

4th Grade Science
2011-2012

Instructor: Ms. Vicki Vrooman

Contact Information:

(918) 481-1111 x208

vvrooman@hollandhall.org

Course Description

The fourth grade science program offers an intriguing balance of scientific knowledge, investigative experience, and an approach that enlivens the curiosity of the student, encouraging the advancement of his/her thinking from the concrete to the abstract. This is a general science class with units of study that cover life science, earth science, and physical science. We continue to build on the concepts and methods used in the primary school.

Benchmarks

Demonstrates an understanding of the important concepts and ideas presented.

Works productively in partnerships.

Applies active reading skills with the aim of acquiring knowledge of science concepts.

Demonstrates the ability to use relevant skills during scientific investigations.

Developing the ability to communicate in writing an understanding of scientific concepts and ideas.

Preparation for Class/Course Materials

Hands On Elementary Science Curriculum; SCIS Rock Kit; ESS Battery and Light Kit; Project Learning Tree, Project Wild, and Project WET; American Heart Association Curriculum; American Dairy Council Nutrition Curriculum; MyPlate.gov curriculum; the NSTA Science & Children Magazine; Teacher made units and materials; and lab equipment

Methods of Instruction

A variety of teaching methods will be used, including, but not limited to: direct instruction, class discussions, hands-on activities, demonstrations, experiments, field trips, dissections, visiting specialists, reading and highlighting, and the use of multimedia (SmartBoard, DVD, computer-internet research).

Assessments

This is a continuous process including daily observations by the teacher of individual and team experimentation, examination of student's ability to record experiment results, participation in class discussions, review sheets, informal teacher and student oral exchanges, unit tests, vocabulary tests, a research paper, written assignments, and science unit work reviews. Comments are sent out three times a year. Student-led conferences are held in the fall and spring to discuss progress of students. Conferences may be scheduled at other times throughout the year, if needed.

Projected Course Schedule

Monday - Thursday, 50 minutes per session and Friday, 40 minutes per session

Outline of Topics

First Trimester: Nutrition & Physical Fitness Unit, Outdoor Education Activities and Vertebrate Animal Unit

Second Trimester: Water Unit, Rocks and Minerals Unit, Flight Unit

Third Trimester: Electricity Unit - Batteries and Lights, Bird Interdisciplinary Unit, Human Body Systems and Anatomy Unit (with dissection of the insides of a rat and a full dogfish shark)