

Be prepared to spend the time necessary to produce exceptional work, investigate, question, explore, look closely, dig deeply, harness your obsessions and put them to work. While casting molten metal can be an exciting activity, be advised that it can also be very dangerous. Students will understand and abide by the foundry safety rules at all times. Do not use any tool you are not familiar with. If you are in doubt about the proper use of a tool ask me or the Foundry Technician Steve Davis for assistance. Casting metal, unlike most

other art processes is a team activity that requires a relatively large number of people to do safely and effectively. You will not be able to do most of the processes involved alone so be prepared to participate in investing, pouring and clean up even if you do not have anything in a particular pour. This is an advanced level class that demands a large commitment of your time, energy and resources. To complete all assignments on time you will need to work on your projects outside of class meetings. Expect to have additional expenses beyond class fees for personal materials and supplies as well.

CASTING POLICY

Anyone casting a mold must be present. It is unfair to your fellow students and additional casting crew to do work for you in your absence. If you cannot be present during the pour, you must make prior arrangements with me. On casting days, it is expected that you will be present for the whole event, start to finish. Participation during cleanup is a must.

MATERIALS AND SUPPLIES

You will be using a variety of materials over the semester, some of which will be provided, others you will need to acquire on your own. While the foundry facility has an extensive selection of hand and power tools I highly recommend that you begin to put together your own “tool box” of your favorite tools and personal safety gear such as a good respirator, eye and ear protection and gloves. Expect to supply some of your own cut off and grinding wheels, sanding and polishing discs and drill bits.

COURSE GOALS

Exercises and projects are designed to expand and widen the range of technical skills and conceptual perspectives that students can draw upon-to clearly communicate ideas and physically manifest their artistic visions.

Students in this course will:

Explore different casting and welding techniques, connective systems, materials and readings to develop a personal vocabulary and repertoire of skills from which to draw on when creating their work.

COARSE LEARNING OUTCOMES (CLO)

Upon successful completion of this course, students will be able to:

Course Goals and Learning Outcomes

Upon completion of this course, students will be able to:

CLO 1. Safely clean, cut, chase, weld, grind, sand and polish metals using hand and power tools.

CLO 2. Join a variety of metals using “hot” systems such as MIG, TIG and OxyAcetylene Welding and brazing.

CLO 3. Join various sculptural elements and materials through the use of “cold” or mechanical connective systems, such as tap and die, positioning and locking pins and epoxies.

CLO 4. Manipulate microcrystalline wax using a wide variety of techniques including direct sculpting, mold casting, fabrication and brushed texturing to create wax patterns for the lost wax casting process.

CLO 5. Reproduce and replicate forms through basic mold making techniques including ridged plaster molds, clay blanket and press molds.

CLO 6. Effectively gate, sprue and invest wax patterns in plaster and sand slurry as well as rammed greensand molds.

CLO 7. Cast bronze and aluminum sculpture and use the process and medium of cast metal to solve technical, visual and conceptual problems in their artistic practice.

CLO 8. Clearly communicate their artistic methods, techniques and conceptual intent through written report, visual presentation and critical discussion.

REQUIRED READINGS

To Be Determined.

COURSE WEB MATERIAL

I will be placing class information on Canvas. It will take me a bit of time to work through the learning curve, so bear with me!

LIBRARY LIASON

Gareth Scott

email: gareth.scott@sjsu.edu

phone: (408) 808-2094

Dr. Martin Luther King, Jr. Library

4th Floor Administration Offices

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

COURSE REQUIREMENTS

Class Attendance and Participation: Attendance is vital to your success in the course. It is your responsibility to find out about any missed schedule changes or announcement. Talking with your fellow classmates or me is the best way to achieve this. I WILL DO A DEMONSTRATION IN EVERY CLASS!! If you miss a class it is up to you to schedule an appointment with me to get the material you missed in class. These appointments can be made during my offices hours or at the end of class (time permitting). This course requires active participation so it is imperative that you attend every class section, arrive on time, come prepared, and stay for the duration of the class period. Showing up late to class, leaving early, coming unprepared, or being disruptive creates a disrespectful learning and work environment and will reflect poorly on your class participation grade. It is possible to produce “A” work in my class

and still receive a final grade of “B” due to poor participation. The more interest you show (as evidenced by questions and comments), the better the class will be for you and your classmates. As proof that you have read this syllabus, bring nail or screw to class on the second day.

Materials: While your materials fee does cover some of the larger, more expensive, and long lasting equipment that can be utilized by a variety of classes and students, as with any art class, you are required to purchase consumable or specialized materials that cannot be shared among the student body. The materials you will need for this class are:

ASSESSMENTS

All projects and assignments are intended to help you reach the course objectives. Any work not turned in on the date it is due is considered late. Ten percent will be deducted from the grade for every class period it is not turned in.

Special circumstances will be taken into consideration (e.g. illness, you were injured while saving people from a nursing home fire, or you were busy eradicating small pox, etc.). The instructor reserves the right to alter assignments and change project due dates with sufficient notice to the students.

Sketchbook (Rolling Due Dates): You are required to keep a sketchbook. I will on occasion ask for drawings of projects you have been thinking about. This helps you get ideas out of your head and it helps me to better understand your intentions.

Projects and Grade Determination: You are required to produce a total of 4 unique projects utilizing the techniques and concepts introduced in the demonstrations. You are not to present another’s ideas or projects as your own. This is called plagiarism; it is taken very seriously by the university and the art community. Specific instructions will be provided in class for each project on the day the project is introduced. Individual project grades will be assessed in 4 different categories, each worth 5 points: Craftsmanship, ambition, concept, and participation. You may submit your project up to one week after the original day of critique. However, there will be a 10% deduction per class day for late work.

Presentation: You are required to do a short presentation on an artist or process that is relevant to this class. In your presentation. This presentation will be explained in greater detail in class.

Critiques: Critiques are a group discussion where we will discuss all of your work. The goal of critiques is to ascertain areas of success and areas that could be improved with in the artwork presented. It is encouraged that discussion is critical and honest. However, it is not the goal of critiques to erode self-confidence. While honesty is expected, it is important to refrain from offensive and generally mean comments. In short, be kind.

Classroom Engagement: Students are expected to arrive on time and stay for the duration, attend class regularly, and be respectful of both the instructor and fellow students. Positive classroom engagement involves: paying attention during demonstrations, asking course content related questions, participating in critiques, not distracting your fellow classmates, etc.

GRADING

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 practice. Other course structures will have equivalent workload expectations as described in the syllabus.

Skills and Drills= 20% of your final grade
Project 1= 20% of your final grade
Project 3= 20% of your final grade
Project 3= 20% of your final grade
Presentation= 10% of your final grade
Participation= 10% of your final grade
Total: 100%

NUMERIC GRADE EQUIVALENTS

93% and above	A
92% - 90%	A-
89% - 88%	B+
87% - 83%	B
82% - 80%	B-
79% - 78%	C+
77% - 73%	C
72% - 70%	C-
69% - 68%	D+
67% - 63%	D
62% - 60%	D-
Below 60%	F

FINAL EXAMINATION OR EVALUATION

A culmination critique will take place on the designated “Final Examination” date for the class.

GRADING INFORMATION

An “A” grade is reserved for exceptional work that shows inspiration and demonstrates significant insight developed to its fullest extent and presented with exquisite craftsmanship.

A “B” grade indicates good work that is definitely above average, though not of the highest quality. This work shows thorough exploration and development, and is well presented with good craftsmanship, but does not rise to the highest level of excellence.

“C” indicates fair work of average or medium character. Work in this category demonstrates complete fulfillment of the stated requirements and an understanding of the issues covered, but does not exceed the expectations of understanding, development, or execution.

“D” is the lowest passing grade and indicates work below average and unsatisfactory. Though work may meet the minimum requirements, it lacks depth, development or is unsatisfactorily crafted.

“F” is for fail and indicates that the student understands so little of the subject that it must be repeated in order for credit to be received. Work in this category may be unfinished, unimaginative, underdeveloped or poorly executed, and shows minimal understanding of issues.

CLASSROOM/SHOP WORK ENVIRONMENT AND CONDUCT

Work Environment

Sculpture work is technically demanding, physical, often messy, and involves the use of materials at extreme temperatures. It is VERY important to be on time, be aware, and come prepared which means dressing appropriately. Exposed skin may come into contact with irritants, sharp objects, and particles at high heat. Loose fitting clothing or hair, strings, or hanging jewelry can get caught in machines resulting in serious injury. Please dress accordingly.

Conduct

- * No eating or drinking in the classroom (water bottles with lids are allowed).
 - * DO NOT talk or make otherwise distracting noises/actions during a lecture or demonstration. It is rude to your fellow classmates and me.
 - * No cell phone, gaming device, or music player use. If you are expecting a necessary call or text please let me know and sit in the back so you can leave without disrupting the class.
 - * Laptop and tablet are allowed for instructional use only. The instructor reserves the right to deny use of laptops and tablets if they are found to be used for non-instructional activity.
 - * Class materials are for classroom use only. If you would like to work at home, see the instructor and I will set you up. The materials are for everyone; if you take them all home, everyone cannot use them.
 - * Be aware of your body, materials, and project's surroundings! It is very easy when working with materials such as wire and large pieces of material to hurt yourself and others. Be mindful where you are in relationship to others and aware of what is going on around you as others may not be aware of your presence.
-
- * Do not touch another person's project without permission or in any other way endanger or damage and another person's project
 - * Students are expected to exercise academic honesty and integrity. Violations such as cheating and plagiarism will result in disciplinary action which may include recommendation for dismissal
 - * It is not acceptable to create a hostile learning or work environment through the use of derogatory comments or language, sexual harassment of a classmate or the instructor.

Consequences for Disruptive Behavior: You will be made aware of and immediately expected to cease any disruptive behavior, this includes texting in class. If the disruptive behavior continues you will be asked to leave the class. If you are found to repeatedly disrupt the class after receiving a warnings and dismissal you will be referred to the judicial affairs officer.

ADDITIONAL NOTES

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

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/>."

Questions? Ask! Ask! Ask! Ask! Ask!

It is important that you ask any and all questions you have as we go along. If you are confused about an assignment, or if I haven't made something clear, please ask me in class, if you have a question it is likely that many of your classmates are wondering the same thing. You can also make an appointment during my office hours. I will be happy to discuss any stage of a project with you.

Dress Code and The Foundry/Facility Safety Test

There will be a shop safety test that must be passed successfully to be able to use the foundry facilities. Long pants, closed toed shoes and shirts that come at least to the elbow are required at all times while using the foundry facilities. These should be of fire resistant material (such as cotton, wool or leather) NO SYNTHETIC MATERIALS. Safety clothing, respirators, safety glasses/shields and ear protection must be worn when appropriate for the given work environment.

Safety Data Sheets:

Forms called SDSs are required for all potentially hazardous materials and are to be supplied to the department by students bringing hazardous materials into the building. They are available from the vendor (store) where the material was purchased, and are required to be on file with the department before materials can be used in any department facility (including the Shop or the 3-D room.) Potentially hazardous materials could include spray paints and adhesives, epoxy resins, etc. Students are required to supply MSDS sheets to the department whenever bringing hazardous materials into the building.

SJSU Foundry Policy on HAZMATS:

Students are not permitted to leave personal hazardous materials on site. Any chemical such as spray paint, solvents, patina chemicals you bring for your projects MUST GO HOME WITH YOU THAT DAY. In addition, even though you will not be storing your chemicals on site, you must have an SDS for all chemicals you will be using.

Course Calendar for ART 170 Spring 2020 (all dates subject to change)

Week	Topic	Date	Demonstration	Due
1	Introduction	1/27-	Class intro, Shop Walk through, Shop test. Begin	

		1/29	Skill Challenges Challenge 1 and 2 (Stack of Dimes, Does it stick?)		
2	Skill Challenges!	2/3	Challenge 3 The line up		
		2/5	Challenge 4: Thinnest Cut		
3		2/10	Challenge 5: Slow your roll		
		2/12	Challenge 6: Get Bent		
4		2/17	Challenge 7: Identical cuts		
		2/19	Challenge 8: The BOX		
5		Organic Meets Geometric	2/24	Project 1 introduction	
			2/26	Sketches due	
6	3/2		Drawings due		
	3/4		Work Day		
7	3/9		Work Day		
	3/11		Work Day		
8	3/16		Work Day		
	3/18		Critique		
9	Mix Media/ Positive and Negative	3/23	Project 2 Introduction		
		3/25	Sketches Due		
3/30		SPRING BREAK			
10		4/1	SPRING BREAK		
		4/6	Work Day		
11		4/8	Work Day		
	12	4/13	Project 3 Introduction		
4/15		Critique 2			
13	4/20	Project 3 sketches due			
	4/22	Project 3 drawings due			

	Casting meets Fabrication			
14		4/27	Wax work finished	
		4/29	Invest	
15		5/4	Pour metal	
		5/7	Work Day	
16		5/11	Monday 11 Last day of instruction. Critique Project 3	
17	Wednesday, May 13 – Final Exam 12:15-2:30 PM		Final exam time will be used for mandatory shop clean up.	

San Jose State University, Department of Art and Art History
Art 170 Section 1. Topics in Metal Sculpture. Metal Sculpture IX
Spring Semester, 2020

BASIC COURSE INFORMATION

Instructor: **Steve Davis**

Course: **ART 170: Metal Sculpture**

Date and Time: **Mondays/Wednesdays 3:00 pm – 5:50 pm**

Office Hours: **Wednesdays, 2:00 pm – 3:00 pm. Held at the Foundry Facility.**

E-mail: steven.davis@sjsu.edu

Prerequisite :

Classroom: **Art Foundry, located at 1036 S. 5th Street.**

Units: **3**

Projects for Metal Fabrication, Spring 2020:

Week 1 – 4. Skill building challenges.

Challenge 1: “Stack of Dimes” Make 3 of your best, most consistent welds using both MIG and TIG processes. (3 welds per process, 6 total).

Challenge 2: “Does it Stick?” Using only two tacks, make a sample that can stand up to the sledgehammer!

Challenge 3: “The Line Up”. Make a 4-hole base plate that perfectly lines up with holes on a provided template.

Challenge 4: “Thinnest cut”! Using the plasma cutter, you make the thinnest cut possible out of 18-gauge sheet metal.

Challenge 5: “Slow your roll”! Using the slip roller, make two rings at identical rolls.

Challenge 6: “Get Bent”! Using the sheet metal break, make three samples that have the same angles. Each sample must have two breaks.

Challenge 7: “Identical Cuts”. Using the horizontal bandsaw, you will make cut three lengths of stock material that are exactly the same length.

Challenge 8: “The Box”. Using all of your acquired fabrication skills, make a perfect box out of stock materials. All sides must be congruent, and all angles must be 90 degrees.

The overall winners of these challenges will be given an all-expense paid trip to the Kwikie Mart where they can have the sugary treat of their choice!

Weeks 5 – 8. Project 1: Organic meets geometry.

Make a sculpture that juxtaposes organic forms with geometric forms out of steel.

Weeks 9-12. Project 2: Mix Media- Positive/Negative

Make a sculpture that uses steel fabrication as well as other media, that equally employs positive and negative space concepts.

Week 13-16. Project 3: Fabrication meets Casting.

Using stock wax shapes, fabricate parts and then cast them in either aluminum or bronze. Once the pieces are cast, fabricate them into a final sculpture. Mix media elements are strongly encouraged.