Art 251/Introduction to Sculpture

Fall, 2018 JinMan Jo, Associate Professor Tuesday/Thursday, 11:00AM-1:00PM <u>Office Hours:</u> 10:00 -10:30AM, 4:00PM – 5:00PM T/TH or by Appointment. (NFAC 222) E-Mail: jjo@uwsp.edu Phone #: 715-346-2271

"Art is the process of making visible the invisible" Paul Klee

"The true artist is the person of enlightened action. He or she works with joy and freedom, undivided attention and selfless energy which might better be described as play" J.R Stocking

Course Description

This course is an introduction to making sculpture. Using the human form as a starting point, students will create sculptures with basic carpentry, metal, and modeling techniques. Class activities will include design generation activities such as drawing and model making, looking at related art works in slide lectures, material and construction demonstrations, self- assessment activities, studio work time, and group critiques.

Course Objectives

In this introductory class, learning effective art making practices is equally important as the actual artworks you will produce. What follows is a summary of learning goals for this class:

Process

- Learning how to make art through a process of creative exploration that includes experimentation, flexibility, and discovery.
- Learning how to critically assess the art you make including self-reflection (verbally and in writing) and through visual analysis (particularly as a way of understanding the interaction between expressive content and formal choices).
- Learning how to develop fruitful design strategies that help visualize and plan in effective ways including modeling and drawing.
- Learning productive studio work habits that lead to energetic, safe, and ambitious art making.

Production

- Learning how to create sculpture that is visually compelling through an effective relationship between a work's expressive content and its composition, detailing, materiality, and structure.
- Learning how to control materials through effective fabrication processes in such a way that the materiality and making of the work contributes to its artistic effect. These fabrication processes include basic carpentry, metal working including MIG welding, Gas welding, brazing, foam carving, armature fabrication, and plaster forming.

Requirements and Course Evaluations

Projects

There will be three sculpture projects assigned. Within each project students will complete various technical practices and design development activities (models, drawings collages). All assignments must be completed on time. Any work turned in up to 7 days late will be lowered one half a letter grade (5 pts) and any assignment turned in over a week late will be lowered by a full letter grade. Refer to the class schedule for a complete listing of all class activities and due dates.

Attendance and Class Participation

Above and beyond all other requirements I believe that class attendance and participation is the most basic condition for any studio art class. Please be aware of the <u>attendance policy</u>: you are <u>allowed 3 absences</u> that you can use for any purpose (illness, sport games, appointments, day off, etc). You must arrive on time and stay in class for the full session to be counted as present. <u>Each additional absence will lower</u> <u>your final grade by one quarter of a letter (2.5 points)</u>. There is no such thing as an excused absence so there is no need to bring notes, send emails, or notify me of reasons. If circumstances outside of your control lead to chronic absenteeism you must come and speak with me about it as it is happening (not long after the fact) for me to consider any modification of this policy.

Art Events:

Students are required to <u>attend four art department events</u> (artist lectures, gallery talks, exhibition openings). Three of these four must be official art department sponsored events (see online calendar). The other event may consist of an off-campus museum of gallery visit OR a non-visual art form event such as theater, music, or film. Many but not all art department sponsored events take place in 4-6 pm time slot, a few occur in the evening. If work, family, or sports commitments keep you from being able to attend events you must come and talk to me <u>before the fact</u>. You are required to write a two-page summary for each event attended. All summaries must include correct information (who, what, when) and summarize remarks made. If the event is an opening with no formal remarks, students are require to find and ask questions of at least one artist included in the exhibition.

Grading

Each of the three projects will be counted as roughly a third of the final grade. Students will be asked to evaluate their own work as part of their self-assessment activities and I will consider this evaluation when I assign project grades.

Final Grade: Project 1 = 30% Project 2 = 30% Project 3 = 30% Art Events = 10% Project Grades: Initial Design Development: 20% Final Design: 20% Technical practice: 10% Self-Assessment: 10% Overall project effort/ work habits: 10% Final Artworks: 30%

Assignment Grades:

Quality of your work for all of the projects: effort, (sculpture takes time—plan on 6-12 hours outside of class each week for this class) willingness to take risks, exploring solutions using

innovation, inventiveness and creativity, demonstrated problem solving ability, demonstrated understanding of concepts, presentation and craftsmanship.

A: In order to get an A, your work must be <u>successful</u> and must <u>go beyond</u> the expectations and learning goals of the assignment. It must also be original, show great effort, thoughtful, well-crafted.

B: In order to get a B, Your work must satisfy the assignment's expectations and learning goals, must be a successful piece of art, showing effort, originality and well-crafted.
C: Completed the assignment but showing deficiencies in one or all of the categories above.

D: Completed an assignment, but showing severe deficiencies in all of the categories above.

Materials and Shop Use

The art department provides certain expendable tools, general supplies and construction materials. Each student is also supplied a personal sketchbook. There are none material fee. You have to be responsible for making these purchases yourself.

<u>Safety:</u>

When in doubt about any piece of equipment or anything concerning the lab, ask myself, or a studio monitor. Safety is our highest concern. **Eye and ear protection are required when using any power equipment. You may not use power tools if you are alone in the studio after 5pm. You may not work in the studio under the influence of drugs or alcohol. If you violate this rule—you will lose studio privileges and will be dropped from the 251 class.** I wish to fully include all persons in this course. If you have any questions or issues that might affect your successfully participating and meeting the requirements of the course please come talk to me. I will make every effort to provide accommodations in the curriculum, instruction, or assessments of this course to enable you to fully participate. There is a protocol for making accommodations we will follow that is required by the University and is both straightforward and confidential.

If you need help, someone to talk to outside of the department about personal matters:

FAMILY CRISIS CENTER

http://www.capserv.org/contact_us.html 1616 West River Drive Stevens Point, WI 54481 715-343-7125 or 800-472-3377 715-343-7176 (f) 715-344-6640 (t/ty)

UWSP Counseling Center

https://campus.uwsp.edu/sites/couns-OLD/web/Pages/home.aspx Third Flr, Delzell Hall 910 Fremont ST. Stevens Point, WI 54481 Take elevator to the 3rd Flr Hours: M-F 8am-4:30pm

In cooperation with the Disability Resource Center, reasonable accommodation will be provided for students with disabilities. **Please meet with the instructor in the first week to make necessary arrangements.**

INTRODUCTION TO SCULPTURE FALL COURSE OUTLINE

This course has been designed for approximately thirty-two class sessions. There are also no classes on November 22 (Thanksgiving). The following schedule is tentative and may be altered to better suit the needs of the class.

Tuesday, September 4	Introduction to course Shop walk-through in sculpture lab
Thursday, September 6	Demo: Oxygen/Acetylene & Plasma Cutting Demo: Oxygen/Acetylene & MIG Welding. Test - cutting and welding <u>Present individual project #1: The Body in Space</u>
Tuesday, September 11	Due: Cutting and Welding Assignments Part 1a: research source artist, Demo: Forging
Thursday, September 13	Part 2b: 2 3D models. Due: Part 1:1200 word review writing Workday
Tuesday, September 18	Part 2: 5 pages 2D studies. Part 3: one final model Workday
Thursday, September 20	Workday in class for Project #1
Tuesday, September 25	Workday in class for Project #1
Thursday, September 27	Workday in class for Project #1
Tuesday, October 2	Workday in class for Project #1
Thursday, October 4	Workday in class for Project #1 Demo: Patina
Tuesday, October 9	Final Sculpture Due Critique Project 1
Thursday, October 11	Critique Project 1
Tuesday, October 16	Due: 1400 word self-assessment <u>Present project #2: Translating the Body</u> Demo: Wood Joints I
Thursday, October 18	Demo: Wood Joints II Due: Part 1: research source artist + 800 word writing Workday
Tuesday, October 23	Part 2: 4 full page 2D studies Part 3: 2 3D models

Thursday, October 25	Due: Part 1: 1200 word review writing Due: Part 2: 5pages 2D studies Workday
Tuesday, October 30	Due: Part 3: one final model Workday
Thursday, November 1	Workday in class on project #2
Tuesday, November 6	Workday in class on project #2
Thursday, November 8	Workday in class on project #2
Tuesday, November 13	Project 2 Final Sculpture due. Critique Project 2
Thursday, November 15	Due: 1400 word self-assessment <u>Present project #3: Convergence</u> Part 1(visual research)
Tuesday, November 20	Part 2(7 pages 2D studies) Part 3(model) Workday
Thursday, November 22	No Class (Thanksgiving)
Tuesday, November 27	Due: Final Design all parts Work day in class on project #3
Thursday, November 29	Work day in class on project #3
Tuesday, December 4	Work day in class on project #3
Thursday, December 6	Work day in class on project #3
Tuesday, December 11	Project 3 Final Sculpture Critique project #3
Thursday, December 13	Project 3 Final Sculpture Critique project #3
Tuesday, December 18 (14:45pm-4:45pm)	MANDATORY CLEAN UP

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Material:Sketch Book (11" x 14"), Mild Steels, gauge 11-20
(melting point) 2600 degrees F

Welding and Forging Project

For this project you will learn how to safely weld steel using a **MIG/TIG Welder**. You will learn how to heat, bend and cut sheet steel using an **Oxygen/Acetylene Outfit**. You will also have the opportunity to learn how to use **Plasma Cutter**.

Steel has great tensile strength without much mass but is not is soft and malleable. Heating steel transforms its workability. It can be greatly transformed from its original sheet form. **Steel offers many possibilities for creative expression**. It is strong and durable. The surface can be its original dark gray, orange from rust or silver from grinding the surface. Heating and cooling the metal will also give variation to its surface color.

Sample, exercise cuts and welds will be done on small flat pieces of steel.

Because of limitations in welding and safety equipment everyone cannot work at the same time. Much of the instruction will be individual, aside from initial group demonstrations. Please do not hesitate to ask questions before using equipment. Improper set-up can cause burns, damage to your eyes and fire. It is your responsibility to abide by safety guidelines. Working with Steel requires wearing proper safety gear, using proper technique and physical exertion.

Maquette:

Design a paper or cardboard model showing an idea for your steel project. Through cutting, bending, welding and grinding you will create a steel sculpture having an irregular/ asymmetrical shape.

Project Goals:

- •Use the maquette to explore & then build upon your sense of design and aesthetics.
- •Create actual or implied volume using closed or partially closed steel forms.
- •Create a sculpture that is asymmetrical different and engaging from multiple viewpoints.
- •Good Craftsmanship- Develop skills in cutting, bending, welding.
- •Transform the steel dramatically from its original state as a flat sheet.
- •Presentation: Create a sculpture that is original and expressive.
- •Articulate what you have done with the material to create a work that is original & expressive

Safety

Please wear-ear plugs, and gloves when needed. Be aware that heated metal stays hot for a long time!! Wear a dusk mask when grinding or using the metal chop saw. Try to cover areas of hard

soled shoes such as hiking or work boots. Sparks often fly upward and can catch in hair that is uncovered. A cap is recommended while welding. Turn on ventilation system and work in well-lighted area.

Cutting Torch/ Trigger Torch Oxygen- Acetylene Outfit

Wear shade 5 goggles Always make sure that there is a place for the melted metal to go

You can cut thin metal with tin snips. Wire and rods with a hack saw. Flat strips can be cut using the chop saw.

Bending/Heating Rosebud: Oxygen Acetylene Outfit

Wear shade 5 goggles Clamp down your piece or use a vise. Heat the metal to a dull red, manipulate with pliers, wrenches and hammers. Cool metal before touching with hands. Be aware that hot metal can burn through leather gloves!

Brazing and Welding

Small welding tip: Oxygen-Acetylene Outfit Use flux coated bronze rods Wear shade 5 goggles

Clean-Up

You have to clean up your working area!!!

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Welding Safety Instructions

- 1. Do not operate welding equipment without teacher supervision.
- 2. Do not operate welding equipment if you are unsure of correct procedures.
- Always wear protective eyewear even under the welding helmet. Helmet settings: Shade=10, Sensitivity=4, Delay=3
- 4. Remove all flammables and conductors from pockets/hands. (i.e. coins, keys, rings, matches, etc)
- 5. Wear cotton, wool, or leather clothing when welding.
- 6. Wear heavy long-sleeved shirts or jackets when welding (no sweatshirts, sweatpants, or fuzzy cotton type material).
- 7. Wear long pants without cuffs and closed-toed shoes only (no flip-flops or sandals).
- 8. Do not wear polyester, nylon, rayon, etc. which could contribute to burns.
- 9. Always wear gloves when welding.
- 10. Do not wear shirts, pants, or jackets with uncovered open pockets or holes.
- 11. Weld on welding table provided never weld directly on concrete.
- 12. All welding will be done on outside patio in dry conditions only.
- 13. All three shielding screens need to be set up to form welding station room.
- 14. Protect your eyes at all times.
- 15. Never attempt to perform or observe welding without the proper shade of welding lenses.
- 16. Be aware that arc rays can cause severe burns to skin and eyes.

- 17. Be sure welding power supply is properly grounded.
- 18. Never touch the uninsulated part of the electrode holder.
- 19. The work clamp and work should not be touched while welding is in progress.
- 20. Check your welding helmets for cracks, cracked lenses, or broken headgear prior to welding.
- 21. Clean the lenses prior to welding.
- 22. Always warn those around you prior to striking an arc.
- 23. Quench metal in water pail after each weld to cool metal.
- 24. Always inspect hoses and cords for cracks and/or frayed connections/wires prior to welding.
- 25. Never lay hoses or cords on/near hot material.
- 26. Do not bend electrode lead in sharply.
- 27. Always use proper inert gas setting.
- 28. Always use proper voltage settings and feed rates for material being welded (use settings chart).
- 29. Never stand in or near water when arc welding.
- 30. Handle hot welded material with care (pliers and shielded with glove) when moving or cooling.

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Wirefeed (M.I.G.) Welding Instructions

- Set up workstation with portable worktable, stool, and all three yellow screen shields against east wall on patio.
- Fill 5 gallon quenching pail with water.
- Remove safety cap off tank.
- Screw regulator into tank.
- Connect ground clamp to steel table or base metal to complete current loop.
- Plug in welding unit (use only designated extension cord) and turn on power switch.
- Back off regulator (counter-clockwise) to decrease pressure.
- Slowly open tank valve all the way to "seat it." Full tank = 200 PSI
- Turn Wire Feed Speed all the way down.
- Press trigger to release gas & tighten regulator valve (clockwise) until second gauge reads 30 CFH.
- Use sizing chart to adjust Arc Voltage & Wire Feed Speed to metal thickness.
- Grind/clean metal surfaces before attaching if necessary.
- Squeeze trigger to feed out wire & clip with pliers at about 1/2."
- Loosen nozzle cone to slightly cover/shield contact tip.
- Dip nozzle tip in wax.
- Handle gun handle with both hands. Hold it upright at 5-10 degree angle. Brace elbow on table. Sit on stool.

- Touch wire (electrode) to metal surface where you want to strike an arc, squeeze trigger to strike arc.
- Once striking arc, maintain 3/8" 1/2" distance between wire and metal. Don't touch wire to metal or you'll weld the tip shut.
- If settings are correct it should sound like "bacon frying in a pan." "Bacon good; popcorn bad."
- Always tack weld any pieces into place before running a bead to prevent metal from moving or warping.
- Watch or "read" the puddle. Keep it in a circle as you move across the surface of metal. It should get no bigger than the opening of a straw. Strive to keep consistent sizing of welding joint.
- Quench metal in water pail after each weld to cool metal.

	Wire Feed Speed
	Arc Voltage – Heat (adjust to thickness of metal)
3 Variables :	Gas – CO2 & Argon Shielding Gas

 Arc Voltage & Wire Feed Speed adjust in proportion to one another. If Arc Voltage goes up, Wire Feed Speed goes up. If Arc Voltage goes down, Wire Feed Speed goes down.

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GAS WELDING AND CUTTING

QUICK REFERENCE LIST

1. Tools:

Welding tips-Numbers varied Cutting torch and tip Sparker Marker #5 Shade Shield Tip Cleaners Welding Booklet Welding Gloves Protective Clothing

2. Regulator Settings

A. Welding; Acetylene: 5PSI-Red Hose

Oxygen: 7PSI-Green Hose

Welding Tips: Welding tip selection varies with the thickness of the metal or the type of welding to be performed (welding, brazing, silver solder) See welding booklet for specific information.

B. Cutting: Acetylene: 5-7 PSI – Red Hose

Oxygen: 25-40 PSI – Green Hose

Cutting Tips: Oxygen setting varies with the thickness of metal and tip size. See

welding booklet for specific information.

3. START UP

- A. Check torch handle and make sure both valves are turn off. Select tip or cutting head and tighten to handle
- B. Open valves on tanks: Acetylene 1/4 of a turn Oxygen. Open completely to seal the cylinder back seal packing.
- C. Check tips and make sure are clean. Puts on goggles, light torch and adjust flame.

4. SHUT DOWN

- A. Turn torch off; Acetylene first and then Oxygen.
- B. Close on tanks
- C. Open valves on handle one at a time and bleed gas until regulator reads zero.
- D. Roll up hose and hang torch carefully
- E. Check list and make sure station is equipped as listed above
- F. Sweep up area and disposed off and scrap metal to appropriate bins.