

NEW YORK STUDIO SCHOOL

OF DRAWING, PAINTING & SCULPTURE

SPRING 2023

SATURDAY AFTERNOON SCULPTURE – IN-PERSON
METALWORK & THE RESONANCE OF SCULPTURE

Instructor: Sam Nichols
Class Hours: 2pm – 6pm ET, Saturdays
First Class: September 23, 2023
Last Class: December 9, 2023
No Class: November 25, 2023

Course Description

With an emphasis on learning essential steel and metal working techniques, this class will explore the resonance of the sculpture object. The course is open to all students interested in making sculptural objects out of metal.

Class instruction will occur in the School's welding room and adjacent common areas within the sculpture department. While focusing on personal safety and responsible practice, students will learn about materials and how to use the School's equipment and hand tools to complete class assignments and independent work. The history of iron and steel within the evolution of sculpture and the visual arts will be introduced through visual presentations and group discussions. In addition to several hands-on demonstrations, students will learn to transform their sketched shapes into forms by learning helpful drafting methods commonly used in patternmaking.

Projects and assignments will be structured to ensure mastery of these techniques while simultaneously strengthening the students' abilities to articulate the significance of their own work. In the latter half of this course, students will be encouraged to incorporate nonmetallic materials into their work. This course will also include instructor presentations, reading handouts, group discussions, and group critiques.

Course Outline

Class time; part one:

Classes will begin with a group meeting, then a technical demonstration or teacher presentation on topics such as:

"A history of Iron and Steel...what are they and where do they come from?"

"...from OGON; god of Iron, Metallurgy, to Andrew Carnegie; capitalist god of steel."

"The emergence of steel as a viable art medium and the important role it continues to play in the visual arts."

"Obsolescent Objects; Has sculpture abandoned the art object?"

"Essential metal working tools for the artist, and how to set up a small metal arts studio."

...Group discussions will follow presentations and/or demonstrations.

Class time; part two:

One or more technical demonstrations will be given in each class and scheduled to coincide with the progression of assignments and student interests. In general, demonstrations will cover:

- SAFETY, SAFETY, SAFETY, and perhaps a bit more SAFETY
- Welding equipment and techniques: welding, brazing and cutting with the Oxy-Acetylene torch. GMAW Welding (Gas Metal Arc Welding) commonly called MIG welding.
- Cold cutting and forming tools: sheet metal and bar shear, metal cutting bandsaw, drill press, stationary and handheld grinders, rod and bar bender, and numerous other hand tools.
- Mechanical fabrication techniques: drilling and tapping holes, making and setting rivets, making and using jigs to create precise and/or multiple pieces.

- Drafting: line developments techniques that facilitate the accurate development of a two-dimensional shape into a three-dimensional form.
- Presenting: through group discussions and demonstration we will explore various ways artists present and speak about their work.

Class time; second half

Students will spend the latter part of class working on their projects.

Learning Outcomes

Upon completion of this course, students will have learned:

- A fundamental knowledge of iron, steel and other nonferrous metals
- A fundamental knowledge of Fabrication & Metal Fabrication terms and vocabulary
- Metal fabrication and their relevant processes – these will include the following:
 - o Metal shop safety and responsible practice
 - o Oxy – Acetylene welding, cutting, heating & brazing
 - o GMAW (MIG) welding
 - o Identifying and selecting metal materials
 - o Preparing materials to be welded
 - o Cold joinery for similar and dissimilar metals
 - Preparing material to be joined – i.e., cutting, grinding, bending a section of material so that it can be joined to another section
 - Identifying, selecting and/or making fasteners – i.e., how to make and set rivet, how to drill and thread (tapping) holes, identifying and selecting commonly available fasteners such as bolts, nuts, washers, screws, etc.
 - o The use of stationary metal working machines:
 - vertical bandsaw; used for straight and curve cutting sheet metal
 - horizontal mitering bandsaw, used to miter lengths of dimensional materials such as rounds (rods), bars, angles, tube & pipe, etc., belt and disc sander, drill press, and others
 - o To draw (development) and make accurate two-dimensional patterns and then use them in making three dimensional objects
 - o To identify, select and use common and specialized hand tools
 - o Jig design and fabrication for use in making multiples
 - o Basic tools and techniques used to bend, shape & form metal
 - o Use basic metal working tools and techniques to investigate, develop, make and present sculptural works
- Basic problem-solving skills in response to situations commonly found in the professional sculpture studio
- To employ effective time management
- Additional content as time permits

Assessable Tasks

This class will have three critique days, and assignments or relevant work by MFA or Certificate students, will be due. The first assignment is intended to familiarize students with the school's sculpture studio, safe practices, and to impart the basics of welding and metal working. This is a required assignment for all students.

Participation in these group critiques is required for all students. Project assignments and critique days will be announced in class.

After completing the first assignment, MFA & Certificate students can tailor their studio work and course content to be more in line with their current practice.

Students are required to bring one 8-1/2" X 11" (or larger) sketch book to be used exclusively in this class. The sketchbook will be used to develop ideas, record technical information and serve as a visual record of each project.

Students will be responsible for purchasing materials needed for their projects; however, there is a limited supply of random material (steel) available for student use.

Evaluation and Grading

NYSS MFA students participating in this course will receive grades. Grading is on a High Pass/Pass/Low Performance/Fail basis.

To achieve a Pass grade:

- The student will demonstrate through completed projects, a sound understanding of the principles, concepts and techniques required in the course.
- Each assignment must be finished and ready for presentation at the *beginning* of class
- The student must actively participate in each group critique process
- Willingness to follow classroom etiquette
- The student must make use of their sketchbook and bring it to class each day

To achieve a High Pass grade:

In addition to meeting the Pass grade criteria, students will receive a High Pass grade if they demonstrate an advanced understanding of the principles, concepts and techniques required in the course. An advanced understanding will be evaluated on the student's:

- ...technical execution of each assignment – dare I say craft and workmanship?
- ...ability to develop and convey concepts, both visually and verbally
- ...willingness to strive beyond their present skill level and to work outside their comfort zone.
- ...actively participate in all aspects of the class
- ...successfully integrating the principles and concepts into their current practice

Assignment grades will be reduced or recorded as incomplete if...

- The assignment is not finished and ready for presentation at the beginning of class.
- The student has an unexcused absence on assignment due days.

Please note that even if you were unable to complete the assignment, your attendance and class participation is still required. Failure can be the best teacher; therefore, project grades will be based largely on the student's effort and class participation.

The following areas will be considered when determining assignment grades...

- 45% student effort and class participation evaluation
- 35% quality of work
- 20% sketchbook and preliminary work

Students are also required to:

- Be punctual and prepared for class
- Communicate directly with the instructor regarding your attendance issues.
- Communicate directly with instructor regarding grades (see Grading Practices above)
- Work only on class specific projects during class time
- Participate in classroom cleanup during the final ten (10) minutes of class time

Readings and Resources

Supplied Readings: (PDF file or handouts)

- *Walter Benjamin*, "The Work of Art in the Age of Mechanical Reproduction", (1935), PDF file.
- *Robert Irwin*, "seeing is forgetting the name of the thing one sees", University of California Press, Introduction, pg.3 – pg.4, (2008), handout
- *Dave Hickey*, "The Invisible Dragon; Essays on Beauty", Art Issues Press (1993) & The University of Chicago Press (2009), (introduction) Enter the Dragon; On the Vernacular of Beauty, (1993), handout
- *Tobin Siebers*, "Disability Aesthetics", University of Michigan Press, Chapter 1, pg.1 – pg.3, (2010), PDF file.

- *Jeanette Winterson, "Art Objects: Essays on Ecstasy and Effrontery"* Vintage Books; Random House Inc., New York, NY, Part One, pg.3 – pg.24, (1997), PDF file.

Suggested Books & Reading:

- *Robert Irwin, "seeing is forgetting the name of the thing one sees"*, University of California Press, (2008)
- *Dave Hickey, "The Invisible Dragon; Essays on Beauty"*, Art Issues Press (1993) & The University of Chicago Press (2009)
- *Jeanette Winterson, "Art Objects: Essays on Ecstasy and Effrontery"* Vintage Books; Random House Inc., (1997)
- *Graham Harman, "Art and Objects"*, Polity Press, Cambridge Press, UK, (2020)

Materials and supplies

A list of suppliers and resources for materials and tools will be given and discussed in the first class; however, please bring the following to our **first class meeting**:

- A blank sketchbook, 8-1/2" X 11" or larger (but not too large), and please bring something to write & sketch with. Handmade sketchbooks are fine, just make sure the pages are securely bound together.
- Closed toe footwear. Leather boots that extend above the ankle will provide adequate foot protection in this class; however, lace-free boots that slip over the foot or incorporate a zipper to secure them, would be ideal.
- One pair of leather palmed gloves.
- A small bag or other means to secure your valuables such as jewelry, phones, etc. Also, if you have long hair it will need to be tied back when working in the studio, so please bring a hairband or other means to do so.
- A long sleeve cotton work-shirt in good condition (no rips, frays, etc.) For safety reasons, garments with a high synthetic fibers content, such as polyester, are not permitted in the welding or grinding areas. Avoid garments containing 15% or more synthetic fiber.
- Shorts are not permitted in the studio so please wear pants made from cotton and in good condition - no rips, frays, etc.

School, Department & Class Policies

Please refer to the Student Handbook for information regarding the School's policies on academic integrity and plagiarism. All students must abide by the general health and safety regulations laid out in the Student Handbook, as well as any specific instructions given by the Instructor.

We will review the rules and etiquette for the sculpture studios on the first day of class. In the meantime, please:

- Be punctual and prepared for class
- Communicate directly with the instructor regarding your attendance issues.
- Communicate directly with instructor regarding grades (see Grading Practices above)
- Work only on class specific projects during class time
- Plan on participating in studio cleanup during the final ten (10) or fifteen (15) minutes of class