Beginning Jewelry
Fall 2023
Art Building 220D
Professor: Jill Baker Gower
Email: Jill.Gower@unt.edu

Course Description (from UNT Catalog)
Design, construction, and forming using basic techniques with an emphasis on personal adornment.
Prereq: ART 1440, 1450

Learning Environment
I value the many perspectives students bring to our campus. Please work with me to create a classroom culture of open communication, mutual respect, and belonging. All discussions should be respectful and civil. Although disagreements and debates are encouraged, personal attacks are unacceptable. Together, we can ensure a safe and welcoming classroom for all. If you ever feel like this is not the case, please stop by my office and let me know. We are all learning together. I encourage you to review UNT’s student code of conduct so that we can all start with the same baseline of understanding (Code of Student Conduct).

Connect with me through email and/or by attending office hours. During busy times, my inbox becomes rather full, so if you contact me and do not receive a response within two business days, please send a follow up email. A gentle nudge is always appreciated.

Course Content and Schedule Changes
The course schedule reflects expected class progress in the course subject matter and is considered tentative. The course schedule is subject to change in content and scope at the course instructor’s discretion.

Curriculum
Piercing, cutting with a jeweler’s saw, using a flexible shaft for finishing, filing, sanding, wax and lacquering, polishing, silver soldering, bezel-setting, lost wax casting, pin stems, hinge making, research into contemporary practitioners.

Course Outcomes & Objectives

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understand the history, current issues, and direction of the artistic discipline</td>
<td>Acquire increasingly sophisticated knowledge of the history, current issues, and direction of metal art media, including functional knowledge of metals techniques.</td>
</tr>
<tr>
<td>Place works in the historical, cultural, and stylistic contexts of the artistic discipline</td>
<td>Increased ability to place works in historical, cultural, and stylistic contexts of metals art media.</td>
</tr>
<tr>
<td>Use the technology and equipment of the artistic discipline</td>
<td>Develop advanced knowledge of raw materials and technical procedures.</td>
</tr>
</tbody>
</table>

Skills: What students should be able to do
Use the elements and principles of art to create artworks in the artistic discipline

Utilize the tools, techniques, and processes of metals to create work from concept to finished object.

Create artwork that demonstrates perceptual acuity, conceptual understanding, and technical skill

Create works of metal art that demonstrate advanced perceptual acuity, conceptual understanding, and technical skill.

Analyze and evaluate works of art in the artistic discipline

Participate in analysis and evaluation of works of metal art.

### Synthesis: How students will combine knowledge and skill to demonstrate learning

| Produce artworks demonstrating technical skill and disciplinary knowledge | Produce metal art objects demonstrating advanced technical skill and disciplinary knowledge. |
| Use knowledge of art and disciplinary vocabulary to analyze artworks | Participate in critique of own works and the works of others using the vocabulary of metals media and demonstrating sound understanding of aesthetic principles and design elements. |
| Participate in critiques of own work and work of others | |

### Classroom/Studio Guidelines
The course structure consists of technical demonstrations, image presentations, lectures, videos, discussions, and critiques as well as one-on-one teaching. If a student feels the need for extra instruction, feedback, or attention, an appointment can be made during the professor’s office hours.

- Demonstrations will be given spontaneously and will most likely not be repeated. Additional recorded demonstrations can be found on Canvas. Students will be responsible for all information and demos given during class time. Note-taking during demonstrations is recommended. If you miss class, it is recommended that you request notes from a classmate.
- If a student misses an important demonstration, it is their responsibility to contact the professor to set up an appointment to have the demo repeated or receive a link to a pre-recorded demo on Canvas.
- Students are expected to come to class on time and work for the full class period.
- Students are expected to have materials ready and in class to work for that day. It is unacceptable to leave class to purchase materials.
- There is a minimum of 6 hours of work outside of class time each week. (6-12 hours is highly recommended).
- There will be scheduled outside-of-class monitored studio time when the tool cabinets will be open and a monitor will be there to help.
- **The last 10 minutes of class time will be used for studio clean-up.**

### Class Participation
To maintain a successful and safe learning environment it is important to be fully aware during class. For this reason, the use of cell phones or other devices, checking email or social media accounts, sleeping, eating, or other forms of distraction are prohibited. Students will be asked to leave class if this sort of behavior becomes distracting.

### Assessment
Assessment will be based on the evaluation of:

- Completed major projects
- Preparatory sketches and models
- Samples
- Participation in class discussions and critiques
- Effort and growth from week to week
- Engagement and interest shown throughout the coursework
Students will be given a letter grade on each major project, based on:

- **Content:** How well the project communicated its message. How well the inspiration for concept was used or translated. Did the project address the concept proposed in the assignment?
- **Complexity:** How challenging or involved the piece is in design and construction. Were risks taken?
- **Craftsmanship:** How well the project is made and finished - “Attention to Details”.
- **Creativity:** Artistic and unique design or idea. Is the composition visually compelling, is every square inch fully engaged?

Rubrics will be utilized with the grading process to clarify the grade given.

**Letter Grades**

**A Outstanding:** Expansive investigation of ideas, excellent composition, near perfect to perfect craftsmanship. All assignments completed on time. Insightful contributions to critiques. Goes substantially beyond minimum requirements. Work far exceeds the expectations of the professor. Keeps working areas clean and helps in studio maintenance.

**B Above Average:** Substantial investigation of concepts and compositions and excellent craftsmanship. All assignments completed on time, insightful contributions to critiques. Work exceeds expectations of the professor. Keeps working areas clean and helps in studio maintenance.

**C Average:** All assignments done competently and completed on time. Strong participation in critiques. Keeps working areas clean and helps in studio maintenance.

**D Marginal Work:** Does not meet expectations of the professor, poor craft or incoherent compositions, or excessive absences. Limited contribution to critiques. Work is handed in late. Little effort is made towards maintenance.

**F Unsatisfactory Work:** Course failure due to minimal idea development, poor craft, disjointed compositions, lack of participation, late assignments, or excessive absences. Does not help with maintenance or studio cleanliness.

**Grading Rules**

- All projects must be finished by the due date. Late work must be turned in at the next class the student attends. Late work will be subject to a penalty of 10% deducted from the assignment’s value per class day the work is late if the reason for its tardy delivery has not been excused.
- All projects may be turned in a second time or entirely redone if the student is unsatisfied with the initial grade; although, the project must be finished when initially turned in on the due date.

**Critiques/Project Deadlines**

There will be a critique on the days that major projects are due. Critiques cannot be made up and are factored into the final participation grade.

**Attendance**

Research has shown that students who attend class are more likely to be successful. You should attend every class unless you have a university-excused absence such as active military service, a religious holy day, or an official university function as stated in the Student Attendance and Authorized Absences Policy (PDF) (https://policy.unt.edu/policy/06-039). If you cannot attend a class due to an emergency, please let me know. Your safety and well-being are important to me.

**Classroom policy**

- Attendance is mandatory, and class time cannot be made up.
- More than 3 unexcused absences will result in the deduction of one-third of a letter grade from the final grade. Thereafter, your final grade will continue to drop one-third letter with each unexcused absence.
- Tardiness or leaving early will not be accepted, three tardies = one absence. If a student is more than 10 minutes late or he/she/they leaves 10 minutes early the student will receive an absence for the period.
• To get an excused absence you must turn in written documentation.

Excused Absences
An absence may be excused for the following reasons: a. religious holy day, including travel for that purpose; b. active military service, including travel for that purpose; c. participation in an official university function; d. illness or other extenuating circumstances; e. pregnancy and parenting under Title IX; and f. when the University is officially closed.

• A student is responsible for requesting an excused absence in writing, providing satisfactory evidence to the faculty member to substantiate excused absence and delivering the request personally to the faculty member assigned to the course for which the student will be absent.
• When an absence is excused, the faculty member will provide a reasonable time after the absence for the student to complete an assignment or examination missed. Faculty members are required to find a fair resolution if a student missed an examination or assignment on days when the university is officially closed.
• A student will not be penalized for an excused absence and will be allowed to take an examination or complete an assignment from which the student is excused within a reasonable period after the absence.
• A student needing assistance verifying absences due to illness or extenuating circumstances for all courses should contact the Dean of Students office. The Dean of Students office will verify the student’s documentation and advocate on the student’s behalf, as appropriate, to instructors for excused absences.

Recommended Text
The Complete Metalsmith Student edition. By: Tim McCreight

Technology Requirements:
This course has digital components. To fully participate in this class, students will need internet access to reference content on the Canvas Learning Management System. If circumstances change, you will be informed of other technical needs to access course content. Information on how to be successful in a digital learning environment can be found at Learn Anywhere (https://online.unt.edu/learn).
COURSE REQUIREMENTS

Models
A paper model is required for each major project.

Course Projects 56%
1. Pierced Pin/Brooch 100 Pts.
2. Charms 100 Pts.
3. Hollow Constructed Pendant with Hinge 100 Pts.

Course Samples 23%
1. Piercing Sample (2 rings) 20 Pts.
5. Hinge 20 Pts.

Pre-Critique Project Analysis 1.8%
3 points per project
On the day of critique a one-paragraph typed description and analysis of your project is required to be turned in with your project. This should include the title of the piece, the idea, inspiration for or concept of the work, description of aesthetic decisions and why they were made in relation to the concept, as well as material choices in their relation to the concept. Describe what went well and what could be improved upon. Assign yourself a letter grade and give a one sentence explanation as to why you believe you deserve that grade.

Participation 1.9%
Factored into the final letter grade and is based on critique participation, studio cleanliness, effort, timeliness, attitude etc.

Sketchbook (keep all sketches for the entire semester) 5%
A sketchbook will be kept specifically for this class (do not fill this sketchbook with math, science, or painting notes etc.) It is mandatory to complete at least 3 well-executed sketches per major project in this sketchbook. It is also recommended to take notes during every class demonstration in this sketchbook. 3 points per sketch per project.

Quizzes and Final Exam 14%
There will be 4 quizzes and 1 Final Exam based on vocabulary and processes. The quizzes will be administered and graded on Canvas.

Total: 539 Pts.

*The instructor reserves the right to change, delete, or add to the course requirements at any time.
Supplies
Required kits available at Voortman’s for $52.15:
Please purchase at your earliest convenience.

There are other required supplies see handout attached or on Canvas

You will need a cabochon for the bezel set ring. We have some plastic gems, but you may want to purchase one now online or check out Rock Barrell. Suppliers listed below.

Other materials you might need or want:
- you might need more sheet metal including 20 gauge Nu Gold or Rich Low Brass, nickel silver, copper, and sterling silver
- apron
- tools for the flex shaft: mandrels, pumice wheels, sanding discs and mandrels, grinding wheels
- jewelers saw blades
- wire in nickel, sterling, copper, or brass
- your own drill bits in 55, 60, and 65
- a variety of other tools and metals
- solder
- tubing in copper, silver, and brass
- fine silver bezel wire

Other Suppliers
Rock Barrell: 13650 TI Blvd, #104, Dallas, TX, (972) 231-4809, https://www.facebook.com/rockbarrell
Fire Mountain Gems: https://www.firemountaingems.com/
Halstead Jewelry Supply: https://www.halsteadbead.com/
Allcraft Jewelry Supply Co.: New York, NY (212) 279-7077 http://www.allcraftusa.com/
Gesswein: Bridgeport, CT http://www.gesswein.com/
Otto Frei: Oakland, CA http://www.ottofrei.com
ParaWire: https://parawire.com/home-of-metalliferous/

<table>
<thead>
<tr>
<th>Estimated Schedule</th>
<th>In Class</th>
<th>Homework</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Week 1</strong></td>
<td>8/22</td>
<td>Handout syllabus&lt;br&gt;Review material list&lt;br&gt;Intro sawing/piercing, drilling&lt;br&gt;Design 2 rings</td>
</tr>
<tr>
<td></td>
<td>8/24</td>
<td>Work on 2 rings&lt;br&gt;Sanding sticks&lt;br&gt;Demo filing, sanding&lt;br&gt;Sample #2 Intro&lt;br&gt;Intro to soldering&lt;br&gt;Explain H, M, and E solders, and processes&lt;br&gt;Butt joint, T-joint, <strong>sweat solder</strong>, wire soldered vertically</td>
</tr>
<tr>
<td>Week</td>
<td>Dates</td>
<td>Activities</td>
</tr>
<tr>
<td>------</td>
<td>-------</td>
<td>------------</td>
</tr>
<tr>
<td><strong>Week 2</strong></td>
<td>8/29</td>
<td></td>
</tr>
</tbody>
</table>
Continue soldering demo  
Scoring, bending  
Finish piercing and sanding rings  
Work on Mini Cookie Cutter - Sample #2  
one-on-one assistance

**Intro Project #1**  
**Sample #1 - 2 rings due at end of class**  
3 Sketches for Project #1  
Work on Mini Cookie Cutter - Sample #2 |
| **Week 2** | 8/31 |  
Demo soldering back and handle on cookie cutter  
Demo annealing, textures, hammer  
**3 sketches due today for Project #1**  
Discuss designs individually, make model  
Continue working on Sample #2  
Work on Sample #2  
make model if you haven't already  
transfer designs onto metal and begin piercing designs |
| **Week 3** | 9/5 |  
Paper model due  
Begin piercing Project #1  
**Sample #2 Cookie Cutter due**  
**Quiz #1 Review**  
Work on Project #1 |
| **Week 3** | 9/7 |  
Super Pickle and it's uses  
Work  
**QUIZ #1 DUE on CANVAS**  
Work on Project #1 |
| **Week 4** | 9/12 |  
Demo pin backs  
Work  
Work on Project #1  
Work on Project #1 |
| **Week 4** | 9/14 |  
Discuss finishing, patinas, sand blasting, Renaissance wax, or spray lacquer  
Continue finishing, sanding and riveting  
Work on Project #1  
Work on Project #1 |
| **Week 5** | 9/19 |  
Work  
Finish piece for beginning of next class  
Do Pre-Crit Project Analysis  
Finish Sample #3 |
| **Week 5** | 9/21 |  
**Critique**  
**Project #1 and Project Analysis due at the beginning of the period**  
mid period -Sample #3 and Sample #4  
Demo Band Ring and open top ring  
discuss band ring sizing |
| **Week 6** | 9/26 |  
**Sample #3 Due**  
Work on Sample #4  
Choose stone for bezel set ring  
Demo bezel creation  
Work on Sample #4  
Work on Sample #4 |
<table>
<thead>
<tr>
<th>Date</th>
<th>Activity</th>
</tr>
</thead>
</table>
| 9/28       | Start forming and soldering Sample #3 and Sample #4  
**Quiz #2 Review**  
Make bezel and band ring  
Solder bezel on band ring  
Finish Sample #4 Bezel Set Ring  
Sketches for Project #2 |
| 10/3       | **Sketches for Project #2 and Project Analysis - due today**  
Discuss designs individually  
Demo wax work  
**Sample #4 Due at END of period**  
Begin wax work |
| 10/5       | Demo wax work  
Continue wax work |
| 10/10      | Continue wax work  
Demo weighing, sprue placement, tree placement  
Demo Invest  
Group 1 invest |
| 10/12      | **Group #1 Cast**  
Group #2 invest |
| 10/17      | **Group #2 Cast**  
**Quiz 3 review**  
Clean up castings |
| 10/19      | Clean up castings, finishing  
**QUIZ 3 due on Canvas**  
Finish Project #2  
Do Pre-Crit Project Analysis |
| 10/24      | **Critique - Project #2**  
**Intro to Project #3**  
Demo dapping  
Demo scoring bending larger work if needed  
Hinge demo  
Work on Sample #5 Hinge  
3 Sketches for Project #3 |
| 10/26      | Work on Sample #4 Hinge  
**3 Sketches Due for Project #3**  
Discuss designs individually  
Create paper model Project #3  
Finish Hinge Sample #5  
Make paper model for Project #3  
Begin Project #3 |
| 10/31      | **Sample #5 Hinge due**  
Begin frame for Project #3  
Work on frame |
| 11/2       | Frame soldering  
fabrication of frame  
Continue working |
| 11/7       | Solder frame to back sheet  
Work on side panels |
Saturday, December 9th we are hosting a workshop for a multi-level Girl Scout Troop. Please do not plan to use the undergraduate studio between 10am and 2pm.

UNT STUDENT RESOURCES AND POLICIES

Student Academic Integrity Standards and Consequences
The University of North Texas promotes the integrity of learning and embraces the core values of trust and honesty. Academic integrity is based on educational principles and procedures that protect the rights of all participants in the educational process and validate the legitimacy of degrees awarded by the University. In the investigation and resolution of allegations of student academic dishonesty, the University’s actions are intended to be corrective, educationally sound, fundamentally fair, and based on reliable evidence. According to UNT Policy 06.003, Student Academic Integrity, academic dishonesty occurs when students engage in behaviors including, but not limited to cheating, fabrication, facilitating academic dishonesty, forgery, plagiarism, and sabotage. A finding of academic dishonesty may result in a range of academic penalties or sanctions ranging from admonition to expulsion from the University. See full policy here (https://policy.unt.edu/policy/06-003)

ADA accommodation statement
The University of North Texas makes reasonable academic accommodations for students with disabilities. Students seeking reasonable accommodation must first register with the Office of Disability Access (ODA) to verify their eligibility. If a disability is verified, the ODA will provide you with a reasonable accommodation letter to be delivered to the faculty to begin a private discussion regarding your specific needs in a course. You may request reasonable accommodations at any time; however, ODA notices of reasonable accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of reasonable accommodation for every semester and must meet with each faculty member prior to implementation in each class. Students are strongly encouraged to deliver letters of reasonable accommodation
during faculty office hours or by appointment. Faculty members have the authority to ask students to discuss such letters during their designated office hours to protect the privacy of the student. For additional information, refer to the Office of Disability Access website (https://studentaffairs.unt.edu/office-disability-access). You may also contact ODA by phone at (940) 565-4323.

EMERGENCY NOTIFICATION & PROCEDURES
UNT uses a system called Eagle Alert to quickly notify students with critical information in the event of an emergency (i.e., severe weather, campus closing, and health and public safety emergencies). In the event of a university closure, please refer to Canvas for contingency plans for covering course materials.

ACCEPTABLE STUDENT BEHAVIOR
Student behavior that interferes with an instructor’s ability to conduct a class or other students’ opportunity to learn is unacceptable and disruptive and will not be tolerated in any instructional forum at UNT. Students engaging in unacceptable behavior will be directed to leave the classroom and the instructor may refer the student to the Dean of Students to consider whether the student’s conduct violated the Code of Student Conduct. The University’s expectations for student conduct apply to all instructional forums, including University and electronic classroom, labs, discussion groups, field trips, etc. Visit Code of Student Conduct to learn more.

PROHIBITION OF DISCRIMINATION, HARASSMENT, AND RETALIATION (POLICY 16.004)
The University of North Texas (UNT) prohibits discrimination and harassment because of race, color, national origin, religion, sex, sexual orientation, gender identity, gender expression, age, disability, genetic information, veteran status, or any other characteristic protected under applicable federal or state law in its application and admission processes; educational programs and activities; employment policies, procedures, and processes; and university facilities. The University takes active measures to prevent such conduct and investigates and takes remedial action when appropriate.

SEXUAL ASSAULT PREVENTION AND SURVIVOR ADVOCACY
UNT is committed to providing a safe learning environment free of all forms of sexual misconduct. Federal laws and UNT policies prohibit discrimination on the basis of sex as well as sexual misconduct. If you or someone you know is experiencing sexual harassment, relationship violence, stalking and/or sexual assault, there are campus resources available to provide support and assistance. The Survivor Advocates can be reached at SurvivorAdvocate@unt.edu or call the Dean of Students Office at 940-5652648

Additional Resources
UNT’s Counseling and Testing Services, can provide psychological counseling and academic testing
UNT Well provides FREE individual and group counseling as well as a vocational assessment.
UNT Food Pantry is a great resource if you or someone you know experiences food insecurity.
Academic Success Center can support you in your academics

SAFETY
While working in laboratory sessions, students enrolled in Jewelry or Metalsmithing courses are required to follow proper safety procedures and guidelines in all activities requiring lifting, climbing, walking on slippery surfaces, using equipment and tools, handling chemical solutions and hot and cold products. Students should be aware that UNT is not liable for injuries incurred while students are participating in class activities. All students are encouraged to secure adequate insurance coverage in the event of accidental injury. Students who do not have insurance coverage should consider obtaining Student Health Insurance. Brochures for student insurance are available in the UNT Student Health and Wellness Center. Students who are injured during class activities may seek medical attention at the Student Health and Wellness Center at rates that are reduced compared to other medical facilities. If students have an insurance plan other than Student Health Insurance at UNT, they should be sure that the plan covers treatment at this facility. If students choose not to go to the UNT Student Health and Wellness Center, they may be transported to an emergency room at a local hospital. Students are responsible for expenses incurred there.
Safety Short Version:

- Absolutely no food at the work benches and soldering areas. All drinks must have lids!
- No open toed shoes in the studio.
- Safety glasses must be worn when working with most tools and while operating machinery.
- Wear a dust mask when grinding or sanding
- Keep long hair tied back at all times.
- Loose clothing should be tucked in or tied back when possible. An apron is recommended.
- When using chemicals such as patinas, proper ventilation and rubber gloves will be used.
- Take note of the fire extinguishers, eye stations, fire alarm and exits.
- If you get pickle on you, rinse it off with water, to neutralize pickle use baking soda.
- Do not use tools or machinery until you have been instructed on its use and safety.
- Be aware of your surroundings. Pay attention to potential hazards around you – other people, tools and machinery.
- Wear cotton shirts - instead of synthetic materials. (these catch fire easily and burn quickly)
- Quench hot metal in water before putting it in the pickle (this causes dangerous fumes)
CVAD
Health & Safety Area Specific Information: Metalsmithing & Jewelry

1. Hazards of Media (inherent)

Chemicals, Metal Etching and Plating
Chemicals used for patinas and plating are toxic and corrosive. There are mild acids and chemicals that are not compatible. Electrical currents are used in some etching/plating processes.

Enamels
Enamels contain silica and heavy metals. Enameling kilns can damage eyes over prolonged unprotected use (IR 3 glasses are recommended for enameling and are available in the studio). High temperatures are used for enameling, be cautious of hot surfaces and objects.

Epoxy, Natural and Synthetic Polymers, Resins
Epoxies, resins, glues, plastics/acrylics and body fillers produce toxic fumes, skin irritants and generate both toxic and liquid hazardous waste. All of these (including some stones) can contain silica causing toxic fumes when sanded. Some polyester resins, plastics, urethane rubbers, and silicon rubbers are used in mold making and can be even more toxic and irritating to the skin when in liquid form.

Metalworking
Metalworking produces toxic and/or irritating dust and fumes. Welding produces toxic fumes and radiates UV light. Soldering produces toxic, carcinogenic fumes from flux. Be cautious of hot objects. Soldering bricks and pumice rocks can create irritating dust. Corrosion products used in patinas (oxides, carbonates, sulfides, or sulfates) produce toxic fumes and irritating dust. Pickle is corrosive and toxic. Flammable gases are used for soldering and annealing metal.

Buffing and grinding equipment involve high speed rotating disks/wheels that are dangerous if not used properly. Lifting heavy equipment and repetitive processes can lead to strain injuries. Electric tools cause vibrations, which can also lead to strain on the muscles. Noise from percussive equipment and tools can damage hearing.

Metal Casting Techniques
Metal casting produces toxic fumes. Investment contains silica and produces irritating dust when mixed. Casting torch will damage eyes if proper IR glasses/goggles aren’t worn. Be cautious of hot surfaces and objects.

Stones, Plaster, and other Dusts, Clays and Powders
Minerals in stone, ceramics, glass, and abrasives (e.g. flint, steatite, dolomite, fluorspar stone, silica, garnet) produce toxic and irritating dust. Plaster is calcium sulfate, which produces toxic, irritating dust during mixing.

Spray Lacquer, Paint, Stains, Solvents, Paint Stripper and other Aerosol Sprays
Spray paint, stains, paint strippers and other aerosol sprays produce toxic fumes, skin irritants and generates liquid hazardous waste in excess paint and solvents used in cleaning (acetone, mineral spirits).

Solvents
Solvents are flammable and toxic. All solvents can cause defatting of the skin and dermatitis from prolonged or repeated exposure. Turpentine can also cause skin allergies and can be absorbed through the skin. Acute inhalation of high concentrations of turpentine or mineral spirits can cause narcosis (dizziness, nausea, fatigue, loss of coordination, coma, etc.) and respiratory irritation. Chronic inhalation of turpentine can cause kidney damage and possible respiratory allergies. Chronic inhalation of large amounts of mineral spirits could cause brain damage. Odorless mineral spirits or turpenoid, which have had the aromatic hydrocarbons removed, are less hazardous.

Pitch, Wax
Pitch is flammable. Overheating pitch degrades it and releases toxic fumes. Never use a torch to heat pitch. Wear eye protection and gloves when heating or breaking pitch.
Overheating wax can release flammable vapors and irritating, toxic fumes. Boiling wax is dangerous and can cause burns.
2. Best Practices

- Only use tools and equipment that instructors have demonstrated during class time.
- If you are ever unsure or uncomfortable using a tool or machine please talk to an instructor or technician. Plan ahead and ask your instructor to demonstrate the tool/machine during class time so that you are properly trained and comfortable to use it on your own during open studio hours.
- Wear the proper safety equipment for each process.
- Wear appropriate personal protection while working at your bench. Eye protection should be worn while using a jeweler’s saw, files or flex shaft (prescription glasses are suitable). Dust masks should be worn when using abrasives in flex shaft.
- Wear appropriate gloves when using any type of solvent, acid or chemical. (Long chemical gloves are in the Chemical Room; disposable nitrile gloves are provided throughout the studio.)
- Read and follow posted signs about equipment usage, safety gear and clean-up.
- ALWAYS clean up messes produced by any material or practice to prevent from exposing others to the hazards of that material and/or practice. Use alcohol to clean up resin/mold making materials. Use a wet sponge to clean up enameling areas.
- Use yellow sorbent pads or spill kit to soak up liquid/chemical spills. If chemical is considered hazardous, place soaked pads in plastic bag or bucket, label and notify area technician. Area of spill should be cleaned with mild detergent and water.
- Ear protection is advised when forging, raising, etc. Foam earplugs are provided by the studio.
- Wear a dust mask when enameling. Enamels contain silica and heavy metals.
- Avoid contaminating enamels and powdercoat with other colors, firescale, other debris.
- The powdercoat oven should not be used for any other purpose.
- Do not change programs of Casting or Enameling Kilns. Alert an instructor or technician if a program has been changed.
- Denatured Alcohol, solvents, spray lacquer and finishing wax must be stored in the Flammable Cabinet. Never store alcohol lamps with alcohol in them. When pouring Denatured Alcohol, place lamp or container in sink and use a funnel to minimize spills.
- Flammable gases are located at soldering and annealing stations. Only use gases through the control of torch handles. Torches may only be used at designated soldering/annealing stations.
- Flammable items, including paper towels, pitch and wax, may not be used at soldering/annealing stations.
- Use ventilation for tasks that create fumes, including soldering, pickling and enameling.
- There are many hazardous chemicals stored in the Chemical Room as well as equipment that can cause you harm if used improperly. Return chemicals to the proper storage place. Notify area technician of missing labels or damaged containers. All containers and funnels should be thoroughly rinsed and dried before and after use. If a container or other item has a dedicated chemical use, do not use it for any other purpose.
- Label patina containers with your name, type of patina, date and class. Store container in Blue Corrosive cabinet. See area technician about proper disposal of chemicals.
- Do not leave hot plates unattended, unplug when finished using. Never allow patina or wax to boil. Use heat guns to heat pitch.
- Use copper tongs for taking work in and out of pickle solution. Avoid getting pickle on skin or clothing, avoid splashes and spills. Use baking soda to neutralize pickle spilled on clothing.
- Do not pour pickle solution down sink drains. Dispose of used pickle by carefully pouring into collection container (labeled ‘Spent Pickle’). Use a funnel to pour and wipe up any spilt liquid.
- Do not leave Liver of Sulfur out. If the solution can still be used, pour into the labeled brown bottle. If the solution is spent, pour in collection container (labeled ‘Spent Liver of Sulfur’).
- Sharp objects, including X-acto and saw blades, should be disposed of in approved ‘Sharps’ container. Metal should be disposed of by placing into scrap bins, never regular trash.
- Skin and eye irritation can occur when using mild acids. If acid (including pickle) come in contact with skin, wash the area with soap and water. If acids come in contact with eyes, rinse eyes at an eyewash station for 15 minutes. Eyewash stations are located at the sinks in room 170 and 172. If irritation persists, seek medical attention.
- When working in the studio outside of class time, be aware of other students in other areas of the metals studio. Identify the monitor on duty in case you have a question or emergency. If you are the last to leave the studio, turn off all equipment (the only exception is kilns being used for casting). Properly turn off soldering torches and bleed hoses. Check the ‘STOP SIGN’ list before leaving.
- Monitors will unlock tool cabinets during their shifts. Cabinets should be locked at the end of the night or if no monitor is available.
- Monitors and graduate students are not to not share lock combinations with other students.
• Put away tools when you are done using them so that they are available for other students.
• Use sign-in sheets for processes including electroforming, etching, and forging. This allows other students to use the equipment in shifts. Failure to sign-in and follow rules may result in loss of privileges to use that equipment.
• Spray lacquer or paint in vented booth only, never in the Metals studio. There is a spray booth in the Sculpture studio, room 159AA.
• Do not use damaged tools or equipment. Report damages immediately to an instructor or technician. If damages occur outside of class time, place a visible sign on the damaged equipment.
• Drink containers must have lids. Food is not allowed in the studios, go to designated area to eat.

3. Links to more information on Health & Safety for the discipline

https://info.risd.edu/environmental-health-safety/#environmental-health+-safety
https://www.ganoksin.com/article/potentially-harmful-metalsmithing-substances/
http://www.silversmithing.com/1safety.htm

Chemical Safety:
https://ehs.princeton.edu/laboratory-research/chemical-safety

4. Area Health & Safety Rules

All users of the studio classrooms are expected to follow studio area rules at all times. If you have any questions, ask your instructor or area technician.

• Follow all CVAD Health and Safety handbook guidelines (the handbook should be reviewed by your instructor and can be found here: https://art.unt.edu/healthandsafety)
• Follow the CVAD Waste Management Chart in the classroom and other health & safety guidelines posted
• In case of emergency, call campus police at (940)565-3000 or call 911
• File an incident report (forms may be found in the CVAD H&S handbook and in the main office) within 48 hours of the event.
• Do not prop classroom doors. Doors are to remain closed to ensure the building HVAC and ventilation work properly
• No food or drink in the studio
• Practice best practices for material handling. If you have questions about a material, ask your instructor for guidance.
• Do not spray any aerosols in any CVAD classroom/studio/doorway or exterior wall/floor. Use the spray booths provided.
• No consumption of alcohol or smoking is permitted in the studios.
• Clean up after yourself- wipe down counters and benches with a wet sponge, sweep or vacuum floors.
• Do not block doorways or block access to lights.
• Do not remove furniture from rooms or borrow furniture from rooms without permission from the area coordinators.
• Do not create “daisy chains” with multiple electric cords.
• No hazardous materials should be poured down sinks.
• Store all flammables in the flammable cabinet. Keep flammable cabinet closed at all times.
• First aid kits are found in each studio. Notify your instructor or area technician if supplies are low.
• Report any safety issues IMMEDIATELY to your instructor or area technician.
• All courses must engage in an end of the semester clean up.
• Children, pets and non-enrolled persons are not allowed in the studio for their own safety.
• Follow all appropriate safety procedures as demonstrated by instructor. Do not use any tools or equipment that you have not been trained on.
• Always wear closed-toe shoes. Tie long hair back and avoid wearing loose clothing or dangling jewelry (hazardous with power tools and soldering).
• Studio Monitors are not allowed to teach new techniques or supervise casting.
• Follow proper safety procedures for turning gas on and off at soldering and annealing stations.
• Wear a dust mask when appropriate (enameling, sand-blasting, powder-coating, etc.).
• Eye protection should be worn during most processes. Safety glasses, face shields, tinted kiln and casting goggles are available throughout the studio.
• If you are the last person to leave the studio, check the ‘STOP SIGN’ list. If you are unsure about any thing listed ask your instructor, technician or a studio monitor.
• Do not use Chemical Room unless under special instruction. Refer to posted signs for proper procedures, safety and clean-up.
• Turn ventilation hoods and snorkels on for processes such as soldering, pickling, enameling, casting, etc.
• Only use Buffing Room equipment if you have been trained by an instructor. Follow posted directions on safety and clean-up.
• Do not enter the Graduate Studio without permission.
• Any long-term unattended use (more than 4 hours for a piece to cure/set/etc.) of a shared workspace must be approved by the technician, and should not conflict with the needs of the faculty or any scheduled courses.
• Safety Data Sheets (SDS) for studio materials are maintained by area technician.
• Follow the CVAD CONTAINER POLICY (see below)

There are 3 types of labels used in CVAD.

All containers must have a label identifying the contents at all times.

**UNIVERSAL LABELS (while chemical is in use):**
All secondary/satellite containers for hazardous materials (or what might be perceived as hazardous -i.e. watered-down gesso, graphite solutions, satellite containers of solvents, powders, spray paints, fixatives, oils, solvents) must be marked with content, your name and the date opened. All unmarked containers will be disposed of with no notice. Labels can be found in the studios. All containers must be marked with your name, contents and date opened.

**UNIVERSAL WASTE LABELS (when material is designated as waste):**
All containers solely containing a universal waste must have a universal waste label identifying the contents as “Universal Waste - (type of universal waste)” that are designated as waste for proper disposal. The label must also include the date the first item of universal waste entered the container.

**HAZARDOUS WASTE LABELS**
All hazardous waste containers must have a label identifying the contents as hazardous. Labels should include all constituents in the waste mixture as well as an approximate percentage of the total for that item. All constituents should equal 100%.
Course Syllabus Acknowledgement - ASTU 2402-502

I _____________________________(print) acknowledge that I have read the course syllabus. I understand the course structure, grading and attendance policies as well as the risk factor rating. I hereby agree to the syllabus and its provisions.

Course number and section: ART 2402.501 Risk Rating: 3

Signature
________________________________________________________________________

Date
________________________________________________________________________

Faculty Name: Jill Gower

Signature
________________________________________________________________________

Date
________________________________________________________________________
ASTU 2402 Beginning Jewelry

Getting to know you:

Preferred pronouns:

________________________________________

Preferred Name:

________________________________________

Major and Minor/s:

________________________________________

Hobbies:

________________________________________

Metals or Jewelry Experience:

________________________________________

What you hope to gain from this course:

________________________________________