



Board/Authority Authorized Course Framework Template

School District/Independent School Authority Name: <i>SD 67 Okanagan-Skaha</i>	School District 67
Developed by: Troy Stubbert & Myron Dueck	Date Developed: 23 January 2018
School Name: Summerland Secondary School	Principal's Name: Alan Stel
Superintendent Approval Date (for School Districts only):	Superintendent Signature (for School Districts only):
Board/Authority Approval Date:	Board/Authority Chair Signature:
Course Name: Metal Art and Jewelry 10	Grade Level of Course: 10
Number of Course Credits: 4	Number of Hours of Instruction: 100-120

Board/Authority Prerequisite(s): (None)

Special Training, Facilities or Equipment Required:

A fully equipped and functional metal working shop is required, with an array of tools and equipment. Some critical components include: basic metal shop hand tools such as files and pliers, basic jewelry hand tools such as small saws and hammers, propane soldering torch, lost wax casting spin caster, burnout oven, drill press, buffing wheels, ultra-sonic gem cleaner and pickling bath. Teacher will need to possess qualifications from a training institute for technology education (BCIT, UBCO and/or OC).

Course Synopsis:

This course will allow students to develop skills and understandings related to the role, production and artistic and cultural qualities of metal art and jewelry. Artistic expression has an important role in society today, and one of the many avenues is the exploration of metal as an art medium. In this course, students will be introduced to the design and production of metal art and jewelry. Students will become accustomed to making basic art and jewelry through the following phases: defining, ideating, prototyping, testing, making and sharing. Students will use these elements to plan, produce, evaluate and self-report on, various jewelry and artistic metal projects. Students are encouraged to use knowledge and understandings in order to 'do'. In this framework, students can incorporate their individual interests and passions to make things such as sheet metal pendants, rings of copper, nickel and silver, chains and polymer bead making, and smaller items such as earrings, brooches and bracelets.

Goals and Rationale:

Metal Art and Jewelry 10 is designed to let students delve into a finer version of metal production. Where many people view the metal shop as bold, raw construction of large metal items, this course may surprise and intrigue people in its intricacy and fine-tuning of common metals, semi-precious metals and alloys such as nickelsilver. A main theme of this course is the opportunity afforded students to explore different types of metals and techniques beyond those that are used in traditional metalworking class.

Metal Art and Jewelry 10 combines many skills and competencies, both curricular and core, through project-based, hands-on learning opportunities. Students will need to **communicate** project ideas and designs. **Creative thinking** is paramount in importance to this course as students engage in making projects through an introduction to artistic expression. Metal Art Jewelry 10 is an avenue for students to explore **positive personal and cultural identity**. The items students choose to design are regularly influenced by different cultures and traditions. First Nations art is one of the influences explored through a **responsible**, sensitive and mature approach to valuing traditional ways of making. Students will be familiarized with the issues surrounding **cultural appropriation** and will be encouraged to be respectful of traditional ways of doing while making contemporary pieces. Jewelry brings with it the unavoidable element of **personal awareness** and expression. Students will have the opportunity to use metalwork as a way to self-express and **positively identify** interests and values.

Goals:

- Develop an understanding of metalworking processes with smaller items and finer detail than that of basic metalwork.
- Develop the skills specific to bonding and manipulating common and precious metals, alloys and wires.
- Develop the understandings and skills required to design personal and culturally expressive metal projects pieces, with the intent to explore and emulate artistic expression
- Develop competencies such as creative thinking and design, communicating intentions and plans, problem solving and overcoming challenges.

Aboriginal Worldviews and Perspectives:

- Students will incorporate a variety of Aboriginal techniques using materials such as seed beads, semi-precious stones, leather, feathers, and twine to make student-designed projects. Suggested avenues can include simple beadwork and accessible Native Jewelry techniques.
- Particular attention will be paid to the issue of **cultural appropriation**, and the ethical decisions that need to be considered when using Aboriginal symbols, products and techniques. This issue can be addressed through consultation with local Aboriginal artists.

BIG IDEAS

Social, ethical, and sustainability considerations impact design.

Personal design interests require the evaluation and **refinement** of skills.

Tools and technologies can be adapted for specific purposes.

Design and production require problem solving and **inquiry** skills.

Traditional ideas, beliefs and cultures can be integrated with new technologies and processes.

Learning Standards

Curricular Competencies	Content
<p><i>Students are expected to be able to do the following:</i></p> <p>Applied Design</p> <p>Defining</p> <ul style="list-style-type: none"> Choose a design opportunity Identify potential users and uses of materials and processes Make inferences about premises and boundaries that define the design space <p>Ideating</p> <ul style="list-style-type: none"> Take creative risks to identify different uses of materials and processes Generate ideas to create a range of possibilities for individual projects Communicate and consider how social, ethical, and sustainability issues play a role in our decisions <p>Prototyping</p> <ul style="list-style-type: none"> Identify and use a variety of materials and information Choose an appropriate form, scale, and level of detail for prototyping, and plan procedures for prototyping multiple ideas Construct prototypes, making changes to tools, materials, and procedures as needed Discuss iterations of prototyping (usually as a group or during demonstrations) 	<p><i>Students are expected to know the following:</i></p> <ul style="list-style-type: none"> Traditional and modern techniques related to the creation of jewellery – traditional bead work with seed beads Concepts related to the creation of art with the primary medium being metal, with the introduction of elements including jewels, polymer clay and hemp rope. Incorporation of other materials to enhance the final product – a focus on paint work and flaming Use, purpose, and traditions of low-value material Investment casting/wax mediums for transfer to metal Introductory welding Material identification for specific applications, with decisions made to minimize waste Definition and application of finishes and polishes Uses of power and non-power tools The definition and considerations surrounding cultural

Testing

- Gather feedback from users over time to critically evaluate their design and make changes to product design or processes
- Iterate the prototype

Making

- Identify appropriate tools, technologies, materials, processes, and time needed for production, and where/how these could be available
- Use **project management processes** when working on individual projects

Sharing

- Share** student progress while making to improve design and process.
- Self-report on their projects, and their own struggles and successes, with consideration for project management processes
- Identify new design issues, including how they might build on their concept

Applied Skills

- Demonstrate an awareness of safety issues for themselves and others in both physical and digital environments
- Identify and evaluate their skills and skill levels, in relation to their project or design interests

Applied Technologies

- Explore existing **technologies** within the learning environment and how these can be incorporated into their design interests
- Analyze how cultural beliefs, values, and ethical positions affect the development and use of technologies

appropriation.

Big Ideas – Elaborations

Inquiry - the exploration of a question, rather than answers, in exploring an idea or concept.

Refinement – the concept that true design is an ongoing process, with students always exploring ways to improve and diversify

Social, ethical, and sustainability considerations - allows students to consider the implications, sensitivities and context when exploring other people's traditions and cultures. As well, consideration is made to recycling, reusing and reclaiming materials in and for the design process

Traditional ideas, beliefs and cultures - consideration to the value and depth of learning gained from indigenous studies and practices, as well as other groups from other times

Curricular Competencies – Elaborations

- **defining:** setting parameters
- **design opportunity:** a system involving some choice for the student to build a project from start to finish
- **boundaries:** limiting factors, such as available technology, expense, environmental impact, issues of appropriation, and knowledge that is considered sacred
- **ideating:** forming ideas or concepts
- **flaming:** the use of heat to permanently alter the look of metal
- **sources of inspiration:** may include experiences; traditional cultural knowledge and approaches, including those of First Peoples; places, including the land and its natural resources and analogous settings; and people, including users, experts, and thought leaders
- **information:** for example, other people as experts (e.g., First Peoples Elders), secondary sources, collective pools of knowledge in communities, collaborative atmospheres
- **iterations:** repetitions of a process with the aim of approaching a desired result
- **sources of that feedback:** may include peers; users; keepers of traditional cultural knowledge and approaches, including those of First Peoples; and other experts
- **testing:** using trial and error, changing only one variable
- **share:** may include showing to others, use by others, giving away, or marketing and selling
- **product:** for example, a physical product, a process, a system, a service, or a designed environment
- **project management processes:** the various steps, tools and planning that must be considered during a design
- **technologies:** things that extend human capabilities

Content – Elaborations

- **cultural appropriation:** when a dominant culture adopts elements of a minority culture without due process, balance and respect
- **other materials:** for example, seed beads, hemp, polymer clay, jewels
- **low-value:** nickelsilver, copper
- **casting:** investment plaster
- **welding:** mig welding, silver soldering
- **finishes and polishes:** for example, mirror, flat
- **mediums:** for example, wax
- **polymer clay:** a substance made up of clay and PVC (plastic) that malleable and settable
- **power:** for example, picklebath, soldering iron
- **non-power:** for example, jeweller's saw, file, pliers, ring mandrel, vice, hammers (regular and nylon) bead crimper, ring gauge, polisher, bench pins

Recommended Instructional Components:

- Direct instruction
- Demonstrations
- Guest speakers and demonstrations
- Experiential learning
- Self-reflection

Recommended Assessment Components: Ensure alignment with the [Principles of Quality Assessment](#)

Clear targets and expectations shared with students at all stages of the assessment process.

Formative:

- Journals used to document trial-and-error, experiential learning
- Practice quizzes
- Peer-assessment and self-assessment
- Self-reporting

Summative:

- Quizzes/testing (students demonstrating what learning outcomes they KNOW and UNDERSTAND)
- Student demonstrations of ability and showing evidence of knowledge and understanding (DO)
- Student self-reporting/teacher-monitored learning goal checklists
- Oral-response/student-teacher conferencing

Learning Resources:

- Guest instructors (Norma Stubbert – owner of Sweet Peach jewelry company)
- Web-based companies and artists for generating ideas and looking at process
 - o <http://passthefeather.org/culture-shock-jewelry/>
 - o <https://artinas.com>
 - o 'metalsmithing' via <https://www.pinterest.ca/pin/237424211588760610/?lp=true>
 - o Various book resources:
 - *Handmade Jewelry – Techniques and Design* – Richards, Alison
 - *Basic Wax Modeling – An Adventure in Creativity* – Tsuyuki, Hiroshi
 - *The Art of Polymer Clay – Designs and Techniques for Creating Jewelry, Pottery, and Decorative Artwork* - Kato, Donna
 - *Jewelry Making – Tips and Tricks of the Trade* – O'Keefe, Stephen

Additional Information:

None

a concept in sociology dealing with the adoption of the elements of a minority **culture** by members of the dominant **culture**