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