Horticulture I - Course Proficiency Evaluation

To demonstrate proficiency in this course, each student must successfully complete all of the listed items in any 8 of the following 12 objectives. Evaluation of each student will be determined by the local course instructor, using the following list of identified proofs of learning, and the student will either earn a "Met" or "Not Met" for the selected objectives.

Student Name: _____

Semester/Year: _____

Class Period: _____

Teacher Name: _____

Met	Not Met	PROOFS OF LEARNING
		1. CREDENTIAL / CERTIFICATION
		a. Successfully earn the NCDPI approved credential or certification for the Horticulture I course. (NC Private Pesticide Applicator)
		2. PUBLIC SPEAKING (ES 1.00)
		a. Communicate thoughts, ideas, and action plans with clarity, when using written, verbal, and/or visual methods.
		b. Interact with others by being an active listener and by speaking clearly and with purpose.
		c. Appropriately consider the audience when planning for a presentation and prepare accordingly to ensure the desired outcome.
		3. LEADERSHIP / FFA (ES 1.00)
		a. Consistently act in ways that align to personal and community-held ideals and principles, while employing strategies to positively influence others.
		b. Use a variety of means to positively impact the direction and actions of a team or organization.
		c. Demonstrate the ability to manage a meeting to accomplish a goal or objective.
		4. WORK BASED LEARNING / SAE / CAREER EXPLORATION (ES 2.00)
		a. Explore individual career interests, set goals, and understand career requirements.
		b. Develop employability skills, personal financial literacy, workplace safety practices, and expand their knowledge of agricultural literacy.
		5. PLANT ANATOMY & TAXONOMY (ES 3.00)
		a. Describe the purpose and functions of roots, stems, leaves, flowers, fruits, and seeds. Explain the difference between monocots and dicots.

		b. Demonstrate proper use of taxonomic naming and explain why scientific plant names are used.
		6. PLANT GROWTH AND DEVELOPMENT (ES 4.00)
		a. Outline and describe the processes of photosynthesis, respiration, translocation, and transpiration.
		b. Demonstrate understanding of hardiness zones.
		7. SEXUAL AND ASEXUAL PLANT PROPAGATION (ES 4.00)
		a. Outline the similarities and differences between asexual and sexual propagation, and describe the requirements for seed germination and growth.
		b. Perform various methods of asexual propagation.
		c. Describe the application of advanced propagation techniques: grafting, budding, mound and air layering, and tissue culture.
		8. PROPERTIES OF SOILS (ES 5.00)
		a. Describe the properties of different horticultural growing media and articulate the advantages of using horticultural soil.
		b. Demonstrate an understanding of soil profiles and proper techniques for sampling from surface and subsurface soil layers.
		9. NUTRIENTS AND FERTILIZERS (ES 6.00)
		a. Identify macro and micro nutrients and the role they play in plant growth.
		b. Compare and contrast types of fertilizers and methods for applying various fertilizers.
		10. ESTABLISHING A GARDEN (ES 7.00)
		a. Demonstrate an understanding of the various types of gardens.
		b. Design a garden with appropriate plant varieties based on season, scale, and location.
		11. CHARACTERISTICS OF PESTS & DISEASES (ES 8.00)
		a. Identify various plant pests based on physical characteristics (anatomy), as well as life cycles.
		b. Compare and contrast the differences between diseases, bacteria, fungi, and viruses; and identify various examples of each.
		12. INTEGRATED PEST MANAGEMENT & PESTICIDES (ES 9.00)
		a. Outline the benefits of IPM as a pest control program, and explain when biological control should be used and at what point chemicals must be considered.
		b. Demonstrate understanding of key signal words and safety information on pesticide labels.