

### 1110: WEEK 7 & 8:

**Lecture: DURER'S ALPHABET:** Understand geometric proportions described in written form to draft an accurate representation through multi-view orthographic and paraline drawings.

**OBJECTIVE:** Students will learn to identify and interpret written descriptions of geometric proportions in order to draft an accurate representation through multi-view orthographic and paraline drawings.

#### DESCRIPTION:

Pretend you were talking over the phone with someone who had never seen the alphabet. This person understands a few basic terms, like “square,” “circle,” and “line,” but has no idea how to make an “A”, or a “B”, or any of the others. Over the phone, do you think you could instruct him or her, using only those few simple terms, how to draw all the letters?

Think it's easy? Okay, try “B.” A straight line with two humps? A line from where to where? Where do the humps go? How big are the humps? And for that matter, what's a “hump”? Not so easy.

What if rather than a general “B” shape, you had to instruct your unlettered friend how to make a *perfect* Times New Roman “B”? Or Palatino, or Arial, or some other typeface? All but impossible! It is indeed fortunate that the need hardly ever arises to give verbal instructions for drafting precise letterforms.

Except, that need does arise, and frequently. This typed page was created using a computer. The computer is loaded up with “fonts.” What exactly is a font? It is actually the verbal instructions for drafting precise letterforms. Your computer has no idea what a “B” is. To display a “B,” it reads and follows the instructions in the “font.”

In 1535 C.E., German artist Albrecht Dürer invented computer fonts. Well, no, not really. Dürer didn't have a computer but still found the need to describe how to draft all the letters of the Roman alphabet, using only geometric terms such as “square,” “circle,” and “line.” These instructions were published in 1535 as *Of the Just Shaping of Letters*.

Dürer's alphabet of 23 letters (J, U, and W are omitted because they aren't used in Latin) is quite elegant, but that's not why the book was such a breakthrough. Many other artists published elegant alphabets before him. What made *Of the Just Shaping of Letters* special was Albrecht's eccentric idea that the instructions for making letters should be written *entirely in geometry*. The book was illustrated with specimens of the letters, but the point is, you could draw those letters yourself, precisely and perfectly, without seeing the pictures! Dürer invented the science of typography.

A PDF version of *Of the Just Shaping of Letters* can be found on-line from Sean Gleeson (<http://sean.gleeson.us/2006/03/08/durers-crazy-idea>).

#### Lab & Homework: EXERCISE 3a

#### PROCESS:

1. Based on Durer's written description, choose a letter of the alphabet and construct a precise and proportioned drawing on tracing paper.
2. Begin with interpreting Durer's written instruction and translating them into easy to read step by step instructions in your own words. Use MSWord to create the list.
3. Follow your own steps to create the letter. Show all construction lines, center points and proportions. Use a 3 ¾" square for you're the box dimension.

4. Imagine the letter was extruded to fit a 3¾" cube then draw all 6 sides of the object. Draw an elevation oblique view and a set of multi-view drawings of the letter and add shading.
5. Draw a set of multi-view orthographic drawings (top, bottom, front, back, sides) of the extruded letter **and** add shading. For the layout of the orthographic views follow the steps you performed for the clay model drawings.
6. On a different 11" by 17" sheet create two sectional drawings (a planar and an elevational). Indicate the sections in your plan, elevation and elevation oblique drawings.

**READING:** Durer, Albrecht. *Of the Just Shaping of Letters.*  
*Week 4. Paralline Drawings.pdf*

**SKILLS:** Drafting plan, elevations, and sections, plan oblique axon with shading. In Illustrator, reconstruct drawings. Line weights in one or the either.

**Assignment 05 Grading Sheet: Durer's Alphabet**

		Points Possible	Points earned
Analysis	Developed construction of letter based on geometry analysis	10	
Orthographic Drawings	Front Elevation	10	
	Rear Elevation	10	
	Right Elevation	10	
	Left Elevation	10	
	Plan	10	
	Section	10	
Axonometric		10	
Line weights		10	
Shading		10	
cleanliness		10	
titles / labels		10	
<b>Total</b>		120	

Grade: