** 7th Grade Science**

**Course Description:**

Grade 7 science, a study of life science, incorporates experimentation, safe laboratory procedures, and the use of various laboratory tools. Students will explore and learn about cells, genetics/evolution, nutrition, and several animal systems such as the skeletal, muscular, nervous, circulatory, respiratory, and digestive systems.  The animal systems are explored as a comparative study of structure and function with a focus on interdependence and homeostatic balance.  Dissections of the earthworm and frog (or alternatives to dissection) are extensions of the units on animal systems.

**Goals:**

Students will perform hands-on activities, utilize scientific inquiry to investigate answers to questions,
​create lab reports/projects, research and discuss current science topics, and gain a better understanding of the living world around them.

Reading assignments will be given periodically throughout the year providing opportunities to practice the skills of analyzing/interpreting data and comprehending key ideas from non-fiction text in addition to building/applying science vocabulary.

**Requirements:**

1. All students will be required to maintain a 1” binder (3 ring style) designated for **science only.**

Notebooks will be assessed periodically.

1. All assignments or written work of any kind handed in must be written in:

**- Blue or Black Ink**

 **or**

 **- Pencil**

Any written work handed in that is not in blue or black ink or pencil will need to be redone.

3. All assignments or written work of any kind that are handed in must have a proper

 heading which includes:

 **- student’s full name**

**- date**

 **- student’s period # for science**

This heading should be placed in the upper right corner of the paper unless otherwise instructed.

**CORE VALUES AND BELIEFS**

**Science supports the following Core Values and Beliefs:**

Academic –

* Demonstrate growth and proficiency in critical thinking and creative problem solving strategies.
* Utilize technology to obtain, process, and evaluate information.
* Communicate effectively through oral, written, visual, artistic, and technical modes of expression.

Social –

* Work cooperatively with others, recognize individual differences, and respect the rights of others. (group work and labs)
* Exhibit an understanding of the value of physical fitness and healthy lifestyle choices. (nutrition unit)
* Demonstrate responsibility in self-discipline, self-reliance, time management, and personal behavior.

Civic –

* Demonstrate an understanding of the value of leadership, and service to the school and the community. (group work)

**Science supports the following 21st Century Skills:**

1. Use real-world digital and other research tools to access, evaluate, and effectively apply information for authentic tasks
2. Work independently and collaboratively to solve problems and accomplish goals.
3. Communicate information clearly and effectively using a variety of tools/media in varied contexts for a variety of purposes.
4. Demonstrate innovation, flexibility and adaptability in thinking patterns, work habits, and working/learning conditions.
5. Effectively apply the analysis, synthesis, and evaluative processes that enable productive problem solving.
6. Value and demonstrate personal responsibility, character, cultural understanding, and ethical behavior.

**CLASSROOM GUIDELINES AND CONSEQUENCES**

The purpose of school is to provide an environment where students come to learn. The following class guidelines were put together to make our classroom is a place where students act responsibly and work cooperatively with the teacher and other students.

 **BE PREPARED**

- Come to class ready to learn

 - Have all required materials with you (science notebook, pen or pencil, homework)

 **BE PROMPT**

- Come to class on time

- Be in your seat working on *Bell Work* when class begins

 - Hand in assignments when they are due

 **BE POLITE**

- Be kind and respectful towards yourself and others

 - Raise your hand before speaking

 - Only **ONE** person speaks at a time

 **BE POSITIVE**

- Believe in yourself

 - Trust that there are people here who want to help you

**In addition to the four P’s listed above:**

 1. **BE AWARE**

 **-** Due to possible hazards that exist in a science classroom / laboratory such as presence of chemicals, glassware, sharp tools, Bunsen burners, etc., **I must insist that no student touch anything that does not belong to them unless instructed by the teacher or given permission by the owner.**

 -Follow all laboratory safety procedures.

 2. If at any time I want the class to be totally quiet, I will say **“FREEZE PLEASE”.**

 This means **Be Quiet and Stop All Activity Immediately!**

**GRADING POLICIES – 7th Grade Science**

**1. HOMEWORK / CLASS WORK:**

Homework / Class work provides practice opportunities and reinforcement of knowledge and skills. Homework is assigned occasionally in science and is a continuation or extension of an assignment started in class. Students should make the effort to successfully complete all assigned work. If the student doesn’t understand the assignment or is unable to complete a particular assignment, the student should seek help from the teacher. The student should complete the assignment the following night and it would not be considered late. Chronically late assignments will earn a reduced grade. The maximum reduction for late work is 50%. If a student misses an assignment due to an excused absence, it is the **student’s responsibility** to find out what the assignment was and to complete the assigned work. Arrangements can be made for lengthy absences. Homework / Class work combined are calculated as 20% of the term grade.

**2. CLASS PARTICIPATION / NOTEBOOK:**

Positive class participation is expected. Group work and class discussions are essential in the development of scientific knowledge/skills making it beneficial for the student’s success to be present in class regularly. Assignments, whether completed during class or sent home as homework, usually require participation in class to successfully understand and complete the work. The class participation grade is based on appropriate class participation and behavior and being prepared for class. One focus in class is the daily maintenance of the science notebook. The notebook and class participation are each calculated as 10% of the term grade.

**3. FORMATIVE ASSESSMENTS:**

Formative assessments are designed for periodic checking of understanding. Quizzes, small activities and exit slips are examples of formative assessments. Anticipate two or three formative assessments for each unit of study. Arrangements for make-up of assessments missed due to absence MUST be made within one week from the day of student’s return to school. It is the **student’s responsibility** to arrange for make-ups upon returning to school. Formative assessments are calculated as 20% of term grade.

**4. SUMMATIVE ASSESSMENTS:**

Summative assessments such as tests and major projects provide opportunities for students to demonstrate what they know in a variety of ways and will often require time in and out of school to complete. Arrangements for make-up of assessments missed due to absence MUST be made within one week from the day of student’s return to school. It is the **student’s responsibility** to arrange for make-ups upon returning to school. Summative assessments are calculated as 20% of the term grade.

**5. LABORATORY WORK:**

Laboratory work and activities will be graded based on accuracy, completeness, quality/neatness, and group cooperation. Arrangements for make-up of a lab activity missed due to absence MUST be made within one week from the day of student’s return to school. It is the **student’s responsibility** to arrange for make-ups upon returning to school. Lab activities are calculated as 20% of the term grade.

**5. EXTRA HELP:**

Extra help is an opportunity for students to ask for clarification of something that they do not understand, prepare for a test, or make up work due to an absence. Please contact me for an appointment as needed.