Unit 2: Traditional Metalsmithing

Content Area: **Art**
Course(s): **Art Experience, Jewelry Design 1**
Time Period: **October**
Length: **10 blocks**
Status: **Published**

Enduring Understandings

Big Idea: Metal Fabrication; Learning to incorporate the Elements and Principles of Design

- Combining concepts creates complex structures
- Manipulation of art materials can result in an exciting unexpected results
- Artists convey personality, individuality and point of view through personal choices while problem solving
- Shape and form provide variety and interest within a 3 dimensional jewelry design
- Varying textures and patinas can describe the surface and shape of objects and convey meaning
- Jewelry is an ancient art form rich with historical and cultural significance
- Safety is essential to the proper use of all tools and materials.
- Crafstmanship is essential to the success of three dimensional art
- People and cultures communicate through all types of visual arts

Essential Questions

How do skill and technique enable the creative process?

Is my artistic point of view and individality portrayed in my work?

How do I use specific techniques and methods of metal working to create a successful jewelry design?

Is my craftsmanship worthy of resale?

What kinds of different styles and effects can I create with multiple textures and patinas?

How do the properties and gauges of metals effect jewelry design?

How much practice will enable me to feel comfortable with using hand tools?

Do I have enough working knowledge of safety and technique to effectively and safely use particuliar tools without causing damage or injury?

Content

Students will be able to define and explain:

Vocabulary

Annealing, Alloy,Malleability, Oxidation, Cold Connections, Dremel tool, Butane, Etching, Eyelets, Forging, Gauge, Pickel, Rivets, Sawing techniques, filing techniques, texture, patina, work hardening

Materials

Sketchbook, rubber stamps, stayz-on black ink pad, sharpie black oil based markers,"super pickel ", ferric chloride, liver of sulfer, ammonia, hydrogen peroxide, salt, commercial patina solutions, sparex, safety glasses, mini crock pot, copper tongs, quenching bowl, Krylon acrylic spray, Guilders paste

Various gauges of metal sheet including copper, nu-gold, brass, aluminum as available 20-24g

Jewelry tools: jewelers saw, saw blades, bees wax, c clamp, bench pin, bench block, ring clamp, mandrels, center punch, forming pliers, flush cutters, metals shears, hammers, rawhide mallet, riveting tool, drill press, 1/16 drill bits, files, dremel tool and accessories, blaser butane torch, pickel pot and solutions, dapping tools, disc cutter, emery cloth, sand papers

Jewelry findings: rivets, eyelets, jump rings, chain, wire

Skills

Students will be able to:

Communicate individual ideas and designs though basic sketches

Research historical and cultural influences in jewelry design

Use a jewelers saw to cut shapes from various gauges of metal sheets

Drill holes in metals using punches and drill presses.

Create three different types of surface texture through the use of etching, stamping and forging

Anneal metal safely using a small butane torch

Create two different types of patinas through various jewelry finishing methods

Join different metal components together using rivets, eyelets and jump rings

Design a series of basic adjustable and riveted textured rings

Remove oxidation from metals with the use of pickeling solutions

Demonstrate good craftsmanship by producing a finished piece of jewelry, free of burrs, marks and scratches

Demonstrate safety procedures while working in the jewelry lab

Identify jewelry as functional art through critique, observation and discussion.

Resources

Student materials kit includes

round nose pliers
chain nose pliers
flat nose pliers

Bent chain nose

Side cutter

6 mini files set

Jewelers saw

Bench pin

Safety goggles

Sandpaper 8 grits package

Toothbrush

Classroom tools
forming pliers
side and flush cutters, snips
crimping pliers
findings--jump rings, crimps, lobster claw, earring wires, crimp covers, spring rings, toggles, cones, beads, found objects, bench block, nylon jaw pliers for wire
wire gauge,headpins and eyepins, resin, etching materials, patina, sheet metal, helicopter punch,

Copper and nickel wire, mandrels, multiple hammers, stamps, sponges, steel wool, pickle pot, enameling kiln, microwave glass kiln, spray booth for varnishes and sealers, various oven baked polymer clay, toaster oven, solder, butane torch, kiln brick flux, rubber cement, drill press, copper tongs, self locking tweezers
sketchbooks

Safety Goggles (When needed)

Chromebooks and smartphones for student research and esl programs
Printer for photos, templates and artwork

Teacher pinterest acct. with technique examples
Pinterest groups -- idea for examples and business branding, sales

Reference Books-- Teacher's personal classroom library

"Making Etched Jewelry- Techniques and Projects,Step by Step"--- Kris Robinson and Ruth Rae

"PATINA 300+ Coloration Effects for Jewelers & Metalsmiths"----- Matthew Runfola
"Stamped Metal Jewelry- Creative Techniques & Designs for Making Custom Jewelry"---- Lisa Niven Kelly
“ New Stamped Metal Jewelry” --Lisa Niven Kelly and

"Making Metal Jewelry"---- Tim McCreight

"Metal Artists’ Workbench"---- Thomas Mann

Youtube instructional videos by Jewelry Artists

Classroom samples and models
Color wheel, sketchbooks
Previous student examples
“Jewelry artist” magazines
www.JewelryMakingDaily.com
www.beaducation.com

Standards

VPA.1.1.12	All students will demonstrate an understanding of the elements and principles that govern the creation of works of art in dance, music, theatre, and visual art.
VPA.1.1.12.D	Visual Art
VPA.1.1.12.D.1	Distinguish innovative applications of the elements of art and principles of design in visual artworks from diverse cultural perspectives and identify specific cross-cultural themes.
VPA.1.2.12	All students will understand the role, development, and influence of the arts throughout history and across cultures.
VPA.1.2.12.A	History of the Arts and Culture
VPA.1.2.12.A.1	Determine how dance, music, theatre, and visual art have influenced world cultures throughout history.
VPA.1.3.12	All students will synthesize those skills, media, methods, and technologies appropriate to creating, performing, and/or presenting works of art in dance, music, theatre, and visual art.
VPA.1.3.12.D	Visual Art
VPA.1.3.12.D.1	Synthesize the elements of art and principles of design in an original portfolio of two- and three-dimensional artworks that reflects personal style and a high degree of technical proficiency and expressivity.
VPA.1.3.12.D.2	Produce an original body of artwork in one or more art mediums that demonstrates mastery of visual literacy, methods, techniques, and cultural understanding.

VPA.1.3.12.D.3	Organize an exhibit of personal works of visual art that convey a high level of understanding of how the expression of ideas relates to the art media, art mediums, and techniques used.
VPA.1.3.12.D.5	Identify the styles and artistic processes used in the creation of culturally and historically diverse two- and three-dimensional artworks, and emulate those styles by creating an original body of work.