New Mexico Agriculture, Food & Natural Resources Course Framework

Landscape (0144)

Suggested Course Length: 180 Days

AFNR Pathway: Plant Systems (PS), Agribusiness Systems (ABS), Power, Structural & Technical Systems (PST)

Prerequisite: Agricultural Science (0132) Recommended

Instructional Design Philosophy

Landscape is an advanced horticulture course focused on landscape design, installation, maintenance, irrigation systems, water conservation, turf management, landscape construction, and horticultural entrepreneurship. Students develop technical skills while planning, designing, installing, and maintaining landscape systems using industry standards and practices.

The SAE serves as the backbone of instruction. Students should develop a landscape design, lawn care, nursery, irrigation, grounds maintenance, landscape construction, or horticultural entrepreneurship SAE. Every unit contributes to the development of a professional landscape portfolio and business plan.

Course-at-a-Glance

Quarter	Units	Days
Q1	Units 1-3	45
Q2	Units 4-6	45
Q3	Units 7-9	45
Q4	Units 10-12	45

Unit 1: Introduction to Landscape Design

Length: 15 Days

Course Competency	AFNR Performance Indicator	Sample Measurement	Teacher Resources	SAE/FFA Connection
Residential Landscape Analysis	PS.05 Landscape Systems	Site Analysis Report	Landscape Design Texts	Landscape SAE
Landscape Industry Overview	PS.05 Landscape Career Applications	Industry Report	NALP Resources	Career Exploration SAE
Design Process Fundamentals	PS.05 Design Planning Principles	Design Sketches	MyCAERT	Entrepreneurship SAE

Unit Assessment

- Residential Landscape Analysis
- Landscape Career Portfolio

Unit 2: Principles of Landscape Design

Length: 15 Days

Course Competency	AFNR Performance Indicator	Sample Measurement	Teacher Resources	SAE/FFA Connection
Applying Principles of Art	PS.05 Landscape Design Principles	Landscape Design Portfolio	Design Resources	Landscape Design SAE
Beginning the Design Process	PS.05 Design Development	Design Layout Activity	CAD Resources	Design Business SAE
Drawing Plans and Symbols	PST.01 Technical Drawing Applications	Landscape Drafting Project	Drafting Tools	Landscape Planning SAE

Unit Assessment

- Landscape Design Portfolio
- Drafting Practicum

Unit 3: Plant Selection for Landscapes

Length: 15 Days

Course Competency	AFNR Performance Indicator	Sample Measurement	Teacher Resources	SAE/FFA Connection
Annuals and Perennials	PS.02 Plant Identification and Selection	Plant Collection	Plant ID Resources	Nursery SAE
Trees, Shrubs and Ground Covers	PS.02 Plant Characteristics	Plant Recommendation Plan	Extension Publications	Landscape SAE
Choosing Landscape Plants	PS.02 Plant Adaptation	Plant Selection Project	Industry Catalogs	Entrepreneurship SAE

Unit Assessment

- Plant Identification Practicum
- Plant Selection Project

Unit 4: Landscape Construction Planning

Length: 15 Days

Course Competency	AFNR Performance Indicator	Sample Measurement	Teacher Resources	SAE/FFA Connection
Putting Plans on Paper	PST.01 Technical Design Systems	Completed Landscape Plan	Landscape Design Software	Landscape Business SAE
Pricing Landscape Plans	ABS.01 Business Planning Principles	Cost Estimate	Industry Pricing Guides	Entrepreneurship SAE
Landscape Proposals	ABS.01 Customer Relations & Sales	Landscape Proposal	Business Templates	Sales SAE

Unit Assessment

- Complete Residential Landscape Plan

Unit 5: Site Preparation and Installation

Length: 15 Days

Course Competency	AFNR Performance Indicator	Sample Measurement	Teacher Resources	SAE/FFA Connection
Preparing Landscape Sites	PS.01 Plant Production Systems	Site Preparation Checklist	Landscape Installation Guides	Landscape SAE
Soil Preparation	PS.01 Plant Growth Factors	Soil Analysis	Soil Resources	Production SAE
Installing Landscape Materials	PS.05 Installation Practices	Installation Project	Industry Standards	Placement SAE

Unit Assessment

- Landscape Installation Project

Unit 6: Irrigation and Water Conservation

Length: 15 Days

Course Competency	AFNR Performance Indicator	Sample Measurement	Teacher Resources	SAE/FFA Connection
Installing Irrigation Systems	PS.04 Water Management Systems	Irrigation Plan	Irrigation Association Resources	Irrigation SAE
Maintaining Irrigation Systems	PST.01 Equipment Maintenance	System Inspection	Manufacturer Resources	Landscape Maintenance SAE
Water Conservation and Xeriscaping	NRS.02 Conservation Practices	Xeriscape Design Project	WaterWise Resources	Environmental SAE

Unit Assessment

- Irrigation System Design
- Xeriscape Project

Unit 7: Turfgrass Management

Length: 15 Days

Course Competency	AFNR Performance Indicator	Sample Measurement	Teacher Resources	SAE/FFA Connection
Selecting Turfgrass	PS.01 Plant Production Systems	Turf Selection Report	Turfgrass Science Resources	Turf SAE
Establishing Turfgrass	PS.01 Crop Establishment	Turf Installation Activity	Extension Guides	Landscaping SAE
Maintaining Turf Areas	PS.03 Plant Health Management	Maintenance Schedule	Industry Resources	Lawn Care Business SAE

Unit Assessment

- Turfgrass Management Portfolio

Unit 8: Landscape Structures and Outdoor Living Spaces

Length: 15 Days

Course Competency	AFNR Performance Indicator	Sample Measurement	Teacher Resources	SAE/FFA Connection
Patios, Walks and Decks	PST.01 Construction Systems	Construction Design Project	Construction Resources	Landscape Construction SAE
Fences and Walls	PST.01 Structural Applications	Structure Layout Plan	Industry Guides	Placement SAE
Landscape Lighting	PST.05 Electrical Applications	Lighting Design Activity	Landscape Lighting Resources	Design SAE

Unit Assessment

- Outdoor Living Space Design Project

Unit 9: Landscape Maintenance

Length: 15 Days

Course Competency	AFNR Performance Indicator	Sample Measurement	Teacher Resources	SAE/FFA Connection
Watering and Fertilizing Plants	PS.01 Nutrient and Water Management	Maintenance Plan	Plant Science Resources	Landscape Maintenance SAE
Pruning Landscape Plants	PS.03 Plant Health Practices	Pruning Demonstration	Arborist Resources	Tree Care SAE
Maintenance Pricing	ABS.01 Pricing and Business Analysis	Service Pricing Sheet	Industry Estimates	Entrepreneurship SAE

Unit Assessment

- Landscape Maintenance Portfolio

Unit 10: Specialty Crop and Garden Systems

Length: 15 Days

Course Competency	AFNR Performance Indicator	Sample Measurement	Teacher Resources	SAE/FFA Connection
Vegetable Garden Planning	PS.01 Crop Production Systems	Garden Plan	NMSU Extension	Garden SAE
Small Fruit Production	PS.01 Specialty Crop Production	Fruit Production Calendar	Specialty Crop Resources	Entrepreneurship SAE
Tree Fruit Production	PS.01 Fruit Crop Systems	Orchard Management Activity	Industry Resources	Production SAE

Unit Assessment

- Specialty Crop Production Portfolio

Unit 11: Equipment Operations and Human Relations

Length: 15 Days

Course Competency	AFNR Performance Indicator	Sample Measurement	Teacher Resources	SAE/FFA Connection
Using Hand and Power Tools	PST.01 Technical Skills Applications	Tool Competency Assessment	Equipment Manuals	Landscape SAE
Landscape Maintenance Equipment	PST.02 Equipment Maintenance	Equipment Inspection	Manufacturer Guides	Lawn Care SAE
Human Relations in the Workplace	CRP.03 Professionalism and Teamwork	Customer Service Evaluation	Industry Materials	Placement SAE
Maintaining Small Engines	PST.02 Service and Repair Procedures	Engine Maintenance Project	Briggs & Stratton Resources	Equipment Repair SAE

Unit Assessment

- Equipment Operations Practicum

Unit 12: Landscape Business & Entrepreneurship Capstone

Length: 15 Days

Course Competency	AFNR Performance Indicator	Sample Measurement	Teacher Resources	SAE/FFA Connection
Establishing a Horticulture Business	ABS.01 Business Development	Business Plan	SBA Business Builder	Entrepreneurship SAE
Financial Management	**ABS.02.02.01.b** Prepare financial reports to describe AFNR business performance. [2024 AFNR...e Document | PDF]	Startup Budget	Farm Credit	Landscape Business SAE
Marketing the Landscape Business	ABS.01 Marketing Principles	Marketing Portfolio	Marketing Templates	Sales SAE
Selling Design and Construction Services	CRP.04 Communication Skills	Client Presentation	Industry Mentors	Landscape Proficiency Award

Capstone Assessment

Students develop and present a complete **Landscape Design & Business Portfolio** including:

1. Residential Landscape Design
2. Plant Selection Plan
3. Irrigation Design
4. Xeriscape Project
5. Turfgrass Management Plan

6. Landscape Construction Design
7. Maintenance Schedule
8. Landscape Marketing Plan
9. Business Plan and Budget
10. SAE Documentation and Presentation

SAE Backbone Model

Quarter	SAE Milestone
Q1	Establish landscape or lawn care SAE and complete site analyses
Q2	Develop design, plant selection, and installation competencies
Q3	Implement maintenance, irrigation, and construction projects
Q4	Build business plan, marketing strategy, and capstone portfolio

End Goal

Every student completes a documented Landscape Design, Lawn Care, Irrigation, Nursery, Grounds Maintenance, Landscape Construction, or Horticultural Entrepreneurship SAE while developing competencies in:

- Landscape Design
- Plant Identification
- Irrigation Systems
- Water Conservation & Xeriscaping

- Turfgrass Management
- Landscape Construction
- Equipment Operation
- Customer Relations
- Entrepreneurship
- Landscape Business Management

This course serves as New Mexico's primary Landscape Design and Installation pathway course and aligns naturally with Nursery/Landscape CDEs, Landscape Entrepreneurship SAEs, Agriscience Fair projects, and careers in landscape architecture, irrigation, nursery production, grounds management, and horticultural business ownership.