7th Grade Integrated Science Syllabus

2008-2009

Philosophy: All children have a right and the ability to learn. I welcome students at their present level of functioning and make it my goal to bring them to a new and higher level. I will be sending an email to all parents within the first month of school to make sure I have good contact information for everyone. Because I am part-time, I am sometimes hard to track-down; because of this email will be my primary method of contact.

LABORATORY REQUIREMENT: Students who take this course spend a minimum of 30% of their time engaged in laboratory exercises. All DoDEA science courses have this minimum 30% time period for laboratory exercises.

Major Concepts/Content: Integrated Science is designed to provide students with an integrated approach to three traditional science disciplines (life science, physical science, earth/space science), in addition to science as inquiry, science & technology, science & social perspectives, and the history & nature of science. The course integrates the traditional disciplines using the unifying concepts and processes of systems, order & organization, evidence, models & explanation, change, consistency & equilibrium, and form & function.

Scientific inquiry and understanding about inquiry are emphasized through practical implications and meaningful applications. Topics students study include water, ecology, geology, plant and animal life, properties of matter, populations, and the solar system.

Major Instructional Activities: Based on the philosophy that scientific knowledge is best acquired through inquiry, the course uses a variety of techniques to introduce, stimulate, explore, and reinforce major scientific concepts, theories, principles, and skills.

Instructional activities are staged in appropriate settings. They include laboratories, classrooms, forms of technology, and field studies. Teaching strategies include investigations, demonstrations, discussions, and hands-on/minds-on experiences.

Major Evaluation Techniques: All aspects (e.g., ability to inquire, scientific understanding of the natural world, and understanding of the nature and utility of science) of progress in science are measured using multiple methods such as individual and group performances, projects, reports, student-generated works, and/or conventional testing.

Essential Objectives: Upon completion of Integrated Science, students should be able to:

- Engage in full and partial scientific inquiries to design, conduct, and communicate scientific investigations to explore ideas about the natural world.
- Use scientific inquiry to design and conduct scientific investigations to meet a human need, make a decision, solve a human problem, or develop a product.

- Recognize and describe the interrelationship between science and technology.
- Apply the tools of technology (e.g., computers) in scientific endeavors.
- Identify qualities inherent in scientific behavior (e.g., reasoning, insight, energy, skill, and creativity).
- Discuss contributions of men and women of various social and ethnic backgrounds to science and technology.
- Apply science concepts to make decisions (weighing risks and benefits) about students' personal health and well-being.
- Describe the levels of structure and function in living things.
- Explain how evolutionary factors affect biological adaptations in plants and animals.
- Describe the types of soil and how they change.
- Understand the basic principles of ecology, food chains, and ecosystems.
- Identify the causes of weathering and the physical/chemical changes associated with weathering.
- Compare and contrast sexual and asexual reproduction in living organisms.
- Explain a system of classification for living organisms, based on body structure/function and interactions with the environment.
- Explain how the earth's position in the solar system affects seasons, weather, and light.

Grading Policy:
Lab reports/ Investigations-20%
Daily Work (Class work/Homework)-30%
Tests/ Projects-30%
Quizzes-20%

Homework: Daily work (including class work and homework) makes up 30% of the total grade. Students are expected to complete assignments on or before due date. Homework is usually a continuation of what is started in class. Occasionally, it is given to reinforce something covered in class.

Students are required to write down their homework assignments each day in their agenda. The agenda may be used for communication between parents and teachers as well.

All homework assignments are also posted on the homework webpage. Parents are encouraged to double check the webpage if a child has difficulty with homework completion.

Late Work Policy: If a student does not complete an assignment on time or if the assignment has been completed, but is not turned in (for whatever reason), he/she will receive a "Letter of Incomplete Work". The first letter serves as a warning and the work is accepted the next school day without grade penalty. If the work is not turned the next school day, then every day after 10 points will be deducted from the highest possible grade. Please do everything to avoid zeros in the gradebook!

Classroom Management: As I stated in my philosophy of education, all students have a right to learn. Students MUST abide by simple, standard rules so that everyone may exercise his/her right to learn. The rules established and enforced are as follows:

1. Listen carefully
2. Follow directions the first time they are given
3. Work quietly. Do not disturb others who are working.
4. Respect peers and teachers. Be kind with your words and actions.
5. Respect school and personal property.
6. Work and play safely.

When working in cooperative groups, additional rules apply and they are as follows:

1. Take turns talking quietly.
2. Listen to each other's ideas.
3. Praise/recognize each other's ideas.
4. Help each other when asked.
5. Work together as a group.
6. Stay on task.
7. Contribute fully as an individual within the group
8. Evaluate how well you worked together

Online textbooks can be accessed using the following address:

http://www.glencoe.com/sites/common_assets/science/ose/

The username and password have been given out to each student.

****Please keep this paper in the front of your Science binder****

Parents please read through the syllabus with your child and sign below. I would like to have a good email address for you all so I can make a distribution list to let you know of upcoming projects, tests, labs, missing homework or just to praise your child.:)

Student Name: _____

Parent(s) or guardian(s):_____

_____

Email address where you would like correspondence sent:

_____

Telephone Number: _____

I am looking forward to an exciting and productive year!