It is the student’s responsibility to meet with the instructor regarding special problems, advising, and class progress. Make sure to schedule your appointment during office hours.

Office hours: M/W: 1:40-2:40; by appointment

Course Description:
Three semester hours, six hours studio, and six hours independent study per week. Casting and fabrication techniques in art metal and jewelry.

This is an advanced course in metalworking and jewelry. This studio course is designed to develop the ability to create, analyze, interpret, and evaluate art. Students learn to express their thoughts, feelings, and values in a variety of visual forms utilizing metal as a medium. This class consists of demonstrations, discussion, lecture, quizzes, and hands on practice, in which emphasis is placed on learning specific techniques and finishing practices. The student will be encouraged to pursue his/her own personal direction and ideas. It is essential for students to attend and work diligently every session. With hard work and patience, each student will gain appreciation for the art of working with metal.

Program Learning Outcomes:
1. Undergraduate students will demonstrate proficiency in studio foundation skills as they relate to the elements and principles of design.
2. Undergraduate students will exhibit a high level of proficiency in the use of materials, techniques and media.
3. Undergraduate students will demonstrate understanding of contemporary art issues through exploration of synthesis of content, problem solving and creativity.
4. Undergraduate students will define and state knowledge of Art Historical precedents.

Student Learning Outcomes: (referencing Bloom’s Taxonomy of Learning Domains)

Cognitive Learning Outcomes
☐ Knowledge- Student will define and state knowledge obtained about the history of the metals field, names of tools, historic context, content drivers and conceptual motivations for artists and basic knowledge of the properties of working with metal.
☐ Synthesis- Student will combine his/her knowledge of skills, craftsmanship, content drivers, historic references and design principles to create and invent their own art forms.
☐ Analysis and Evaluation- Through the practice of working critiques and final critiques, student will be able to discuss, share, contrast and comprehend the successes and difficulties in each work. Student will exercise professional practices involved with making, shipping, and exhibiting.

Affective Learning Outcomes
☐ Student contributes to organization and cleanliness of the studio. The practice of tool maintenance and cleanliness is essential to future practice in the field and the world. This participation will allow student to experience personal value and place in the program as a whole.
Psychomotor Learning Outcomes

☐ Student will learn to assemble, construct, fabricate and manipulate multiple materials using hand and machine tools (jewelers saw, sheers, soldering torch, files, chemical finishes, flex shaft, drill press, etc.) using traditional and contemporary techniques with consideration for safety rules.

Recommended Textbook:
The Complete Metalsmith, by Tim McCreight

We also have multiple books in the studio that you can check out and borrow.

Recommended Websites:
http://www.snagmetalsmith.org/
http://www.ganoksin.com
http://crafthaus.ning.com/
http://www.etsy.com/
http://www.enamelistsociety.org/
http://www.artjewelryforum.org/
http://www.klimt02.net

Course Requirements & Attendance:
Attendance is mandatory! A studio course requires your participation in order for you to understand techniques and practice conceptual growth.

- Class time cannot be made up; therefore, more than 3 absences will result in the loss of one full letter grade from the final grade. I am giving you three “free-bees” meaning it could be an excused school absence (sports/academics), a death in the family, or a personal absence. Do not waste your days by simply not showing up. Emergencies happen. Your grade will continue to drop a letter grade with each additional absence. If you know you’ll have more than two absences for school/sports, talk to me before the semester begins.
- We will have regular work during “dead” week.
- Arrive on time, with all materials and designs ready prior to class and participate the entire time. Three late arrivals or early departures result in one absence. Students not participating in class are considered absent.
- Missing a critique will dramatically affect your grade for that project.
- With a three-credit class, there is a minimum of six to nine hours of work expected outside of class each week. Please learn to set priorities and budget your time. Open studio hours will be posted. Advanced students will be asked and required to hold hours each week. Please respect them as studio monitors. It is a privilege. Any problems...let me know. This is your time to get additional work done; take advantage of these hours.
- Lost work is missed work. Student must take care of his/her own work. Make sure that you keep your preparatory sketches.

Course Evaluations:
Near the conclusion of each semester, students in the School of Art electronically evaluate courses taken within the COFA. As you evaluate this course, please be thoughtful, thorough, and accurate in completing the evaluation. Please know that the COFA faculty is committed to excellence in teaching and continued improvement. Therefore, your response is critical!
**Academic Integrity:**
Academic integrity is a responsibility of all university faculty and students. Faculty members promote academic integrity in multiple ways including instruction on the components of academic honesty, as well as abiding by university polity on penalties for cheating and plagiarism. Academic dishonesty includes both cheating and plagiarism. Cheating includes but is not limited to (1) using or attempting to use unauthorized materials to aid in achieving a better grade on a component of a class; (2) the falsification or invention of any information, including citations, on an assigned exercise; and/or (3) helping or attempting to help another in an act of cheating or plagiarism. Plagiarism is presenting the words or ideas of another person as if they were your own. Examples of plagiarism are (1) submitting an assignment as if it were one's own work when, in fact, it is at least partly the work of another; (2) submitting a work that has been purchased or otherwise obtained from an Internet source or another source; and (3) incorporating the words or ideas of an author into one’s paper without giving the author due credit. A full description of university procedures and penalties in response to cheating and plagiarism can be found in the on-line Student Handbook in the Academic Integrity section.

**Accommodation of Disabilities: Rights and Responsibilities of Students:**
To obtain disability related accommodations, alternate formats and/or auxiliary aids, students with disabilities must contact the Office of Disability Services, Human Services Building, Room 325, 468-3004 as early as possible in the semester. Once your information is verified, ODS will notify me and outline the accommodations. If you are pregnant or have any disability, consult a doctor before taking this class.

**Witheld Grades:**
Ordinarily, at the discretion of the instructor of record and with the approval of the academic chair/director, a grade of WH will be assigned only if the student cannot complete the course work because of unavoidable circumstances. Students must complete the work within one calendar year from the end of the semester in which they receive a WH, or the grade automatically becomes an F. If students register for the same course in future terms the WH will automatically become an F and will be counted as a repeated course for the purpose of computing the grade point average.

**Grading:**
Your grade will be based on your effectiveness to understand and apply the learning outcomes listed above. More specifically, each project will be graded on the following categories: quality of finished projects, creativity and design concepts, craftsmanship, effort, preparedness, work in class, work outside of class, attendance, critique participation, development and improvement of skills, quizzes, and involvement with studio clean-up. Late pieces will adversely affect your grade.

**GRADING SCALE:**
Letter grades are assigned according to the following scale for the Final Average
A (90-100) B (80 – 89.9) C (70-79.9) D (60-69.9) F (0-59.9)

**Course Projects:**
1. Draw from the Hat- 100 pts
2. Utensil- 100 pts
3. Decorative additions- 100 pts
4. Decorative sample trinkets- 50 pts
5. Your own bag of tricks- 100 pts
Your work must be completed and turned in for a grade during the critique. Projects may be re-worked before the end of the semester and returned a second time if the student is unsatisfied with the initial finished work. However, you will not receive points back for being late. Work is based on craftsmanship, content, concept, creativity, complexity, and participation. Last day to resubmit in work is May 6 by 8:00.

Extra Credit:
There will be an opportunity to write two papers to earn up to ten points each. The paper should be a well-written 2-3 page paper about a contemporary artist in the metals and jewelry field. At least two sources are required and one must be something other than an Internet source. Make sure to include at least one pictorial example of your artist's work. The paper must be well written and grammatically correct. (Go to the writing center at the library for help.) Last day for extra credit and re-turned work is May 6.

Sketchbook:
Each student is required to complete at least five sketches per project in their sketchbook. It is also required to take notes during every demonstration and keep class handouts in your sketchbook or a folder. Writing, poetry, word play, journaling and anything else that are inspiring are encouraged. I prefer the student to figure out what works for them. This is your sketchbook; it is not a method of satisfying my requirements. It is a method of learning how to catalog your ideas for the future. The sketchbook will be checked with each project. The sketchbook grade will directly affect each grade (not a blanket grade at the end of the semester.)

Lab Material Fee:
The lab fee is billed to the student account. This fee covers studio materials such as acid, pumice, some metal, acetylene gas, natural gas, chemicals for patina, flux, yellow ochre, etching solutions, sanding belts, large drill bits, sample materials for student use (ex. wax), torch tips, torch set-ups, cleaning materials…I will cover as much as possible.

General Art Supplies:
You will be responsible for buying your own metal and materials that moves beyond what I have provided. We'll discuss this as we proceed; it is a responsibility of an artist to pay for materials. It's a realistic concern that you will always have. Learn to conserve material now.

Art supplies you need:
- Calendar
- Flux brush
- 6” Metal Ruler with inches and centimeters
- Towel
- Safety Glasses, Mask
- Apron
- Masking tape
- Sandpaper (220,320,400)
- Sketchbook
- Rubber gloves
- Lock (your preference and responsibility)
- White-out
- Small box for soldering supplies
- Sharpie marker extra fine

Suppliers
- Pieh Tool (hammers) http://www.piehtoolco.com
- Rio Grande- tools and materials http://www.riogrande.com
- Otto Frei http://www.ottofrei.com
General Safety Rules:

1. Use common sense. Be aware of your surroundings. **Always** have 2 people in the room.
2. Do not use tools or machinery until you have had permission from your professor and proper instruction. If you feel uncomfortable or unsure using a piece of equipment or tool, ask the professor before use.
3. **No open toed shoes! I will ask you to leave if you have sandals.**
4. You must have current TETANUS INOCULATIONS. Make sure to call Environmental Health and Safety on campus if blood gets on anything.
5. Know the location of the eyewash, med kit, fire extinguisher, showers, baking soda, and telephone. If anything happens and you can reach the gas safely, turn it off.
6. Safety glasses must be worn when working with specified tools and while operating machinery. Wear ear protection when needed. Wear a respirator and use ventilation when working near fumes, chemicals, or dust. Use proper filter cartridges on your respirator depending on the materials you are working with. When using chemicals, such as patinas, proper ventilation, goggles and rubber gloves will be used.
7. Keep hair tied back at all times. Loose clothing and jewelry is dangerous. If loose clothing can’t be tucked in, an apron is suggested. Long earrings and loose necklaces should be taken off during class. Wear cotton shirts instead of synthetic materials. (Synthetics catch fire easily)
8. If you get pickle (a cleaning solution for metal) on you or it spills, neutralize it with baking soda and then rinse with water. Don’t put hot metal in the pickle; this causes dangerous fumes and the acid could splash on you.
9. Don’t come to class under the influence of drugs or alcohol, you will be asked to leave and will be responsible for any material that you have missed.
10. Dull tools or broken tools are dangerous. Show the instructor immediately.
11. **REPLACE TOOLS IN PROPER STORAGE SPOT WHEN FINISHED!**
12. No smoking (or smokeless tobacco) or eating in the studio. No smoking on back porch. There are highly flammable materials outside.
13. Drinks need to have a lid on them at all times.
16. Only students enrolled in metals classes are allowed in the studio. An outside person is never allowed to use tools unless otherwise instructed by the professor
17. **You may not bring chemicals, tools or other metals into the studio without the professor's approval.**
18. Only use headphones (for music) at your workbench. Always keep the level of music at a volume where you can hear someone. However, you must place your IPod and headphones in a drawer when the professor is speaking, presentations are given and ANY time you are using your flex shaft, rotary tool or torch. Using your IPod is a privilege. (It can be lost)
19. Make sure to turn off gas, airlines, and pickle pots before you leave the studio.
20. Do not use hammers on steel.
21. Keep iron-based tools out of the acid. If you contaminate pickle accidentally, you will be asked to help with clean up. Mistakes happen, but this extra work will remind you not to let it happen again. Do not let tools get wet.
22. Leave the studio cleaner than when you came in.
HEALTH AND SAFETY IN THE STUDIO

The three routes through which toxic substances can enter the body are inhalation, ingestion, and absorption (skin contact).

INHALATION of airborne chemicals can affect the nose, upper respiratory tract, and lungs. Upon entering the bloodstream, they affect the blood, bone, heart, brain, and liver.

INGESTION can result in an exposure to most of the internal organs and local action on the stomach wall.

ABSORPTION (skin contact) causes the chemical to enter through your skin into the bloodstream thus affecting some of the most sensitive areas of the body. It also causes allergic reactions and dermatitis from loss of protective skin oils.

Overexposure symptoms progress from headache, dizziness, blurred vision, loss of coordination, mental confusion, weakness, and fatigue to eventual loss of consciousness. Most acute effects of overexposure are short-term and the body can recover. However, chronic unsafe practices can create long-term health problems such as cancer, lung disorders, and reproductive system damage. We will discuss materials throughout the semester so that you are safe from these issues.

Consideration Rules:

1. If you are interrupting or disruptive during the class, I will ask you to leave and not return until you have met with me during my office hours to explain why I’ve asked you to leave.
2. Do not be late as it wastes everyone’s time and time is precious for artists.
3. **Do not cut directly on the tables. Use a chipboard mat or cutting mat. And do not drill directly into desk of drill press plate. Use wood scraps. Do not form on the tables; use a stump.**
4. Do not hammer on your desktop; go to the stump to do forming.
5. Do not tape sandpaper on the desktops. I will provide a sanding board for this type of work.
6. REPLACE TOOLS IN PROPER STORAGE SPOT WHEN FINISHED! While in class, you will need to put the tools away often so that everyone can share.
7. **Keep desks clear of unnecessary clutter. You are not allowed to store your materials on top of the desk, in the dustbin, or anywhere in the studio. Please discuss with the professor if your work is too large. Make sure to get a locker for your materials.**
8. Don’t talk to people while they are using machinery. Maintain your distance when a student is on a machine or using a torch.
9. No cell-phone usage in the studio. Take it outside. Turn your cell-phone off the moment you come into the classroom. See me if you have an emergency call that you are waiting for.
10. If we listen to community music, everyone needs to agree on the selection.
11. If I offer more studio hours that I am hosting, please be considerate that this is my only time to make artwork and I’m allowing you to work during the same hours. If you have questions, ask a studio monitor, use common sense or look it up in a book before you ask. Set up an appointment so I have total focus on your needs.
12. I’d like to have the studio open as much as possible. Let’s work together to make this happen. If we have safety issues, I will have to close the studio at specific hours.
13. THE COMPUTER IS FOR RESEARCH AND DESIGN ONLY. THIS IS NOT THE
COMPANY FOR CHECKING EMAIL, FACEBOOK, INSTAGRAM... THERE ARE LABS
ON CAMPUS FOR THESE THINGS.

Course Calendar:
1.23- syllabus, rules, safety studio, draw projects
1.28- demo on hydraulic press
1.30- design and work review
2.4- demo on building low tech die forming
2.6- design and work review
2.11- demo- hammering low-tech die forming
2.18- design and work review
2.20- **Project 1 due**
2.25- Ingot pour, forging
2.27- design and work review
3.4- Sinking Day; Raising Day
3.6- design and work review/ Raising Day continued
3.11- Mokume gane billet
3.13- design and work review
3.18-3.20- **Spring Break**
3.25- Mokume gane billet
3.27- **Project 2 Due**
4.1- Chasing & Repousse- 1
4.3- design and work review
4.8- Chasing & Repousse- 2
4.10- Work Day
4.15- Mokume gane patterning demo
4.17- Work Day
4.22- **Project 3 Due; sample viewing**
4.24- Work Day
4.29- Work Day
5.1- Work Day
5.6- Work Day
5.8- Work Day
5.15 **Final Exam 8:00-10:00; Samples and Final due**
**Pick up work May 15 between 1 -2**
(Desks MUST be cleaned out; you must participate in final critique & cleanup).

Some items on the calendar may need to be changed. You will be informed.
**Remember, the metals studio is a communal workspace. The last ten minutes of every
class will be reserved for clean-up. We will also have a mandatory clean up before
each critique and a final clean up at the end of the semester.**

**The instructor reserves the rights to change, delete, or add to the course
requirements and schedule at any time.**