Science 9 Course Outline

Wolfe Spring 2020

Welcome to Science 9 with Ms. Wolfe! This semester we will cover a several topics in different areas of science.

Content:

UNIT 1: Physics Weeks 1 - 5

"Electrical current is the flow of electric charge"

Static Electricity ● Batteries ● Circuits - Series and Parallel ● Ohm's Law — Voltage, Current, Resistance

UNIT 2: Biology Weeks 6 - 9

"Cells are derived from cells"

Cell reproduction – mitosis • Asexual reproduction • Creating gametes – meiosis • Human sexual reproduction

UNIT 3: Chemistry Weeks 10 -13

"The electron arrangement of atoms impacts their chemical nature"

Periodic table organization • Properties of elements • Electron arrangements lonic and covalent compounds

UNIT 4: Interconnectedness

Weeks 14 - 18

"The biosphere, geosphere, hydrosphere, and atmosphere are interconnected"

The effect of solar radiation • Biotic and abiotic components of ecosystems •

Matter cycles • Sustainability of ecosystems • First Peoples' knowledge of interconnectedness

Resources: Text: BC Science 9, McGraw-Hill – Ryerson

In-class notes and handouts
Ms. Wolfe's homework website

Materials: Required: binder, lined paper, duo-tang (to create a lab book),

pencil, pen, eraser, ruler

Recommended: calculator, geometry set, pencil crayons

Evaluation:

Students will have multiple opportunities to develop mastery of each skill. The graded assignments will include note-taking, individual assessments such as quizzes and tests, labs, activities, and small projects. There will be a final assessment.

As we work through the four units in this course, we will help students to master the content as well as achieve the following *curricular competencies*:

- Question and predict
- Plan and conduct
- Process and analyze
- Evaluate
- Apply and innovate
- Communicate

At the end of each unit students will self-assess and be assessed as to whether they are "emerging", "developing", "proficient", or "extending" these expectations. Students will have multiple opportunities to develop mastery of each skill and will receive credit for the class after meeting minimum requirements in each content area.

Be on the lookout for "pink sheets," which list the assignments and topics covered and approximate dates, for each topic. These are an important tool for students to stay organized and on top of things. They are posted on the homework site as well as handed out in class.

Contact information:

I can be reached at sarah.wolfe@yesnet.yk.ca or phone the school at 667-8665

My homework site is https://wolfe-fhc.weebly.com/. Please check the homework site for assignment trackers ("pink sheets") and copies of handouts, etc.

Extra help hours: I will be available in my room (225) Mon & Wed 3:20 – 3:50 (except during staff meetings). Additional times by appointment.

Please feel free to contact me with any questions, however, be aware that I generally check my email only once each weekday.