. Immediate detention, parent contact, or office referral may occur in extreme circumstances at my discretion.

1st violation - warning 2nd violation - 15 minute detention 3rd violation/skip - 30 minute detention/parent contact 4th violation/skip - office referral

## Make-up Policy

Students will have two days to make up work per day missed. If you are absent, you are responsible for finding out what you missed from me (not from another student). Make-up exams will be given at my discretion.

## **Emergency Procedures**

Remain calm in the event of any emergency and listen carefully to any instructions from the teacher.

**Evacuation Procedures:** In the event of a fire, follow your teacher's instructions closely. We will evacuate the classroom in an orderly manner and leave the building through the third floor main entrance, walking up the hill.

**First Aid:** See your teacher for any injury that may need first aid. Band-Aids will be kept in the classroom, and for more serious problems, the school nurse is available.

**Emergency Health Concerns:** If any student has an immediate health problem (severe allergic reaction, seizure, etc.), notify the teacher *immediately*. Move away from the student. The teacher will press a call button to alert the office of the emergency, and a team of teachers trained as first responders will be notified and take care of the student.