3D Modeling with Sculptris

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3D Modeling with Sculptris

Sculptris is an incredibly powerful and fun digital sculpting software. But without a brief introduction, it remains daunting and difficult to use. Here are the basics of what you need to know.

Getting Started
Sculptris gives you a sphere of clay and wants you to sculpt it in to whatever you want. Frequently, it is hard to conceptualize your model without a reference point. So before you even start sculpting, let’s import a background in to Sculptris.

Here, I chose a polar bear. I’m going to use it as a reference for how best to shape my ball of clay.

Symmetry and Axis
You will notice that your ball of clay has a line down the middle. This is the axis that divides the clay in half. You will also notice that symmetry is selected on the left hand side. This means that dragging out the left side of the ball of clay will do the same exact thing on the right side of the ball of clay. The two sides will mirror each other.
We now want to turn our ball of clay “sideways” so that the axis is facing directly perpendicular to us. Let’s take a moment to learn some basic navigation tools.

**Navigation Tools**

- **Orbit your ball of clay** - click and drag in a blank space / click and drag center mouse click
- **Move Clay** - hold down “alt” and drag in a blank space
- **Zoom In/Out** - scroll center mouse click
- **Change Brush Size** - hold down space and click and drag your mouse up or down
- **Change Brush Strength** - hold down space and click and drag your mouse left or right (for both of these, a circle will appear that shows you how you are changing your size and strength)
Basic Brushes
Here is the interface for the basic brushes of Sculptris. For your preliminary design, you will use the grab tool exclusively. It is the one highlighted on the right.

Once your model becomes more detailed, you can use the draw and crease tools.

**Grab** - drags out different parts of your clay  
**Draw** - adds raised detail  
**Crease** - cuts a line into your model  
**Smooth** - smoothes out rough edges and joins clay together  
**Inflate** - swells that section of the clay

Shaping Your Clay
Using the grab tool, with the axis of your ball of clay perpendicular to you and symmetry on, drag out your clay to mirror your background image.

Tip: when dragging out parts that you don’t want to be “split” (the head or tail of an animal), make sure your brush size is large enough to cover the entire surface area. If it is too small, you will get two heads.
Remember to be constantly orbiting and zooming in and out of your model. This is how you will be able to see the model from all angles and make sure it looks the way you want it to. The grab tool will work for most of your needs at this point in your design.

Adding Detail
Once you have the basic shape of your model established, you can now reference a few other brushes to add detail to your model. Just a refresher:

**Grab** - drags out different parts of your clay  
**Draw** - adds raised detail  
**Crease** - cuts a line in to your model  
**Smooth** - smoothes out rough edges and joins clay together  
**Inflate** - swells that section of the clay

Use the draw tool to add more concrete detail to your model
Viewing and Using Wireframe

Checking the “w” box on the left hand side allows you to see all the “wires” that make up your model. In more complicated areas of your design, there will be more “triangles” to accommodate the sophistication. This is called triangulation. Sculptris basically creates models by arranging different triangless and selecting the “w” button allows you to see the framework behind your design.

The more concentrated the triangles, the more complicated that portion of the model. Sometimes this can interfere with your design. To simplify your model, choose the “reduced selected” button and click where you would like the wireframe to be simplified.

Saving Your Model

You will want to save a Sculptris file of your design in case you want to go back and work on it more in the future. If you are done with your model, you can also export it to an .obj file. This is the type of file that the 3D printing software can read and use to convert to print.