DELAWARE VALLEY SCHOOL DISTRICT

PLANNED INSTRUCTION

A PLANNED COURSE FOR:

JEWELRY DESIGN

Grade Level: 11-12

Date of Board Approval: _____2019_____

DELAWARE VALLEY SCHOOL DISTRICT

Planned Instruction

Title of Planned Instruction: JEWELRY DESIGNS

Subject Area: ART Grade(s): 11-12

Course Description:

This course will enable students to gain skills of craftsmanship, design and technology. They will be exposed to a broad range of metalworking processes and techniques and develop fabrication and finishing skills in a 3-D form. They learn within a new format, to articulate their creative ideas and synthesize the concepts and processes historically and contextually.

Time/Credit for the Course: ½ Credit, 1 Semester

Curriculum Writing Committee: Dr. Irene Scotti Lantz

Curriculum Map

1. **Marking Period One: Overview based on 45 days:** Jewelry Designs is a course in three-dimensional design which develops an understanding of the principles and elements of design in art. The course introduces technical skills that are necessary to design and create artistic personal adornment. Students will gain knowledge in Jewelry theory and practice through experiences in different Jewelry media areas. Sketchbooks will be used to document the progression of skills acquired, and self-expression. The sketchbook will contain visual and written entries, which will include responses and reflections on works of art.

   Marking Period One Goals:
   Understanding of the foundations in metalsmithing:
   - Design, technology, craftsmanship
   - Explore critical and creative thinking in 3-dimensional designs
   - Understanding basic metal properties and procedures
   - Use basic vocabulary of jewelry making.
   - Identification of the characteristics of metals
   - Understanding safety procedures
   - Methods of metal fabrications: use of a range of jewelry fabrication techniques in working with different metals to create jewelry forms, i.e. Metal fusion- Soldering and Cold Forming (Riveting)
   - Manipulation of various metals, Forming and Surface Ornamentation (folding, bending, rolling mill, dapping),
   - Basic Polishing Techniques: Flexible shaft, Polishing machine
   - Use a sketchbook/journal to develop ideas for creating works of art.
   - Understanding of the elements and principles of design employed in their work
   - Communicating an idea through works of art by using media, methods, and concepts appropriate to their intent.
   - To personally express themselves through their works of art.
   - Individual and group Critiques

2. **Marking Period Two: Overview based on 45 days:** Builds upon the skills that are necessary to design and create artistic personal adornment with metal and other materials. Ability to make connections to the historical, and cultural aspects of jewelry & metals. Develop an understanding of different forms of personal expression. Develop vocabulary and observation skills to react, respond and reflect to different forms of jewelry & metals. Participate in judgment, assessment/evaluation in group discussions and individual critiques on the merits of different forms of jewelry & metals.

   Marking Period Two Goals:

Understanding of embellishment and critique in Jewelry Design

- Metal Design incorporating a gem
    - Identification of the characteristics of gems, and minerals
    - Creating a bezel
    - Stone setting
- Metal Design Integration: Synthesis of a variety of jewelry techniques into one design-i.e., marriage of metals, fold forming, mixed media
- Alternative methods of jewelry forming
    - Wire, weaving, repoussé, reticulation
    - Etching- design, block out, acid etch, engraving, oxidizing, finishing
    - Enameling
- Use a sketchbook/journal to develop ideas for creating works of art.
- Individual and group Critiques

Curriculum Plan

UNIT 1: Introduction to Metal Techniques

PA Academic Standards, PACS English/Language Arts, PACS Math, National Standards.
Standards Addressed:
9.1.12. A,C,D,E,F,J
9.2.12 A,B,C,D,E,
9.3.12 A,B,C,D, E,F,G,
9.4.12 A,B,C,D

Anchor(s):
M08.B-F.2.1.2, M08.C-G.1.1.1
E08.B-K.1.1, E08.B-V.4.1, E08.C.1.2, E08.C.1.3, E08.E.1.1

Big Idea(s):

Artists use tools and resources as well as their own experiences and skills to create art. 9.1.3.E, 9.1.3.H, 9.1.12.E
The skills, techniques, elements and principles of the arts can be learned, studied, refined and practiced. 9.1.12.A, 9.1.12.B, 9.1.12.C, 9.1.12.E
There are formal and informal processes used to assess the quality of works in the arts. 9.3.12.A, 9.3.12.B, 9.3.12.C, 9.3.12.E

Essential Questions:
How do the artist's tools affect the outcome of a work of art?
How does a particular medium influence how an artist approaches a problem, communicates an experience?
How do artists use style to express an experience or idea?

Concepts:
The tools artists use influences the outcome of their artwork.
Artists think differently when working through different media.
Artists work in various styles to express experiences and ideas.

Competencies:
Experiment with different media to develop a work of art and explain why they made choices to use each medium.
Develop and present a personal body of work that documents personal vision, concerns and life experiences.
Construct a critical response to a work of art that implements criteria including aesthetics.

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Overview: Metal Techniques and Exploration, Principles of Design, Jewelry Theory

Goals: Students will be able to develop designs using various techniques in metal (cold [rivet] and hot [solder] forming), and texturing. Students will be able to utilize the techniques of layering, forming, and manipulation of various metals while incorporating the elements and principles of design (form, value and color) within their designs.

Objectives:

1. Students will be able to study the handouts and apply the procedures/vocabulary/tools and methods to acquire strategies to implement the principles of soldering, polishing, and forming techniques. (DOK Level- 1,2,3,4)
2. Students will be able to create a design in jewelry using a schematic format to analyze their steps of procedure. (DOK Level- 1,2,3,4)
3. Students will be able to create their designs by completing the procedures of cutting, forming, soldering and polishing using the tools in the studio. (DOK Level- 1,2,3,4)
4. Students will be able to apply the tenets of the elements and principles of design while creating and critiquing an original work of art. (DOK Level- 1,2,3,4)

Core Activities and Corresponding Instructional Methods:

1. Create a representational design in metal that incorporates layering (positive and negative), variation of texture (pattern, inlay, etc.), and the elements and principles of design (suggestions: landscapes, organic, figurative.)
    a. Direct instruction, and practice, modeling of the sawing, soldering, polishing techniques. Handouts of design principles, visualization using PowerPoint on Smart board, Handouts of techniques and vocabulary, and safety procedures. (*Reading non-fiction*)
    b. Students will research jewelry artists that have incorporated positive and negative layering techniques, and a variation of textures in metal within a representational design. Students will be able to design and create in both a drawn schematic design that includes all processes used, paper model and soldering steps. *(Math-Relationship between quantities, properties of geometric transformations)*
    c. Students will be able to transfer their template drawings initially onto construction paper to ensure that their design is able to be constructed in metal. Once verified, students will create textures (tools, rolling mill) in metal, cut (using a saw), solder the parts together, and polish when all steps are completed. *(Math-Relationship between quantities, properties of geometric transformations)*

d. Students will be able to complete an original representational design with various colored metals combining the elements and principles of design and the techniques of texturing (patterning, inlay, etc.), layering (positive and negative design).

2. Create a design in metal that incorporates mixed media (found object), cold (rivet) and hot (solder) forming, and the elements and principles of design.
    a. Direct instruction, and practice, modeling of the sawing, soldering, riveting and polishing techniques. Handouts of found object principles, visualization using PowerPoint on Smart board, Handouts of techniques and vocabulary, and safety procedures. (*Reading non-fiction*)
    b. Students will research riveting techniques, and jewelry artists that have utilized mixed media-found objects to understand the purpose of using found objects in a jewelry design. (*Reading non-fiction*)
    c. Students will be able to design and create both a paper model and a drawn schematic design that includes all processes used, and soldering steps. *(Math-Relationship between quantities, properties of geometric transformations)*
    d. Students will be able to transfer their template drawings onto metal, apply any textures, cut-using a saw, solder the parts together, rivet-mixed media (found object) and polish when all steps are completed. *(Math-Relationship between quantities, properties of geometric transformations)*
    e. Students will be able to complete an original design using metal and mixed media object that combines both soldering and riveting elements.
3. Create a design that incorporates at least two colors of metal and a 3-dimensional element (this can be a stand-alone lesson or incorporated into any of the other design lessons).
    a. Direct instruction, and practice, modeling of cutting, and soldering the marriage of metals. Handouts of marriage of metal principles, visualization using PowerPoint on Smart board, packets of vocabulary and techniques.
    b. Students will research a jewelry artist that has utilized marriage of metals and a three-dimensional design for inspiration to create a unique design. (*Reading non-fiction*)
    c. Students will be able to create a design that incorporates both marriage of metals (the connecting of two different colored metals side by side with a perfect seam), and a 3-dimensional element in their designs. *(Math-Relationship between quantities, properties of geometric transformations)*
    d. Students will be able to design and create both a paper model and a drawn schematic design that includes soldering steps, and all processes used. *(Math-Relationship between quantities, properties of geometric transformations)*

e. Students will be able to transfer their template drawings onto metal and cut them out with a saw, form metal using tools (rolling mill, dapping, inlay, texturing,) solder the parts together, and polish when all steps are completed. *(Math-Relationship between quantities, properties of geometric transformations)*
f. Students will be able to complete an original 3-dimensional design that incorporates color by using a minimum of two different color metals (copper, brass, nickel, bronze, and silver).

4. Analyze and critique a piece of jewelry.
   a. Direct instruction and practice, modeling, small group/collaborative learning: tenets of art philosophies and criteria for critiquing art works. Discussion of the elements and principles of design in jewelry (handouts). (*Reading non-fiction*)
   b. Class critique, analyze and critique a piece of jewelry. Discussion of the elements and principles of design in jewelry and how it relates to other modalities in art. A written analysis of the uses of elements and principles of design in the students' work of art (*Writing*).

Assessments:

- **Diagnostic:** Direct observation, discussion and questioning
- **Formative:** Individual and group critique
- **Summative:** Questionnaires, Critique analysis, and jewelry designs graded using a rubric.

Extensions:

- The student will be provided resources to develop more complex designs, 4 or more levels that include texturing with soldered components.
- The student will include two mixed media objects within the design.
- The student will include two or more areas of marriage of metal in the 3-dimensional design.

Correctives:

- The student will Simplify the design for less positive and negative cut outs.
- The student will Simplify the design to include two shapes for cutting and soldering.
- The student will Reduce the area amount of marriage of metal in the design.

Materials and Resources:

Smart Board, PowerPoint, pencils, erasers, handout with metal procedures and vocabulary terms, Safety Rules
Equipment:

- Soldering Torch.
- Polishing machine
- Flexible shaft
  - Finishing supplies, files
- Rolling mill
- Anvils, hammers, mandrels, dapping tools
- Cutting tools
  - Saws, V-bench, glasses, blades

Sheet metal, wire, tubing, and scrap metal, found objects
Student supply kit

Curriculum Plan

UNIT 2: Metal Design Integration

Marking Period 2: 45 Days

Standard (s): PA Academic Standards, PACS Math, PACS English/Language Arts.

Standards Addressed:
9.1.12. A,C,D,E,F,J
9.2.12 A,B,C,D,E,
9.3.12 A,B,C,D, E,F,G,
9.4.12 A,B,C,D

Anchor(s):
M08.B-F.2.1.2, M08.C-G.1.1.1
E08.B-K.1.1, E08.B-V.4.1, E08.C.1.2, E08.C.1.3, E08.E.1.1

Big Idea(s):
The arts provide a medium to understand and exchange ideas. 9.1.12.E, 9.2.12.I, 9.4.12.A
The skills, techniques, elements and principles of the arts can be learned, studied, refined and practiced. 9.1.12.A, 9.1.12.B, 9.1.12.C, 9.1.12.E
People use both aesthetic and critical processes to assess quality, interpret meaning and determine value. 9.3.12.F, 9.4.12.C

Essential Questions:
How does jewelry express the culture?
How can jewelry raise awareness in society?
How do artist refine their skills to carry out intention in their artworks?
How is the quality and value of art perceived differently depending on the place, time, culture, and social context in which it is viewed?

Concepts:
Artists can employ various techniques to communicate trends about the culture.
Artists can influence change.
Artists refine skills and techniques to carry out their intentions in their artworks.
People have applied different criteria for assessing quality and value of works of art depending on the place, time, culture, and social context in which the works are viewed.

Competencies:

Create a piece of jewelry that uses various techniques to communicate the trend in society.
Create a piece of jewelry that is intended to influence change.
Experiment with different media to create a work of art and explain why they made choices to use each medium.
Identify the criteria by which a work of art would have been evaluated in its original historical, cultural or social context and compare it to criteria used to assess quality and value today.

Overview: Embellishment Processes and Exploration in Metalsmithing

Goals: Students will be able to create aesthetic designs incorporating various processes, and embellishments (gem stones, setting, etching, reticulation, repoussé, enameling, color surfacing.)

Objectives:

1. The students will be able to study the handouts and apply the procedures/vocabulary and methods to acquire strategies to implement the principles of bezel creation and setting techniques, and to recognize characteristics of various gems and minerals. (DOK Level – 1, 2, 3, 4) (*Reading non-fiction*)
2. The students will be able to create a bezel design in metal employing a particular style in jewelry. (DOK Level – 1, 2, 3, 4) *(Math-Relationship between quantities, properties of geometric transformations)*
3. The students will be able to employ strategies of different techniques to design, integrate the elements and principles of design and to create a wearable piece of art. (DOK Level – 1, 2, 3, 4)
4. The students will be able to apply the tenets of the elements and principles of design while researching and analyzing the different styles of jewelry in a particular culture. (DOK Level – 1, 2, 3, 4) (*Reading non-fiction*) (*Writing*)

Core Activities and Corresponding Instructional Methods:

1. The student will be able to create a jewelry design that incorporates a bezel and a particular style in jewelry.
    a. Direct instruction and practice, modeling bezel making and setting procedures. Preliminary drawing, review different styles in jewelry, and various gem stones. visualization using PowerPoint on Smart board, examples, rubric. Handouts of techniques and vocabulary, and gems. (*Reading non-fiction*)

   b. Students will research jewelry artists using cabochon gems, and bezel setting techniques, and different fashion styles to understand aesthetics in jewelry designs and provide a written document of their findings. (*Reading non-fiction*) (*Writing*)
   c. Students will be able to complete the preliminary steps of the gem/metal design including: a schematic of all processes used, cutting and shaping of bezel, soldering steps, setting technique, and a creation in a paper model. *(Math-Relationship between quantities, properties of geometric transformations)*
   d. Students will be able to complete an aesthetic design incorporating a cabochon gem, and bezel setting technique in a particular jewelry fashion style.

2. The student will be able to create an original integrated metal design incorporating a synthesis of learned techniques (transfer knowledge) with a new technique to form an aesthetic jewelry design. This lesson can be modified for any of these techniques: wire, weaving, etching, fold forming, reticulation, repoussé, enameling, and color surfacing.
   a. Direct instruction and practice. Small group/collaborative learning: design alternative techniques incorporating known techniques. visualization using PowerPoint on Smart board. Handouts of the specific technique and vocabulary. Teacher modeling of different techniques. (*Reading non-fiction*)
   b. Students will research the new technique and an artist who has created in the technique for inspiration and to be able to incorporate the learned techniques with transfer knowledge. Handouts of the chosen technique (Wire, weaving, etching, fold forming, reticulation, repoussé, enameling, and color surfacing). (*Reading non-fiction*)
   c. Students will be able to complete the preliminary steps of the integrated design including: a schematic of all processes used, specific processes of chosen technique, soldering steps, and/or setting and a creation in a paper model. *(Math-Relationship between quantities, properties of geometric transformations)*
   d. Students will be able to complete an original integrated design that synthesizes transfer knowledge with the new technique, and the elements and principles of design.
   e. Class critique, analyze and critique the different fashion styles of their designs and their value in society. Discussion of the elements and principles of design in jewelry.

Assessments:

Diagnostic: Direct observation, discussion and questioning

Formative: Individual and group critique

Summative: Cabochon stone design, and Metal Design Integration graded using rubric.

Extensions:

- Provide resources to develop a design that incorporates two cabochon gem stones or a faceted stone with a step bezel in the gem design.
- Include two new techniques to learned techniques in the integrated design.

Correctives:

1. Supply a premade cabochon stone setting to create a gem design.
2. Reduce the number of techniques to synthesize in the integrated design.

Materials and Resources:

Handouts of techniques, fashion styles, and gem stone.

- Soldering Equipment/Torch
- Bezel pusher
- Wire toothbrush
- Rawhide mallet
- Cabochon stones
- Planishing hammer
- Sheet scrap metal
- Rolling Mill
- Students supply kit
- Sheet metal, tubing
- Oxidizers
- Kiln and enamels
- E3 Etch Controller and supplies
- Dapping tools
- Pitch Pot
- Pitch

Primary Textbook(s) Used for this Course of Instruction

Name of Textbook: The Jeweler's Bench Reference

Textbook ISBN #: 0-918820-03-0

Textbook Publisher &Year of Publication: Harold O'Conner, 1977

Curriculum Textbook is utilized in (title of course):