# JEWELRY/METALS PROGRAM INTRODUCTION

#### MISSION STATEMENT

The Jewelry/Metal Arts Program is an active and robust part of the Oakland campus. The program encourages personal expression through the creation of jewelry, functional objects, and sculpture.

Students have the opportunity to explore a variety of processes and materials through courses taught by nationally and internationally known faculty. The program builds on a foundation of traditional and contemporary metalsmithing techniques. The curriculum emphasizes skilled craftsmanship, conceptual issues, design, aesthetics, and history.

The undergraduate curriculum covers the full range of techniques for production of jewelry, holloware, and small metal sculpture, including soldering, cold connections, forging, casting, enameling, stone-setting, hinges and mechanisms, and production methods.

Our studio offers three work areas, each with a state-of-the-art ventilation system. The facilities include individual professional jeweler's benches with flexible shafts and a wide range of tools. A dedicated senior studio also offers individual jeweler's benches.

Internships are available with professional metal artists in the San Francisco Bay Area. The program regularly hosts leading artists in the field for lectures and/or workshops.

Our students have received Society of North American Goldsmiths (SNAG) student and minority grants and Women's Jewelry Association Student Scholarships. Students and alumni have also shown their work in national juried and invitational venues.

# **CURRICULUM**

The mandate to encourage interdisciplinary study across the campus is supported by the jewelry/metals program. The central methodology of the program is fine art through the practices of sculpture and design with emphasis on craftsmanship. The program's primary focus is fine art while encouraging the investigation of alternative concepts, methods and materials. Specifically, it is the program's function to encourage creative and critical thinking in alliance with fine art practices.

# **CRITIQUE**

The critique is the essential element of art education. Art is communication at the highest aesthetic level. Therefore, students must be able to articulate the thoughts and conceptions behind their work. The structured forum in which to assess and evaluate work is critical. The critique measures the effectiveness with which you have communicated your ideas to your viewers. The critique is an appraisal of a student's progress of concept, communication and craftsmanship. A critique hammers out the important details and refines the quality of the work.

The personal goal of every student should be to become self-motivated, self-disciplined and self-directed. These qualities combined with the acquisition of skills and historical knowledge of their craft will enable the student to be autonomous and free to follow their own path. Beyond these qualities, students also need to develop their ability to be self-critical and to be their own best critic. They need to be able to separate from their work, out of the persona of artist as maker and into that of artist as a critical observer.

The students' ability to recognize quality work is determined greatly by the breadth of their experience, knowledge and exposure to superlative works, all of which increase understanding and the ability to make value judgments.

#### STUDENT WIDE LEARNING OUTCOME

#### **Every graduating CCA Fine Arts student must demonstrate the following:**

- 1. Creation of a coherent and insightful body of work that gives evidence of a focused exploration. This might take the form of a single work or a series of works that reflect a vision/concept, set of ideas, and/or exploration of a medium.
- 2. Technical mastery in at least one medium.
- 3. Ability to organize and publicly present work in exhibition or other appropriate format.
- 4. Ability to articulate in both oral and written forms the ideas within the body of work.
- 5. Ability to demonstrate or articulate a work in progress that is appropriate to the medium.
- 6. Ability to conduct research in the development of an artwork.
- 7. Ability to document their work in an appropriate medium, including but not necessarily limited to photography.
- 8. Elementary knowledge of professional practices, including compiling a resume, artist statement and portfolio.
- 9. Familiarity with current practices and issues in the medium, which may be fulfilled through an appropriate internship.
- 10. Working knowledge of the traditions and history of the medium.
- 11. Ability to self-critique and use appropriate criticism in the further development of one's work.
- 12. Successful development of a work ethic that includes self-discipline, self-motivation, and studio/safety skills.

# **CURRICULUM OVERVIEW**

# <u>DRAWINGS</u>

Preliminary or working drawings are central to the disciplines practiced in the jewelry/metals program and are required before a project. It is strongly recommended that students take drawing classes to complement the metals curriculum. As an integral element of the metals program, students are required to develop an articulate working portfolio/sketchbook of drawings of ongoing class projects as an implement for work development, technical refinement, general discussion and critiques. Drawings are the first step in conveying concepts to others as well as an ongoing record for future reference and reflection.

### THE PORTFOLIO

Graduating Jewelry/Metals seniors are required to assemble a portfolio to be left with the department as an alumni work reference. Included within: resume, artist statement, slides of senior works, slide list and any other pertinent information. All portfolios are to be created within a prescribed folder issued by the jewelry/metals department.

### STUDIO ETIQUETTE AND RULES

Proper studio etiquette is mandatory to ensure that everyone using the studio facility will be operating it in a safe and healthy manner. Adherence to studio rules is required. The rules are enforced at all times. Failure to adhere to the rules may result in personal injury or injury to others. Therefore, anyone who continually violates the rules may be denied use of power tools, hand tools, and access to the studio altogether or reported to Student Affairs. Additionally, the misuse of the studio facilities and its contents, or general misconduct may have consequences leading to restrictive or disciplinary actions.

#### STUDENT IDENTIFICATION

All students are required to carry a current CCA student identification with them at all times while on campus. This rule allows students, faculty, staff and security to identify with its Oakland CCA community and to deter crime on and around campus. A student may be asked by faculty, staff or campus security to show identification. Individuals may be asked to leave the campus if no ID is presented. We rely on each other as a community to maintain a safe and comfortable environment. Please report suspicious activities or people to campus security.

# **PERSONAL ITEMS**

Faculty and/or staff are not responsible for lost, stolen or damaged personal items. Students take full responsibility for their own things. Faculty and/or staff are not responsible for lost, stolen or damaged artwork outside their possession. Mind your things and do not leave personal items unattended.

# **GENERAL SAFETY**

Safety and common sense go together. Safety issues change with every tool and process we use, please stay aware and focused in the studio at all times.

- 1. You must wear safety glasses while working in the studio.
- 2. You must clean off your workbench, tray, equipment and/or work area each day.
- 3. Consume meals, food and drink outside the work studio.
- 4. Do not operate any equipment until approved by an instructor or studio manager.

- 5. Know how to operate the tools (turn off) before operation.
- 6. Do not talk to, startle or disrupt anyone while they are operating equipment.
- 7. No open toe shoes in the studio. Secure loose clothing and tie back long hair.
- 8. Remove loose jewelry, such as bracelets, long necklaces and long earrings.
- 9. Make all necessary tool adjustments before beginning to work.
- 10. Clamp or hold work securely while working at the drill press.
- 11. Turn off and inform an instructor if any power tool begins to act or smell unusual.
- 12. You may NOT remove any safety guards or devices installed on power tools.
- 13. Never leave torches, power tools or devices ON and unattended at any time.
- 14. Do not use any hand tools or power tools in ways other than their intended use.
- 15. During class-time, visit with guests/take calls outside the operating studio.

It is paramount that the Jewelry/Metals studio be respected and kept orderly. All students bear the responsibility of keeping the studio clean and safe while working. These rules are enforced by the faculty/staff for the welfare of the studio and for the safety of the students. Remember, safety is no accident!

Additionally, students must be mentally sharp and aware of their surroundings. Be aware of what is going on around you, respecting others' workspace. Do not leave bags and clothing lying around making it difficult for others to navigate around you and your things. Be aware of potentially dangerous situations or activities so that quick action can be taken in the event there is an emergency. Be familiar with the J/MA community and aware of who is in the studio to prevent theft or robbery. Keep doors closed after dusk.

### PERSONAL SAFETY

While some eye protection is available, you are required to provide your own safety glasses. Hearing protection and breathing respirators are also recommended at times. Do not spend too much time in the studio. Working with little rest leads to poor craftsmanship, causes injury accidents and/or destruction of your hard work. It takes less time to complete work when well rested and clear minded.

**Note:** If an instructor or studio manager finds a student to be under the influence of non-prescribed substances or alcohol, overly fatigued and/or potentially dangerous to themselves and others, the student may be refused access to the studio.

# **HEALTH SAFETY**

<u>CIGARETTES</u> are prohibited in public places by California State law. Smoking is therefore prohibited within CCA school buildings including the entire J/MA department. Besides the proven dangers of secondhand smoke, the carcinogenic effects are multiplied when in combination with airborne toxins. No smoking within 20 feet of the building and clean up butts.

<u>ALCOHOL AND DRUGS</u> are not part of the teaching and learning process at CCA, and it is inappropriate to serve or consume alcoholic beverages as part of an official class or studio activity. Alcoholic beverages may be served to those 21 years of age or older at approved campus events. No working in the studio after alcohol has been consumed.

Consumption or possession of alcohol and/or illicit drugs is strictly forbidden in the J/MA studio. Students engaged in such activities will be reported to the administration for disciplinary action. The proper function of the J/MA studio and equipment cannot tolerate those under the influence of any drugs or alcohol. Please notify faculty and studio manager if you are taking any prescribed drugs that may hinder your ability to operate studio equipment or machinery.

Violation of the Jewelry/Metal Arts department policy on alcohol and drugs, when attending class, lectures, functions and operating department equipment and machinery can result in students being denied recommendation or reference.

### **EMERGENCIES PROCEDURES**

All CCA emergency procedures are posted in a folder on the wall at the main studio door.

#### **EMERGENCY NUMBERS:**

Campus Patrol Officer (24/7) (510) 385-1821 Public Safety Office (415) 703-9510 or (510) 594-3780

# INJURY / FIRST-AID

In the event there is an injury accident/illness in the studio, implement the following guidelines.

- 1. Stay calm and composed.
- 2. Access the injury for severity; what actions should be taken?
- 3. For MILD INJURY or illness, notify studio manager or campus security.
- 4. For SERIOUS INJURY, inform an instructor or studio manager, call 911.
- 5. In the event there is no instructor/manager, contact campus security and call 911.
- 6. Monitor the injured person until security/first-aid arrives.
- 7. Ask the injured party who should be notified from their contact list. Relay information to public safety.
- 8. Secure the victim's personal belongings.
- Send someone to meet emergency responders and escort them to the victim.
   Note: Victims should only be transported by ambulance or taxi. Public safety will call a taxi.a

#### **SMALL FIRE**

Control the fire with an extinguisher located by a main door in each room.

#### How to use an extinguisher:

- P Pull pin
- A Aim hose at base of flame
- S Squeeze handle
- S Sweep from side to side

If your and/or someone's clothes are on fire:

Smother small fire with a fire resistant blanket, rug, or heavy coat. Using an emergency shower may be an option.

Call 911 for medical attention and inform studio manager/campus security.

#### **LARGE FIRE**

Pull the fire alarm located in the hall and evacuate the building and call 911. Inform campus security of the fire and its location.

#### **EARTHQUAKE**

- 1. If you are in the building, stay inside. Do not evacuate during an earthquake.
- 2. If you are outside, stay outside. Move to an open area away from buildings, trees and power lines.
- 3. Call out "EARTHQUAKE, DUCK, COVER, HOLD". Wait until the shaking stops. Visually access safety before emerging. Aftershocks may occur.
- 4. Avoid overhead fixtures, windows and bookcases.
- 5. Assist any disabled persons in the area and find a safe place to move.

#### **AFTER AN EARTHOUAKE**

- 1. Call out "IS EVERYONE OKAY".
- 2. Evacuate only after instructed by a supervisor or campus security.
- 3. Call 911 if there are serious injuries. Find or call campus security.

#### NUCLEAR / BIOLOGICAL / CHEMICAL

#### **CHEMICAL EMERGENCIES**

- 1. If an **immediate hazard** arises, call 911, notify studio manager and/or campus security, and evacuate the area.
- 2. If a **minor hazard** arises, notify studio manager and/or campus security and evacuate the area.

#### **BOMB THREAT OR SUSPICIOUS PACKAGE / OBJECT**

- 1. Notify campus security.
- 2. Try to remember any helpful information about the threat.
- 3. Isolate the person who received the threat.
- 4. Alert employees and visitors not to turn on or use radios.

#### **SHELTER IN PLACE GUIDELINES**

- 1. Close all windows
- 2. Turn off all fans, heating and air conditioning systems.
- 3. Go to an above ground room with the fewest windows and doors.
- 4. Wet some towels and jam them in the crack under the door if fumes are coming in. Tape around doors, windows, exhaust fans or vents. Use plastic garbage bags to cover outlets and heat registers.
- 5. If you are told there is a danger of explosion, close the window shades, or curtains. Stay away from windows to avoid injury.

6. Stay put until the studio manager gives instructions to evacuate.

### **STUDIO ACCESS**

Access to the studio varies depending on the level of the student. No one student is allowed in the studio alone; there must be a minimum of two students to remain working in the studio, and one of the two must be an approved monitor. To become an approved monitor, one must have completed J/MA-1A or equivalent and have taken the *Safety Test*. Completion of the test gives a student the door code and the ability to work and monitor outside of class time. Beginning students are not given the code to the doors and are only allowed in the studio after class hours if accompanied by at least one qualified monitor. If two students remain in the studio and one wishes to leave, both must close down and vacate at the same time.

**ACCESS HOURS** may vary but generally hours for qualified students are as follows:

Week 1 to 12 8:00am to Midnight Week 13, 14, 15 8:00am to 2:00am

Spring/Summer break Closed

### **STUDIO MONITORS**

Studio monitors are individuals who have completed J/MA-1A or equivalent and have passed the *Safety Test*. All students who have met these qualifications automatically become a monitor to those in the beginning classes. Additionally, qualified students are required to sign up for a minimum of two hours a week monitoring. These hours are to be outside class time, after 5:00pm but not past midnight on weekdays. Weekend hours are 8:00am to midnight but not during an Extended Ed class or during janitorial hours (Sunday 5:00-6:00pm). Monitor responsibilities include: Arriving on time, staying until hours are completed, opening and/or closing the studio, helping beginning students and monitoring the wellbeing of the studio and its occupants. If a monitor is going to leave and there is no replacement monitor, all students must close and leave the studio.

### **CLOSING THE STUDIO**

When leaving the J/MA Studio at night always clean your workbench and survey the studio for any problems, then shut down the studio properly.

- 1. Turn off the oxygen cylinder regulator.
- 2. Turn off all natural gas valves and individual lines to the torches.
- 3. Turn off the pickle pots.
- 4. Put all hammers and stakes away.
- 5. Shut off the lights and make sure the doors and windows are locked

# **TOOL BOXES**

Toolboxes with the essential tools and a saw frame are supplied to the beginning classes only. Students beyond the beginning classes are expected to acquire their own basic tools. Students with these supplements are fully responsible for any lost, stolen or damaged tools in their possession. In the event a tool is lost, stolen or damaged, the student will be required to pay the studio manager for the replacement of said items. Any tools left unsecured in the studio are at risk of theft or damage. Students are responsible for locking and securing their borrowed tools.

# **BENCHES**

All the jeweler benches in A27 are community benches and should be treated as such. While using a bench, treat it with respect. Avoid causing damage to the bench, flex-shaft, light, drawers and chair. Do not cut, file or sand into the bench. Avoid excessively cutting into the bench pin. Do not drill holes in the bench or bench pin. When done working, clean off the surface of the bench and chair, empty the bench tray into the sweeps bin, and return the light and flex-shaft to an orderly placement.

The benches are for all to use. No student has exclusive rights to any one bench and cannot make another student move. If a student is going to be away from the studio for more than thirty

minutes they must clean up and vacate their bench. Respect the studio and its community and it will respect you.

### **BENCH CHAIRS**

The rolling bench chairs are for the benches only. Do not move them from the bench area. Do not stand on a rolling chair; find a stool. Rolling bench chairs are NOT to be used in the hammer room, the Streich Zone and/or especially at a soldering bench. The chairs are flammable and subject to unnecessary damage or burn marks. A rolling chair at the soldering bench is a serious offence. The replacement cost is over four hundred dollars per chair, so... DON'T DO IT!

#### **DRAWERS AND LOCKERS**

The studio has limited storage but allows one bench drawer per student. Upper division students are included in a lottery for upper cabinet space, but a student with an upper cabinet may be denied a drawer in cases of limited space. Drawers and lockers are to be labeled with name and semester and will be emptied at the end of each semester unless the occupant is registered as a returning J/MA student. Never put holes with screws or nails in or on lockers. Never put tape on the face of a drawer or cabinet. In the case a student needs additional or larger space, a locker in the hall may be available from J/MA manager or possibly Sculpture studio manager. Possession of a storage space is no guarantee that this space will remain yours beyond the semester. A student may also be asked by the studio manager to open or vacate his/her locker at any time. DO NOT leave random items stored around the studio in corners, above cabinets, under desks, etc. They may not be there when you return. Faculty and staff are not responsible for lost or stolen items.

# SINKS AND COUNTERS

The sinks and counters are a community area that all are responsible for. These areas are to be kept clean and free of debris and residual chemicals. Never put anything in the sink that may clog the drain. Never pour pickle into the sink without neutralizing first with baking soda. Avoid casting investment entering the sink.

# **TORCHES**

J/MA has three soldering tables, one in each room. A20 (the Streich Zone) A27 (the main studio) and A24 (backroom casting and hammering). The torches at the soldering tables are fueled by natural gas and oxygen.

- 1. The soldering torches have both gas and oxygen shut off valves. To operate the gas must be turned on and the oxygen cylinder must be turned on and the regulator set between 10 15 PSI
- 2. The large annealing torch operates on natural gas and compressed air; the compressed air lines have separate regulators and can be set between 20 and 30 PSI but are usually pre-set.

- 3. The casting torch is oxygen and pressurized natural gas and generally used for melting quantities of metal for centrifuge or vacuum casting. Settings for the heating nozzle: oxygen should be set at 30-40 PSI and the natural gas regulator should be set at 7-10 PSI. There is a separate oxygen and natural gas hose connected to the casting torch.
- 4. When lighting a torch always use the tools intended for this purpose i.e. strikers or electronic strikers.
- 5. Never use a cigarette lighter to light a torch, clear tables of any flammable materials, tie hair back and be careful of loose clothing especially thin cotton garments.
- 6. When lighting a torch always begin by lighting the gas first and then turn on the oxygen and adjust the flame. When turning the torch off do this in reverse, oxygen off and then turn off the gas.

### **PICKLE POTS**

J/MA currently has two heated pickle pots. Generally we use a bath that consists of concentrated citric acid which removes the oxides from the metal before or after soldering or annealing. The citric acid pickle is maintained by the studio manager and part of JMA's hazardous waste stream.

- 1. When mixing acid, always add the dry acid to the water. NEVER add water to dry acid this could cause a chemical reaction and explosion.
- 2. Never put any steel binding wire or steel wool into the acid bath. Steel causes electrolysis with the copper that has leached into the bath and will electro-plate your work, which is very difficult to remove.
- 3. Avoid contact with clothing, as it will make bleached marks and leave holes.
- 4. Never let pickle pots run dry. This will destroy them; add water when the level gets low.
- 5. When adding dry pickle to the water, stir water until the pickle is completely dissolved.

# FERROUS AND NONFERROUS METAL

Ferrous metal contains iron; nonferrous metals do not contain iron. J/MA primarily uses nonferrous metal such as copper, brass, nickel, silver and gold. Much of our equipment is designed only for nonferrous metal.

- 1. Never use ferrous metal in the rolling mill. NO STEEL!
- 2. Never cut any ferrous metal with the step-shear, bench or Beverly shear.

# **BAND SAWS**

J/MA has two band saws. The blue band saw located in A24 is only for wood and plexi-glass. The grey band saw is only used for metal. This saw can cut heavy gauges of nonferrous stock as well as mild steel up to about 10 gauge.

- 1. Always adjust the blade guard to just above the thickness of the material you're cutting.
- 2. Always wear eye protection and have hair and loose clothing tied back.
- 3. Think about what you're doing and be focused.
- 4. Ask for assistance until knowledgeable about these pieces of equipment.

# **POWER SANDERS**

The power sanders in the studio are used for all materials. Take special care to pay attention when using these machines. While they will allow for the quick removal of material, they are quick to damage your piece and/or injure the user. At no time may a student remove any safety guards or modify. Take care to avoid work getting caught in the machine or damaging the sanding belt. Do not ever press sharp points into the sanding surface in order to avoid cutting or ripping the belt. Do not operate sanders with frayed belts. If belts look damaged, inform Studio Manager. As the dry sanders are made of steel, clean up any remaining water after each use to prevent severe rusting.

# **ROLLING MILLS**

J/MA is fortunate to have two rolling mills; a hand rolling mill in A27 and a power mill in A20 (Streich Zone). Both mills roll nonferrous sheet and wire stock. The rolling mill is an essential tool for the metalsmith being used not only for milling but also for roller-printing, embossing and lamination to name a few of its uses. The power rolling mill can be dangerous if not used correctly. Take precaution to tie back loose hair and clothing. Keep hands well clear of moving rollers. Be ready to turn off at a second's notice; it will not turn itself off if you get caught.

- 1. No steel! Rolling mill is for nonferrous metals only.
- 2. No wet metal! Make sure metal is clean and dry with no acid residue. Acid and water will destroy the rollers.
- 3. Do not use the power mill without supervision.

# **HYDRAULIC PRESS**

The hydraulic press is primarily used for making small metal hollow forms using acrylic matrix dies and urethane. There are many other techniques such as blanking dies and conforming dies that are useful for production. Avoid damage to acrylic spacer blocks provided with the press. Your professors will instruct you in the uses of the press and the studio manager can assist you.

# **DRILL PRESSES AND FLEX-SHAFTS**

J/MA is equipped with one free standing drill press, a bench model press and a precision drill press. Studio benches are equipped with individual flexible shaft units.

- 1. Always wear eye protection and have hair tied back, no loose clothing.
- 2. Have items to be drilled, supported, clamped, or secured properly.
- 3. Before you turn on the machine, focus and concentrate on what you're doing.
- 4. Do not run flex-shafts at top speeds for long periods of time. Most burs, cutting discs, sand papers etc. are designed to work at medium speeds. Rarely is there a reason for high speeds. The flex-shafts should be allowed to rest and cool down periodically.

### **SHEARS**

We have four shears in the J/MA studio. The step shear is located in A20, the Streich Zone. There is also a large manual shear appropriate for cutting heavy gauge sheets. There is one bench shear in A27 that has a hole for cutting wire. The shear in the back in room A24 is called a throatless shear or Beverly shear; it is configured in a way that enables you to cut curves into a metal sheet.

- 1. Never cut steel with the J/MA shears. Non Ferrous metal only!
- 2. The step shear is rated up to 18-gauge thicknesses.
- 3. Never cut wire or sprues on any shear. This will damage the blades.

#### **POLISHING MACHINES**

J/MA has two free standing polishing units used for finishing and buffing jewelry. These are used with polishing compounds and cloth buffing wheels. Polishing compounds are abrasive and have different cutting levels. Generally we use Tripoli compound (moderate abrasive), White Diamond (fine abrasive) and Rouge as the final polish, both polishing machines have exhaust fans with switches on the side of the unit.

- 1. Always have hair tied back and secure loose clothing.
- 2. Never attempt to polish wire or chain with the polishing wheel. VERY DANGEROUS!
- 3. Polishing compounds contain silica; wear a respirator when using buffing compounds.
- 4. Always use the ventilation that is incorporated in the machine base.

# HAMMERS, STAKES AND CIRCLE CUTTER

J/MA has a sizable inventory of hammers and forming stakes. Hammers and stakes are for nonferrous metals only. The surface of these tools is polished so that the surface of your work will not be marred. Hammers should never come in contact with the polished surface of a forming stake. This will cause damage to both tools. There should always be something (non ferrous metal) between the hammer and the stake. There are also nylon tools that can be used to minimize the scarring of your metal. Additionally, A brass mallet should be used when using the circle cutters.

- 1. Never hit metal to metal (steel to steel).
- 2. No wet metal; keep steel surfaces free of water
- 3. Clean the surface of the tool and put all tools away when you are done.
- 4. Only use a brass mallet for hammering out circles with the circle cutter.

#### KILNS AND CASTING

**Burnout Kilns** are used for burning out a wax medium and firing plaster investment. They are provided to students cleared by an instructor or Studio Manager. They are computer or manually operated depending. The programmable kilns are provided with written instructions and a logbook (clipboard) for logging cast information on the wall nearby. Burnout kilns operated by students are programmed and monitored by the student/s burning out. It is important to coordinate

with the cast group the procedures, times and order of casting as to operate with clarity and efficiency. Students unable to meet their commitment to the cast will be noted and their flask will be set aside for a later casting. Do not expect another student, faculty or staff to act as a substitute for you without prior arrangements. Kiln log books should be labeled with burnout schedules and names of participating students. Do not leave kilns turned on when not in use. Avoid contact with fragile internal heating elements. The heating elements may cause electric shock or burns so thermal insulating gloves must **ALWAYS** be worn when operating the kilns. As soon as casting is complete, turn off the kiln.

Enameling Kilns are provided to students cleared by an instructor or Studio Manager. They are to be used for enameling purposes only. It is the student/s responsibility to program, monitor and shut down the kiln for each use. Kilns are to be logged/labeled with names of those responsible for the operation. Avoid contact with fragile internal heating elements. The heating elements may cause electric shock or burns so thermal insulating gloves must ALWAYS be worn when operating the kilns. Never leave an enameling kiln unattended for an extended period of time. Do not expect another student, faculty or staff to act as a substitute for you without prior arrangements.

<u>Centrifuges</u> are used to cast molten metal into a fired investment flask using centrifugal force. They are provided to students approved by an instructor or studio manager. Safety with these tools is paramount. If improperly used, molten metal or parts may be flung from the machine causing severe injury or burns. It is important to use the proper crucible depending on which metal is being cast and to make sure the flask is installed securely and in the correct position before releasing. No student may operate a casting machine alone. As soon as all casting is complete, the centrifuge must be vacuumed and cleaned.

<u>Investment Vacuum/Vacuum Caster</u> is a machine used to both extract air from wet investment and/or vacuum molten metal into a fired investment flask. Using the vacuum to remove air from the investment can be messy and potentially cause damage to the machine. To avoid investment from overflowing the flask into the machine's vacuum port (causing damage) simply wrap a band of tape around the top of the flask to extend its height. This will contain the rising investment when vacuumed. If the investment gets down into the port the machine will have to be repaired. Be sure to clean up any residual investment from the machine after each use. It is important to take great care not to damage the tool, subsequently preventing others from investing. It is the student/s responsibility to leave equipment ready for the next operation. Any equipment damage must be reported to the Studio Manager or instructor for prompt repair.

# **BEAD BLASTER**

The bead blaster is intended for nonferrous material only but may be used with other materials. Check with the studio manager if blasting anything other than clean, nonferrous metal. The bead blaster is filled with a fine abrasive (glass bead) that should not be inhaled. It is important to secure the access doors to keep silica dust from escaping. Turn on the light/filter switch before operation. It may be advisable to wear a respirator if the door will be opened and closed excessively. Never put wet metal or materials into the blaster, as it will clog the circulation of the abrasive medium. Never point the nozzle towards the glass window to avoid etching the glass. Please keep hands clean, as many people will be putting their hands in the same gloves. Clean

hands will also extend the life of the rubber. When finished be sure to close the compressed air valve and turn off the light/filter switch.

### **PITCH**

This is a processed sap like medium used for chasing and repousse. The heating of this material has been designated to only one section of the back soldering bench for the purpose of managing this messy material. It is important not to get the pitch all over everything (which is easy to do). Pitch should be completely removed from the piece via heat gun before heating the metal with a torch. This is to prevent the pitch from dripping onto the soldering stones and pumice, which may cause much aggravation for those who do not want pitch on their work. Certain tools have been designated for pitch in an attempt to reduce contamination. Avoid getting pitch on the heat guns by setting them down in an area free of hot pitch. Do not heat or burn this material without ventilation. Please take care to control this unruly material.

### **WAX INJECTOR**

The wax injector is a tool used to heat and inject wax into a rubber mold. It is a tool that can be messy and cause burns. It is a tool that requires intermittent monitoring. It is the student's responsibility to monitor this tool until the process is complete. Do not leave unattended for extended periods of time. Turn off power and compressed air as soon as the process is complete.

### J/MA GENERAL TOOLS

All the tools and equipment of the studio (hand tools, power tools, etc.) are to be treated with respect and responsibility. No J/MA tools are to leave the studio without approval from an instructor or studio manager. Additionally, certain tools require check out from the studio manager but are not to leave the J/MA studio. If a student wishes to take any tools home they must first have the approval of an instructor or studio manager. If there is a tool you find you need a lot, this is the time to consider buying your own. While the studio offers many resources for the development of work in the studio, it is the student's obligation to acquire the tools and equipment necessary to create work outside and beyond their academic experience.

# **MUSIC POLICY**

Though music is allowed in the studio, it is important to recognize the dangers involved in mixing music with machinery. The music allowed in the studio should never be above a comfortable speaking level. Loud music may prevent a student from hearing another student's warning, the potential warning sounds of equipment and machinery, fire alarms, etc. All music is not allowed during class time unless approved by the instructor. Outside class time music is allowed with the consent of all others present. Personal music is allowed outside class time but should not prevent a student from hearing studio activity and/or safety warnings.

### **BICYCLES**

Bicycles are prohibited inside the J/MA studio as well as inside any CCA building. This is to ensure clear passage and to maintain a working environment free of hazards. Bicycles found in the department will be removed and placed outside the building. The J/MA department is not responsible for lost, stolen or relocated bicycles. All bicycles should be locked to one of the many designated bike racks located throughout the campus but never obstructing a pathway or stairway.

### **GRAFFITI AND VANDALISM**

Any student observed vandalizing school property, will be disciplined by the school, which may result in suspension or expulsion.

### **END OF SEMESTER**

All students must clean out their storage drawers or lockers by the end of classes unless approved by the studio manager. Graduating seniors must remove all their things no later than one week following the end of classes.

### FUNCTION OF FACULTY, STAFF, AND STUDENTS

<u>THE PROGRAM CHAIR</u> is responsible for developing and maintaining the department curriculum and syllabi, monitoring assessments and grades, overseeing the department, faculty, staff and students and representing the department's interest on various councils and committees within CCA and the arts community at large. The Program Chair is also expected to demonstrate a sustained record of professional practice both nationally and internationally.

**THE FACULTY** are responsible for their individual classes, designing projects or syllabi that function within the J/MA curriculum, assessments and grading. Faculty is expected to demonstrate a record of professional practice.

**THE STUDIO MANAGER** is responsible for the day-to-day running of the department, maintaining classrooms, equipment and studios in order for classes to take place in a clean safe environment. The studio manager coordinates operations within the department and the CCA community and is responsible for maintaining equipment and tools and in matters of safety has total authority. The studio manager has full responsibility over equipment and therefore has ultimate authority over use of equipment. The studio manager can teach non-academic subjects especially in areas of engineering and technical skills.

**STUDENTS (UNDERGRADUATE)** in the Jewelry/Metals program are required to participate in all educational activities pertaining to their area of study, adhere to the J/MA department curriculum, and be punctual to classes and lectures.

#### CONTRACT WITH JEWELRY/METAL ARTS DEPARTMENT

To ensure that all students are aware of the Jewelry/Metal Arts Program guidelines and operations we require a signed copy of the J/MA Program contract. This document states that the signer has read the J/MA handbook and pledges to follow the principals stated within it. As a standard this contract will ensure the faculty and staff that all students in the department are aware and understand all the rules and regulations of the J/MA studio and program completely and in the same way. The Contract stands as a reminder and emphasizes the importance that all members of the J/MA department can rely on one another to uphold standards of conduct and responsibility that will provide a safe and fluid learning environment. The outcome should be a positive and enriching academic experience.

The contract must be signed before a student can use any of the J/MA program facilities.

# CALIFORNIA COLLEGE OF THE ARTS JEWELRY/METAL ARTS PROGRAM CONTRACT

I have read and understand all the information, rules, regulations and guidelines in the CCA Jewelry/Metal Arts Program Handbook. Furthermore, as a participant in the J/MA Program I agree to uphold all rules outlined in the handbook and to respect it's guidelines. I understand that faculty and staff have the right to restrict or take away my access to certain department privileges, areas, or equipment for any behavior that I may demonstrate that is contradictory to what is outlined in this document.

Signature		Date	 
	(PRINT CLEARLY)		
Full Name			
Class	Phone #		
Email			