



Board/Authority Authorized Course: **Indigenous Technology 11**

School District/Independent School Authority Name: Cowichan Valley School District	School District/Independent School Authority Number: SD79 Cowichan Valley
Developed by: Tobias Lemay	Date Developed: April 30, 2018
School Name: Cowichan Secondary School	Principal's Name: Alison Keple
Superintendent Approval Date (for School Districts only):	Superintendent Signature (for School Districts only):
Board/Authority Approval Date:	Board/Authority Chair Signature:
Course Name: Indigenous Technology 11	Grade Level of Course: 11
Number of Course Credits: 4	Number of Hours of Instruction: 120 hours
Course Category: Area and Ethnic Studies	Course Code: YAES-1C

Board/Authority Prerequisite(s): None

Special Training, Facilities or Equipment Required:

- Teacher trained in Technology Education; specifically, wood and metal work
- Teacher background in two and three-dimensional design
- Guest experts in various Indigenous technologies
- Access to both Woodshop and Metal shop
- Variety of two-dimensional supplies: paper, pencils, felts, acrylic and watercolour paint, brushes, printmaking supplies etc.

- Variety of three-dimensional supplies; this could be an extremely wide variety of needs, depending on the cultures explored:
 Example: Northwest Coast Indigenous cultures: variety of wood mediums, carving knives, chisels, gouges, saws, tracing paper, light table, projector, planes, sanders, drills, clamps files, vices, adzes, workbench, rasps, emery cloths, sandpaper, glue, paint, oils, stains, dyes, to name a few
- Other cultures (Inuit, Eastern Canadian, Aztec, etc.) will all use similar tools but may require the resourcefulness of the teacher to find tools to enable students to proceed with inquiry of a culture that is not of the local indigenous people.
- Resource materials: access to internet, books, resource centre materials

Goals and Rationale:

Students will be introduced a variety of traditional Indigenous technologies. Production techniques used to produce and reproduce artifacts will be explored. Students will be guided and encouraged in skill development and tool use toward mastery of Indigenous technologies. Examples include: three-dimensional wood sculptures, fishing spears, basket weaving, segmented drums, steam bent boxes, traditional bridge building, plant technologies, canoes paddles, skinned drums...etc. Techniques covered will encompass woodshop and metal shop machine processes and emphasize the safe use of all tools and machines.

The teachings will reflect the balance of physical, emotional, mental, and spiritual values that exist in the material world of stories, as seen in Indigenous cultures.

Students will develop an understanding and appreciation of Indigenous cultures technologies.

Course Synopsis:

A course designed to explore the technologies specific Indigenous cultures and the design, fabrication, and machining processes involved in production.

Indigenous Worldviews and Perspectives:

Learning involves patience and time: The structure of the course is centered on a collaborative learning environment. This will require students to make connections and organize their knowledge. Reflection on their own performance will be encouraged in order to further their own learning.

Learning requires exploration of one's identity: Through the carving process students are encouraged and asked to always return to their own unique experience. They will learn their strengths, challenges and their innate abilities and capacity to learn.

Learning ultimately supports the well-being of the self, the family, the community, the land, the spirits, and the ancestors: This principle will be supported by providing multiple access points for students to learn. The students will also be able to represent their learning in various ways.

As this course is focused on the technologies of Indigenous peoples, we will rely heavily on the expertise of knowledge keepers in our local Coast Salish Community. They will not only bring a breadth of knowledge about topics ranging from carving to and painting to drum making and traditional plant use, they will also bring a local understanding of Indigenous worldview and perspectives connected to the land we work, learn and play on.

BIG IDEAS

Social, ethical, and sustainability considerations impact design

Technologies help us accomplish many specific tasks in our lives.

User needs and interests drive the **design process**.

Complex tasks require different technologies and tools at different stages.

The identities, worldviews, and technologies of Indigenous cultures are renewed, sustained, and transformed through their connection to the land.

Learning Standards

Curricular Competencies	Content
<p><i>Students are expected to be able to do the following:</i></p> <p>Explore and Create:</p> <ul style="list-style-type: none"> • Apply the principles of design to the creation of a variety of projects • Create projects which emphasize traditional Indigenous histories, technologies and design strategies • Demonstrate safe and responsible use of materials, tools, technologies, and work space • Explore artistic possibilities and take creative risks • Develop and refine artistic skills, reflecting historical cultural traditions <p>Reason and Reflect</p> <ul style="list-style-type: none"> • Describe and analyze how materials, technologies, and processes are used in Indigenous cultures • Recognize and evaluate design choices in creations • Develop personal answers to aesthetic questions <p>Communicate and Document</p>	<p><i>Students are expected to know the following:</i></p> <ul style="list-style-type: none"> • Principles of design • Image development strategies • Materials, techniques, and technologies specific to Indigenous cultures • Creative processes as a reflection of the moral, values, beliefs, and traditions • Use of symbols and metaphors to represent ideas and perspectives • Identify the shapes and motifs specific to the cultural context of indigenous culture being explored • Role of the artist, technologies, and audience • Influence of visual culture and technologies on self-perception and identity

<ul style="list-style-type: none">• Document, share, and appreciate works of art in a variety of contexts• Demonstrate respect for self, others, and place• Communicate ideas and historical culture through art making• Communicate and respond to social and environmental issues <p>Connect and Expand</p> <ul style="list-style-type: none">• Explore First Peoples perspectives and knowledge, other ways of knowing, and local cultural knowledge through artistic works• Create projects that demonstrate personal, cultural, and historical contexts	<ul style="list-style-type: none">• Traditional and contemporary First Peoples worldviews, stories, and history as expressed through visual arts and technologies• Contributions of traditional, innovative, and inter-cultural artists• The ethics of cultural appropriation and plagiarism• Traditional and contemporary First Peoples worldviews, stories, and history as expressed through arts and technologies• Understand that creating art forms that reflect personal indigenous identity helps to shape a better understanding of self and one’s identity within the modern world• Identify the materials, techniques, and technologies traditionally used in indigenous cultures
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Big Ideas – Elaborations

- **Design process:** an approach for breaking down a large project into manageable chunks. Architects, engineers, scientists, and other thinkers use the design process to solve a variety of problems

Curricular Competencies – Elaborations

- **Traditional Indigenous histories:** emotional connection through identifying with traditional shapes and motifs, to inform others of the morals, values, beliefs, and traditions of an Indigenous culture
- **Responsible use of materials:** using materials in an environmentally responsible way, considering their level of biodegradability and potential for reuse and recycling
- **Creative risks:** make an informed choice to do something where unexpected outcomes are acceptable and serve as learning opportunities
- **Materials:** the broad spectrum of materials, technologies and processes is open-ended and constantly evolving, and materials chosen will reflect the indigenous culture chosen by the student to explore
- **Historical cultural traditions:** works of art that share common visual characteristics can be described as belonging to the same indigenous culture
- **Aesthetic questions:** questions relating to the nature, expression, and perception of artistic works
- **Document:** through activities that help students reflect on and demonstrate their learning (e.g., writing an essay or article, journaling, taking pictures, storyboarding, making video clips or audio-recordings, constructing new works, compiling a portfolio)
- **Place:** any environment, locality, or context with which people interact to learn, create memory, reflect on history, connect with culture, and establish identity. The connection between people and place is foundational to First Peoples perspectives on the world.
- **Respond:** through activities ranging from reflection to action
- **Social and environmental issues:** locally, regionally, nationally, and/or globally
- **Ways of knowing:** First Nations, Métis and Inuit, gender-related, subject/discipline-specific, cultural, embodied, intuitive

Content – Elaborations

- **Principles of design:** balance, contrast, harmony, emphasis and unity

Content – Elaborations

- **Image development strategies:** processes that transform ideas into visual images. The students will learn the following strategies: thumbnail sketches, transferring images, modifying images, differentiating between cultural shapes and forms, and differentiating and choosing different cultural shapes and forms
- **Creative process** as a reflection of the moral, values, beliefs, and traditions: projects created to reflect the stories, histories, and religion of the indigenous culture being explored
- **Symbols and metaphors:** symbols are any motif, shape or image that has meaning, while metaphors are the meaning that develops when more than one symbol is juxtaposed
- **Shapes and motifs:** not in a western art context, but reflective of the indigenous culture in a historical context. In traditional Northwest Coast Indigenous, for example, art forms use the basic motifs of form line, ovoid, trigon, crescent, and circle
- **Traditional histories:** identifying traditional shapes and motifs, to inform others of the morals, values, beliefs, and traditions of an indigenous culture
- **Cultural appropriation:** use of a cultural motif, theme, “voice”, image, knowledge, story, song, or drama shared without permission or without appropriate context or in a way that may misrepresent the real experience of the people from whose culture it is drawn
- **Materials, techniques, and technologies traditionally used:** used by the creators of artwork in a historical context, not what we would use today. The tools discussed will vary depending on the culture(s) students wish to complete an inquiry on; this could be a wood, fabric, cedar for weaving, soapstone, shell, etc. and the tools original used to change the raw materials to artwork with cultural meaning

Recommended Instructional Components: Core Competencies

Communication

- **Connect and Engage with others (to share and develop ideas)**

- I ask and respond to simple, direct questions.
- I can consult with instructor as necessary in class

Thinking: Creative Thinking

- **Generate Ideas**

- I build on others ideas and add new ideas of my own or combine with people's ideas in new ways to create new things or solve straightforward problems.

- **Develop Ideas**

- I can persevere over years if necessary to develop my ideas.

Thinking: Critical Thinking

- **Analyze and Critique**

- I can show if I like something or not.

- **Question and Investigate**

- I can explore materials and actions.

- **Develop and Design**

- I can experiment with different ways of doing things
- I can monitor my progress and adjust my actions to make sure I achieve what I want.

Assessment:

This course is assessed by using the Triangulation of Assessment, which allows the teacher to collect evidence of student learning; this evidence is collected from the following three sources: conversations, observations, and products.

The following Principles of Quality Assessment will be noted:

- Assessment is ongoing, timely, specific, and embedded in day to day instruction
- Student is involved in assessment and feedback
- Assessment focuses on all three components of the curriculum model - knowing, doing, understanding
- Assessment provides ongoing descriptive feedback to students

The students will play an active role throughout all stages of assessment to ensure that they feel ownership of their work and to hear and provide feedback about how they are doing, and where to next?

Each student will have a final conversation about their final product and the collected teacher data observations. This process gives the students a role in the assessment process and encourages the students to invest in their own learning. The teacher will use this information to make a final assessment on the three components of the curriculum model – knowing, doing, understanding and will determine if the student demonstrates an understanding of the concepts and competencies relevant to Indigenous Technologies 11.

Learning Resources:

SD#79 Cowichan Resource Centre: Salish Weave Collection, die cuts, as well as other resources

First Peoples classroom resources: www.fnese.ca

Heart/Mind Coast Salish Principles of Learning

Gilbert, Jim and Karin Clark, Learning by Designing, volumes 1 and 2

Gilbert, Jim and Karin Clark, Learning by Doing Northwest Coast Native Indian Art

Stanley, Robert Sr., Northwest Native Arts, Basic Forms

Stanley, Robert Sr., Northwest Native Arts, Creative Colors, book 1 and 2

Classroom library essential: Bill Reid, Robert Davidson

Access to internet for student inquiry