Course Name	Landscape Construction and Maintenance	Course Details	Level 4 advanced course in the Plant Science pathway. This course is part of the Horticulture / Green Industry strand.
		Course = 0.50 Carnegie Unit Credit	
Course Description	The Landscape Construction and Maintenance provides instruction that incorporates plant science, soil and media mixtures, plant identification and optimal environments, and landscape design, installation, and maintenance of new and existing landscapes: Participation in FFA activities and Supervised Agricultural Experience(SAE) projects is an integral course component for leadership development, career exploration, and reinforcement of academic experiences.		
Note:	This is a suggested scope and sequence for the course content. The content will work with any textbook or instructional resource. If locally adapted, make sure all essential knowledge and skills are covered.		
SCED Identification #		Schedule calculation based on 60 % of instructional time in semester. Scope and sequence allows for additional time for guest speakers, student presentations, field trips, remediation, or other content topics.	

All courses taught in an approved CTE program must include Essential Skills embedded into the course content. The Essential Skills Framework for this course can be found at **https://www.cde.state.co.us/standardsandinstruction/essentialskills**

Instructional Unit Topic	Suggested % of Instructional Time	CTE or Academic Standard Alignment	Competency / Performance Indicator	Outcome / Measurement	CTSO Integration
Careers	2%	**CS.05.** Describe career opportunities and means to achieve those opportunities in each of the Agriculture, Food & Natural Resources career pathways.	**CS.05.02.** Examine and choose career opportunities that are matched to personal skills, talents, and career goals in an AFNR pathway of interest.	**CS.05.02.01.a.** Examine and categorize careers in Landscape Construction and Maintenance	
Design/Install	9%	**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.c.** Install plants according to a design plan that uses the proper plants based on the situation and environment. **PS.04.01.02.c.** Evaluate a design and provide feedback and suggestions for improvement (e.g., a floral arrangement, a landscape or a landscape plan, etc.).	

Tree/Shrub Selection	9%	**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.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.c.** Evaluate a design and provide feedback and suggestions for improvement (e.g., a floral arrangement, a landscape or a landscape plan, etc.).	
			PS.04.02. Create designs using plants.	**PS.04.02.03.b**. Research and provide examples of ecological factors incorporated into landscape designs.	
Plant Selection and Maintenance	9%	**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.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.c.** Evaluate a design and provide feedback and suggestions for improvement (e.g., a floral arrangement, a landscape or a landscape plan, etc.).	
			PS.04.02. Create designs using plants.	**PS.04.02.03.b.** Research and provide examples of ecological factors incorporated into landscape designs.	
Turfgrass Selection	3%	**PS.04.** Apply principles of design in plant systems to enhance an environment (e.g.	**PS.04.01.** Evaluating, identifying and preparing plants to enhance an environment.	**PS.04.01.01.b.** Demonstrate proper use of plants in their environment (e.g., focal and filler plants in floriculture, heat	

		floral, forest landscape, and farm).		tolerant and shade plants in a landscape design, etc.).

PS.04.01.02.c. Evaluate a design and provide feedback and suggestions for improvement (e.g., a floral arrangement, a landscape or a landscape plan, etc.). |
			PS.04.02. Performance Indicator: Create designs using plants.	**PS.04.02.03.b**. Research and provide examples of ecological factors incorporated into landscape designs.
Integrated Pest Management	2%	**PS.03.** Propagate, culture and harvest plants and plant products based on current industry standards.	**PS.03.03.** Develop and implement a plan for integrated pest management for plant production.	**PS.03.03.04.c.** Evaluate environmental and consumer concerns regarding pest management strategies.
Water Management/ Landscape Irrigation	9%			
Landscape Design	2%	**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.04.02.02.a. Identify and categorize tools used for design (e.g., computer landscape software, drawing tools, florist tools, etc.).

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.). |

Business	2%	**ABS.04.** Develop a business plan for an AFNR business.	**ABS.04.01.** Analyze characteristics and planning requirements associated with developing business plans for different types of AFNR businesses.	**ABS.04.01.03.a.** Research and describe the components to include in a business plan for an AFNR business.	
		ABS.05. Use sales and marketing principles to accomplish AFNR business objectives.	**ABS.05.03.** Assess marketing principles and develop marketing plans to accomplish AFNR business objectives.	**ABS.05.03.03.a.** Research and summarize the purpose, components and process to develop marketing plans for AFNR businesses.	
Tools/ Compact Equipment – Maintenance and Operation	9%	**PST.01.** Apply physical science principles and engineering applications to solve problems and improve performance in AFNR power, structural and technical systems.	**PST.01.01.** Apply physical science and engineering principles to assess and select energy sources for AFNR power, structural and technical systems.	**PST.01.02.01.a.** Compare and contrast applications of simple machines in AFNR related mechanical systems. **PST.01.02.02.c.** Devise and document processes to safely implement and evaluate the safe use of AFNR related tools, machinery and equipment. **PST.01.02.03.b.** Select, maintain and demonstrate the proper use of tools, machines and equipment used in different AFNR related mechanical systems.	
			PST.02. Operate and maintain AFNR mechanical equipment and power systems.	**PST.02.01.01.a.** Maintain the cleanliness and appearance of equipment, machinery and power units used in AFNR power, structural and technical systems to assure proper functionality. **PST.02.01.02.b.** Service filtration systems and maintain	

				fluid levels on equipment, machinery and power units in accordance with operator's manuals.	
Hardscape	4%	**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 utilizing hardscape materials to enhance an environment. PS.04.02. Performance Indicator: Create designs using plants.	**PS.04.01.01.b.** Demonstrate proper use of hardscape in their environment (e.g., walls, paths, rock, mulch, etc.). **PS.04.02.03.c.** Utilize green technologies and sustainable practices that prevent or limit negative environmental impacts.	