



Grand River Collegiate Institute

COURSE OUTLINE

For students and their families.

Course Name
Grade 10 Science

Course Code
SNC 2PI

Prerequisite
SNC 1DI or SNC 1PI

Teacher
Mrs. L. Leavy
Mrs. J. Ruby

Contact
3-219 (519-576-5100 x 6025)
3-219 (519-576-5100 x 3219)

Textbook: Science Links 10
McGraw-Hill Ryerson

COURSE DESCRIPTION

This course enables students to develop a deeper understanding of concepts in biology, chemistry, earth and space science, and physics, and apply their knowledge of science in real-world situations. Students are given opportunities to develop further practical skills in scientific investigation. Students will plan and conduct investigations into everyday problems and issues related to human cells and body systems; chemical reactions; factors affecting climate change; and the interaction of light and matter.

Essential Learnings/Expectations/Skills

To be successful in this course you **must** be able to demonstrate **all** of the essential expectations as communicated by your teacher. These will be clearly communicated to you throughout the course.

Scientific Investigation Skills and Career Exploration (throughout the course):

- Demonstrate scientific investigation skills (initiating and planning, performing and recording, analyzing and interpreting, and communicating).
- Identify and describe a variety of careers related to the fields of science under study.

Chemistry: Chemical Reactions and Their Practical Applications (Strand 1):

- Analyze how chemical reactions are used in common products, and assess the safety and environmental hazards associated with them.
- Examine, through laboratory investigation, the characteristics of chemical reactions.
- Demonstrate an understanding of chemical reactions and ways to represent them.

Biology: Tissues, Organs, and Systems (Strand 2):

- Investigate current technologies (e.g. MRI, CAT Scan) that have an impact on human health.
- Investigate cell division, cell specialization, and the organization of systems in animals.
- Demonstrate an understanding of the organization of cells, from tissues, to organs, to systems in animals.

Earth and Space Science: Earth's Dynamic Climate (Strand 3):

- Analyze the effects of human activity on climate change, and effects of climate change on living things.
- Investigate and demonstrate an understanding of various natural and human factors that have an impact on climate change and global warming.

Physics: Light and Applications of Optics (Strand 4):

- Analyze how properties of light and colour are applied in technology and the impact of these on society.
- Investigate and demonstrate an understanding of the properties of light, and predict its behavior in mirrors and as it passes through different materials.

EVALUATION – Evidence of Learning

Why is Formative Assessment Important?

There will be many ongoing formative assessments throughout the course. Formative assessments serve as practice for students prior to being evaluated (summative assessment). The ongoing feedback helps students to recognize their strengths and weaknesses and provides information to the teacher regarding future instruction. Although no marks are assigned to formative assessment, under extenuating circumstances it may be used as additional evidence to support the teacher's professional judgment when determining a final grade.

Why is Summative Assessment Important?

There will be several summative assessments throughout the course. A summative assessment is used to evaluate student learning and to determine grades.

The types of formative and summative assessments are outlined below:

Strand	Assessment Technique	Purpose
Chemistry	Quizzes (on-line and in-class)	Formative and Summative
	Laboratory Reports	Formative and Summative
	Test	Summative
Biology	Quizzes (on-line and in-class)	Formative and Summative
	Laboratory Reports	Formative and Summative
	Medical Technology Presentation	Summative
	Test	Summative
Climate Change	Quizzes (on-line and in-class)	Formative and Summative
	Laboratory Reports	Formative and Summative
	Roof Top Garden Project	Summative
Physics	Quizzes (on-line and in-class)	Formative and Summative
	Laboratory Reports	Formative and Summative

Final Grade	
Term Work <ul style="list-style-type: none">● Tests● Lab Reports and Assignments	70 %
Final Evaluation - Lab Practical Exam (in class)	10 %
Final Evaluation – Written Exam (out of class)	20 %

Refer to the GRCI Web Site www.grc.wrdsb.ca for Assessment, Evaluation and Reporting Policies as well as Academic Honesty and Late Policies.

Procedures

Late and Missing Assignments: It is important for students to develop good personal management skills (such as time management and planning). These skills will be reflected in the **learning skills** area of the report card. It is expected that students will complete and submit all essential tasks as they are the opportunity for you to demonstrate your learning to your teacher.

Attendance: Attendance in classes is an important part of learning, and absences should be avoided. When a student is absent, a parent/guardian must call the school's attendance line on the date of absence, or provide a note explaining the absence for the student to submit the following day. Students are responsible for what they missed during their absence.

Cheating and Plagiarism: It is important for students to do their own best work. Some assignments for this class are done within the classroom and observed by the teacher, which helps to minimize the chances of cheating and plagiarism. However, in the event that cheating or plagiarism occurs, the following consequences may be implemented, in consultation with administration and dependent upon the situation:

1. The student may be required to redo all or part of the assignment or assessment.
2. The student may be required to complete an alternate assignment or assessment.
3. The student's work may be treated as a missed assignment.

There may also be other consequences that are determined to be appropriate (e.g. detention, suspension, etc.) as per the school's progressive discipline process. Parents/guardians will be informed about the infraction and the consequences.

Please refer to the school website: <http://grc.wrdsb.ca/about/policies> for more details on these policies and other academic procedures.

Signatures

Please sign below indicating you have read and understand the requirements for successful completion of this course.

Student

Parent/Guardian

Date

Date