

Introduction to Forensic Facial Reconstruction

Syllabus

Welcome to the Class. In each lesson, you have some readings and some hands-on activities. You should take pictures of your sculpture that are in focus and under good light. Email them to the instructor for constructive comments. Such correspondence with the instructor is a central component of a successful learning experience. It's important not to race ahead with the lessons without tending to feedback about your work. Mistakes can be amplified if left unchecked.

I hope you enjoy the class. Please contact me with questions and suggestions along the way.



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Course objectives

1. A good understanding of facial musculoskeletal anatomy.
2. Learn to identify the sex, age, and race of an adult skull with reasonable confidence.
3. Complete a facial reconstruction using the Manchester Method.

Supplies

- A plastic skull with jaw. Expect to pay between \$20 and \$100 USD for the skull. It's fine if the skull has a spring in the jaw and if the cranium is cut like a lid. It should be a cast from a real human skull. If you have questions about a skull, email me some pictures of it before you buy it. Reconstructions of Hominids are perfectly acceptable and a Neanderthal reconstruction will be one of the three examples in the course.
- The text "Forensic Facial Reconstruction" by Caroline Wilkinson
- 4 pounds of oil- based clay. I use Chavant High Melt brown; other brands will work. A flesh-colored clay will be advantageous.
- A pair of 6" or 8" sculpting calipers.
- A ruler in cm.
- A couple wooden modeling tools that look useful to you.
- a wire loop sculpture tool like this:
http://www.sculpturehouse.com/images/211_med.jpg
- A stand for the skull. You can make this from wood and clay, or an iron pipe and flange.
- A small amount (5cc) sticky wax or beeswax
- Vinyl eraser refills (About 15cm of them)

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- Two plastic eyes, 24mm-26mm. They need not be expensive glass ones. Here's a source: <http://www.schoepferseyes.com/default/HumanStyle.html>
- Digital camera and ability to email pictures.

Course Content

1. Anatomy of your skull
 - a. Anatomy
 - b. Issues with casts
 - c. Fragmentary skulls
 - d. Photographing your skull
2. Gender, Age, and Race
 - a. Sexing the skull
 - b. How old? Issues and rules of thumb
 - c. Race. What is *race*, and what can be determined from a skull?
3. Preparations for work
 - a. Observations and notes
 - b. The Frankfurt Plane
 - c. Mounting the skull
4. Tissue Depth
 - a. Issues with datasets
 - b. Interpreting data
 - c. Preparing and placing the markers
5. Deep Anatomy of the face
 - a. Temporalis
 - b. Masseter
 - c. Setting the eyes
 - d. Projection of the Nose
6. The Mouth and lower face
 - a. Chin
 - b. Lips and cheeks
7. The Nose and mid-face
 - a. Nose and mid-face anatomy
 - b. Nose variation
 - c. Nose placement and form
8. The Eyes and upper face
 - a. Eye and forehead anatomy
 - b. Eye and forehead variations

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- c. Eye form, lid placement, and refinements
- d. The eyebrow

9. The Ears

- a. Ear anatomy
- b. Ear variation
- c. Ear placement and form

10. Fatty deposits and glands

- a. Paratoid glands
- b. Fatty deposits

11. Skin layer

- a. Methodical and sensible application
- b. Using the thickness markers as guides.

12. Modeling life-like form

- a. What is form?
- b. Using a modeling rake
- c. Avoiding hollow, smeary and dead form.

13. Wigs, hair, and presentation

- a. Hairline
- b. Hair growth direction
- c. To wig or model?

14. New Directions

- a. Computer aided
- b. Computer generated