Chariho Regional School District - Science Curriculum September, 2016

LANDSCAPE DESIGN

Unit 1: Using Drawing Instruments

OVERVIEW

Summary

Students will identify and properly use the traditional tools of the landscape designer and drawing techniques.

Content to Be Learned

- Use of the T-square, architect scale, straightedge, triangle and templates.
- Proper techniques for precision drawing and erasure.

Practices

• Constructing scaled drawings with precision.

Essential Questions

• What combination of drawing materials should be used to create professional landscape plan drawings?

AFNR Standards

- PS.04. Apply principles of design in plant systems to enhance an environment (e.g. floral, forest landscape, and farm).
- PS.04.02. Create designs using plants.
- PS.04.02.02.a. Identify and categorize tools used for design (e.g., computer landscape software, drawing tools, florist tools, etc.).
- PS.04.02.02.b. Demonstrate the use of tools used for creating designs.
- PS.04.02.02.c. Choose and properly use appropriate tools to create a desired design.

Unit 2: Lettering and Landscape Symbols

OVERVIEW

Summary

Students will learn to create graphic presentations of landscape designs. The basis of these presentations will

consist of a study and practice of different methods of lettering designs, then symbols of major landscape features will be added. Once the individual pieces have been mastered, students will arrange the components of a graphic presentation to illustrate a landscape design.

Content to Be Learned

- Use of drawing materials to create industry standard lettering.
- Graphic representations of major landscape symbols.
- Industry standard landscape design presentations.

Practices

- Develop hand lettering skills.
- Creation and appropriate use of major landscape symbols.
- Constructing graphic representations of landscape designs.

Essential Questions

• What is included in a landscape drawing presentation?

AFNR Standards

- PS.04. Apply principles of design in plant systems to enhance an environment (e.g. floral, forest landscape, and farm).
- PS.04.02. Create designs using plants.
- PS.04.02.02.a. Identify and categorize tools used for design (e.g., computer landscape software, drawing tools, florist tools, etc.).
- PS.04.02.02.b. Demonstrate the use of tools used for creating designs.
- PS.04.02.02.c. Choose and properly use appropriate tools to create a desired design.

Unit 3: The Landscape Process

OVERVIEW

Summary

Students will learn to identify the components of the landscaping process starting with a client interview, design, installation and maintenance.

Content to Be Learned

• The component steps of each phase of the landscape process.

Practices

- Conduct a client interview.
- Create a preliminary design.
- Identify future needs in the process (installation and maintenance).

Essential Questions

• What is the process that should be followed to effectively create a new landscape?

AFNR Standards

- PS.04. Apply principles of design in plant systems to enhance an environment (e.g. floral, forest landscape, and farm).
- PS.04.01. Evaluating, identifying and preparing plants to enhance an environment. PS.04.01.01.a. Identify and categorize plants by their purpose (e.g., floral plants, landscape plants, house plants, etc.).
- PS.04.01.01.a. Identify and categorize plants by their purpose (e.g., floral plants, landscape plants, house plants, etc.).
- PS.04.01.01.b. Demonstrate proper use of plants in their environment (e.g., focal and filler plants in floriculture, heat tolerant and shade plants in a landscape design, etc.).

Unit 4: The Outdoor Room Concept

OVERVIEW

Summary

Students will identify the use of indoor and outdoor areas of residential and commercial designs in order to create basic designs that utilize the 'Outdoor Room Concept.'

Content to Be Learned

- The uses of indoor and outdoor components of residential spaces.
- The uses of indoor and outdoor components of commercial spaces.
- Plantscape and hardscape utilized in each of these outdoor spaces.

Practices

- Identify the correlation between landscape features and use of the space.
- Create a design that utilizes proper use of the Outdoor Room Concept.

Essential Question

• How can the function of indoor residential spaces influence the design of outdoor spaces?

AFNR Standards

- PS.04. Apply principles of design in plant systems to enhance an environment (e.g. floral, forest landscape, and farm).
- PS.04.01. Evaluating, identifying and preparing plants to enhance an environment. PS.04.01.01.a. Identify and categorize plants by their purpose (e.g., floral plants, landscape plants, house plants, etc.).
- PS.04.01.01.a. Identify and categorize plants by their purpose (e.g., floral plants, landscape plants, house plants, etc.).

- PS.04.01.01.b. Demonstrate proper use of plants in their environment (e.g., focal and filler plants in floriculture, heat tolerant and shade plants in a landscape design, etc.).
- PS.04.01.02.a. Summarize the applications of design in agriculture and ornamental plant systems.
- PS.04.01.02.b. Create a design utilizing plants in their proper environments.

Unit 5: Plant Selection and Hardscape

OVERVIEW

Summary

Students will learn the factors that are relevant to proper plant and hardscape selection in a landscape design. Selection of proper plants for a space as well as meaningful use of hardscape will be explored. Students will learn how the placements of elements in the landscape can be used to solve problems in the landscape and make recommendations for various sites in the landscape.

Content to Be Learned

- Appropriate plant selection for a site.
- Appropriate hardscape selection for a site.

Practices

- Evaluate a landscape site and make recommendations for the proper placement of plantscape and hardscape.
- Construct a design that reflects good plant and hardscape selection.

Essential Ouestion

• How can the selection of plantscape and hardscape influence the use of an outdoor space?

AFNR Science Standards

- PS.04. Apply principles of design in plant systems to enhance an environment (e.g. floral, forest landscape, and farm).
- PS.04.01. Evaluating, identifying and preparing plants to enhance an environment. PS.04.01.01.a. Identify and categorize plants by their purpose (e.g., floral plants, landscape plants, house plants, etc.).
- PS.04.01.01.a. Identify and categorize plants by their purpose (e.g., floral plants, landscape plants, house plants, etc.).
- PS.04.01.01.b. Demonstrate proper use of plants in their environment (e.g., focal and filler plants in floriculture, heat tolerant and shade plants in a landscape design, etc.).
- PS.04.01.02.a. Summarize the applications of design in agriculture and ornamental plant systems.
- PS.04.01.02.b. Create a design utilizing plants in their proper environments.

Unit 6: Principles and Elements of Design

OVERVIEW

Summary

Students will learn about the principles and elements of design as they apply to the landscape. The principles of design serves as guidelines, and include the concepts of unity and harmony, rhythm, balance, accent/ focal area and scale/ proportion. Elements of design are considered the tools of design, and include form, space, texture, line and color.

Content to Be Learned

• The principles and elements of design; Unity/ Harmony, Rhythm, Balance, Accent/ Focal Area, Scale/ Proportion, Form, Space, Texture, Line, and Color.

Practices

- Summarize the applications of design in landscapes.
- Evaluate a design and provide feedback and suggestions for improvement.
- Create a design that shows good use of the principles of design.

Essential Questions

• How can the principles and elements of design be applied to residential and commercial landscapes?

AFNR Standards

- PS.04. Apply principles of design in plant systems to enhance an environment (e.g. floral, forest landscape, and farm).
- PS.04.02. Create designs using plants.
- PS.04.02.01.a. Research and summarize the principles and elements of design for use in plant systems.
- PS.04.02.01.b. Apply principles and elements of design that form the basis of artistic impression.
- PS.04.02.01.c. Analyze designs to identify use of design principles and elements. PS.04.02.03.a. Explain the concept of landscape ecology and summarize factors that shape the ecology of a landscape (e.g., composition, structure, function, etc.).

Unit 7: Plant Identification

OVERVIEW

Summary

Students will identify a variety of plants in the landscape through multiple resources. The outdoor learning lab will be the primary source of viewing landscape plants as they interact with the environment.

Content to Be Learned

- Identification of common landscape plants.
- Basic care of common landscape plants.
- The use of landscape plants for design in every season.

Practices

- Identify and categorize common industry plants by their purpose.
- Demonstrate proper use of plants in their environment.

Essential Questions

• How are some of the commonly used landscape plants best used in the landscape?

AFNR Standards

- PS.04. Apply principles of design in plant systems to enhance an environment (e.g. floral, forest landscape, and farm).
- PS.04.01. Evaluating, identifying and preparing plants to enhance an environment.
- PS.04.01.01.a. Identify and categorize plants by their purpose (e.g., floral plants, landscape plants, house plants, etc.).
- PS.04.01.01.b. Demonstrate proper use of plants in their environment (e.g., focal and filler plants in floriculture, heat tolerant and shade plants in a landscape design, etc.).