

**Agriculture, Food & Natural Resources Career Cluster
Nursery and Landscape
Course Number 01.47000**

Course Description

This course is designed to provide students with the basic skills and knowledge utilized by the green industry in nursery production and management and landscape design and management. Classroom and laboratory activities are supplemented through supervised agricultural experiences and leadership programs and activities.

Course Standard 1

AFNR-NL-1

The following standard is included in all CTAE courses adopted for the Career Cluster/Pathways. Teachers should incorporate the elements of this standard into lesson plans during the course. The topics listed for each element of the standard may be addressed in differentiated instruction matching the content of each course. These elements may also be addressed with specific lessons from a variety of resources. This content is not to be treated as a unit or separate body of knowledge but rather integrated into class activities as applications of the concept.

Standard: Demonstrate employability skills required by business and industry.

The following elements should be integrated throughout the content of this course.

1.1 Communicate effectively through writing, speaking, listening, reading, and interpersonal abilities.

Person-to-Person Etiquette	Telephone and Email Etiquette	Cell Phone and Internet Etiquette	Communicating At Work	Listening
Interacting with Your Boss	Telephone Conversations	Using Blogs	Improving Communication Skills	Reasons, Benefits, and Barriers
Interacting with Subordinates	Barriers to Phone conversations	Using Social Media	Effective Oral Communication	Listening Strategies
Interacting with Co-workers	Making and Returning Calls		Effective Written Communication	Ways We Filter What We Hear
Interacting with Suppliers	Making Cold Calls		Effective Nonverbal Skills	Developing a Listening Attitude
	Handling Conference Calls		Effective Word Use	Show You Are Listening
	Handling Unsolicited Calls		Giving and Receiving Feedback	Asking Questions
				Obtaining Feedback
				Getting Others to Listen

Nonverbal Communication	Written Communication	Speaking	Applications and Effective Résumés
Communicating Nonverbally	Writing Documents	Using Language Carefully	Completing a Job Application
Reading Body Language and mixed Messages	Constructive Criticism in Writing	One-on-One Conversations	Writing a Cover Letter
Matching Verbal and Nonverbal communication		Small Group Communication	Things to Include in a Résumé
Improving Nonverbal Indicators		Large Group Communication	Selling Yourself in a Résumé
Nonverbal Feedback		Making Speeches	Terms to Use in a Résumé

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Showing Confidence Nonverbally		Involving the Audience	Describing Your Job Strengths
Showing Assertiveness		Answering Questions	Organizing Your Résumé
		Visual and Media Aids	Writing an Electronic Résumé
		Errors in Presentation	Dressing Up Your Résumé

1.2 Demonstrate creativity by asking challenging questions and applying innovative procedures and methods.

Teamwork and Problem Solving	Meeting Etiquette
Thinking Creatively	Preparation and Participation in Meetings
Taking Risks	Conducting Two-Person or Large Group Meetings
Building Team Communication	Inviting and Introducing Speakers
	Facilitating Discussions and Closing
	Preparing Visual Aids
	Virtual Meetings

1.3 Exhibit critical thinking and problem solving skills to locate, analyze and apply information in career planning and employment situations.

Problem Solving	Customer Service	The Application Process	Interviewing Skills	Finding the Right Job
Transferable Job Skills	Gaining Trust and Interacting with Customers	Providing Information, Accuracy and Double Checking	Preparing for an Interview	Locating Jobs and Networking
Becoming a Problem Solver	Learning and Giving Customers What They Want	Online Application Process	Questions to Ask in an Interview	Job Shopping Online
Identifying a Problem	Keeping Customers Coming Back	Following Up After Submitting an Application	Things to Include in a Career Portfolio	Job Search Websites
Becoming a Critical Thinker	Seeing the Customer's Point	Effective Résumés:	Traits Employers are Seeking	Participation in Job Fairs
Managing	Selling Yourself and the Company	Matching Your Talents to a Job	Considerations Before Taking a Job	Searching the Classified Ads
	Handling Customer Complaints	When a Résumé Should be Used		Using Employment Agencies
	Strategies for Customer Service			Landing an Internship
				Staying Motivated to Search

1.4 Model work readiness traits required for success in the workplace including integrity, honesty, accountability, punctuality, time management, and respect for diversity.

Workplace Ethics	Personal Characteristics	Employer Expectations	Business Etiquette	Communicating at Work
Demonstrating Good Work Ethic	Demonstrating a Good Attitude	Behaviors Employers Expect	Language and Behavior	Handling Anger
Behaving Appropriately	Gaining and Showing Respect	Objectionable Behaviors	Keeping Information Confidential	Dealing with Difficult Coworkers
Maintaining Honesty	Demonstrating Responsibility	Establishing Credibility	Avoiding Gossip	Dealing with a Difficult Boss
Playing Fair	Showing Dependability	Demonstrating Your Skills	Appropriate Work Email	Dealing with Difficult Customers
Using Ethical Language	Being Courteous	Building Work Relationships	Cell Phone Etiquette	Dealing with Conflict
Showing Responsibility	Gaining Coworkers' Trust		Appropriate Work Texting	

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Reducing Harassment	Persevering		Understanding Copyright	
Respecting Diversity	Handling Criticism		Social Networking	
Making Truthfulness a Habit	Showing Professionalism			
Leaving a Job Ethically				

1.5 Apply the appropriate skill sets to be productive in a changing, technological, diverse workplace to be able to work independently and apply team work skills.

Expected Work Traits	Teamwork	Time Management
Demonstrating Responsibility	Teamwork Skills	Managing Time
Dealing with Information Overload	Reasons Companies Use Teams	Putting First Things First
Transferable Job Skills	Decisions Teams Make	Juggling Many Priorities
Managing Change	Team Responsibilities	Overcoming Procrastination
Adopting a New Technology	Problems That Affect Teams	Organizing Workspace and Tasks
	Expressing Yourself on a Team	Staying Organized
	Giving and Receiving Constructive Criticism	Finding More Time
		Managing Projects
		Prioritizing Personal and Work Life

1.6 Present a professional image through appearance, behavior and language.

On-the-Job Etiquette	Person-to-Person Etiquette	Communication Etiquette	Presenting Yourself
Using Professional Manners	Meeting Business Acquaintances	Creating a Good Impression	Looking Professional
Introducing People	Meeting People for the First Time	Keeping Phone Calls Professional	Dressing for Success
Appropriate Dress	Showing Politeness	Proper Use of Work Email	Showing a Professional Attitude
Business Meal Functions		Proper Use of Cell Phone	Using Good Posture
Behavior at Work Parties		Proper Use in Texting	Presenting Yourself to Associates
Behavior at Conventions			Accepting Criticism
International Etiquette			Demonstrating Leadership
Cross-Cultural Etiquette			
Working in a Cubicle			

Support of CTAE Foundation Course Standards and Georgia Standards of Excellence L9-10RST 1-10 and L9-10WHST 1-10:

Georgia Standards of Excellence ELA/Literacy standards have been written specifically for technical subjects and have been adopted as part of the official standards for all CTAE courses.

Course Standard 2

AFNR-NL-2

Modify behavior to work safely in the agriculture lab and work sites, demonstrate selected competencies in leadership through the FFA and agricultural industry organizations, and develop plans for a Supervised Agricultural Experience Program (SAEP).

- 2.1 Explain the role of the Agricultural Education program and the FFA in personal development.
- 2.2 Demonstrate knowledge learned through a SAEP.

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- 2.3 Develop leadership and personal development skills through participation in the FFA.
- 2.4 Explore career opportunities in horticulture/plant science through the FFA and Agricultural Education Program.
- 2.5 Explore the professional agricultural organizations associated with the course content.

Course Standard 3

AFNR-NL-3

Explore and formulate a logical discussion about the green industry including its scope, importance, and careers available in the nursery and landscape industries.

- 3.1 Define and describe the overall structure, scope, and importance of the green industry.
- 3.2 Discuss the scope and importance of the nursery and landscape industries.
- 3.3 Explore career opportunities in the green industry related to nursery and landscape.

Course Standard 4

AFNR-NL-4

Identify tools and equipment and explain their function in the nursery and landscape industries.

- 4.1 Identify hand and power tools and equipment used in landscape operations.
- 4.2 Demonstrate proper tool and equipment safety procedures in nursery and landscape operations.
- 4.3 Demonstrate proper maintenance and storage for tools and equipment.

Course Standard 5

AFNR-NL-5

Describe plant nomenclature, identification, and plant environmental needs.

- 5.1 Define the history and purpose of botanical nomenclature.
- 5.2 Identify common landscape and nursery plants by common and scientific names.
- 5.3 Classify plants using horticultural characteristics (e.g. trees, shrubs, vines, groundcovers).
- 5.4 Categorize plants by their environmental needs (e.g. sun, shade, drought tolerant).

Course Standard 6

AFNR-NL-6

Investigate the properties of soils and determine the factors that affect crop productivity and plant health.

- 6.1 Describe soil structural characteristics that affect fertility and plant growth.
- 6.2 Identify types, characteristics, and uses of soil amendments.
- 6.3 Demonstrate soil testing procedures and prescribe treatments based on the interpretation of soil test results.

Course Standard 7

AFNR-NL-7

Design new and existing landscape planting sites for nursery and landscape plants.

- 7.1 Discuss the importance of preparing beds for planting.
- 7.2 Determine ways to calculate the area of varying shaped planting sites.
- 7.3 Calculate the amount of fertilizer, lime, and/or other soil amendments needed for the planting site.
- 7.4 Demonstrate preparation of the planting site using hand tools and power equipment.
- 7.5 Modify an existing landscape site to renovate and improve its aesthetics and function.

Course Standard 8

AFNR-NL-8

Install and maintain landscape plants to industry standards and recommended practices.

- 8.1 Identify and demonstrate proper planting procedures.
- 8.2 Identify and demonstrate correct mulching applications.
- 8.3 Identify and demonstrate accurate fertilizer applications.
- 8.4 Describe and demonstrate appropriate pruning techniques.

Course Standard 9

AFNR-NL-9

Create and interpret landscape plans based on industry standards and recommended practices.

- 9.1 Identify equipment used in site analysis and landscape drawing processes.
- 9.2 Assess client and site needs.
- 9.3 Measure and draw to scale a given landscape using field notes and desired specifications.
- 9.4 Utilize standard landscape drawing practices including landscape symbols, computer programs, hand tools, etc.
- 9.5 Apply the principles of landscape design.
- 9.6 Select appropriate landscape plant materials.
- 9.7 Produce a landscape plan.

Course Standard 10

AFNR-NL-10

Develop a pricing strategy for landscape planning, design, and installation.

- 10.1 Calculate the cost of a landscape plan and installation.
- 10.2 Identify different methods used to price landscape plans and installation.

Course Standard 11

AFNR-NL-11

Identify plant pests, pest control practices, and prescribe the use of cultural, biological and chemical materials and methods to protect nursery crops and landscape plantings.

- 11.1 Identify and describe landscape pests.
- 11.2 Analyze damage to landscape plants from pests.
- 11.3 Identify different types of management approaches to control pests.
- 11.4 Describe the concepts of integrated pest management.

Course Standard 12

AFNR-NL-12

Compare and contrast the use of various plant irrigation methods based on plant needs, effectiveness and economic feasibility.

- 12.1 Investigate the relationship between water and plant growth.
- 12.2 Judge types of irrigation systems based on plant needs, effectiveness, feasibility, ease of use, etc.
- 12.3 Demonstrate effective watering methods and techniques.

Course Standard 13

AFNR-NL-13

Identify and recommend turf grasses for various landscape situations.

- 13.1 Describe characteristics of turf leaves, seeds, and stems.
- 13.2 Classify turf grasses species.
- 13.3 Select turf grasses for specific purposes (e.g. athletic fields, golf courses, lawns, shade areas).

Course Standard 14

AFNR-NL-14

Prepare an annual calendar of activities for nursery and landscape operations.

- 14.1 Evaluate labor needs of landscape and nursery jobs based on seasons.
- 14.2 Create a growing and maintenance calendar for nursery and landscape plants.
- 14.3 Develop an annual calendar of activities for a nursery and landscape operation.