

Sample Integrated Lesson Plan

Program: Drafting & Design

Unit: 12

Lesson Title: Sketching Perspectives

Terminal Objective: Upon completion of this unit, the student will be able to list perspective types, identify views, list uses for perspectives and correctly define terms associated with perspectives. This knowledge will be shown by correctly performing the assignments and by scoring at least 85% on the assignments.

Enabling Objectives:

1. The student will list and identify the uses of one-point, two point, and three point perspective types with 85% accuracy in a written paragraph.
2. The students will identify Above the horizon, At the horizon, and Below the horizon views with 85% accuracy when questioned about pictures and diagrams presented in class.
3. The student will use the Chapter 12 and the glossary of Drafting (French & Vierck, 13th Ed.) to define terms associated with perspectives on a worksheet diagram with 85% accuracy.

Related PA Academic Standards:

Reading, Writing, Speaking and Listening

- #1.1.E. Establish a reading vocabulary by identifying and correctly using new words
- #1.5.A. Write with a sharp, distinct focus.
- #1.5.C. Write with controlled and/or subtle organization.
- #1.6.A. Listen to others
- #1.6.D. Contribute to discussions.

Introduction: (Time: 2-3 minutes)

1. Relation to past--similar to obliques (one point), alphabet of lines
2. Motivation--Perspective drawings are used for presentation; present a more appealing view than orthographics.
3. Objectives--State objectives from above
4. Method to accomplish--Read information sheets, observe demonstration and complete assignments
5. Evaluation--Grade Sheet criteria will be used to grade the assignments; Unit test must score 85% or better
6. Question--What is the dictionary definition of perspectives?

Body/Main Content: (Time: 10-15 minutes)

- I. Terms & Definitions
 - A. Go over terms and the definitions
- II. Types of Perspectives (TM1)
 - A. One point
 - B. Two point
 - C. Three point
- III. Types of Perspective Views (TM2)
 - A. Above the horizon--worm's eye view
 - B. At the horizon--normal view
 - C. Below the horizon--bird's eye view
- IV. Perspective Equipment (TM3)
 - A. Grids--paper
 - B. Board--drafting machine
 - C. Machine--perspective board and T-square
- V. Uses of each type of perspective

Adapted from: <http://www.voced.iup.edu/t2t/> originally developed by Stephen Patchan, fcavts@lcs.com

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- A. One point--minimal detail, exteriors
 - B. Two point--interior and exterior detail, shows width and depth
 - C. Three point--interior and exterior detail, shows width, depth and height
- VI. Lines and Points (TM4)
- A. Picture Plane--PP
 - B. Horizon Line--HL
 - C. Ground Line--GL
 - D. Visual Ray Lines-VRL
 - E. Station Point--SP
 - F. Vanishing Point Left-VPL
 - G. Vanishing Point Right-VPR
 - H. Vertical Measuring Line--VML
 - I. Vanishing Lines--VL (receding lines)

Summary: (Time 2-5 minutes)

I. Review

- A. Perspective--point of view vanishing lines intersect at VP on horizon
- B. Types--one point, two point and three point
- C. Use--presentation drawings

II. Questions

- A. PP-Picture Plane
- B. HL-Horizon Line
- C. GL-Ground Line
- D. VL-Vanishing Lone
- E. VPL-Vanishing Point Left
- F. VPL-Vanishing Point Right
- G. Visual Ray Lines
- H. Vertical Measuring Line
- I. Station Point

Materials Needed:

References: MAVCC material

Technical Drawing, French & Vierck, 13th Ed. Chapter 12

Material: Drafting instruments, vellum and tape