

# Communications Technology

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## **OVERALL EXPECTATIONS:**

By the end of this course, students will:

- D1.** demonstrate an understanding of and apply safe work practices when performing communications technology tasks.

## **Specific Expectations:**

By the end of this course, students will:

- D1.1** describe industry hazards (e.g., ergonomic hazards, electrical hazards, mechanical hazards), identify sources of hazard information (e.g., Workplace Hazardous Materials Information System [WHMIS], Passport to Safety), and describe methods of preventing accidents (e.g., safety audits, regular retraining in safety procedures);
- D1.2** demonstrates an understanding of and apply safe work practices when performing communications technology tasks (e.g., use of safe procedures for lighting set-up, cable management, computer operation, and ladder use).

## Technological Safety Checklist

Communications Technology	Comments
<p>While on the surface it may appear that safety concerns within communications technology are limited, there are in fact many aspects of the program to consider. For example, a communications technology course with a technical theater approach may require students to work with live wires, extension cords, lighting, ladders and other devices that require safety training.</p> <ul style="list-style-type: none"><li>• Sufficient and appropriate personal protective equipment (PPE) such as safety glasses, ear protection or latex gloves for handling chemicals is available for all students.</li><li>• PPE is in good condition (e.g., safety-glass lenses are not scratched or deformed).</li><li>• Safety glasses are stored in an organized fashion (i.e., not left randomly in a bin).</li><li>• All materials or chemicals that are stored in secondary containers are clearly identified, as per WHMIS requirements.</li><li>• Appropriate safety posters or notices that remind students of the use of PPE, health and safety regulations, possible hazards, or safeguards and precautions are prominently displayed.</li><li>• Good housekeeping practices are evident e.g., the room is well-organized, there are no trip hazards, exits are clearly marked and clear of obstructions, the facility is clean and inviting, breaker panels and emergency cut-offs are accessible, etc.</li><li>• Ladders are stored so they do not present trip hazards.</li><li>• There are sufficient electrical outlets. Electrical outlets do not appear to be overloaded.</li><li>• Computer workstations appear to meet basic ergonomic principles (e.g., computer chairs and desks are used for their intended purpose).</li></ul>	

# Communications Technology: Sample Student Safety Passport

Student's Name \_\_\_\_\_ Class and Year \_\_\_\_\_

Equipment	Date Competency Display	Student Signature	Teacher Signature
<p>The student demonstrates the safe use of fixed and portable lighting systems by:</p> <ul style="list-style-type: none"> <li>• securing lighting instrument firmly to the grid, using safety chains and twist lock plugs, or securely mount on stands and dollies</li> <li>• making sure the light is switched "OFF" before connecting the power supply</li> <li>• disconnecting the electrical supply to the instrument before changing a bulb, making adjustments or relocating the instrument</li> <li>• inspecting lighting instruments before using them (e.g., replacing burned out bulbs, frayed cords, switches and loose electrical plugs; using appropriate gauge wire and CSA approved products)</li> <li>• installing bulbs that are appropriate for the instrument</li> <li>• keeping hands away from a hot instrument (e.g., by wearing gloves when removing and replacing bulbs)</li> <li>• using two hands to position and focus the instrument</li> <li>• keeping all cords clear of traffic areas during use</li> <li>• ensuring hands and floor are dry before touching lighting equipment</li> <li>• disconnecting the electrical source before attempting to remove or protect wet lighting equipment.</li> </ul>			
<p>The student is able to assess the safety of a ladder by identifying:</p> <ul style="list-style-type: none"> <li>• missing or loose steps or rungs</li> <li>• damaged or worn non-slip feet</li> <li>• loose nails, screws, bolts or nuts</li> <li>• loose or faulty spreaders, locks and other metal parts in poor repair</li> <li>• rot, decay or warped rails in wooden ladders</li> <li>• cracks and exposed fiberglass in fiberglass ladders</li> <li>• cracked, split, worn or broken rails, braces, steps or rungs</li> <li>• sharp edges on rails and run</li> </ul>			

Equipment	Date Competency Display	Student Signature	Teacher Signature
<ul style="list-style-type: none"> <li>• rough or splintered surfaces</li> <li>• corrosion, rust, oxidation and excessive wear, especially on treads</li> <li>• ladders are checked for distortion by sighting along the rails</li> <li>• missing identification labels.</li> </ul>			
<p>The student is able to properly set up a ladder, keeping the 4:1 ratio and ensuring that at least 1 metre of the ladder extends beyond the upper platform on which the ladder rests.</p>			
<p>The student can determine when to use an extension ladder instead of a step ladder.</p>			