

## **Sculpting notes November 13**

### **Demonstration of creating a waste mold for a sculpture – Part 1.**

Waste mold AKA production mold made of plaster - three layers in total:  
inside layer is blue; next layer is white; layer of burlap and plaster on the outside  
One layer of thin blue plaster, two layers thick of white plaster one with burlap.  
The edge or separating wall is about one inch thick.

Inside of mold treated with a separator (shellac/wax) for dry gypsum

Use 3 layers of liquid soap for gypsum

Cement fondue has no separator – just a wet mold

On model, establish division for the two pieces. There will be registration points made up of matching sockets and knobs

For division, pick high point of the model and determine the two mold sections

Use stiff clay – not mushy, and make a coil. Flatten the coil with a rolling pin.

Create one wall section at a time about 5/8 inch thick (1/2 is too thin and 3/4 is too thick.

Cut edges sharp and straight, width 1 and 5/8 inch – the part that connects is the front edge – ease it to touch completely – no gaps – for curves – 90 degrees from the apex of the curve.

Fill in gaps, pushing from the front edge. Make sure it is connecting – the back side does not connect but it is firmly connected on the front side. Keep a consistent width all the way. Mend any cracks – need fluid wall on the outside. Keep the wall smooth. Don't push in. Can use connector pieces on the back – it is the outside line that is important. If it cracks, fill it. Keep roughly the same margin all around. You can cut the outside edge down. The wall at the bottom from side to side acts as a dam for the plaster.

#### **Tips:**

- Use a rake to smooth the surface of the wall
- Don't use too much water – the wall will come off.

Wall goes around the piece at the bottom to contain the plaster from outside to outside of the side walls. The burlap shell waste molds need to be kept thin.

Forming knobs and sockets – use a looney in five locations – top and both sides – rotate the coin to form the knob. These are the registration marks and the front side is done first. Smooth the edges of the knob. Check for gaps and rigidity of the wall.

Applying plaster: Put down newspaper and wet with sprayer. Important to keep area used so it is easy to clean up plaster afterwards. Cleanup is critical. Work on a table, not on a stand. Do not get plaster on the back of the model. Cover it with damp newspaper. Drape it on and tuck it in so it doesn't hang over the wall.

Put water (gauge how much is needed) in bowl and Add blue powder to water (room temperature to cool – not warm) Use straight plaster. Sift it into the water. Let it sink. Colour coat should not be oversaturated. The plaster lets you know when it is ready – it forms islands on top of the water to show it is saturated. Coats your fingers but runny. Don't mix it until you are ready to apply.

Applying plaster to the model – lift out the plaster (don't flick) and direct it onto the clay. Cover the entire surface, especially the important contours and areas of the model that are depressed – especially check the sockets. Blow out the air bubbles. All holes are eventually filled. This layer of plaster is called a splash coat, but apply carefully. Clean the bowl in the sludge bucket. This coat has to set before the next step.

For second coat: Fill bowl half full with cold water for the next stage plaster (no colour).

First clean up well after the first layer.

Don't mix the plaster right away – let it sink until it comes to the top of the water – when it has a crust, it is enough. You can let it slake for up to 5 minutes. When you mix it, take out any hard lumps. Don't stir – it gets thick too fast. You will need a spatula to put on this slightly thicker plaster especially in any holes. Fill areas that have indentations but don't press too hard or you will break through the blue coat. Build the plaster loosely at first along the wall, building to one inch from the front of the clay wall. Be sure to get the connection between the model and the wall well covered. No gaps. Fill in undercuts or you will lose details in the mold. The plaster should be thicker at the outside edge of the wall. Clean up the outside edge of the mold section using a serrated edge of a knife. Remember, it is important that plaster is thick at the edge.

Use a shallow container to mix more plaster to put around the wall where it connects with the model. Make the face thicker for protection especially any crevices – caution – keep out any air bubbles.

**Next week – the burlap and plaster coat and section two – the back.**