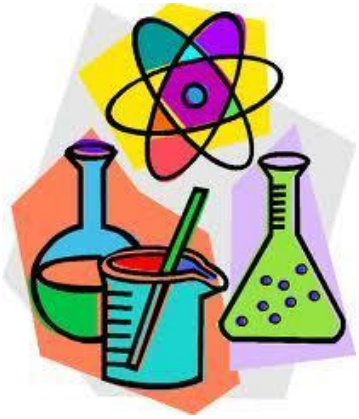
SCIENCE 7
2022-2023
Course Outline



TEACHER: Mrs. T. Szmata

TEXTBOOK: Gue, et al., SCIENCE FOCUS 7, McGraw-Hill Ryerson, 2001.

COURSE OBJECTIVES:

The major course objectives of the Science 7 curriculum are:

1. To encourage students to develop a critical sense of wonder and curiosity about scientific and technological endeavors.

2. To enable students to use science and technology to acquire new knowledge and solve problems, so that they may improve the quality of their own lives and the lives of others.

3. To prepare students to critically address science related societal, economic, ethical, and environmental issues.

4. To provide students with a foundation in science that creates opportunities for them to pursue progressively higher levels of study, prepares them for science related occupations, and engages them in science related hobbies appropriate to their interests and abilities.

5. To enable students, of varying aptitudes and interests, to develop a knowledge of the wide spectrum of careers related to science, technology and the environment.

METHODS OF INSTRUCTION:

Lecture, discussion, and readings will be used to present concepts.

Exercises, laboratory work, demonstrations, and projects will be used to reinforce and expand the concepts.

MATERIALS:

It is recommended that you keep everything in a 2” or 3” three ring binder. You may also need a calculator, pencil crayons, markers, a ruler and other materials throughout the school year.

CLASSROOM EXPECTATIONS:

Please abide by the following classroom expectations:

1. Regular attendance.

2. At the start of class, be at your desk, ready to work, with all your materials at hand.

3. Washroom breaks are permitted. However, only one student is allowed to leave the classroom at a time.

4. Only water is permitted in the Science Lab.

5. Treat others, their ideas and possessions with respect.

6. Electronic Device Policy:
    - The best place for your electronic device is at HOME or in your LOCKED locker. However, if you choose to bring it to class, electronics are to be turned off or to be silent and left in the appropriate place provided by your teacher.
    - Appropriate use of electronics is encouraged as they will be used to supplement regular classroom instruction. However, they may only be used with permission from your teacher.
    - Electronic devices will not be allowed following the completion of an assignment, quiz or test. Alternative activities will be provided in the case that you finish your work early.

EVALUATION:

25% Assignments, Activities, and Laboratory Exercises

25% Quizzes

25% Tests

25% Final Examination

Keep track of your marks as they will be posted online regularly. Our online marks system is used as a tool for teachers to communicate with students and parents about such things as attendance, marks, discipline, schedules, assignments, events, and fees.

ASSIGNMENT POLICY:

ALL Assignments are given a due date. Please do not be late. If an assignment is not completed on time you must spend a lunch hour finishing it with me.

Notes and assignments must be completed in the event of an absence. You can find the extra materials in the “While You Were Away” folders on the side table.

QUIZ POLICY:

A small quiz will be given approximately once a week covering the material from the lessons throughout that week. Quizzes may consist of matching, true and false, multiple choice, labeling or written questions.

EXAM POLICY:

A large unit exam will be given at the end of each unit covering all the material learned throughout the unit. Exams may consist of matching, true and false, multiple choice, labeling or written questions.

SAFETY:

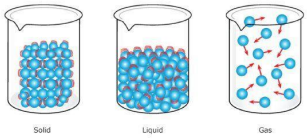
To ensure the safety of others, students misbehaving or not following directions given in the laboratory will be suspended from the laboratory and given an alternative assignment.

EXTRA HELP:

I would be pleased to offer extra assistance – please contact me to arrange a suitable time either before school, at lunch, or after school.

COURSE OUTLINE:

Unit	**Topics**
1. Interactions and Ecosystems (8 weeks)	Interactions within Ecosystems Impacts on Ecosystems Environmental Choices How Organisms Interact Cycles in the Environment Succession and Change in Ecosystems Environmental Monitoring
2. Plants for Food and Fiber (8 weeks)	People and Plants Structure and Adaptation Plant Reproduction and Breeding Meeting the Need for Food and Fiber Sustaining the Soil Pests and Pest Control
3. Heat and Temperature (8 weeks)	Using Energy from Heat Measuring Temperature The Particle Model, Temperature and Thermal Energy Expansion and Contraction The Particle Model and Changes of State Transferring Energy Conserving our Fossil Fuels



4. Structures and Forces
(7 weeks)

Types of Structures
Describing Structures
Mass and Forces
Forces, Loads and Stresses
How Structures Fail
Designing with Forces
Stables Structures

5. Planet Earth
(8 weeks)

Minerals
Rocks and the Rock Cycle
Erosion
The Moving Crust
Earthquakes
Volcanoes
Mountains
Fossils
Geological Time
Fossil Fuels