

Department: Science

Course Name: Science 8 – Physical Science

Course Description:

This course presents an introduction to chemistry and physics. For the first half of the year, students explore the basics of chemistry. The second semester is dedicated to physics. This course fosters hands-on learning with a primary goal of preparing students for upper school science courses. Numerous lab activities and open exploration provide students with opportunities to apply science concepts to real world situations. In addition, students will develop Vernier technology skills necessary for STEM-literacy in today's science classrooms.

Content:

Scientific Methods

Units and Measuring

Density

Matter

Atomic Theory

Periodic Table

Chemical Reactions

Distance, Time, and Speed

Motion

Forces

Newton's Laws

Energy & Work

Gravity

Skills:

Measuring

Graphing data

Outlining

Hypothesizing

Observing and inferring

Analyzing and interpreting data

Note taking and organizational skills

Text and Materials:

McGraw Hill Physical iScience

Methods of Instruction:

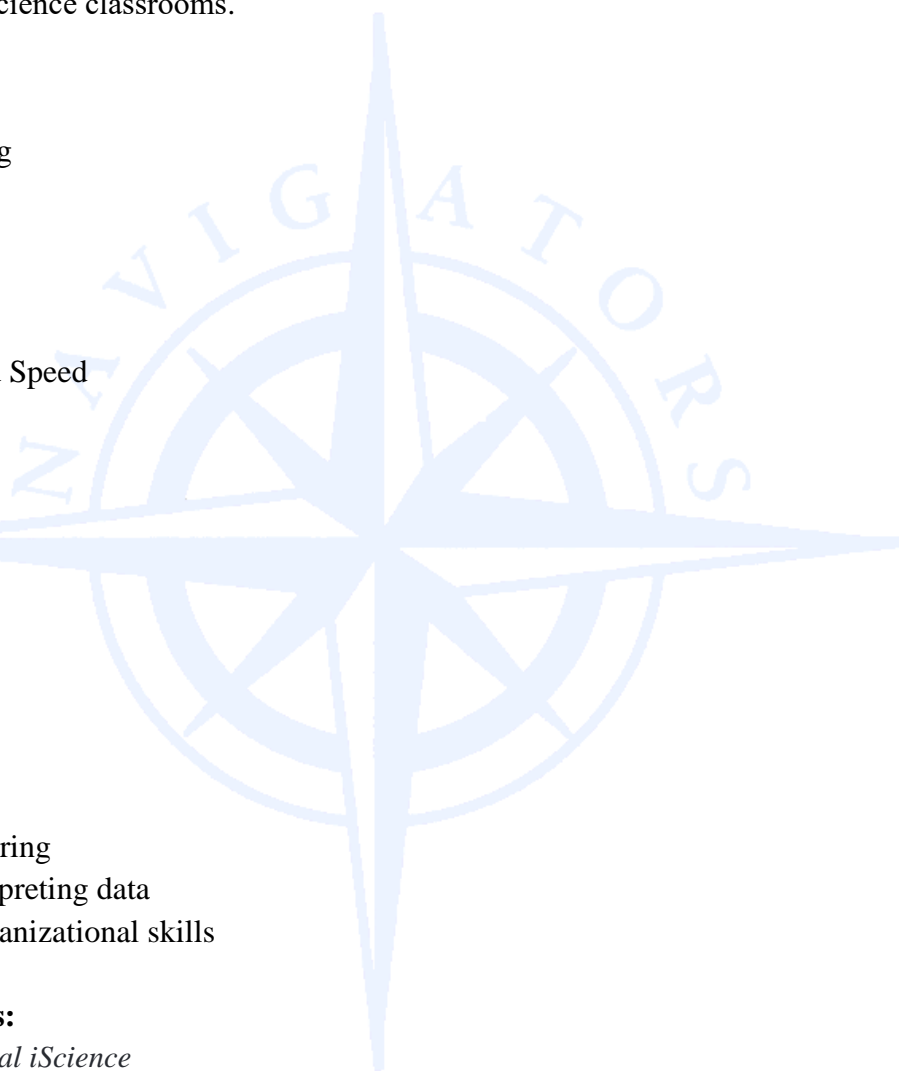
Lecture and Demonstrations

Laboratory experiments

Group projects

Computer projects

Individual student presentations



Methods of Evaluation:

Quizzes- traditional and online assessments

Tests- traditional and online assessments

Homework- traditional and online assessments

Classwork

Note-Taking

Class participation

Laboratory reports

Laboratory participation

