

UNIT 4

LETTERING

Total Periods: 2

Unit Outcomes

At the end of this unit, students should be able to:

- ✓ distinguish the different lettering styles and guide lines for letter writing;
- ✓ understand the rules and principles of lettering;
- ✓ Execute (draw) the common Technical drawing lettering styles.

Unit Overview

The information that a drawing must present cannot be revealed by graphic shapes and lines alone. To make a drawing informative and complete, you must include lettering in the form of dimensions, notes, legends, and titles. Lettering can either enhance your drawing by making it simple to interpret and pleasant to look at, or it can ruin your drawing by making it difficult to read and unsightly in appearance. Therefore, it is essential that you master the techniques and skills required for neat, legible lettering.

Lesson 4.1 *Techniques of lettering and single stroke letters***Number of Period: 1****Learning competencies**

At the end of this lesson, students should be able to:

- mention the role of lettering in technical drawing.
- identify the different four types of lettering styles.
- draw vertical and inclined single-stroke letters and numbers properly.
- make Technical lettering, Single-strokes letters properly;

Planning ahead

This lesson is to introduce the student to basic letter drawing skills through using traditional tools. Instructors should choose activities to support whichever system of teaching is used. Therefore understand technique of lettering and differentiate the styles of lettering.

1. Make ready the various diagrams to show lettering styles and techniques to draw free hand letters to display for the students.
2. Program the way and time allotment for providing the activities and how many students will be participate in a group work.

Hints for Teaching

Explain and demonstrate the types of lettering styles techniques to be considered. The directions of strokes is very important to develop the skill of free hand lettering.

Discussion

1. Ask students the purpose of applying letters in technical drawing.
2. Demonstrate the styles of letter and techniques to be considered in free hand lettering by using traditional (board) tools.
3. Instructors should choose activities to support whichever system of teaching is used. Give as activity 4.1 to practice from student textbook.
4. The left-hander does have a problem of developing a system of strokes that seems personally most suitable. The strokes shown on the text are for right-handers. The lefthander should experiment with each letter to find out which strokes are best. The habits of left-handers vary so much that it is futile to suggest a standard system of strokes for all lefthanders.

Teaching Note

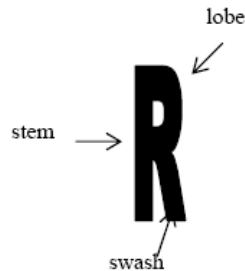
When using ANSI lettering standards: use gothic text style vertical or inclined, use all capital letters, use 3mm for most text heights and use 6mm for the height space between lines of text by taking the text height and dividing by 2.

There are 2 kinds of letters in the alphabet: uppercase or capital letters and lowercase or small letters. Where lowercase letters are grouped into 3:

1. Ascenders – like b, d, f, h, k, l, and t.
2. Normals – like a, c, e, m, n, o ... etc.
3. Descenders – like f, j, p, q and y.

Ascenders are lowercase letters whose parts reach the capline. Normals are lowercase letters whose parts are confined between the waistline and the baseline. Descenders are lowercase letters whose stem touches the dropline.

Study the drawing below, particularly the parts of each letter. The stem is the straight part of a letter, the lobe is the curved part of a letter and the swash is the inclined or diagonal part of a letter.



Lesson 4.2 *Guide line, uniformity, stability, and composition of lettering*

Number of Period: 1

Learning Competencies

At the end of the lesson, students will be able to:

- prepare guide lines properly for capital letters, lowercase letters, numerals and fractions;
- draw letters and numerals with proportional height and width;
- perform lettering exercises observing proper spacing.
- practice good working habits of Leroy lettering and lettering templates/guidelines.
- outline the uses of the Leroy lettering and lettering templates.
- develop all the techniques required to draw legible letters with proper proportion, spacing and composition.

Planning ahead

In this lesson guide lines, uniformity, stability and composition of lettering will be discussed. Therefore, you should be able to do the following:

- Prepare diagram to show advantage of guide lines in free hand lettering as a teaching aid.
- Collect architectural drawing, machine drawing and map drawing for display and students will learn the application of lettering.
- Program to practice to lay out letters in title block and fill out with letters..

Hints for Teaching

It is a first time for the students when learning technical lettering please make sure them to develop a skill of freehand lettering rather than using lettering devices. So, to make your teaching interesting by using teaching aids like blueprint.

Discussion

1. Ask students what is advantage of guide line and what are the points to be consider for keeping quality of free hand lettres.
2. Discuss and demonstrate about guidelines, stability, uniformity and composition of letters..
3. Allow students to do activity 4.2 and 4.3 from student textbook.

Teaching Note

Leroy Lettering Set are used in drafting and other roles where standard uniform characters are required, such as for title blocks and annotations, special notes on engineering drawings, or on photographs. The set typically consists of a set of Leroy templates, a scribe, and set of pens (see photo).

Lettering templates are an alternative to the Leroy Lettering approach, offering essentially the same kind of mechanical lettering but using a different guide (see picture from the text). The templates are offered in U.S. and metric sizes, usually corresponding to the technical pen line size they are designed to be used with, for example an 0.25 works with a .25 technical fountain pen. They work well with a straight edge, eliminating some of the steps required with the Leroy equipment.

Lesson Guide

Period	Lesson title	Starter activity	Main activity	Concluding activity
1	4.1 Techniques of lettering and single stroke letters	Ask brain storming question to students the purpose of letter in drawing	- Discuss and demonstrate letter styles and strokes. - Give worksheets for students to practice lettering. - Allow to do activity 4.1	- Review terms as used and have students make a discussion. - Give home work to do exercises from the textbook
1	4.2 Guide lines, stability, uniformity & composition of lettering	Review exercise to draw single stroke letters and ask questions about the topics	- Discuss and demonstrate about guide lines, stability, uniformity & composition of lettering. - Help students to do activity 4.2 and 4.3.	- Students give feedback about today's lessons. (Teacher acts as facilitator.) - Give exercises for students as a homework.

Evaluation**Instruct your students to:**

- differentiate between Guide lines for capital and lower case letters.
- write upper and lower case letters correctly.
- write numbers 0-9 and fractions.
- Completing the exercises on time

Method

- Presentation,
- Demonstration,
- Group discussion.

Assessments

The teacher should follow and assess each student's work continuously over the whole activity of the lesson and compare it with the following description to determine whether the student has achieved the minimum required level.

Students working below the minimum requirement level will require extra help if they are to catch up with the rest of the class. They should be given extra attention in class and additional activities at the end of the lesson or during breaks.

Students working above the minimum requirement level should be praised and their achievements recognized. They should be encouraged to continue working hard and not become complacent.

Test

Match Column A with Column B. Write on your paper only the letters of the correct answers.

Column A

- _____ 1. Lobe
- _____ 2. Roman
- _____ 3. Cap-line
- _____ 4. Swash
- _____ 5. Gothic
- _____ 6. Stem
- _____ 7. Text
- _____ 8. Guidelines
- _____ 9. Ascenders

Column B

- a. simplest letter style
- b. lines for uppercase
- c. capital letters
- d. straight part of a letter
- e. black letter
- f. parent of all letter style
- g. small letters
- h. inclined part of a letter
- i. lowercase letter
- k. thin lines for lettering
- l. curved part of a letter



Answer key for the test

1. l 2. f 3. b 4. h 5. a 6. d 7. e 8. k 9. j 10. c

Lettering rubric

	Exception	Above Average	Average	Below Average	Unacceptable	Comments
Criteria	20-16	15-11	10-6	5-1	9	
Scale	$\frac{1}{4}^{\circ}$ guidelines with $\frac{1}{8}^{\circ}$ spaces	1-2 measurement errors	3-4 measurement errors	5-6 measurement errors	More than 6 measurement errors	
Spelling Accuracy	All words are spelled properly	1-2 spelling errors	3-4 spelling errors	5-6 spelling errors	More than 6 spelling errors	
Lettering Quality	Letters are dark, crisp, clear and readable	Lettering missing 1 elements	Average missing 2 elements	Below average only 1 element present	Letters are fuzzy light and unreadable	
Letter Width and Spacing Quality	Letters are equal width and spacing is appropriate to distinguish between words	Most letters are equal width and spacing is appropriate to distinguish between words	Some letters are equal width and spacing is somewhat appropriate to distinguish	Some letters are equal width or spacing is somewhat appropriate to distinguish	Letter width and spacing is unacceptable	
Guideline Quality	Lines are neat, light and unreadable from a 3° distance	Lines are neat but medium weight	Lines are neat but dark	Lines are neat but very dark	Unacceptable guidelines	

Answer for the question on the textbook exercise**1. What is the purpose of lettering in a drawing?**

To make a drawing informative and complete, by inserting letters in the form of dimensions, notes, legends, and titles. Also lettering can enhance your drawing by making it simple to interpret and pleasant to look at.

2. What are the different styles of letters to be used in drawing?

- Gothic Letters
- Italic Letters
- Text Letters
- Roman Letters

3. Identify ascending and descending lowercase letters.

Strokes of the letters extending above the waist line are known as ascenders (such as b, d, f, h, i, k, l, t,), and those extending below the base line as descenders (such as g, p, q, y).

4. Mention few techniques of letter you know.

- proportions and forms of the letters and the order of the strokes
- draw vertical strokes downward or toward you with a finger movement, and draw horizontal strokes from left to right with a wrist movement without turning the paper
- the spacing of letters and words

5. What does the term Stability refers to in lettering?

When the upper portions of certain letters and numerals are reduced in size where possible, thereby producing the effect of stability and a more pleasing appearance is called stability of letter.

6. What are the four guidelines of lower case letters?

- i. Cap line
- ii. Waist line
- iii. Base line and
- iv. Drop line.

7. How do we maintain height and inclination uniformity of letters in a word?

By drawing guidelines with construction line

8. What are instruments used for drawing guidelines?

- Braddock-Rowe lettering triangle
- Ames Lettering Instrument

9. What are the lettering devices?

- LeRoy Lettering and
- Lettering Template/Guide