

LIFECASTING: ROOTS
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Lifecasting is a method of capturing human form through molds and casts and is typically used for practical effects in movies. A mold is set around a body part, and the casting material is used to fill in the mold. For my honors project, I researched the methods, materials, and processes of lifecasting to create life-like body parts to use for sculptures and practical effects.

I made three sculptures that incorporated lifecasting. First, I researched the method through videos on YouTube. I watched film industry professionals go through the process of casting entire bodies and describe the different materials used. I then researched the two mold-making materials—silicone and alginate. I decided on alginate because its cheaper and sets faster. My first piece, Spores, is an interactive mask I filmed being used in various locations. I started off small by casting my fingers as an introductory way to learn the process. Measuring the amount of alginate for this smaller scale of casting was straightforward and easily captured fingers in different positions. The plaster of Paris used to cast the fingers set up in about half an hour. I then cut away the alginate and had ten different casts of fingers, which I attached to the mask. After completing the mask for Spores, I started casting hands for my second sculpture. I failed to do the right amount of alginate for the mold the first time. I researched more on the exact measurements needed to fill the bucket and cover my hand. After these hands were cast in plaster, they were attached to the larger sculpture, Amalgamation. For the third sculpture, Mycorrhiza, three different casting methods were incorporated: plaster of Paris, beeswax, and silicone. Lifecasting faces was the next step in the process of learning lifecasting. I started by taking a mold of my boyfriend's face. Once the alginate was set, I used wet plaster bandages to cover the mold in order to keep its shape, and his face was subsequently cast in plaster. I then took a mold of his hand. Under supervision, I took molds of sections of my face. The first mold was that of my lips and chin, which was then cast in plaster. The second facial mold was the side of my face. I mixed silicone-based pigments in with clear silicone to obtain a flesh tone. This was then pressed into the alginate mold and set aside to cure for 24 hours. For the third project, I again took a mold of my hand. Using a double boiler, I melted the beeswax into a liquid and poured it into the mold, and let that sit overnight.

Lifecasting was a long learning process that took a lot of trial and error. It was important for me to watch videos of professionals from the film industry demonstrating it in order to get the process down. Getting accurate measurements of materials for casting hands in a bucket was the most difficult part of using the alginate. Casting faces was an intimidating task but by strategically building up material around that area based on tips from videos, I was able to take very successful casts of faces. Experimenting with different casting materials in the final sculpture was the most interesting part of this process. Overall, this project allowed me to learn the vast opportunities for experimentation and implementation lifecasting can provide.