EIGHTH GRADE SCIENCE

INSTRUCTOR: Susan Ricketts

COURSE PHILOSOPHY: Eighth grade science provides students with opportunities to analyze science-related issues such as the human body system, medical fields, the Earth in Space, technology, and satellites. A discussion of these and other issues can provide excellent additional opportunities for the development of thinking skills.

COURSE DESCRIPTION: The study of eighth grade science will give the students a new perspective on why and how things happen around them. They will begin to ask their own questions and supply their own answers. This course includes the ongoing processes of asking and answering questions about the world around us. Curiosity and imagination are guiding lights for this course. By virtue of this curiosity and imagination, students are able to create a never-ending list of questions about the universe in which we live.

OBJECTIVES: Eighth Grade GLE’S

Strand/Standard I - Properties and Principles of Matter and Energy

Big Idea I.1 - Changes in properties and states of matter provide evidence of the atomic

theory of matter

Level 3 I.1.A - Objects, and the materials they are made of, have properties that can be used

to describe and classify them

Level 4 I.1.A.a - Scope and Sequence--Physical and Chemical Properties and Changes of Matter

Recognize that elements (unique atoms) and compounds (molecules or crystals) are pure

substances that have characteristic properties

Level 4 I.1.A.b - Scope and Sequence--Physical and Chemical Properties and Changes of Matter

Describe the physical and chemical properties (e.g., magnetic attraction, conductivity, melting

point and boiling point, reactivity) of pure substances (elements or compounds) (e.g., copper

wire, aluminum wire, iron, charcoal, sulfur, water, salt, sugar, sodium bicarbonate, galena,

quartz, magnetite, pyrite) using appropriate senses and tools

Level 3 I.1.B - Properties of mixtures depend upon the concentrations, properties and

interactions of particles

Level 3 I.1.C - Properties of matter can be explained in terms of moving particles too small to

be seen without tremendous magnification

Level 4 I.1.C.a - Scope and Sequence--Physical and Chemical Properties and Changes of Matter

Describe evidence (e.g., diffusion of colored material into clear material such as water; light

reflecting off of dust particles in air; changes in physical properties and reactivity such as gold

hammered into foil, oil spreading on the surface of water, decay of organic matter,

condensation of water vapor by increased pressure) that supports the theory that matter is

composed of moving particles too small to be seen (atoms, molecules)

Level 3 I.1.D - Physical changes in the state of matter that result from thermal changes can

be explained by The Kinetic Theory of Matter

Level 4 I.1.D.a - Scope and Sequence--Physical and Chemical Properties and Changes of Matter

Using the Kinetic Theory model, illustrate and account for the physical properties (i.e., shape,

volume, malleability, and viscosity) of a solid, liquid, or gas in terms of the arrangement and

motion of molecules in a substance

Many more GLE’s will be assessed and are available in the science room.

DAILY REQUIRED MATERIALS TO BE BROUGHT TO CLASS: Pen or pencil, science notebook, and other required materials as requested.

Test Policy: Test and/or projects will be due for each chapter or unit. A mandated quarter test, semester test, and end of the course final are required. These tests will be comprehensive and will count for a grade.

Homework: Homework will be done in a timely manner. The Science Fair Project will be due in March and most of the work on it will be completed out of classes. The Science Fair Project will be optional for Biology II and Chemistry.

Grading Scale: Grading is calculated with the following standard percentage scale, based on the total points earned:

100-95 = A 86-83 = B 76-73 = C 66-63 = D

94-90 = A- 82-80 = B- 72-70 = C- 62-60 = D-

89-87 = B+ 79-77 = C+ 69-67 = D+ Under 60 = F

Attendance and Make-Up Work: Rules regarding attendance and make-up work follow the written policies of the school board. These can be found in the current student handbooks.

Late Work: Late work will be 20% off if turned in one day after the due date and 50% off the second day after due date till the end of the quarter.

Tardy to class: Rules regarding being late to class follow written policies of the school board which may be found in the current student handbook.

Classroom Rules:

1. Follow the rules written in the student handbook.

2. Be Present.

3. Be Prompt.

4. Be Prepared.

5. Be Polite.

Consequences:

1. Warning – discussion with student.

2. Movement to an assigned seat.

3. Call parents.

4. Disciplinary note sent home.

5. Conference with parent or guardian.

6. Referral to office.

• A severe disruption will call for immediate referral to the office.

Student signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Parent signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_