



Grand River Collegiate Institute COURSE OUTLINE

For students and their families.

Course Name Science, Grade 12 University/College Preparation Curriculum Document http://www.edu.gov.on.ca/eng/curriculum/secondary/	Course Code SNC 4MI	Prerequisite SNC 2DI/2PI SNC 3UI/3CI (recommended)
Teacher Mrs. K. Neaven	Contact 519-576-5100 (ext.6058)	

Textbook: None

COURSE DESCRIPTION

This course will provide students with the opportunity to increase their current understanding of a variety of Scientific concepts, as well as some of the contemporary social and environmental issues in health-related fields. The knowledge acquired and the skills developed through class discussions, investigations and problem solving experiences will assist students in their understanding of themselves and the changing world around them.

Essential Learnings/Expectations/Skills

To be successful in this course you **must** be able to demonstrate **all** of the essential expectations outlined below:

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

- Demonstrate scientific investigative skills (related to both inquiry and research) in the four areas of skills (initiating and planning, performing and recording, analysing and interpreting, and communicating).
- Identify and describe careers related to the fields of science under study, and describe the contributions of scientists to those fields.

Medical Technologies

- Demonstrate an understanding of the function, use and information provided by of a variety of medical technologies
- Assess the impact of medical technologies and therapies, both conventional and alternative, used to diagnose and treat human health conditions
- Effectively communicate scientific findings and results in a variety of ways

Nutrition

- Investigate and demonstrate an understanding of chemical components of and energy in food, and the processes by which food is digested
- Assess how personal and societal factors affect eating behaviours
- Evaluate the social and economic impact of the use of non-nutrient food additives

Biotechnology

- Investigate various techniques and biological processes used in biotechnology, and explain how they are applied in the food, health and agriculture industries
- Analyze a variety of social, ethical and legal issues related to applications of biotechnology in the health, agriculture or environmental sectors

Pathogens and Disease

- Investigate and demonstrate an understanding of the nature of pathogens, the diseases they cause and ways of controlling their spread
- Evaluate the impact of scientific and technological knowledge and individual behavior on the control of pathogens and the prevention of disease

Science and Public Health Issues

- Assess the impact of scientific research, technological advances and government initiatives on public health
- Investigate and demonstrate and understanding of major public health issues, past and present

EVALUATION – Evidence of Learning

Formative Assessment:

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 next steps for the student's learning. In the case where, due to extenuating circumstances, a student has been unable to complete a summative assessment, formative assessments may be used as additional evidence to support the teacher's professional judgment when determining a final grade.

Summative Assessment:

Summative assessment will occur near the end of the unit/instruction and demonstrates the student's knowledge for the purpose of evaluation and reporting. These assessments will be included in the mark shown on the student's report card.

The types of formative and summative assessments are outlined below:

Assessment Technique	Purpose
Quizzes	Formative and Summative
Laboratory Reports	Formative and Summative
Tests (one per strand)	Summative
Assignments	Formative and Summative

Final Grade	
Term Work	
• Tests and Quizzes	30%
• Lab Reports and Assignments	40%
Final Assessment – Presentation and Written Report	30 %

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. 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 Signature

Parent Signature

Date

Date