Grade 10 Academic Science (Extended)
SNC2D3

Course Profile (Page 1)

Course Description:
This course enables students to develop their understanding of basic concepts in biology, chemistry, earth and space science, and physics, and to relate science to technology, society, and the environment. Throughout the course, students will develop their skills in the processes of scientific investigation. Students will acquire an understanding of scientific theories and conduct investigations related to sustainable ecosystems; atomic and molecular structures and the properties of elements and compounds; the study of the universe and its properties and components; and the principles of electricity.

<table>
<thead>
<tr>
<th>Level:</th>
<th>Academic</th>
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<tbody>
<tr>
<td>Credit Value:</td>
<td>1.0</td>
</tr>
<tr>
<td>Pre-requisite:</td>
<td>SNC1D3</td>
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<tr>
<td>Department:</td>
<td>Science</td>
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<td>Course Fees:</td>
<td>None</td>
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Textbooks & Resources:
- Growing Success: Assessment, Evaluation and Reporting in Ontario Schools
- The Ontario Curriculum Grades 9 and 10 Science (Revised 2008)
- Pearson Investigating Science 10

Course Evaluation: Student Evaluation consists of three components...

1) Learning Skills & Work Habits:
   Students are evaluated on 6 Learning Skills & Work Habits. They are:
   - Responsibility
   - Organization
   - Independent Work
   - Collaboration
   - Initiative
   - Self-Regulation
   These six attributes are evaluated on a scale of Excellent (E), Good (G), Satisfactory (S) & Needs Improvement (N) and reported on the report card. They are not included in the course mark, unless specified in the curriculum expectations.

2) Term Mark (Assessment of Learning):
   Student performance standards for knowledge and skills are described in the curriculum Achievement Chart. The curriculum is assessed in four categories:
   - Knowledge and Understanding 21%
   - Thinking and Inquiry 21%
   - Communication 14%
   - Application 14%
   Evaluation of these four categories generates the term mark. The term mark accounts for 70% of the final mark.
   It is the student’s responsibility to submit evidence of learning.

3) Final Evaluation (Assessment of Learning):
   The final evaluation, administered at or towards the end of the course is based on the evidence shown to the right. The final evaluation accounts for 30% of the final mark.
   The final evaluation consists of:
   - Exam 30%

Final Mark = 70% Term Mark + 30% Final Evaluation

For a detailed description on Course Evaluation, see “How Did I Get That Mark!” at www.satec.on.ca

Course Conduct Policies: See Student Agenda.

Please retain this page in the front of your notebook for future reference.
## Course Outline:

<table>
<thead>
<tr>
<th>Unit</th>
<th>Description</th>
<th>Approximate Length</th>
<th>Major Unit Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology</td>
<td>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.</td>
<td>4 weeks</td>
<td>Biology Project and Environmental Study Project</td>
</tr>
<tr>
<td>Chemistry</td>
<td>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.</td>
<td>5 weeks</td>
<td>Chemistry Project</td>
</tr>
<tr>
<td>Earth and Space Science</td>
<td>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.</td>
<td>3 weeks</td>
<td>Climate Change Project</td>
</tr>
<tr>
<td>Physics</td>
<td>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.</td>
<td>5 weeks</td>
<td>Light Project</td>
</tr>
<tr>
<td>Skills</td>
<td>Scientific investigation skills and career exploration.</td>
<td>Integrated into each unit.</td>
<td></td>
</tr>
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</table>

Note: At least 3 of the above 4 projects plus additional environmental study will be assigned. All of the above units will also include tests, quizzes, labs, and assignments.

Note: The order of the units of study may change due to student needs and resources available during the course.

## General Information:

Field Trips: None at the present time.

How to Seek Extra Help: 1) Speak to your subject teacher and book a time to meet. 2) Speak to a Peer Helper and book a time to meet. 3) Speak to a Guidance Councillor to arrange for a tutor.