ART 35

Handout #1: WAX WORK

Name

SAFETY INFORMATION

WARNING! HOT WAX MAY CAUSE BURNS TO EYES AND SKIN. Always use appropriate protective equipment when handling hot wax (closed-toe shoes, gloves, apron, face shield, etc.) Wax melts at 170°F, and will ignite at 347°F. If wax ignites remove source of heat. If necessary, use a CO₂, dry chemical or foam fire extinguisher. Do not use water!!!... this will only <u>spread</u> flames!!! Skin contact: Submerge injured area in cold water. Leave wax in place, rather than pulling away damaged skin—cool wax will protect skin. Seek treatment, if necessary. Avoid inhalation of fumes: Always provide adequate ventilation, and/or a NIOSH certified organic vapor respirator with a dust and mist filter. Do not ingest: If ingested, do not induce vomiting. Health Center ph#: 479-6435

WORKING WITH WAX:

Turn on the slotted vent. Always put on a face shield marked "WAX," and cover your arms, legs and feet. There are gloves and other wax tools hanging from the vent, on and underneath the table. There is an electric wax pot that is <u>always kept</u> at a 'general purpose' temperature, <u>about 180°F</u>. Other pots may be kept cooler or hotter on the gas burner (no more than 250°F) and used for face coats, melting wax off of tools, or other specialty work. <u>Use extra caution when using very hot wax</u>. Keep water out of hot wax pots. Use a striker to light the burner underneath a wax pot, and make sure to turn off the gas burner when you are finished with it. **Clean up your mess** as you work along, and return the tools in better shape than you found them. <u>Recycle wet or dirty wax</u> in the large "tipping" wax pot.

Begin by making a sheet of wax. Soak the plaster bat with water until it is <u>saturated</u>. Sponge away standing water. Pour a large ladle of wax over the bat until the wax is 3/16 inch thick. Allow to cool, and remove. The sheet may be manipulated by hand, with tools, cut-and-darted, etc. It will be easier to work if warmed by the sun, a hot-air gun, heat lamp, warm water, etc. To add one piece of wax to another, warm the wax and firmly press pieces together, or use a soldering iron or hot knife to melt pieces together. Avoid inhaling fumes. Warm wax is fragile, so allow welds to cool before moving. Any image thicker than 1 inch must be kept hollow, be sturdy and of consistent thickness.

MAKING A WAX CASTING:

PREPARING YOUR MOLDS: Always use the <u>appropriate</u> parting agent for casting wax in mold: **Water clay:** If clay is wet, no other parting agent is required.

Plaster:Soak until saturated (5-10 minutes), then remove any standing water. Use wax that is
less than 212°F, or it may boil the water from the plaster and it will stick to mold.Alginate:No parting agent required.

Polyurethane Rubber: No parting agent generally required, however, application of silicone spray after several wax castings may be necessary for continued easy release.

Silicon Rubber: No parting agent generally required for wax castings.

CASTING WAX: Medium-sized and larger molds may need to be partially filled, gently 'slushed' and thoroughly rotated while being emptied. Repeat this process until a consistent thickness is achieved—the ideal thickness for most projects is 3/16 inch (between 1/8-1/4 inch). Hot wax may also be brushed onto an open mold or onto a wax pattern in order to add thickness. Small molds may simply be filled with wax and left to cool for 15-30 minutes, depending on size, then de-molded. To get the best wax impression from a rubber mold: A) Warm rubber with hot air and apply a face coat of 'hotter' (225°F) wax, followed by a coat of regular 180°F wax. B) Allow to cool for 10-15 minutes, then back this up with a coat of 180°F wax. C) Repeat step 'B' until about 3/16 inch thick.