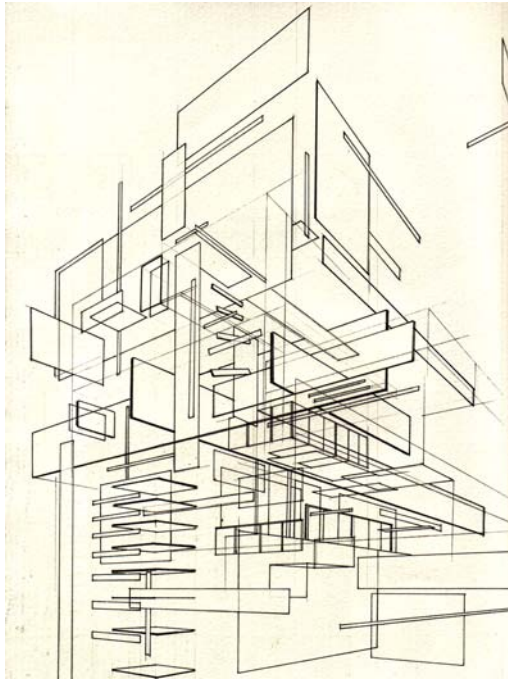


Course Number and Title: **ARCH 155 / Basic Architectural Drawing**

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Course Website: [www.thedraftedline.com/teaching](http://www.thedraftedline.com/teaching)



### ASSIGNMENT 8: DRAFTED TWO-POINT PERSPECTIVE – Drexel Main Building

**Assignment Objectives:** One-point perspective drawing allowed us to represent a central axis of vision which focused the viewer and generated a sense of enclosure particular to a space. Two-point perspective will allow us to view objects at an oblique angle, demonstrating their volumetric nature and other three-dimensional characteristics in context. This assignment will also continue to build upon the techniques of drafting including line weight and layers; composing a drawing; and using graphic representation to explain design intent.

**Draft (not freehand) a 2-pt perspective of the Main Building.**

1. Select an interior or exterior view of Drexel's Main Building entry sequence to use for the 2-pt perspective. Use your viewfinder to frame the picture plane.
2. Prior to beginning the constructed perspective:
  - a. Test out multiple compositions by shifting the picture plane in relation to the plan of the space.
  - b. Move the station point in relation to the plan to determine the best viewing angle.
3. On vellum begin to lay out the perspective with construction lines. **The perspective drawing should be a minimum of 3 times the size of your viewfinder frame size. (Do not trace from a photograph.)**
4. Position the horizon line at 5' or 6' above the ground line – locate your vanishing points on this line.
5. As more information is known, fill in the construction-line framework with final line weights:
  - a. DRAFTED Primary lines: object profiles, foreground elements
  - b. DRAFTED Secondary lines: changes in plane, secondary elements, middle-ground elements
  - c. DRAFTED Tertiary lines: fine details, closely-spaced lines, background elements

- Using the Architecture font you developed in class, provide a drawing label for your finished perspective.  
**Note: Do not shade, shadow or render the final drafted perspective. This 2-pt perspective is meant to develop the ability to do quality line drawings.**

Keep in mind the following principles of two-point perspective in the layout and development of your drawing:

- The Ground Line is the line on which the viewer is standing.
- The Horizon Line is at eye level and the Vanishing Points are located on the Horizon Line.
- All horizontal lines, parallel to the picture plane and perpendicular to it, converge to two vanishing points.
- Vertical lines always remain vertical – they never converge.
- The vanishing points are established by extending lines which form a 90 degree angle from the station point to the picture plane and dropping them down vertically to the horizon line.
- The 90 degree vanishing point lines should be parallel to the exterior walls of your volume.
- The entire form should fall within a 60-degree cone of vision within the 90 degree vanishing point lines to prevent distortion when constructing the perspective.
- When drawing complex, non-orthogonal forms such as curves and angles, place those objects inside an imaginary orthogonal box to assist in drawing them accurately.
- The location of the station point affects the amount of foreshortening in your image:
  - As the station point, or spectator, moves farther away from the object, the vanishing points move farther apart, horizontal lines flatten and perspective depth is compressed.
  - As the station point, or spectator, moves closer to the object, vanishing points move closer together and perspective depth is exaggerated.
- The location of your picture plane affects the size of your image, in effect allowing you to zoom in or out on the composition.
  - In this drawing, have the picture plane pass through a significant vertical edge of the subject.
  - This vertical edge will be used as a measuring line in the drawing.

Refer to Chapter 8 of Design Drawing, "Perspective Drawings"

This drawing should be drafted with your leadholder using your drafting board and tools. Complete this drawing on a sheet of drafting vellum (not trace paper) from your kit. Consider the orientation of the paper (vertical / portrait or horizontal / landscape) to fully capture the view. **Please note:** This 2-pt perspective will ultimately be composed with the re-drafted section and plan of the main building to create a composed drafted set of drawings.

**Assignment progress due (75% complete drawing): 12.01.09 / 12.03.09**

**Assignment due (100%, combined with Assignments 9 in a composed set): 12.08.09 / 12.10.09**



Drexel University's Main Building, circa 1900



Great Hall, Main Building, circa 1900s