

## **SCIENCE**

### **Course Expectations Regarding Occupational Health and Safety (OHS)**

#### *General Considerations for Program Planning: Health and Safety*

Teachers are responsible for ensuring the safety of students during classroom activities and for teaching students to assume responsibility for their own and others' safety. They must model safe practices and communicate safety expectations to students in accordance with school board and ministry policies. This concern for safety in science requires that students demonstrate:

- knowledge about the materials, tools, processes, and procedures used in science;
- skill in performing tasks in the laboratory;
- knowledge about health and safety concerns and about the care of living things (plants and animals) that are brought into the classroom;
- concern for the health and safety of self and others.

Students demonstrate the knowledge, skills, and habits of mind required for safe involvement in science when they, for example:

- maintain a well-organized and uncluttered work space;
- carefully follow the instructions and example of the teacher;
- identify possible health and safety concerns;
- follow established safety procedures;
- suggest and implement appropriate safety procedures in new situations;
- comply with Workplace Hazardous Materials Information System (WHMIS) legislation.

#### *Teacher's Note*

Because of the important messages they carry, and since all students must take Science, delivery of the Biological and Chemical Modules is highly recommended in both Grade 9 and Grade 10 Science Courses. The Physical Module Section I is appropriate for Grade 9 Science.



MINISTRY OF EDUCATION COURSE EXPECTATIONS	MODULE	SECTION & PAGE
<p>genetic info, or an organism's development, and investigate the consequences such factors have on human development (e.g. identify the consequences of exposure to Xrays for the development of the fetus).</p> <p><b>Physics: Electrical Applications</b>  <i>Developing Skills of Inquiry and Communication</i> (SE):            Demonstrate knowledge of electrical safety procedures when planning and carrying out investigations and choosing and using materials, tools and equipment.</p>		8
<p><b>Chemistry: Exploring Matter</b>  <i>Developing Skills of Inquiry and Communication</i> (SE):            Demonstrate a knowledge of laboratory safety and disposal procedures while conducting investigations (e.g. wear safety glasses; practice orderliness and cleanliness; be aware of WHMIS guidelines and emergency procedures, use proper handling and storage procedures.</p> <p>Demonstrate the skills required to plan and conduct an inquiry into the properties of substances, using apparatus and materials safely, accurately, and effectively.</p>	Chemical	Section I: pgs. 2-17

Grade 10

**Science Grade 10, Academic (SNC2D)**

MINISTRY OF EDUCATION COURSE EXPECTATIONS	MODULE	SECTION & PAGE
<p><b>Chemistry: Chemical Processes</b>  <i>Developing Skills of Inquiry and Communication</i> (SE):            Select and use appropriate apparatus, and apply WHMIS safety procedures for the handling, storage, disposal, and recycling of laboratory materials (e.g., wear safety goggles and aprons;</p>	<p>Chemical</p> <p>Biological</p>	<p>Section II: pgs. 27-35</p> <p>Section II: pgs. 12-18</p>

MINISTRY OF EDUCATION COURSE EXPECTATIONS	MODULE	SECTION & PAGE
use proper techniques for the handling, disposal, and recycling of acids, bases, and heavy metal ions; describe procedures to be followed in an emergency).		

### Science Grade 10, Applied (SNC2P)

MINISTRY OF EDUCATION COURSE EXPECTATIONS	MODULE	SECTION & PAGE
<p><b>Chemistry: Chemical Reactions and their Practical Applications</b>  <i>Developing Skills of Inquiry and Communication</i> (SE):            Select and use appropriate apparatus, and apply WHMIS safety procedures for the handling, storage, disposal, and recycling of laboratory materials (e.g., wear safety goggles and aprons; use proper techniques to handle, dispose of, and recycle acids, bases, and heavy metal ions; describe procedures to be followed in an emergency).</p>	<p>Chemical</p> <p>Biological</p>	<p>Section II: pgs. 27-35</p> <p>Section II: pgs. 12-18</p>

**Note: OE and SE :** *Overall Expectations and Specific Expectations*