San José State University  
Department of Art and Art History  
Art 47: Introduction to Metalsmithing  
Spring Semester 2020

Course and Contact Information

Instructor: Yvonne Escalante  
Office Location: Art Building 321  
Telephone: (408) 924-4390  
Email: Yvonne.escalante@sjsu.edu  
Office Hours: 3:00 - 4:00 pm Tuesday/Thursday or by appointment  
Class Days/Time: 9:30 am – 3:30 am Friday  
Classroom: Art 210  
Prerequisites: None  
Units: 3

Additional Contact Information

* E-mail is generally the best method of contact during non-office hours.  
* Please allow 48 hours for an e-mail response.  
* Emergency: 911 Campus Escort: 42222  
* Individuals with disabilities may contact the Disability Resource Center (DRC), Administrative Building 110, 408/924-6000, for a variety of formats such as Braille, large print, sign interpreters, assistive listening devices, audio tape and accommodations for physical accessibility.

Course Format

Activity

Faculty Web Page and MYSJSU Messaging

Course materials such as syllabus, handouts, notes, assignment instructions, etc. can be found on Canvas Learning Management System course login website at http://sjsu.instructure.com. You are responsible for regularly checking with the messaging system through MySJSU at http://my.sjsu.edu and Canvas to learn of any updates.

Course Description

Introduction to tools, materials, and techniques for small-scale metal work. Primer course for metalsmithing and jewelry.
Course Goals
This course is designed to introduce correct and safe use of basic tools, equipment, and techniques used in the creation of jewelry and small-scale sculpture. As the semester progresses, students will build a toolkit of skills that will provide a strong foundation for further exploration in metals and an understanding of how these techniques can be applied to alternative materials and disciplines. Discussions, readings, one-on-one meetings, and practice will aid in developing and identifying expectations of craft, successful design development, and independent problem solving. This knowledge will be applied to complete two projects and two exercises.

Students in this course will:
Gain confidence and proficiency in the use of tools and equipment associated with basic fabrication, casting, and stone setting in non-ferrous metals. In addition, students will understand and apply the vocabulary and terminology used in jewelry and small metals to create, discuss, and critically review works. Upon completion of this course students will have a clear understanding of all shop safety protocol and industry best practices.

Course Learning Outcomes (CLO)
Upon successful completion of this course, students will be able to:

- CLO1: Identify and safely use tools and equipment associated with techniques covered.
- CLO2: Apply techniques covered in demonstrations to create finished work that meets expectations outlined in each assignment.
- CLO3: Apply the lost wax process to cast and finish a piece in silver.
- CLO4: Participate in and contribute to the critical evaluation of finished work through active involvement in instructor-led class critiques.
- CLO5: Apply the content described in course readings and individual research to the projects completed in the class.

Required Texts/Readings

Textbook (purchase not required)
The Complete Metalsmith: An Illustrated Handbook by Tim McCreight
ISBN-10: 0871922401
A class copy is available for reference in Art 210 during class and lab hours.
Students may purchase a copy at www.Amazon.com or at other book retailers.

Practical Casting: A Studio Reference, Revised Edition by Tim McCreight
ISBN-10: 096159845X
A class copy is available for reference in Art 210 during class and lab hours.
Students may purchase a copy at www.Amazon.com or at other book retailers.
Other readings

Required readings will be uploaded to Canvas as needed.

Other equipment and materials required

A dedicated sketchbook for notes and design sketches is required. A small toolbox or tackle box is strongly recommended. Students are required to purchase silver and any materials or supplies that exceed the class allotment such as saw blades, sandpaper, and metal as needed for the completion of projects. Cost will vary from student to student depending on individual needs and current market prices. Students will be given fair warning when outside materials are needed as projects are assigned. Students can expect to spend $30-$100 during the course of the semester. A list of vendors will be provided in class.

Students in Art 47 will be required to purchase one troy ounce of fine silver. Although market prices fluctuate on a daily basis, expect to pay around $20.

Course Web Materials

- ART 47 course materials online on the SJSU Canvas site for the course at: https://sjsu.instructure.com. Your username is your 9-digit SJSU ID number, and your password is your SJSU-One account password.
- Optional Resources include: Electronic resources links to writing guides and internet sites will be posted to Canvas.

Library Liaison

Gareth Scott

email: gareth.scott@sjsu.edu
phone: (408) 808-2094

Art and Art History Resources: https://libguides.sjsu.edu/Art

Course Requirements and Assignments

Success in this course is based on the expectation that students will spend, for each unit of credit, a minimum of 45 hours over the length of the course (normally three hours per unit per week) for instruction, preparation/studying, or course related activities, including but not limited to internships, labs, and clinical practica. Other course structures will have equivalent workload expectations as described in the syllabus.

Assignment outline

Project 1
An introduction to basic tools and safety protocol for the jeweler’s saw, torch, and drill press. Upon completion, you will know how to anneal, pierce, cut, finish, rivet and apply pattern and polish to sheet metal to create a pendant and necklace.

Due: 2/28/20 - 20%
**Project 2: Raw to Refined – creating a 3-part ring from a silver coin**
Starting with an ounce of fine silver, you will learn how to forge and alloy silver to create a three-part ring with a cabochon stone setting. This project will also introduce you to basic and advanced silver soldering techniques and stone setting.
**Due: 4/17/20 - 20%**

**Project 3: Introduction to casting**
This assignment will introduce you to basic casting and wax working. You will create a cast bronze or silver piece utilizing the lost wax process. Demos will cover pattern making in wax, investing, and centrifugal casting, as well as build on skills acquired thus far.
**Due: 5/08/20 - 20%**

**Class participation**
Participation is assessed as follows:
- Active participation in the critical evaluation of projects through class critiques
- Active participation in class discussions
- Active participation in daily and weekly cleaning duties
- Participation in the end of the semester cleanup to be held on the scheduled final day

Participation points may be made up through extracurricular activities related to Jewelry and Metalsmithing classes as cleared by instructor.
**20%**

**Reading and peer reviews**
Each critique will begin with a written peer review based on assigned readings. There will be a total of three critiques, one for each project. See class schedule for dates.
**5% per critique, total 15%**

**Hazardous material and safety test**
All students enrolled in a studio art class are required to take a hazardous materials test. This test will include safe handling, storage, and disposal of hazardous materials commonly used in the Jewelry and Small Metals Lab (Jlab) Art Rm, 210 & 210A. The test will be held during the sixth week of instruction with a review session held in the class prior to the exam. Participation in the review and test are mandatory; failure to pass the test will result in loss or limited lab access.
- Hazardous materials and safety test review – 2/21/20
- Hazardous materials and safety test – 2/28/20
**5%**

**Final Examination or Evaluation**
Final critique – The final critique will be held on the final day of instruction during the regularly scheduled time. All students are expected to participate in the critical discussion of the final project for participation points. This is the final day late and extra credit work will be accepted for credit.

**Final date & time:**
| 5/08/19 | Exercise 2 due, final critique 10:00 am – 12:00 pm |
Final cleanup and art pick up – The mandatory class cleanup will be held during the scheduled final exam date and time according to the University’s final exam schedule. Participation is required to earn final participation points. During this time, the lab will receive a deep and thorough cleaning. Arrangements must be made with instructor ahead of time to attend an alternate cleanup if necessary. Please dress in appropriate clothing, including close-toed shoes: you will get dirty.

**Final cleanup date & time:**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
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<tbody>
<tr>
<td>5/13/19</td>
<td>Mandatory class cleanup and art pickup 7:15 am - 9:30 am</td>
</tr>
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</table>

**Grading Information**

**Assignment Format and Submission:**

This course requires students to complete two projects and two exercises utilizing the tools and techniques covered in class. To ensure a safe and fruitful learning environment, students are required to be present for all safety and equipment demonstrations. It is the student’s responsibility to schedule makeup demonstrations. Students should be prepared to actively participate in all in-class lectures, demonstrations, discussions, and critiques. Students are expected to budget time to work in the Jewelry and Small Metals Lab (Art 210) outside of class to complete projects and exercises. An open lab schedule will be posted by the second week of class. Each project will be submitted for evaluation following an in-class critique. Research, blogs, and writing assignments will be submitted electronically to Canvas for evaluation. Grades and comments will be posted on Canvas along with a rubric detailing the point value earned. A final critique will be held on the last day of instruction followed by a mandatory lab cleanup scheduled for the day of the class final.

- **Making up missed work** – It is your responsibility to make arrangements to make up missed demos, acquire notes from missed lectures, and to contact me with special circumstances regarding attendance and late work.

**Contact your peers** to keep up to date on any information you may have missed due to an absence.

**Peer contacts: Name, phone number, and email**

1. __________________________________________________________
2. __________________________________________________________

**If you missed a demo or need assistance on equipment:**

- JSM will hold special mentor sessions to provide individual assistance.
- Email me at yvonne.escalante@sjsu.edu to set up an appointment during office hours or to request an appointment outside of office hours. If you cannot make office hours, please include three times you are available to meet.
- You may come to my office hours for drop-in visits; however, this is first-come first-served and is limited to the time posted

**Evaluations will be based on:**

- Student’s level of participation in in-class demonstrations, class discussions, and critiques associated with each assignment.
- Student’s ability to successfully apply skills learned through demonstrations and practice to a finished work of their own design.
Evidence of thoughtful project development through sketches, models, and research.

A grading rubric will be included with each assignment.

**Determination of Grades**

- Numeric grades will be determined by the total points earned for all assignment including class participation out of 100 possible points. Letter grades will be given based on percentage equivalents.

- **Extra Credit** – Extra credit is welcome and encouraged in order for you to further explore any of the techniques covered. I may also offer extra credit in class as unforeseen opportunities arise. You may submit extra credit pieces worth up to 5% of your grade. Extra credit is given a point value based on complexity of the piece and quality of the end product. 5% is not guaranteed and can range from 1-5% per piece.

- **Late work** – Late work will be accepted; however, 5% will be deducted from late work for each class meeting it is late and 10% for every week it is late. For classes held once a week, 10% will be deducted for each class meeting it is late. All late work must be submitted by the final critique for credit.

- **Class participation** – Participation is assessed as follows:
  1. Active participation in the critical evaluation of projects through class critiques.
  2. Active participation in class discussions.
  3. Wearing appropriate clothing and safety gear when working in the lab.
  4. Active participation in daily and weekly cleaning duties.
  5. Participation in the end-of-semester cleanup, to be held on the scheduled final day.
     - Participation points may be made up through extracurricular activities related to Jewelry and Metalsmithing classes as cleared by instructor.

**Relative weight of course requirements:**

1) Project 1 (20%)
2) Project 2 (20%)
3) Project 3 (20%)
4) Class Participation (20%)
5) Hazardous material and safety test (5%)
6) Reading and Peer reviews (15%)

**Numeric grade equivalents:**

<table>
<thead>
<tr>
<th>Percentage Range</th>
<th>Grade</th>
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<tbody>
<tr>
<td>93% and above</td>
<td>A</td>
</tr>
<tr>
<td>92% - 90%</td>
<td>A-</td>
</tr>
<tr>
<td>89% - 88%</td>
<td>B+</td>
</tr>
<tr>
<td>87% - 83%</td>
<td>B</td>
</tr>
<tr>
<td>82% - 80%</td>
<td>B-</td>
</tr>
<tr>
<td>79% - 78%</td>
<td>C+</td>
</tr>
<tr>
<td>77% - 73%</td>
<td>C</td>
</tr>
<tr>
<td>72% - 70%</td>
<td>C-</td>
</tr>
<tr>
<td>69% - 68%</td>
<td>D+</td>
</tr>
<tr>
<td>67% - 63%</td>
<td>D</td>
</tr>
<tr>
<td>62% - 60%</td>
<td>D-</td>
</tr>
</tbody>
</table>
Syllabus: Introduction to Metalsmithing

below 60% F

Please note: Except in cases of documented emergencies, incomplete grades are not given in this course.

“All students have the right, within a reasonable time, to know their academic scores, to review their grade-dependent work, and to be provided with explanations for the determination of their course grades.” See University Policy F13-1 at http://www.sjsu.edu/senate/docs/F13-1.pdf for more details.

Additional Note:
This syllabus is subject to change, in the event of unforeseen circumstances, or in the case that changes will significantly enhance the quality of the course. Students will collectively have the opportunity to shape the ways in which the course unfolds.

Department Advising
For information about majors and minors in Art & Art History, for change of major/minor forms and a list of advisors: http://www.sjsu.edu/art/ or the Art & Art History department office in ART(H)/(PHOT) 116, 408-924-4320, art@sjsu.edu

Classroom Protocol
Students are expected to be punctual for class and actively engaged during all class meetings. Cell phones, smart phones, or other devices that detract from full attention should turned off or silenced.

Students using lab must:
• Be enrolled in Art 47, 147 or 149, unless otherwise cleared by instructor and granted volunteer status by HR.
• Always abide by general shop safety protocol as outlined in class and posted signs.
• Never operate equipment without being cleared by instructor.
• Never allow a friend or relative not enrolled in one of the classes listed above to use or operate any equipment.
• Never operate any equipment under the influence of medication, illegal substances, or alcohol – none of these substances are allowed in the lab at any time unless I am notified of the medication along with a doctor’s note.
• Infraction of this rule will result in loss of lab privileges and possible legal action.
• Always be respectful of lab assistants in charge of open lab hours. If you are asked to stop doing something or asked to leave, do so immediately. Talk to me directly if you feel there was any unfair treatment. You may email me at yvonne.escalante@sjsu.edu and/or come by my office, Art 321 during posted office hours.
• Never cast or use equipment while alone.

Clothing
• Always wear close-toed shoes during class and lab hours, even if you are not operating equipment.
• Keep long hair securely pulled back and remove any dangling jewelry or accessories (such as earbuds) before operating equipment.
• Remove any loose clothing that could get caught up in equipment prior to operation.
• Always wear safety glasses when operating equipment.
• When casting, you are required to have fire resistant clothing on. Avoid synthetic fabrics such as polyester that can flash at low temperatures, resulting in severe burns. Long cotton or canvas pants such as jeans are required on casting days.

• Failure to comply with the shop clothing protocol will result in loss of lab privileges for the day or until student is appropriately clothed.

Mandatory 10 minute daily cleanup (graded participation)

General cleanup:
• Turn main gas and air valves off (located under your workstation).
• Clean and return tools to station drawer (jeweler’s saw, ring clamp, needle files, dividers, bench pin, soldering kit, and Foredom bits).
• Clean and return glass and/or soldering plate to bench side storage area.
• Clean and return tools and unused supplies to the appropriate storage bin/cabinet.
• Sweep floor and table top under and around your workstation.

Assigned cleanup duty:
• Complete assigned duty each class day before the end of class.

Clean, sweep, and/or vacuum shared equipment immediately after use.

Demos and lectures – You are required to attend all demos and lectures. You will not be permitted to use tools/equipment until cleared by instructor. If you are going to miss a class, it is your responsibility to schedule a makeup demo with instructor or GA before continuing with the project. This will also affect your participation grade as outlined in the grading rubric. You are required to keep a dedicated notebook for taking notes during these demos and lectures.

Lab access outside of class – Because specialized equipment is necessary in the completion of class projects, students must be prepared to work outside of class during posted open lab hours. Open lab hours are times in which no class is in session and a trained lab monitor is in charge of opening and overseeing the lab for safety and compliance. You are encouraged to use this time to perfect techniques covered in class, experiment with techniques learned through independent projects, and create extra credit pieces. Open lab is a privilege that is only sustainable through the cooperation of all lab users. Abuse of lab access or rules will result in limiting or closing lab hours.

Responsibilities of lab monitors – Lab monitors do not teach and are not responsible for cleaning up after you. Lab monitors are volunteers that have been trained in classroom safety and protocol. They are not permitted to train you on equipment. During lab time the lab monitor is there to monitor the lab to ensure safety and compliance. Lab monitors should be notified of any injury or incident immediately in order to maintain health and safety. Broken or missing equipment should also be reported to the lab monitor immediately. Lab monitors may ask you to verify lab use eligibility and reserve the right to ask you to leave due to an infraction of lab protocol.

Laptops and cell phones – Laptops are allowed for class research only but are not required. Cell phones must remain off during demos and lectures. Failure to do so will be treated as a missed demo.

University Policies

Per University Policy S16-9, university-wide policy information relevant to all courses, such as academic integrity, accommodations, etc. will be available on Office of Graduate and Undergraduate Programs’ Syllabus Information web page at http://www.sjsu.edu/gup/syllabusinfo/.”
## Course Schedule

### Art 47: Introduction to Metalsmithing Spring Semester 2020

The schedule is subject to change with fair notice. Updates will be emailed or posted to Canvas

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topics, Readings, Assignments, Deadlines</th>
</tr>
</thead>
</table>
| 1    | 1/24/20| Introduction  
Demo: Annealing  
Safety/Equipment: Torch and Pickle  
Homework: bring in a design and texturing material next class |
| 2    | 1/31/20| Demo: Texturing Metal  
Safety/Equipment: Rolling mill, Hammers, Mallets, Stamps, and Anvil  
Demo: Cut and Pierce  
Safety/Equipment: Drill Press, Jeweler’s Saw  
Homework: 5 piercing designs due 2/7/20 |
| 3    | 2/07/20| Demo: Finishing Part 1  
Safety/ Equipment: Files and Sandpaper  
Demo: Finishing Part 2  
Safety/ Equipment: Buffing Machine and Flex Shaft Rotary Tool (Foredom) |
| 4    | 2/14/20| Demo: Finishing Part 3  
Safety/Equipment: Patina and Sealing  
Demo: S Hook and Jump rings |
| 5    | 2/21/20| Demo: Rivets  
Final workday  
**Hazmat test review**  
**Homework: Peer review reading**: bring silver to next class |
| 6    | 2/28/20| **Project 1 due at the beginning of class**  
**Peer review 1 due at the end of critique**  
**Hazmat test**  
Demo: Casting an ingot  
Safety/Equipment: Oxy Acetylene Torch |
| 7    | 3/06/20| Demo: Forging and Annealing  
Demo: Alloying Silver |
| 8    | 3/13/20| Demo: Drawing down wire  
Work on milled stock  
Homework: All milled material and stone due 3/20/20 at beginning of class |
<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topics, Readings, Assignments, Deadlines</th>
</tr>
</thead>
</table>
| 9    | 3/20/20 | Demo: Soldering  
Homework: finish shank                                                    |
| 10   | 3/27/20 | Demo: Bezel cup  
Homework: finish bezel  
Work on ring                                                                 |
| 11   | 4/03/20 | **Spring Recess- campus closed no lab March 30 – April 3**                     |
| 12   | 4/10/20 | Demo: Final assembly  
Demo: Stone setting  
**Homework: Peer review reading**                                           |
| 13   | 4/17/20 | **Project 2 due at the beginning of class**  
**Peer review 2 due at the end of class**  
Introduction to final project  
Demo: Carving wax                                                             |
| 14   | 4/24/20 | Demo: Preparing your pattern for investing  
Demo: Investing                                                               |
| 15   | 5/01/20 | Casting day!  
Last day to work  
**Homework: Peer review reading**                                             |
| 16   | 5/08/20 | **Exercise 2 due, final critique**  
**Final critique, Project 3 due at the beginning of class**  
**Peer review 3 due at the end of class**                                     |
| Final Exam | 5/13/20 | **Final cleanup and art pickup!**  
Room 210, 7:15 am – 9:30 am  
Attendance is mandatory!                                                      |
|       |         | **May 11 last day of open lab hours**                                         |

*There shall be an appropriate final examination or evaluation at the scheduled time in every course, unless specifically exempted by the college dean who has curricular responsibility for the course.*