

**Level of Instruction:** Senior High

**Curriculum Overview:**

Science 3200 is an activity-based course designed to contribute to the development of basic concepts and skills through the study of Physical Science. Throughout this course students are provided opportunity to develop their scientific literacy by engaging in the process of Inquiry, Problem Solving, and Decision Making. Core activities provide opportunity for students to develop practical laboratory skills and to engage in scientific process. STSE (Science, Technology, Society, and Environment) Modules provide students with opportunity to go beyond the facts to examine how science permeates our everyday lives.

**Authorized Learning Resource:**

Nelson Science 10

**Unit Plan:**

All schools are expected to complete these core areas and adhere to the sequence of units outlined below.

**Unit 1: Chemical Reactions**

CORE STSE 1: What in the World is Chemistry?

CORE STSE 2: Staying Safe on the Job: How to Use Material Safety Data Sheets

CORE STSE 3: From Alchemy to Chemistry

CORE STSE 4: From Light Bulbs to Fireworks

CORE ACTIVITY 1: Testing Ionic Properties

CORE ACTIVITY 2: Measuring Masses in Chemical Changes

CORE STSE 5: Reactions in the Real World

CORE ACTIVITY 3: Recognizing Acids and Bases

CORE STSE 6: Chemistry at Work

**Unit 2: Motion**

CORE STSE 7: School Bus Seatbelts

CORE ACTIVITY 1: Your Speed

CORE STSE 8: The Physics of Hybrid Electric Cars

CORE STSE 9: The Physics of Thunder and Lightning

CORE ACTIVITY 2: Balloon Car Contest

CORE ACTIVITY 3: Determining an Average Speed Contest

CORE STSE 10: The Physics of the Olympics

CORE STSE 11: The Physics of Animal Tracking

CORE STSE 12: *The Physics of Space Shuttle Launch*

## Assessment:

Assessment in this course is governed by the *Assessment and Evaluation Policy* of the Eastern School District. This policy is located at <http://www.esdnl.ca/about/policies/esd/IL.pdf>. The regulations are located at <http://www.esdnl.ca/aboutesd/policies/regulations.jsp?cat=I&code=IL>

Assessment is intended to inform instruction, provide feedback to students, and meet the needs of diverse learners. It is used for the purposes of grading, certifying, and promoting students. All assessments should be outcome-based and designed to test students' basic knowledge of content, their understanding and ability to apply content, and ability to synthesize and problem solve. Assessments should provide equal opportunity for all students according to their abilities, needs, and interests. As a result, teachers make adaptations to accommodate the diverse range of learners in their classes.

## Assessment and Evaluation Plan for Science 3200:

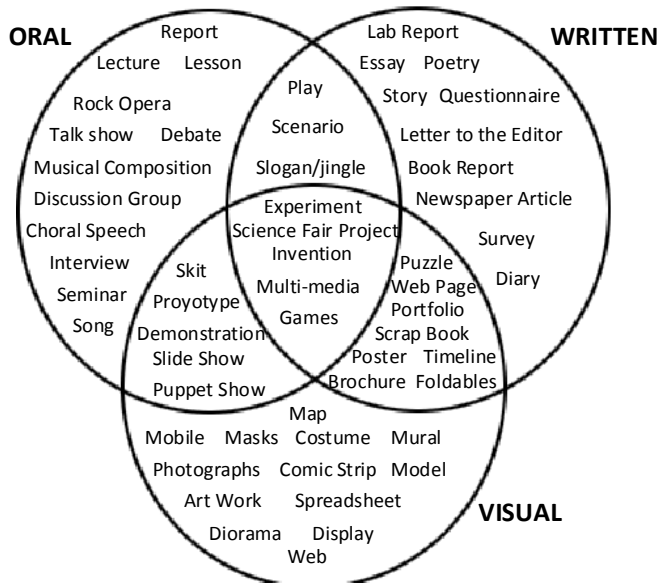
Evaluation is the process of analysing, reflecting upon, and summarizing assessment information, and making judgments or decisions based upon the information gathered. All schools are expected to adhere to the evaluation scheme below for Science 3200.

Tests/Quizzes	40%
Performance Assessment	60%

**Note: Summative examinations are not included in the evaluation of Science 3200. Students are required to complete a formative assessment during the examination periods in January and June.**

### Performance Assessment:

Performance assessments should emphasize project-based learning and require students to show what they can do by using a wide variety of activities that permit students to have their learning styles addressed. Performance assessment should also include student self-assessment. Some suggestions are included in the diagram below.



**Rubrics** are used to inform and measure learning during performance assessments. A rubric defines the expectations to achieve at a certain level. It also provides information about how well students performed an activity, and it provides a clear indication of what students need to accomplish in the future to better their performance. Links to samples of rubrics for different types of performance assessments can be found on

<http://www.esdnl.ca/programs/rubricresources/>. The Assessment tab of the Teacher Resource contains rubrics and checklists.

**Resource Links:**

Department of Education Curriculum Guide for General Science 3200

<http://www.ed.gov.nl.ca/edu/k12/curriculum/documents/science/highschool.html#gen3200>

Science Resources and Support Documents - Senior High

<http://www.ed.gov.nl.ca/edu/k12/curriculum/documents/science/highschool.html>