**Area of Learning: Applied Design, Skills, and Technologies — Woodwork Grade 10**

**BIG IDEAS**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| User needs and interests drive the design process. |  | Social, ethical, and sustainability considerations impact design. |  | Complex tasks require different technologies and tools at different stages. |

**Learning Standards**

|  |  |
| --- | --- |
| **Curricular Competencies** | **Content** |
| *Students are expected to be able to do the following:*Applied DesignUnderstanding context* Engage in a period of researchand **empathetic observation**

Defining* Identify potential users and relevant contextual factors for a chosen design opportunity
* Identify criteria for success, intended impact, and any **constraints**
* Determine whether activity is collaborative or self-directed

Ideating* Take creative risks in generating ideas and add to others’ ideas in ways that enhance them
* Identify and use **sources of inspiration**
* Screen ideas against criteria and constraints
* Critically analyze and prioritize competing **factors** to meet community needs for preferred futures
* Maintain an open mind about potentially viable ideas

Prototyping* Choose a form for prototyping and develop a **plan** that includes key stages and resources
* Evaluate a variety of materials for effective use and potential for reuse, recycling, and biodegradability
* Prototype, making changes to tools, materials, and procedures as needed
* Record **iterations** of prototyping
 | *Students are expected to know the following:** project design opportunities
* importance of woodwork in historical and current cultural contexts of First Nations, Métis, or Inuit communities, and other cultural contexts
* ethics of **cultural appropriation** in design process
* identification, characteristics, properties, and uses of wood from various species
* choices related to the sustainable use of wood
* uses and creation of plans and drawings
* **techniques** for stock breakout and woodworking using a variety of tools and equipment, including **stationary power equipment**
* function, uses, and role of portable and stationary power equipment in the creation of a project
* function and use of hand tools
 |

**Area of Learning: Applied Design, Skills, and Technologies — Woodwork Grade 10**

**Learning Standards (continued)**

|  |  |
| --- | --- |
| **Curricular Competencies** | **Content** |
| Testing* Identify **sources of feedback**
* Develop an appropriate test
* Conduct the test, collect and compile data, evaluate data, and decide on changes

Making* Identify and use appropriate tools, **technologies**, materials, and processes
* Make a step-by-step plan and carry it out, making changes as needed
* Use materials in ways that minimize waste

Sharing* Decide on how and with whom to **share** product and processes
* Demonstrate product to users and critically evaluate its success
* Identify new design goals

Applied Skills* Demonstrate and document an awareness of precautionary and emergency safety procedures
* Develop competency and proficiency in skills at various levels involving manual dexterity and woodworking techniques
* Identify the skills needed, individually or collaboratively, in relation to specific projects, and develop and refine them

Applied Technologies* Choose, adapt, and if necessary learn more about appropriate tools and technologies to use for tasks
* Evaluate **impacts**, including unintended negative consequences, of choices made about technology use
* Evaluate the influences of land, natural resources, and culture on the development and use of tools and technologies
 |  |