

Eighth grade Science class
Contact information:
G & G Enterprises

Course expectations
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Introduction:

Welcome to 8th grade science. In this course, you will be challenged to develop your own scientific questions about the world around you, to design and conduct experiments, form conclusions based on the data collected, and finally critically evaluate scientific evidence.

Qualities that will make you successful in this class:

- * An effective critical thinker
- * An effective communicator
- * A long-range planner
- * An informed citizen
- * A hard worker willing to persevere through challenging tasks.
- * A self directed learner
- * A creative producer
- * An effective collaborator
- * A Positive risk taker

Grading policy:

Accurately assess students' competency of curriculum by encouraging excellence and individual responsibility.

1. Grading Breakdown:

- Formative assessments: 30-40%
- Summative assessments: 55-70%
- Classroom citizenship/ laboratory safety: not more than 15% of the quarter average.

2. We grade by competencies. This will allow students to identify areas of curriculum strengths and weaknesses.

3. Self designed science study:

- Requirements:
 - Who: all students currently completing all assignments with quality work in all classes.
 - Choices: Any area of science not covered by the curriculum
 - Procedures:
 - Teacher approved
 - Completed independently by student
 - Student initiated check-ins with teacher
 - Points awarded: flexible based on amount of content learned and amount of work involved.

4. Late work:

- Homework:
 - 1 day late: 70% of score earned
 - 2 or more days late: 60%
- Summatives: 10%/day off up to 40%

5. Retakes:

- Summative assessments only (tests and final projects)
- Available to all students
- Student must initiate and meet with the teacher within one week of the assessment grade being posted.
 - Parent signature on original assessment
 - Must attend all study-hall science labs prior to retake
- Deadline will be given
 - To complete all unfinished or missing work pertaining to assessment.
 - To complete all teacher required work for preparation of the new assessment (as instructed during the teacher student meeting.)
- Student will receive a very different test/assessment than the original. The goal is to understand the material, not to get good at taking a specific test.
- Student will receive the score from the final retake even if it is lower than the first assessment.
- Purpose:
 - Encourage students to learn material they were not proficient with at the time of the assessment
 - Is not designed to be a common practice.
 - Students who continually choose to utilize this option will meet with the teacher to determine why the student frequently needs to utilize this option and create a plan to prevent the need for continued retakes.
- The teacher may deny future retakes in some circumstances.

Class procedures:

1. Always follow your safety contract
2. Any assignments requiring calculations should include all your work with your answer including units.
3. Homework:
 - a. Collected at beginning of class.
 - b. Student's full name and period must be on homework
 - c. We encourage collaboration, but students should **NOT** produce identical work. This is plagiarism and you will receive a zero for the assignment.
 - d. Extensions may be given if requests are made in **advance of the due date or when extenuating circumstances exist.**
 - e. **Assignments designed to prepare students for a lab will not be accepted late. In this case, you will receive a zero, and I will work with you to give you the information required before you are allowed to participate in the lab.**
4. Absences:
 - a. **If you are absent when an assignment is due**, it must be turned in the day you return to school to be considered on time.
 - b. Complete missed assignments. The number of days you were out is the same number of days you have to complete the assignment.

- c. If there are extenuating circumstances, please see me.
 - d. Lab make-up must be done at the next study hall science lab when you return.
5. Please leave the classroom only with permission.
 6. Keep all class notes and handouts, as they prove helpful when studying for tests and quizzes, or analyzing lab questions.
 7. If you have questions, please ask! Take ownership of your education! Remember, you are in control of your learning.
 8. Extended learning opportunities are encouraged. See “self designed science study” section
 9. Extra Help: I am available for extra help during study halls and by appointment.
 10. Notebook: Label the dividers for your binder and insert them in this order (This is a suggestion)
 - a. Notes/Handouts/Class work
 - b. Homework (for graded/returned homework)
 - c. Quizzes
 - d. Labs/projects/Tests
 - e. Experimental Design Booklet will go in the pocket of your binder if you have one. Nothing else should be put here.

Technology Use:

Google Calendar

- All homework will be posted. It can be found on Mrs. G's website.

Google Classroom

- Used for homework, project and in-class assignments. Which may include videos, Google Forms and tutorials.
- All handouts, in addition to homework will also be available.

Course Overview:

The nature of science: experimental design, engineering, safety

1. Given a problem students will design and safely conduct a controlled experiment, including collecting and interpreting data and drawing conclusions as well as use the engineering process to create solutions.

Development of the Human Genetics and Brain Function

2. Given a choice of materials, student will model the brain and neurons and how they communicate to one another.
3. Given a population, students will determine the probability of reproduction and survival based on genetic variation and use mathematical models to show how natural selection affects phenotypes of that population.

Conversions of matter & energy

4. Given a choice of materials students will model the relationship between particle motion and thermal energy as well as properly demonstrate conversions of matter.

Interactions of objects over time: astronomy, motion, gravity, scale

5. Given materials, students will model the interactions of objects using Newton's laws.

6. Given a scenario, students will defend an argument that digital signals are more reliable than analog.

Transformation of Earth’s landforms and resources

7. Given a choice of materials, student will model the cycling of energy through earth’s spheres and demonstrate how this process causes changes over time to our world. Student will also describe how we use technology to mitigate the effects of catastrophic events.

Human interactions and impact on the Earth

8. Given evidence, students will construct arguments to defend the idea that human interactions impact earth’s systems.

Classroom citizenship/Laboratory safety Rubric

Criteria	Grading Scale
<ul style="list-style-type: none"> ● Regularly share your ideas. ● You listen and respond to the opinions of others in a respectful manner. ● Clearly you have prepared for class as you ask thought-provoking questions. ● You are always to class on time and are never disruptive. ● You participate actively in class without reminders and are always on task. ● You follow all safety rules at all times. ● You always have your homework and class materials (text, binder and lab notebook) ● You maintain a positive attitude and work well with others ● You lead by example during labs and your classroom citizenship is excellent. 	<p>A: Meets all criteria with excellence</p> <p>B: Criteria is almost always followed.</p> <p>C: Criteria is usually followed.</p> <p>D: Needs improvement following most of the criteria</p> <p>F: Criteria is not followed.</p>

You will earn extra points on your classroom citizenship/Lab Safety grade by going above and beyond as evidenced by:

- Your willingness to help others,
- Your evident desire to learn
- Your enthusiastic thoughtfulness toward your classmates.
- You must always live up to all classroom expectations, and then when finished early you
 - volunteer to help clean up or assist other students.
 - You encourage other students to keep focused on the assigned task and you are enthusiastic about it.
 - Your attitude encourages others to desire to learn and have a positive attitude.

Students must keep this in their notebooks at all times, along with their safety contracts.

8th Grade Science Supply List

- Notebook: Single subject, for notes and daily warm-up journals or loose paper.
- Writing utensils: pencil and pen. You will need both. Pencil will be required when graphing or sketching in science.
- Three ring binder: (1 ½")
- Dividers for your binder: You will be required to keep your binder neat and organized
- One folder with at least two pockets that can fit in the front of your binder:
 - This will be where you keep your homework that you have not yet completed, or that you have not yet submitted. (Suggested)
- Printer paper (For home to print your homework)
- Graph paper
- Flash drive for you to easily save computer work done at school.
- Calculator
- Ruler (metric) for all graphing.
- Colored pencils (Suggested)

PARENTS & GUARDIANS:

I know that you will work with me to make this year a successful one. Please feel free to email me with any questions or concerns. As I check email frequently, this is the most expedient means to contact me, and I will make every effort to get back to you promptly.

After signing below, please return with your student by September 11, 2015. Thank you!

Do you have a computer with reliable internet access at home? (circle) YES NO

Do you have a reliable printer at home?(circle) YES NO

Do you give permission for photographs of your son/daughter to be posted on the class web page? (circle) YES NO

SIGNATURES:

I have read and understand the requirements for 8th grade science (attached packet.)

Student's printed name:

Student's signature: _____ Date: _____

Guardian printed name: _____ Date: _____

Guardian signature: _____ Date: _____