

### Sturgeon Composite High School Chemistry 30 COURSE OUTLINE

Semester 2 – 2021-22 (Feb.-June) Mrs. S. Reed/ Mrs. T. Blonski Email: <u>sreed@sturgeon.ab.ca</u> google classroom: \_\_\_\_



#### PREREQUISITE: Chemistry 20 – minimum mark recommended 65%

TEXT: Inquiry into CHEMISTRY – McGraw-Hill Ryerson or Nelson Chemistry

#### COURSE MATERIALS:

- scientific or graphing calculator
- data booklet (supplied)
- binder with paper or coil book
- graphing paper and ruler

#### COURSE CONTENT: Chemistry 30 consists of four units of study.

Students will be encouraged to develop positive attitudes that support the responsible acquisition and application of knowledge related to science and technology. Attitude outcomes such as an interest in science, mutual respect, scientific inquiry, collaboration, stewardship, and safety are to be developed throughout Chemistry 30, in conjunction with the specific outcomes for Knowledge as outlined below; Science, Technology and Society (STS); and Skills in each unit.

#### UNIT A: THERMOCHEMICAL CHANGES (21%)

- 1. determine and interpret energy changes in chemical reactions
- 2. explain and communicate energy changes in chemical reactions

#### UNIT B: ELECTROCHEMICAL CHANGES (31%)

- 1. explain the nature of oxidation-reduction reactions
- 2. apply the principles of oxidation-reduction to electrochemical cells
- UNIT C: CHEMICAL CHANGES OF ORGANIC COMPOUNDS (18%)
  - 1. explore organic compounds as a common form of matter
  - 2. describe chemical reactions of organic compounds

#### UNIT D: CHEMICAL EQUILIBRIUM FOCUSING ON ACID-BASE SYSTEMS (30%)

- 1. explain that there is a balance of opposing reactions in chemical equilibrium systems
- 2. determine quantitative relationships in simple equilibrium systems

# COURSE EVALUATION: The final mark in Chemistry 30 will be based upon the following: EXAM: 30 % (Provincial Diploma Exam)

#### TERM WORK: 70%

Exams Quizzes		Exams that covers all outcomes of the unit Quizzes that cover a group of objectives within the unit
Labs/Assignments	20%	Lab and assignments covering groups of objectives within the unit

## **\*\***PLEASE NOTE: In the event that we switch to on-line learning, course weightings may be altered to fit this format of learning, based on the recommendations of the division and the government.