

Art 445: Metal

Units: 2.0

Spring 2025 Friday—9:00-11:40 pm

Location: WAH 108

Instructor: Brian Olson

Office: WAH 108

Office Hours: Friday before class, please make appointment

Contact Info: bolson@usc.edu

Sculpture Technician: Jay Lizo

Hours of Service: M-F 9-5

Contact Info: lizo@usc.edu.

Catalog Description

Introduction to metal in fine art. Emphasis on technical proficiencies and effective solutions working in a variety of metals.

Course Description

Designed to explore techniques and philosophies of working with ferrous and non-ferrous metals. Explorations in welding and forging. Combining metals with other traditional and non-traditional sculpting materials will be encouraged in order to give a strong understanding in the versatility of art metals and it's application. Students will be urged to produce individualized items and develop an understanding of art metal and its place in the fine arts field.

Learning Objectives

Upon completion of this course students will be able to:

- Safely work with mild steel to construct complicated and unique 2D and 3D objects.
- Discuss and use elements and principles of metalsmithing as they relate to the practice of fine art
- Use various metal working tools (welder, plasma cutter, forge, box break, roller, shear) to create artwork.
- Cast metal (bronze and/or aluminum) using the "lost wax" process

Prerequisite(s): N/A

Co-Requisite(s): N/A

Concurrent Enrollment: N/A

Recommended Preparation: None

Course Notes

In addition to the scheduled classes, **you will be required to attend the bronze pour, (usually scheduled on a Thursday night from 9 pm – 2 am between week 11-14.)** You will be released from class on the following Friday morning and have an additional class release to compensate.

Required Resources

Notebook and safety gear including leather boots and gloves.

Required Readings and Supplementary Materials

Sculpture Tools, Materials and Techniques - Second Edition, by Wilbert Verhelst, Prentice-Hall 1988
Sculpture Kit (Available from tool crib.)

Description and Assessment of Assignments

Introduction to metal concepts in the creation of fine art. Equal emphasis on safety, technical proficiencies and effective solutions in working with a variety of metals.

Grading Breakdown

Students will be graded primarily on your completed bronze project. The midterm test, quizzes (verbal and written) and attendance will have an impact on the final grade. Please note: In the event of remote instruction, the grade assignments will be updated and adjusted, adding additional quizzes.

Including the above detailed assignments, how will students be graded overall? Participation should be no more than 15%, unless justified for a higher amount. All must total 100%.

Assignment	Points	% of Grade
Bronze Assignment	50	50%
Welding Assignment	25	25%
Participation	15	15%
Midterm	10	10%
TOTAL	100	100%

Grading Scale

Course final grades will be determined using the following scale

A	95-100
A-	90-94
B+	87-89
B	83-86
B-	80-82
C+	77-79
C	73-76
C-	70-72
D+	67-69
D	63-66
D-	60-62
F	59 and below

Assignment Submission Policy

All projects must be photographed and submitted via email.

Grading Timeline

Announce a standard timeline for grading and feedback.

Additional Policies

Students are required to attend class regularly. You will not be able to use any equipment that was discussed in Safety lectures or demonstrated during your absences (or missed being late for class). This will impact your ability to perform assignments and result in a lower grade.

Course Schedule: A Weekly Breakdown

The following schedule will provide an overview of assignments and dates, which we will try to maintain. These dates may change due to weather, University events and bronze pour (see course notes above.)

Classes will meet weekly and be composed of two parts. The first part will consist of a lecture and demonstration; the second part will be a lab time for students to gain hands-on experience. Students who miss any safety information will not be able to use equipment.

	Topics/Daily Activities	Readings and Homework	Deliverable/ Due Dates
Week 1	Introduction to metal Lecture on safety equipment and gear.		
Week 2	Introduction to welding: oxy-acetylene.	Hand out 1st project	Project 1 due week 6
Week 3	Welding demonstration & cutting demonstration with the wire feed welder and the plasma cutting system.	Review notes from previous week and practice	
Week 4	Introduction/Safety/Dem o on MIG Welding & Plasma Cutter.	Review notes from previous week and practice	
Week 5	Sheet metal fabrication: Introduction/Safety/Dem o on the box break, slip roller, shear. Demonstrate various techniques of mechanical fastening.	Review notes from previous week and practice	
Week 6	Lecture and demonstration on metal forging	Review notes from previous week and practice	Project 2 is due week 15/Finals week
Week 7	Midterm Test	Hand out 2nd project	Bring in Sketches for Project 2 week 8
Week 8	Lecture & demonstrate the "lost wax" process of bronze casting.		
Week 9	Demonstration on mold making	Work on project	
Week 10	Demonstration on gating and venting		Complete wax assignment
Week 11	Demonstration on working with microcrystalline and paraffin.		Complete Sprue
Week 12	Lecture and demonstration on investments including coating the wax mold.		Complete Investment

Week 13	Lecture on “burning out” investments.		
Week 14	Intro/Safety/Demo – Pouring Bronze.		
Week 15	Demonstration on finishes.		Final critique on 3rd project and
FINAL	Demonstration on shooting images for Final Portfolio and Submission		Date: For the date and time of the final for this class is consistent with <i>USC Schedule of Classes</i> at www.usc.edu/soc .

Statement on Academic Conduct and Support Systems

Academic Integrity

The University of Southern California is foremost a learning community committed to fostering successful scholars and researchers dedicated to the pursuit of knowledge and the transmission of ideas. Academic misconduct is in contrast to the university’s mission to educate students through a broad array of first-rank academic, professional, and extracurricular programs and includes any act of dishonesty in the submission of academic work (either in draft or final form).

This course will follow the expectations for academic integrity as stated in the [USC Student Handbook](#). All students are expected to submit assignments that are original work and prepared specifically for the course/section in this academic term. You may not submit work written by others or “recycle” work prepared for other courses without obtaining written permission from the instructor(s). Students suspected of engaging in academic misconduct will be reported to the Office of Academic Integrity.

Other violations of academic misconduct include, but are not limited to, cheating, plagiarism, fabrication (e.g., falsifying data), knowingly assisting others in acts of academic dishonesty, and any act that gains or is intended to gain an unfair academic advantage.

Academic dishonesty has a far-reaching impact and is considered a serious offense against the university. Violations will result in a grade penalty, such as a failing grade on the assignment or in the course, and disciplinary action from the university itself, such as suspension or even expulsion.

For more information about academic integrity see the [student handbook](#) or the [Office of Academic Integrity’s website](#), and university policies on [Research and Scholarship Misconduct](#).

Please ask your instructor if you are unsure what constitutes unauthorized assistance on an exam or assignment or what information requires citation and/or attribution.

Use of AI

In this course, I encourage you to use artificial intelligence (AI)-powered programs to help you with assignments that indicate the permitted use of AI. You should also be aware that AI text generation tools may present incorrect information, biased responses, and incomplete analyses; thus they are not prepared to produce text that meets the standards of this course. To adhere to our university values, you must cite any AI-generated material (e.g., text, images, etc.) included or referenced in your work and provide the prompts used to generate the content. Using an AI tool to generate content without proper attribution will be treated as plagiarism and reported to the Office of Academic Integrity. Please review the instructions in each assignment for more details on how and when to use AI Generators for your submissions.

If found responsible for an academic violation, students may be assigned university outcomes, such as suspension or expulsion from the university, and grade penalties, such as an “F” grade on the assignment, exam, or in the course.

Academic Conduct

Plagiarism – presenting someone else’s ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in *SCampus* in Part B, Section 11, “Behavior Violating University Standards” <https://policy.usc.edu/student/scampus/part-b>. Other forms of academic dishonesty are equally unacceptable. See additional information in *SCampus* and university policies on scientific misconduct, <http://policy.usc.edu/scientific-misconduct>.

Discrimination, sexual assault, intimate partner violence, stalking, and harassment are prohibited by the university. You are encouraged to report all incidents to the *Office of Equity and Diversity/Title IX Office* <http://equity.usc.edu> and/or to the *Department of Public Safety* <http://dps.usc.edu>. This is important for the health and safety of the whole USC community. Faculty and staff must report any information regarding an incident to the Title IX Coordinator who will provide outreach and information to the affected party. The sexual assault resource center webpage <http://sarc.usc.edu> fully describes reporting options. Relationship and Sexual Violence Services <https://engemannshc.usc.edu/rsvp> provides 24/7 confidential support.

Statement on University Academic and Support Systems

Students and Disability Accommodations:

USC welcomes students with disabilities into all of the University’s educational programs. [The Office of Student Accessibility Services \(OSAS\)](#) is responsible for the determination of appropriate accommodations for students who encounter disability-related barriers. Once a student has completed the OSAS process (registration, initial appointment, and submitted documentation) and accommodations are determined to be reasonable and appropriate, a Letter of Accommodation (LOA) will be available to generate for each course. The LOA must be given to each course instructor by the student and followed up with a discussion. This should be done as early in the semester as possible as accommodations are not retroactive. More information can be found at osas.usc.edu. You may contact OSAS at (213) 740-0776 or via email at osasfrontdesk@usc.edu.

Student Financial Aid and Satisfactory Academic Progress:

To be eligible for certain kinds of financial aid, students are required to maintain Satisfactory Academic Progress (SAP) toward their degree objectives. Visit the [Financial Aid Office webpage](#) for [undergraduate-](#) and [graduate-level](#) SAP eligibility requirements and the appeals process.

Support Systems:

[Counseling and Mental Health](#) - (213) 740-9355 – 24/7 on call

Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention.

[988 Suicide and Crisis Lifeline](#) - 988 for both calls and text messages – 24/7 on call

The 988 Suicide and Crisis Lifeline (formerly known as the National Suicide Prevention Lifeline) provides free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week, across the United States. The Lifeline consists of a national network of over 200 local crisis centers, combining custom local care and resources with national standards and best practices. The new, shorter phone number makes it easier for people to remember and access mental health crisis services (though the previous 1 (800) 273-8255 number will continue to function indefinitely) and represents a continued commitment to those in crisis.

[Relationship and Sexual Violence Prevention Services \(RSVP\)](#) - (213) 740-9355(WELL) – 24/7 on call

Free and confidential therapy services, workshops, and training for situations related to gender- and power-based harm (including sexual assault, intimate partner violence, and stalking).

[Office for Equity, Equal Opportunity, and Title IX \(EEO-TIX\)](#) - (213) 740-5086

Information about how to get help or help someone affected by harassment or discrimination, rights of protected classes, reporting options, and additional resources for students, faculty, staff, visitors, and applicants.

[Reporting Incidents of Bias or Harassment](#) - (213) 740-2500

Avenue to report incidents of bias, hate crimes, and microaggressions to the Office for Equity, Equal Opportunity, and Title for appropriate investigation, supportive measures, and response.

[The Office of Student Accessibility Services \(OSAS\)](#) - (213) 740-0776

OSAS ensures equal access for students with disabilities through providing academic accommodations and auxiliary aids in accordance with federal laws and university policy.

[USC Campus Support and Intervention](#) - (213) 740-0411

Assists students and families in resolving complex personal, financial, and academic issues adversely affecting their success as a student.

[Diversity, Equity and Inclusion](#) - (213) 740-2101

Information on events, programs and training, the Provost's Diversity and Inclusion Council, Diversity Liaisons for each academic school, chronology, participation, and various resources for students.

[USC Emergency](#) - UPC: (213) 740-4321, HSC: (323) 442-1000 – 24/7 on call

Emergency assistance and avenue to report a crime. Latest updates regarding safety, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible.

[USC Department of Public Safety](#) - UPC: (213) 740-6000, HSC: (323) 442-1200 – 24/7 on call

Non-emergency assistance or information.

[Office of the Ombuds](#) - (213) 821-9556 (UPC) / (323-442-0382 (HSC)

A safe and confidential place to share your USC-related issues with a University Ombuds who will work with you to explore options or paths to manage your concern.

[Occupational Therapy Faculty Practice](#) - (323) 442-2850 or otfp@med.usc.edu

Confidential Lifestyle Redesign services for USC students to support health promoting habits and routines that enhance quality of life and academic performance.