R.H. KING ACADEMY SCIENCE DEPARTMENT
COURSE OUTLINE AND EVALUATION

SNC 1P1: GRADE 9 APPLIED SCIENCE

COURSE OVERVIEW

This course enables students to;

1. understand basic concepts in biology, chemistry, earth and space science, and physics;
2. to develop practical skills in scientific investigation;
3. to apply their knowledge of science to everyday situations.

TOPICS OF STUDY

In this course, students will design and conduct investigations into practical problems and issues related to ecosystems, the structure and properties of elements and compounds, astronomy and space exploration, and static and current electricity.

Ecology Unit

In this unit students will:

- demonstrate an understanding of the dynamic nature of ecosystems, including the relationship between ecological balance and the sustainability of life;
- investigate factors that affect ecological systems and the consequences of changes in these factors;
- analyse issues related to environmental sustainability and the impact of technology on ecosystems.

Chemistry Unit

In this unit students will:

- describe the atomic structure of common elements and their organization in the periodic table;
- investigate the physical and chemical properties of common elements and compounds, and relate the properties of elements to their location in the periodic table;

Electricity Unit

In this unit students will:

- demonstrate an understanding of the principles of static and current electricity;
- design and build electrical circuits that perform a specific function;
- analyse the practical uses of electricity and its impact on everyday life.

Space Unit

In this unit students will:

- demonstrate an understanding of the formation, evolution, structure, and nature of our solar system and of the universe;
- design and conduct investigations into the appearance and motion of visible celestial objects;
- describe how human endeavours and interest in space have contributed to our understanding of outer space, the Earth, and living things, and identify Canadian contributions to space exploration

ASSESSMENT AND EVALUATION

Assessment* for *learning
Diagnostic assessment: Posing questions, worksheets, etc.

Assessment* as *learning
Formative assessment: Homework Take-up, class activities, practice quiz or test, observations, student-teacher conversations, self-assessment, peer assessment, etc

Assessment* of *learning (Evaluation)

Knowledge	18%	70% Term
Inquiry	18%	
Communication	12%	
Application/Making Connections	12%	
Projects (K, I, C, A)	10%	
Written Exam	30%	30% Final Summative

Categories
- ***Knowledge and Understanding.*** Subject-specific content acquired in each course (knowledge), and the comprehension of its meaning and significance (understanding).
- ***Thinking and Investigation.*** The use of critical and creative thinking skills and inquiry, research, and problem-solving skills and/or processes.
- ***Communication.*** The conveying of meaning through various forms.
- ***Application.*** The use of knowledge and skills to make connections within and between various contexts.

Summative Evaluation
The summative evaluation for this course is in the form of a final written examination. This exam evaluates expectations in all four units.

COURSE TEXTBOOK: Science Links 9 **Replacement Cost**: $90

MATERIALS REQUIRED
splash proof goggles, binder, loose leaf paper, pens, pencils, eraser, ruler, calculator, graph paper

CLINIC
All students can benefit by attending clinic periods when they feel they need extra help. You may be required to commit to clinic with your Science teacher based on marks, completion of work, disciplinary needs, or teacher request.

CHEATING AND PLAGIARISM
It is expected that all students at R.H. King Academy will practice academic honesty and build this into their career philosophies. They must acknowledge any input from peers, parents and secondary sources. Information gathered from the Internet is considered a secondary source. To submit any work that is not completely their own is considered plagiarism. “Loaning” completed work to other students is considered to be cheating.

Cheating will result in a mark of zero and may result in suspension and/or loss of credit **and/or loss of credit.**