SACKVILLE HIGH SCHOOL

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**SCIENCE 10 COURSE OUTLINE**

Science 10 Teaching Staff 2016-2017:

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**Textbook:** Nova Scotia Science 10 (McGraw –Hill Ryerson, 2012)

**Course Outline:**

**Life Science: Sustainability of Ecosystems Assessment: 25%**

* Describe how different geographical locations can sustain similar ecosystems
* Predict and analyse the impact of external factors on the sustainability of an ecosystem, using a variety of formats
* Distinguish between biotic and abiotic factors, determining the impact on the consumers at all trophic levels due to bioaccumulation, variability and diversity.
* Describe how the classification involved in the biodiversity of an ecosystem is responsible for its sustainability.

**Physical Science: Chemical Reactions Assessment: 25%**

* Name and write formulas for common ionic compounds and molecular compounds
* Represent chemical reactions and the conservation of mass using balanced symbolic equations
* Perform experiments, using appropriate instruments and procedures, to identify substances as acids, bases or salts based on their characteristic properties
* Classify simple acids, bases and salts based on their characteristics, name and formula

**Physical Science: Motion Assessment: 25%**

* Use instruments and terminologies effectively and accurately for collecting data in various experiments
* Distinguish among constant, average and instantaneous speed and velocity of an object
* Using linear experimentation with appropriate technologies, analyze graphically and quantitatively the relationships among distance, time and speed and among position, displacement, time and velocity
* Describe and evaluate the design and functions of motion technology

**Earth and Space Science: Weather Dynamics Assessment: 25%**

* Use weather instruments effectively and accurately for collecting local weather data and collect and integrate weather data from regional and national weather observational networks
* Identify questions and analyze meteorological data for a given time span and predict future weather conditions, using appropriate technologies
* Illustrate and display how science attempts to explain seasonal changes and variations in weather patterns for a given location
* Describe how the atmosphere and hydrosphere act as heat sinks in the water cycle

**Assessment:**

Science courses require commitment and students must take responsibility for achieving the outcomes. Students need to make sure that they keep up with the work and seek extra help early if they encounter difficulties before they become overwhelming. Unit assessments will consist of multiple opportunities for a student to demonstrate their understanding of the outcomes. Such opportunities include (but are not limited to) tests, quizzes, in-class assignments, labs and projects. No one method of assessment will be worth more than 50% of the unit. The Science “exam” (unit 4 test) is not exemptible, and is scheduled in the formal exam period.

**Continuous School Improvement Goals involve developing critical thinking and problem-solving skills for all students.**

**Communication of Student Achievement:**

A collaborative effort of all stakeholders (student/parent/teacher) is important to ensure student academic success. In an effort to maintain communications, a numbers of avenues are available.

* Marks and attendance can be checked at any time on the Parent/Student Portal of PowerSchool. (If you do not have a password for the portal, please contact the main office.)
* The Auto-dialer calls home regarding unexcused absences.
* Parents and students are encouraged to contact the teacher via email or phone if they have any concerns regarding academic progress.

**Creating a Positive Learning Environment**

To maximize the opportunities for success, it is important:

* To be on time and prepared with the necessary materials.
* To display proper classroom etiquette and participate in classroom activities.
* To complete all assigned homework and to expect periodic homework checks.
* To review covered materials daily in preparation for assessments and class work.
* To adequately prepare for all tests.
* To assume full responsibility for any and all missed class work or assessments.
* To attend extra help sessions when needed.

We look forward to working with you and hope that we can help you meet your goals with great success.