



Sturgeon Composite High School

Science 10

COURSE OUTLINE

Fall 2021-22 (Sept.- Jan.)

Instructors: Mrs. S. Reed/Mr. T. Anderson/Ms. J. Brimacombe

Email: _____ google classroom code: _____



PREREQUISITE: Minimum 65% in Science 9 or 65% in Science 14 or 50% in Science 24

And Recommended 65% in Math 9

TEXT: Science 10: Addison Wesley

- **COURSE MATERIALS:**

- Calculator – **only needs to be able to do $\sqrt{}$ and x^2**
- Three ring binder with; Loose leaf paper or a coil scribbler (300pages min.), **graph paper**, and ruler that is see-through

COURSE CONTENT: The Science 10 program is an integrated academic course containing the fundamental concepts of biology, chemistry and physics that will help students better understand science and its appropriate applications in our daily lives.

Science 10 consists of **four** units of study.

UNIT I: Energy and Matter in Chemical Change (30%)

- Chemical changes involve energy and transformations of matter.
- Emphasis on Nature of Science

UNIT II: Energy Flow in Technological Systems (30%)

- The first and second laws of thermodynamics have been useful in the development of modern and efficient energy conversion devices.
- Emphasis on Science and Technology.

UNIT III: Cycling of Matter in Living Systems (30%)

- The fundamental unit of life, the cell, is an efficient open system comprised of a cell membrane and organelles that carry out the basic functions of all living organisms.
- Emphasis on Nature of Science

UNIT IV: Energy Flow in Global Systems (10%)

- Solar energy sustains life and drives global climate systems on Earth.
- Social and environmental contexts for investigating climate change
- Hydrologic cycle and phase change
- Relationship between biomes, solar energy and climate

EVALUATION: The final mark in Science 10 will be based upon the following:

TERM WORK: Consists of: 70%**

Each unit will be assessed by:

- Lab reports, assignments, projects - 10%
- Quizzes - 20%
- Unit Exams - 40%

FINAL EXAM: 30%**

- Cumulative exam of all course material