ART 0024 - ADVANCED METAL ARTS

Catalog Description

Prerequisite: Completion of ART 22 with grade of "C" or better
Hours: 90 (36 lecture, 54 laboratory)
Description: Advanced exploration of metal techniques, design principles, and material use for sculpture and functional and nonfunctional art forms. Emphasis on development of a personal creative vision, furthering technical skills, and complex problem solving. Includes ferrous and nonferrous metal machining, advanced welding techniques, advanced forming methods, and public outdoor art installation. (CSU)

Course Student Learning Outcomes

- CSLO #1: Discuss, describe, analyze & critique own metal sculpture along with other students' work using relevant terminology.
- CSLO #2: Create original metalwork using advanced tools and casting processes.
- CSLO #3: Create original ferrous and non-ferrous metal work by process of conception, design, execution, finish, presentation, and installation.
- CSLO #4: Apply proper and safe methods for using metalworking equipment, welding equipment, related metalworking equipment, and chemicals needed for finishes.

Effective Term

Fall 2024

Course Type

Credit - Degree-applicable

Contact Hours

90

Outside of Class Hours

72

Total Student Learning Hours

162

Course Objectives

Lecture Objectives:
1. Analyze bodies of work and contemporary and historic public projects.
2. identify and discuss appropriate advanced tools and technology (such as forming molds, foundry equipment, plasma cutting equipment and TIG welding equipment) to create art works;
3. identify safe methods for using advanced metal machining equipment, welding equipment, related metal working equipment, and chemicals needed for both anodizing and finishes;
4. participate as a team member by contributing to the planning of anodizing sessions and large scale art work installations;
5. Explain visual vocabulary for analyzing bodies of work and public projects.
6. examine and discuss the contemporary and historical aspects of design and technical aspects in metal art and public art projects;

7. Critically analyze artwork success from critiques both orally and in written formats using proper terms;

Laboratory Objectives:
1. Create a cohesive body of work by a process of conception, design, execution, finish, presentation, and installation;
2. Select and use appropriate advanced tools and technology (such as forming molds, foundry, plasma, and TIG welding equipment) to create artwork;
3. select, describe, and apply proper and safe methods for using advanced metal machining equipment, welding equipment, related metalworking equipment, and chemicals needed for both anodizing and finishes;
4. participate as a team member by contributing to a group effort during anodizing sessions and large scale art work installations;
5. Use experimental methods of metal casting, fabrication, and finishes of art works.

General Education Information

- Approved College Associate Degree GE Applicability
  - AA/AS - Fine Arts
- CSU GE Applicability (Recommended-requires CSU approval)
- Cal-GETC Applicability (Recommended - Requires External Approval)
- IGETC Applicability (Recommended-requires CSU/UC approval)

Articulation Information

- CSU Transferable

Methods of Evaluation

- Classroom Discussions
  - Example: Students will begin classroom discussions from the beginning of the concept & design development. By contributing to in-class discussions, students will be able to demonstrate their understanding of their ideas and offer thoughts & suggestions to fellow classmates. Classroom discussions are also inclusive of the critiques required at the end of the assignment.
- Projects
  - Example: Students will be required to complete approximately 3 assignments throughout the semester. These assignments include concept development and design of a cardboard/ mat board maquette, successful execution of the project at hand, and verbal knowledge and assessment of their assignments. This will end with installation of their pieces in a specific location.
- Reports
  - Example: Reports include assigned artist research as well as gallery visits papers. Written reports include student research, critical observations based on class information and topics, and artist studio visits.
- Skill Demonstrations
  - Example: Students will be evaluated on formal critiques of assigned student projects/artworks; the ability to choose the appropriate techniques (casting, forming, forging, welding, and finishing) and materials to create fabricated metal artworks of their concepts will be the main focus for evaluation.

Repeatable

No

Methods of Instruction

- Laboratory
- Lecture/Discussion

Lab:

1. The instructor will lecture on integrating concept, design, and technology as it pertains to metal art works. The students will then take mat board and create a maquette (small scale model) of their first assignment taking into consideration the elements and principles of design in 3-dimensional works as well as transferring the techniques to metal.

Lecture:

1. The instructor will lecture and demonstrate for all project techniques, and will lead a critique of finished project works, evaluating: craftsmanship, proper choice of materials and how students best realized their initial vision.

Typical Out of Class Assignments Reading Assignments

Students will be required to read from various sources: 1. selected textbooks 2. published articles 3. course handouts. Example: Students read article on contemporary metal sculpture and write a response. Example: Students read article on safety concerns regarding metal art and be prepared to discuss in class.

Writing, Problem Solving or Performance

Writing: 1. Maintain a notebook of lecture material and a sketchbook of ideas and designs for class projects. 2. Gallery/Museum/Artist report. Problem Solving: 1. Design and execute metal forms, using formed, forged and welding techniques as indicated in the course content. Performance: 1. Apply appropriate surface designs using additive and subtractive techniques to the class projects. 2. Apply appropriate finish surface decoration using patinas, heat oxides and organic coatings (paint).

Other (Term projects, research papers, portfolios, etc.)

Out of class work will include both library and internet research. It will also include visiting local art galleries and museums during exhibition receptions. Portfolio of students finished works will be presented during formal critiques. The writing assignment will require the student to develop a course notebook to include lecture notes, concept drawings, and out of class research.

Required Materials

- Artist Blacksmith Sculpture: The Art of Natural Metalwork
  - Author: David Freedman
  - Publisher: CreateSpace Independent Publishing Platform
  - Publication Date: 2016
  - Text Edition: 1st
  - Classic Textbook?:
  - OER Link:
  - OER:
- A Universe of Metal Sculpture
  - Author: Henry Harvey
  - Publisher: Schiffer Publishing
  - Publication Date: 2010
  - Text Edition:
  - Classic Textbook?:
  - OER Link:
  - OER:
- Principles of Metal Casting
  - Author: Mahi Sahoo; Sudhari Sahu
  - Publisher: McGraw-Hill Education
  - Publication Date: 2014
  - Text Edition: 3rd
  - Classic Textbook?:
  - OER Link:
  - OER:
- METAL Design and Fabrication
  - Author: David and Susan Frisch
  - Publisher: Watson-Guptill
  - Publication Date: 1998
  - Text Edition: 1st
  - Classic Textbook?:
  - OER Link:
  - OER:
- Chasing & Repoussé
  - Author: Nancy Megan Corwin
  - Publisher: Brynmorgen Press
  - Publication Date: 2009
  - Text Edition: 1st
  - Classic Textbook?:
  - OER Link:
  - OER:
- Metal Casting for Beginners: Step By Step Guide That Will Help You Get Started with Metal Casting, Even If You Are a Complete Beginner
  - Author: Charles Prince
  - Publisher: Independantly published
  - Publication Date: 5/10/2022
  - Text Edition: 1st
  - Classic Textbook?: No
  - OER Link:
  - OER:

Other materials and-or supplies required of students that contribute to the cost of the course.

Ferrous and nonferrous metal for project work will be required. Other related materials my be requested of student.