

Studio Equipment Checklist

Main Studio at 1060 Heinz Avenue

Intaglio / Relief / Monotype:

- American French Tool etching presses (3):
 - bed size 40 x 70"
 - bed size 40 x 70"
 - bed size 48 x 78"
- Charles Brand etching presses (2):
 - bed size 30 x 50"
 - bed size 32 x 52"
- Griffin etching press:
 - bed size 21.75 x 40"

Lithography:

- Griffin manual lithography press
 - o bed size 26.5 x 45.5"
- Takach motor-driven lithography press
 - o bed size 33 x 56.5"
- lithographic stones ranging in size from 10 x 14" to 28 x 32"
 - o _____
- metal printing base for plate lithography: 32 x 51"

Letterpress:

- Vandercook SP15
 - o Maximum form size 14 x 18"
 - o Maximum printable area 12 x 15"
 - o Maximum sheet size 14 x 20"

Letterpress (cont):

- Vandercook SP20
 - o Maximum form size 19 x 26"
 - o Maximum printable area 17 x 22"
 - o Maximum sheet size 19 x 28"
- Nolan Manual Hand Proofing Press (this press can be available at 1060 Heinz Avenue and 2990 San Pablo)
 - o maximum 12 x 20" form size (approx)
 - o maximum 13.25 x 24" paper size
- Printing bases
 - Patmag base (magnetic): 12 x 16"
 - Bunting base (magnetic): 8 x 11 1/4"
 - Boxcar base (not magnetic): 12 x 16"

Screen Printing:

- Vacuum table with arm (manual printing):
 - o Vacuum area 36" x 48"
 - o Maximum screen size 50 x 72" (or 48 x 60" if using the vacuum area)
- Cincinnati vacuum table with arm (manual printing):
 - o Vacuum area 27 x 43"
 - o Maximum screen size 42 x 64"
- Portable clamp boards (screen printing surfaces)
- Backlit washout booth
 - o Inside sink dimensions: 24" D x 44" W x 44" H
- Squeegees for hand printing (various durometers)
 - o sizes range from 4 inches to 32 inches
- Squeegees for use with one-arm printing table (75 durometer)
 - o sizes: 12 inches, 16 inches, 20 inches, 24 inches, 32 inches and 36 inches

Exposure Room:

- Amergraph Advantage 150 Screen exposure unit
 - o Maximum outside dimensions of silkscreen 30" x 40"
- Anderson Vreeland Orbital VIII Photo-Polymer Platemaker
 - o Maximum plate size A2 / 16" x 23"

Photo Dark Room:

- Enlargers:
 - Beseler 23C II
 - Beseler 45MXT with dichro 45 color head
 - Beseler 45 MX II (cold enlarger)
- NuArc FT26MH flip-top vacuum exposure system (single point metal halide bulb): used for photo-intaglio, photo-litho and alternative photo processes. Maximum plate / paper size approximately 18 x 24" or 20 x 22"

Acid Room:

- Etching chemistry:
 - Edinburgh Etch (Ferric Chloride and Citric Acid) for copper
 - Copper sulfate (for electro-etching)
- Nitric acid (for stone lithography and spit bite)
- Trays for etching (various sizes)
- Sodium bicarbonate for neutralizing acid

Digital Lab:

- Computer stations (4)

Computer Software:

- Adobe Creative Suite
- Other: _____

Printers:

- Epson 9900 (44" wide, photo and matte black inks)
- Epson p8000 (44" wide, matte black ink)
- Epson p6000 (24" wide, matte black ink)
- Epson 4800 (17" wide, matte black ink)

Digital Lab (cont'd):**Scanners:**

- Imacon Flextight 848 Virtual DrumScanner (scan films up to 4"x5", reflective materials up to A4)
- Epson 10000 XL Photo Flatbed Scanner (12"x 17")
- Epson 4490 Photo Flatbed Scanner (Letter size)

Other studio equipment:

- Work tables
 - (3) in main studio
 - (1) in back studio
- Challenge 265 manual paper cutter - for cutting stacks of paper
 - Maximum paper size: 26.5 x 40"
 - Maximum thickness of paper stack: 3.5"
- Kutrimmer 1058 - for trimming polymer plates
 - cutting length 22 ½ inches
- Book press (nipping press)
 - Platen size: 9 x 14"
- Plate shear for metal plates up to ¼ inch thick:
 - Maximum width of plate: 36.5"
- Aquatint boxes:
 - Box for use with pre-ground, powdered rosin: maximum plate size (approx) 44 x 56"
 - Box for use with lump rosin: maximum plate size (approx) 14 x 20"
- Tear bars (up to 48" long)
- Cutting mats

Consumable Supplies

Main Studio at 1060 Heinz Avenue

Please communicate with us about any supplies (such as inks / chemicals / materials) not listed here that you'll use for class. It is important to us to provide Safety Data Sheets (SDS) for all materials being used in the studios; Kala staff will collect this information and make it available in our studio SDS binders. We will also advise teaching artists on suitable chemical storage in our facility.

General:

- Rags
- D*solve or SoySolv II (Vegetable Cleaning Agents / bio-based solvents; alternatives to mineral spirits)
- Mineral spirits
- Isopropyl Alcohol 99%
- All-purpose cleaner (Dr. Bronner's Sal Suds or Simple Green)
- Newsprint

Etching / Intaglio:

- Etching chemistry
 - Edinburgh etch (Ferric Chloride + citric acid)
 - Copper sulfate (for electro-etching)
- Powdered rosin
- Lump rosin
- Soda ash (sodium carbonate)
- Vinegar
- Soy Sauce
- Whiting (calcium carbonate)
- Sodium bicarbonate (baking soda) for neutralizing acid

Lithography:

- Cheesecloth
- Lithotint
- Asphaltum

Lithography (cont'd):

- Gum arabic
- Nitric acid
- Acetic acid 1:10
- Phosphoric acid
- Magnesium carbonate
- Powdered rosin
- Talc
- Tympan grease
- Shop mix black ink for leather roller
- Plastic wrap (for wrapping leather roller)
- Carborundum for graining lithographic stones: 80, 100, 150, 180, 200, 220 and 280 grit

Screen printing:

- Photo-emulsion (Ulano 935 WR)
- Emulsion remover
- Silkscreen de-hazer (available on request from Print Studio Manager)

Letterpress:

- Vanson rubber-based Ink: Black (10850), Process Blue, Warm Red, Yellow, Opaque white, Transparent white
- Magnesium carbonate
- Crisco

Photo dark room:

- Disposal drums for fixer and developer

Studio Equipment Checklist

Community Studio at 2990 San Pablo Avenue

Kala's community studio can be configured to include 2 smaller-sized printing presses suitable for intaglio / relief / monotype and one additional table-top proofing press for relief / letterpress printing.

Some portable resources from the main studio at 1060 Heinz Avenue (e.g. wood type) can be transported to the San Pablo Avenue studio for class use.

While there are large windows that can provide excellent air-flow, the community studio is not equipped with a ventilation system; whenever possible we use only materials that are AP certified non-toxic. For printmaking processes in this space, we promote the use of inks & materials that do not require solvent clean-up.

Studio equipment:

- Work tables
- Studio sink
- Rulers (up to 12" long)
- Cutting mats
- Tear bar (1)
- 24" T-Square
- Guillotine paper cutters (for cutting single sheets of paper)
 - Maximum paper size: 12 x 14"

Presses for intaglio / relief / monotype:

- Etching presses (2):
 - bed size 18 x 30"
 - bed size 17 x 32"

Press for relief / letterpress:

- Nolan Manual Hand Proofing Press (this press can be available at 1060 Heinz Avenue and 2990 San Pablo)
 - maximum 12 x 20" form size (approx)
 - maximum 13.25 x 24" paper size

Personal Protective Equipment

These items are available in the main studio at 1060 Heinz Ave

- Re-usable Ear protection: 3M Optime™ 98 Earmuff (for use with the pressure washer)
- Disposable earplugs (for use with the pressure washer)
- Cloth aprons
- Chemical-resistant PVC/Polyester apron: (Tingley® A41008 SafetyFlex®), for use in the acid room

Items below are available for teaching artists & class participants upon request.

Reusable gloves:

- Black Neoprene (SHOWA Best Gloves Chloro Flex 723 brand)
recommended for use when handling: nitric acid, ferric chloride, copper sulfate, photo chemicals. Also suitable for photo emulsion, photo emulsion remover, mineral spirits, isopropyl alcohol, denatured alcohol, liquid etching grounds, lead type, leading and all soiled rags.
- Green Nitrile (Ansell Solvex 37-175 brand)
recommended for use when handling: ferric chloride, copper sulfate, photo emulsion, photo emulsion remover, mineral spirits, isopropyl alcohol, liquid etching grounds, lead type, leading and most soiled rags.
 - Nitrile gloves DO NOT protect from acetone, xylol, or corrosives.
 - Do not wear nitrile gloves with nitric acid. Use the neoprene gloves described above.

Disposable / single-use gloves:

- Green nitrile gloves (Ansell Touch 'N' Tuff brand)
recommended for use when handling: mineral spirits, isopropyl alcohol, denatured alcohol, liquid etching grounds, most soiled rags (except those used to clean up ferric chloride), lead type & leading. Also suitable for handling oil- and rubber-based inks.
 - Nitrile gloves DO NOT protect from acetone, xylol, or corrosives.
 - Do not reuse disposable nitrile gloves. Use once, then dispose.
 - Change disposable gloves every hour during heavy, continuous use of materials.
 - Do not wear nitrile gloves with nitric acid. Use the neoprene gloves described above.

Splash goggles:

- Chemical splash goggles (MCR Safety Indirect Vent 2235R brand)
recommended for use when: pressure-washing silkscreens, dispensing etching chemistry