

# Sturgeon Composite High School Science 10 COURSE OUTLINE

STURGEON PUBLIC SCHOOL DIVISION

Instructor: Mrs. C VanDerHoek

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

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

Loose leaf, graph paper, and ruler that is see-through

3 – section coiled scribbler (journal)

**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%) Sept 3rd – Oct 10th

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

## UNIT II: Energy Flow in Technological Systems (30%) Oct 15th - Nov 21st

- 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%) & UNIT IV: Energy Flow in Global Systems (10%) Nov 25<sup>th</sup> – Jan 17<sup>th</sup>

- 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
- 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 15%
- Unit Exams 45%

#### FINAL EXAM: 30%

Cumulative exam of all course material

### **Student Expectations/Responsibilities:**

- Students are responsible for their learning; they are to attend all classes, be
  on time, complete all assignments, do the preparatory reading that is
  required, and study for exams.
- If a student is absent for exams, the office is to be notified by the parents/guardians as to why they will be or were absent. Should absences for exams begin to be a pattern, a doctor's note may be required.
- If a student is absent from class, it is their responsibility to find out from another student in class what was missed and to pick up any missed assignments from the bin at the front of the class.
- Power Points will be available on the Google classroom for students to print off. Use class code **s2b8ya** to log into Google classroom
- Unit exam estimated dates are given at the start of the course (check power school for changes and updates to these if there are any); these major exam dates should be put into the calendars on your phones. Quiz dates will be given at least a week before the quiz for most cases; there may be pop quizzes or some with only a few days' notice.
- There are no rewrites of unit exams or quizzes in Science 10. If you want to rewrite, you can take the course again the following semester.
- Students who find the need to cheat or facilitate cheating will receive a mark of zero - "0". That mark may be used as part of your evaluation in this course.
- ALL assignments are to be answered in complete sentences marks will be deducted for grammar and spelling as students need to learn to communicate in a clear and concise manner.

I am available for extra help at noon hours – please let me know if you plan to come.