



Malvern Collegiate
Institute
**Course
Evaluation Profile &
Outline 2023/2024**

Course Name: SNC2D

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Department: Science

Course Description/Rationale/Overview: This course enables students to enhance their understanding of concepts in biology, chemistry, earth and space science, and physics, and of the interrelationships between science, technology, society, and the environment. Students are also given opportunities to further develop their scientific investigation skills. Students will plan and conduct investigations and develop their understanding of scientific theories related to the connections between cells and systems in animals and plants; chemical reactions, with a particular focus on acid–base reactions; forces that affect climate and climate change; and the interaction of light and matter.

Prerequisite: To enroll in this course a student must have successfully completed Grade 9 Science

Class Requirements:

- Three ring binder
- Scientific calculator · Writing utensils
- Ruler, protractor
- Textbook: Science Perspectives 10, Nelson (to be provided)

COURSE REQUIREMENTS/SCHOOL POLICIES

ASSESSMENT/EVALUATION STRATEGIES:

PLAGIARISM: Plagiarized work may result in a mark of zero, and the case will be forwarded to school administration.

LATE ASSIGNMENTS: Assignments not submitted on time will not be accepted once the assignments have been marked and returned to the class. Please speak with your teacher if you feel you won't be able to complete your assignment in time.

MISSED TESTS/ASSESSMENTS: Missed tests/assessments due to illness will not be academically penalized. The teacher will provide alternative arrangements for the student to complete the test/assessment. The student will provide a note from a parent/guardian. Students who are involved in extracurricular activities must notify the teacher if they are to be away during an evaluation so that alternative arrangements can be made beforehand.

Diagnostic assessment activities are used, as required at the beginning of a block of learning (i.e. course, unit), to determine students' strengths and learning needs in order to plan, modify and adjust instruction or to provide alternative learning opportunities. *Diagnostic assessment data is not used in the determination of midterm or finals for inclusion on the report card (e.g. homework, diagnostic test).* **Formative** assessments are ongoing, during the learning process. It is used to monitor student performance and provide feedback in an effort to enhance and improve learning and instruction. Recorded formative data can be tracked and monitored to support professional judgment in cases where the body of evidence provided by the student has been affected by such things as illness and missed evaluations. .

Summative evaluations occur at the conclusion of a block of learning (e.g. activity, unit, course, semester/school year) and focuses on student achievement and program effectiveness. This is used to determine the term mark (e.g. assignments, quizzes, tests, lab reports/activities).

LEARNING SKILLS: Evaluated on Report Card as E(excellent); G(good); S(satisfactory); N(needs improvement)

1) Responsibility 2) Organization 3) Independent Work 4) Collaboration 5) Initiative 6) Self-Regulation

TERM WORK: ACHIEVEMENT CATEGORIES (70% of final mark)

The evaluation in this course is designed to reflect learning and assessment in the four categories as defined by the Science Policy Document. For both the term work and the culminating activities, the final mark will be calculated according to the following categories:

**Knowledge and Understanding
Communication**

**Application
Thinking and Investigation**

CULMINATING TASKS:

Culminating Activity - 10%

Exam - 20%

FINAL MARK: Term Work (70%) + Culminating Tasks (30%)

Classroom Routines and Procedures:

Regular attendance is essential. If you are going to be away, you are responsible for catching up on missed work or submitting it beforehand. All work submitted must be your own. Submitting another person's work is considered plagiarism and may result in a mark of zero. · Listening is an important part of class. Please listen to instructions. Record important due dates and dates of assessments. · Review course material regularly. No eating during class. **Food is not permitted in any science classroom.**

Please refer to the Student Code of Conduct for further information

COURSE OUTLINE: Science, Grade 10 (SNC2D)

Term work will be based on the **Overall Curriculum Expectations** listed below.

Earth and Space Science: Climate Change *Earth's climate is dynamic and is the result of interacting systems and processes. Global climate change is influenced by both natural and human factors. Climate change affects living things and natural systems in a variety of ways. People have the responsibility to assess their impact on climate change and to identify effective courses of action to reduce this impact.*

Analyze some of the effects of climate change around the world, and assess the effectiveness of initiatives that attempt to address the issue of climate change; Investigate various natural and human factors that influence Earth's climate and climate change; · Demonstrate an understanding of natural and human factors, including the greenhouse effect, that influence Earth's climate and contribute to climate change.

Chemistry: Chemical Reactions *Chemicals react with each other in predictable ways. Chemical reactions may have a negative impact on the environment, but they can also be used to address environmental challenges*

Analyze a variety of safety and environmental issues associated with chemical reactions, including the ways in which chemical reactions can be applied to address environmental challenges; Investigate, through inquiry, the characteristics of chemical reactions; Demonstrate an understanding of the general principles of chemical reactions, and various ways to represent them.

Biology: Tissues, Organs, and Systems of Living Things *Plants and animals, including humans, are made of specialized cells, tissues, and organs that are organized into systems. Developments in medicine and medical technology can have social and ethical implications.*

Evaluate the importance of medical and other technological developments related to systems biology, and analyze their societal and ethical implications; Investigate cell division, cell specialization, organs, and systems in animals and plants, using research and inquiry skills, including various laboratory techniques; Demonstrate an understanding of the hierarchical organization of cells, from tissues, to organs, to systems in animals and plants.

Physics: Light and Geometric Optics *Light has characteristics and properties that can be manipulated with mirrors and lenses for a range of uses. Society has benefited from the development of a range of optical devices and technologies.*

Evaluate the effectiveness of technological devices and procedures designed to make use of light, and assess their social benefits; Investigate, through inquiry, the properties of light, and predict its behaviour, particularly with respect to reflection in plane and curved mirrors and refraction in converging lenses; Demonstrate an understanding of various characteristics and properties of light, particularly with respect to reflection in mirrors and reflection and refraction in lenses

Scientific Investigation Skills and Career Exploration

Demonstrate scientific investigation skills (related to both inquiry and research) in the four areas of 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, and identify scientists, including Canadians, who have made contributions to those fields.