

Catholic District School Board of Eastern Ontario
Notre Dame Catholic High School

<i>COURSE TITLE:</i>	Grade 9, Applied Science
<i>COURSE CODE:</i>	SNC 1P
<i>LEVEL OF DIFFICULTY:</i>	Applied
<i>AREA OF STUDY:</i>	Science
<i>SUGGESTED PREREQUISITE(S):</i>	Grade 8 Science
<i># OF SCHEDULED HOURS</i>	110
<i>CREDIT VALUE:</i>	1
<i>FACILITATOR(S):</i>	Glen Cordick
<i>TEXTS:</i>	Nelson Science 9: Concepts and Connections
<i>COURSE DESCRIPTION:</i>	

This course enables students to understand basic concepts in biology, chemistry, earth and space science, and physics; to develop practical skills in scientific investigation; and to apply their knowledge of science to everyday situations. Students will design and conduct investigations into practical problems and issues related to cell division and reproduction, the structure and properties of elements and compounds, astronomy and space exploration, and static and current electricity.

UNITS OF STUDY:

(not necessarily in order)

1. Biology	26 hrs
2. Chemistry: Atoms and Elements	26 hrs
3. Earth and Space Science: Universe	26 hrs
4. Physics: Electricity	26 hrs
5. Culminating and Final Exam	6 hrs

LEARNING EXPECTATIONS

Biology: Reproduction – Processes and Applications

By the end of this course, students will:

- * demonstrate an understanding of the processes of cell division, including mitosis, and the function of sexual (including human) and asexual reproductive systems;
- * conduct investigations into questions arising from reproductive issues;
- * examine the impact of scientific research and technological developments on issues related to reproduction.

Chemistry: Exploring Matter

By the end of this course, 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;
- * demonstrate an understanding of the importance, production, use, and environmental hazards of common elements and simple compounds.

Earth and Space Science: Space Exploration

By the end of this course, 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.

Physics: Electrical Applications

By the end of this course, 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.

How This Course Supports the Ontario Catholic School Graduate Expectations

This course encourages the Catholic learner to develop his/her God-given gifts and abilities to promote growth toward personal responsibility in preparation for a chosen career path. Throughout this course, emphasis will be placed on the moral, ethical, and realistic decision making in an effort to build responsible citizenship. The classroom environment will instill a spirit of cooperation, rather than competition amongst students, and will foster a collaborative sense of community. This course provides many opportunities for students to work effectively as interdependent team members and to acknowledge others for their opinions.

COURSE EVALUATION:

Summative Evaluation (70%)

Knowledge and Understanding
Thinking and Inquiry
Making Connections
Communication

Final Evaluation (30%)

Cumulative Assessment	15%
Final Exam	15%

The Achievement Chart for Science

Achievement Category Descriptions

Knowledge and Understanding – the degree to which the student demonstrates understanding of the concepts.

Thinking/Inquiry – the student utilizes proper problem solving techniques, strategies, resources, technology and tools.

Communication – the student represents information properly: written, graphical, chart, numerical and symbolic forms. Effective communication implies timeliness, presentation and completeness. The appropriate use of technology is assessed in this component.

Making Connections – the student will apply proper connections between concepts and familiar environments and identifies important issues relating to each topic.

COURSE EVALUATION:

Course Assessment

Student Achievement will be based on the achievement chart categories outlined below and in individual demonstration for specific expectations. Achievement chart categories will be posted in the classroom for greater awareness and understanding of assessment. All major assignments will be evaluated using levels. Grades will be determined using the students' most consistent and most recent level of achievements. For the purposes of reporting, the percentages grade range will correspond to the following levels as defined by the Catholic District School Board of Eastern Ontario:

Level	Mark Code	Level	Mark Code	Level	Mark Code	Level	Mark Code
4++	98/ 100						
4+	94	3+	79	2+	69	1+	59
4	86/ 90	3	75	2	65	1	55
4-	82	3-	72	2-	62	1-	52

The achievement chart identifies four categories of knowledge and skills in SUBJECT: Knowledge, Thinking and Inquiry, Communication and Application. The achievement chart provides a standard province-wide method for teachers to use in assessing and evaluating their students' achievement. Each achievement chart has descriptions of the levels of achievement for each of the four categories of knowledge and skills. Level three is the provincial standard; level four indicated a level of aptitude beyond the standard; level two indicates the student is slightly below provincial standard; and level one indicates a limited understanding of material. The achievement chart helps determine, towards the end of the course, the student's most consistent level of achievement of the curriculum expectations as reflected in his or her course work.

POLICIES

Late Assignment

If a student fails to submit a summative assignment on the due date they will receive a completion contract. They will renegotiate a new due date with the subject teacher. The student will have their parent sign the contract and return it to the teacher the next day. If the contract is not returned, the classroom teacher will phone the parent. If the assignment gets submitted on the new date, the student will receive a grade. If not, the student will report to study hall and the parent will be notified. If completed at a passable level, the assignment will receive a “pass”.

Academic Dishonesty

If a student cheats on a test or plagiarizes a summative assignment, they will have to re-do the work in a supervised setting at their teacher’s convenience. The parent will be notified and the vice-principal will create a file to track the incident. Should a second incident occur in any class, the student will receive a suspension and a grade of zero for that assignment.

Culminating Activity

A Culminating Activity provides an opportunity for students to synthesize and demonstrate the full breadth of their understanding of overall expectations. The task is completed over more than one class period, involves all four categories of the achievement chart, and is authentic and related to the “real world”. Student work to be assessed must demonstrate individual achievement.

SNC 1P CLASSROOM EXPECTATIONS:

1. Adhere to all school policies including attendance, dress, punctuality and behaviour.
2. You are responsible to bring the following materials to EVERY CLASS:

binder with extra paper	pen and pencil (with eraser)
textbook	calculator
centimeter ruler	
3. I expect notebooks and textbooks to be organized and free from graffiti. All work should be clearly titled and dated. Page numbers and question numbers should be clearly indicated.
4. When homework is assigned it is to be completed for the next class – no excuses. If you foresee difficulties, you are required to come for extra help. I am available for extra help at lunch, before and after school. I encourage you to ask questions.
5. I do not tolerate copying in any form. A mark of zero will be assigned for copied work.
6. If you are absent, YOU are responsible to catch up on work missed. Absence for a test/quiz/performance task results in a zero, unless proper documentation is provided. I must be notified ahead of time for any exceptional circumstances causing you to be absent on these days.
7. **RESPECT, RESPECT, RESPECT!** Respect your classmates and your teacher. Unacceptable behavior will not be tolerated. Respect others' property. Return borrowed materials, clean up after yourself, do not deface property. Respect yourself. Be responsible and organized.
8. Students may, for legitimate reasons, negotiate an extension or due date change with the teacher prior to the original due date (Notre Dame Contract). Approval for such a change will be at the discretion of the teacher. Computer printing problems will not be accepted as legitimate reasons for late assignments. If such a situation should occur the student must either present a hand written assignment or a computer disc that the teacher can read on a computer compatible with the Notre Dame computer system. This must be done on the day the assignment is due. This policy does not include renegotiation of culminating activity due dates.

I, _____ (student) have read and understood the expectations outlined in the SNC 1P Outline.

Parents/Guardians: Please be aware of the expectations set for your son/daughter in this course. If you have any questions, please do not hesitate to contact me at Notre Dame: 253-4700.

Sincerely, G. Cordick

Parent/Guardian Signature : _____

Date: _____

Daytime Phone Number: _____

Comments:

Notre Dame Catholic High School Extension Contract

SAMPLE

STUDENT NAME _____

COURSE _____

The following work has not been handed in _____

The original due date _____

New date for submission _____

**Once this new date is negotiated, the student agrees to submit this work on that date to receive a grade of zero or the student will attend study hall until the assignment is completed at a passable level.*

**The student understands that failure to hand in any of the summative assignments in this course will result in the inability to demonstrate some course expectations, which may result in the loss of credit.*

STUDENT SIGNATURE _____

TEACHER SIGNATURE _____

PARENT/GUARDIAN SIGNATURE _____
