Nebraska CTE

Landscape Design

Investigate the importance of plant identification in choosing and using landscape plants. AFNR.HS.21.1	**a** Identify the importance of scientific nomenclature when identifying and selecting landscape plants, using cultivars or varieties in a scientific name and the corresponding common name. AFNR.HS.21.1.A
	b Identify plants by their purpose (e.g., floral plants, landscape plants, house plants). AFNR.HS.21.1.B
	c Distinguish between various types of turfgrasses and compare how they are used in different landscape situations. AFNR.HS.21.1.C.
	d Develop knowledge of landscape characteristics and environmental requirements for landscape plants. AFNR.HS.21.1.D
	e Describe the differences between annual, perennial, woody and herbaceous plants and how they are used in landscape design. AFNR.HS.21.1.E
Summarize methods of propagation and production for landscape needs. AFNR.HS.21.2	**a** Explain the methods of asexual propagation and their importance in producing landscape plants. AFNR.HS.21.2.A
	b Identify which species and of landscape plant varieties are best propagated asexually. AFNR.HS.21.2.B.
	c Describe methods of producing turfgrass, including seed, asexual propagation, plugs, and sod. AFNR.HS.21.2.C
	d Develop a schedule for propagation and production to meet seasonal landscape needs. AFNR.HS.21.2.D
	e Describe how plants that do not meet ANSI Standards for Nursery Stock influence immediate and long-term landscape management processes. AFNR.HS.21.2.E
Implement a landscape management plan that addresses the influence of environmental factors, nutrients, and soil on plant growth. AFNR.HS.21.3	**a** Summarize the environmental factors involved in managing landscapes including soils, water, pests and human actions. AFNR.HS.21.3.A
	b Explain the techniques of soil sampling and relate this process to testing the soil and interpreting the results to recommend fertilizer applications and pH treatment. AFNR.HS.21.3.B
	)evelop a water management plan for a landscape that includes turfgrass, woody, nd herbaceous plants. AFNR.HS.21.3.C

Skip to main content

	d Analyze the deficiency symptoms of the major plant nutrients and investigate the economic impacts of those deficiencies. AFNR.HS.21.3.D
Develop a landscape plan to include hardscapes and plants. AFNR.HS.21.4	a Assess client needs to communicate effectively with clients throughout the design process. AFNR.HS.21.4.A
	b Differentiate between design styles by interpreting the use of design principles (e.g., order, unity and rhythm) in a landscape plan. AFNR.HS.21.4.B
	c Evaluate the use of design elements (e.g., scale, proportion, balance) in a landscape plan. AFNR.HS.21.4.C
	d Analyze environmental conditions and human factors that will influence design decisions. AFNR.HS.21.4.D
	e Determine if an irrigation system is needed and choose the appropriate type and components for optimal coverage. AFNR.HS.21.4.E
	f Demonstrate how various plant types (e.g., conifers, deciduous shrubs) are combined as part of the landscape system for function, management, and aesthetics. AFNR.HS.21.4.F
	g Determine plant materials and hardscape elements appropriate for the site and client, applying principles of sustainability. AFNR.HS.21.4.G
Describe the seasonal differences for managing a landscape for a year. AFNR.HS.21.5	a Describe, in the correct order, the steps utilized in Integrated Pest Management (IPM). AFNR.HS.21.5.A
	b Identify common plant pests (insects and diseases). AFNR.HS.21.5.B
	c Describe the damage inflicted to the plants. AFNR.HS.21.5.C
	d Explain the types of pest control methods and classification of herbicides and discuss the appropriate uses and safety measures for each type. AFNR.HS.21.5.D
	e Compare situations where different soil amendments, fertilizers, and pesticides are used to determine best management practices (BMP). AFNR.HS.21.4.E
	f Analyze how an irrigation plan provides optimal coverage for all plant types, including turfgrass. AFNR.HS.21.4.F
	g Interpret the reasons, methods, and timing for pruning woody and herbaceous plants for optimal plant growth in landscapes. AFNR.HS.21.4.G
Recommend materials and methods ap lar needs. AFNR.HS.21.6	a Demonstrate knowledge of drawing tools and/or software to calculate area and volume with necessary conversions to figure accurate quantities of naterials. AFNR.HS.21.6.A

Skip to main content

b **Use common calculations to compare prices for landscape plants and hardscape materials and their installation to recommend the most cost-effective approach.** AFNR.HS.21.6.B

c **Investigate equipment types and availability to recommend the appropriate equipment for installation and management.** AFNR.HS.21.6.C

d **Describe the process needed to construct and manage a landscape and create a cost analysis for the project.** AFNR.HS.21.6.D