

CURRICULUM ALIGNMENT – Transporting Nuclear Materials

Ontario

Grade	Course Name and Number	Strand	Expectations
9	Exploring Technologies, Grade 9 (TIJ1O)	A. Technology Fundamentals	Overall Expectation A1: Demonstrate an understanding of the fundamental concepts and skills required in the planning and development of a product or service, including the use of a design process and/or other problem-solving processes and techniques.
9	Exploring Technologies, Grade 9 (TIJ1O)	A. Technology Fundamentals	Overall Expectation A2: Demonstrate the ability to use a variety of appropriate methods to communicate ideas and solutions.
9	Exploring Technologies, Grade 9 (TIJ1O)	A. Technology Fundamentals	Overall Expectation A3: Evaluate products or services in relation to specifications, user requirements, and operating conditions.
9	Exploring Technologies, Grade 9 (TIJ1O)	A. Technology Fundamentals	Specific Expectation A1.3: Apply correctly the mathematical and scientific concepts and skills required in the planning and development of a product and/or service.
9	Exploring Technologies, Grade 9 (TIJ1O)	A. Technology Fundamentals	Specific Expectation A1.4: Incorporate appropriate technological concepts (e.g. aesthetics, control, environmental sustainability/ stewardship, ergonomics, fabrication/building/ creation, function, innovation, material, mechanism, power and energy, safety, structure, systems) in the design, fabrication or delivery, and evaluation of a product or service.
9	Exploring Technologies, Grade 9 (TIJ1O)	A. Technology Fundamentals	Specific Expectation A1.5: Describe the characteristics of a variety of materials used in the fabrication of a product or the delivery of a service (e.g. strength, durability, possible toxicity, lifespan, density, nutritional value, flavour, asepsis) and identify other relevant considerations to be made in relation to those materials (e.g. cost, availability).
9	Exploring Technologies, Grade 9 (TIJ1O)	A. Technology Fundamentals	Specific Expectation A2.1: Use a variety of appropriate methods to communicate information or ideas and concepts during the planning and production stages of a project (e.g. production plans, scripts, flow charts, storyboards, sketches, technical drawings, recipes, client consultation reports, design briefs).

9	Exploring Technologies, Grade 9 (TIJ1O)	A. Technology Fundamentals	Specific Expectation A2.2: Use correct terminology to identify and describe various processes, tools, and equipment used in creating products or delivering services (e.g. processes: levelling, squaring, formulating, baking, sterilizing, colouring; tools: pruning saw, wire cutter, curling iron; equipment: USB flash drive, tire balancer, camcorder, flat iron, deep fryer, magnifying lamp, ultraviolet sanitizer, solderless breadboard, measuring cup, thermometer).
9	Exploring Technologies, Grade 9 (TIJ1O)	A. Technology Fundamentals	Specific Expectation A3.1: Evaluate a product or service, and processes associated with its development, on the basis of a set of criteria relevant to that product or service (e.g. adherence to specifications, ease of use, attractive appearance, ruggedness, clean joints, acceptable weld bead, uniform colour, adherence to forest management plan, nutritional value).
9	Exploring Technologies, Grade 9 (TIJ1O)	A. Technology Fundamentals	Specific Expectation A3.2: Suggest improvements to a product or service on the basis of a set of criteria relevant to that product or service (e.g. durability, reliability, ease of use, eco friendliness, appearance, safety, customer satisfaction).
9	Exploring Technologies, Grade 9 (TIJ1O)	B. Technological Skills	Overall Expectation B1: Use problem-solving processes and project-management strategies in the planning and fabrication of a product or delivery of a service.
9	Exploring Technologies, Grade 9 (TIJ1O)	B. Technological Skills	Overall Expectation B2: Fabricate products or deliver services, using a variety of resources.
9	Exploring Technologies, Grade 9 (TIJ1O)	B. Technological Skills	Specific Expectation B1.1: Apply the steps of a design process or other problem-solving process to plan and develop products and services (e.g. define the problem or challenge, taking into account relevant contextual or background information; gather information [about criteria, materials, constraints]; generate possible solutions, using techniques such as brainstorming; choose the best solution; develop and produce a model or prototype; test the model or prototype; incorporate improvements or redesign and retest; report on results).
9	Exploring Technologies, Grade 9 (TIJ1O)	B. Technological Skills	Specific Expectation B1.2: Apply the steps and/or techniques of appropriate problem-solving processes and methods e.g. diagnostics, reverse engineering, trial and error, divide and conquer, parts substitution, extreme cases) to solve a variety of problems in different technological areas.

9	Exploring Technologies, Grade 9 (TIJ1O)	B. Technological Skills	Specific Expectation B1.5: Demonstrate the ability to work cooperatively in a group environment to solve problems (e.g. share tools, tasks, materials, and resources).
9	Exploring Technologies, Grade 9 (TIJ1O)	B. Technological Skills	Specific Expectation B1.6: Use appropriate communication, time-management, and organizational strategies (e.g. active listening, scheduling, flow charts, meal plans) to facilitate the process of developing a product or service.
9	Exploring Technologies, Grade 9 (TIJ1O)	B. Technological Skills	Specific Expectation B2.1: Use appropriate tools, materials, and equipment (e.g. tools: hammer, chisel, screwdrivers, soldering iron, cheese grater, sieve, seam ripper; pruning shears, hair clipper; materials: wood, aluminum, polystyrene, paper, wax, clay, textiles, electronic components, mulch, hair colour; equipment: drill press, test meter, computer, software, printer, video camera, thermometer, grill, sewing machine, autoclave, curling iron) to create products or deliver services.
9	Exploring Technologies, Grade 9 (TIJ1O)	B. Technological Skills	Specific Expectation B2.3: Meet all design criteria (e.g. technical requirements, type and quality of materials, appearance, ease of use, safety, timeline, client's expectations) in creating a product or delivering a service.