

Agricultural Education: School Year _____

Forestry

Course Code # 5115 or 5165 Term: ___ Fall ___ Spring

1/2 Credit _____ 1 Credit _____

Competencies denoted by 1/2 must be taught if the course is offered for 1/2 credit.
All competencies must be taught if the course is taught for 1 credit.

Student:	Grade:
Teacher:	School:
Number of Competencies in Course:	1/2 credit 18 1 credit 45
Number of Competencies Mastered:	
Percent of Competencies Mastered:	

Standard 1.0 The student will explore careers in the world of forestry.

Learning Expectations		Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
1.1	Assess the importance of trees and forests in rural and urban settings.	1/2		
1.2	Explore the history and current status of forestry in the United States.	1/2		
1.3	Analyze career opportunities available in forestry.	1/2		
1.4	Demonstrate communication skills involved in forestry	1		

Standard 2.0 The student will specify major forest products of the world and describe the practices used in the management of these products.

Learning Expectations		Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
2.1	Analyze global uses of forests and their products.	1/2		
2.2	Describe the role of a forest manager.	1		
2.3	Summarize basic forest management practices.	1/2		
2.4	Summarize best management practices used in forestry and their effects on water quality.	1		

Standard 3.0 The student will analyze methods of tree growth classification and identification of forest trees.

Learning Expectations		Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
3.1	Explain the major parts of the growth processes for trees.	1/2		
3.2	Discuss the classification system of a tree according to size and crown.	1/2		
3.3	Explain hardiness zones.	1		
3.4	Categorize basic taxonomy and characteristics of leaves, fruits and twigs.	1/2		
3.5	Evaluate the effects of soil fertility on tree growth.	1		

Standard 4.0 The student will recommend basic tools and safety practices in the forestry industry.

Learning Expectations		Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
4.1	Determine basic safety practices for working in the forest industry.	1/2		
4.2	Recognize the dangers and learn proper safety precautions for working in a forestry environment.	1/2		
4.3	Relate hand tools and power equipment to their uses in the forest industry	1		

Standard 5.0 The student will employ the skills necessary for surveying and cruising timber stands.

Learning Expectations		Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
5.1	Manipulate standard measurements and their equivalents and use common formulas to perform appropriate calculations in forestry	1		
5.2	Use the basic procedures, calculations and tools of forestry surveying	1		
5.3	Convert compass-readings and adjust a compass for needed directions	1		
5.4	Use pacing and chaining techniques to measure horizontal distances, angles, and slopes	1		
5.5	Determine the types of cruises, the tools used, and the methods of cruising	1		
5.6	Complete systematic grid layouts for plot and point cruising and determine volume by cruising	1		

Standard 6.0 The student will interpret land descriptions and locate land tracts on a topographical and a standard map.

Learning Expectations		Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
6.1	Interpret a topographic map	1		
6.2	Utilize different types of compasses	1		
6.3	Plot a compass reading on a map by azimuth and bearing readings	1		

Standard 7.0 The student will describe the different types of damage that occur to a forest.

Learning Expectations		Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
7.1	Specify types of causes and effects of wild fire and prescribed fires.	$\frac{1}{2}$		
7.2	Recommend tools and techniques for fire fighting.	$\frac{1}{2}$		
7.3	Evaluate the causes and control of damages caused by insects, diseases, wind and pollution.	$\frac{1}{2}$		

Standard 8.0 The student will recommend utilization practices and discuss marketing forest products.

Learning Expectations		Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
8.1	Evaluate forest utilization practices	1		
8.2	Specify forest-marketing techniques for highest returns	1		
8.3	Evaluate worldwide markets for forest products	1		

Standard 9.0. The student will integrate academic competencies in the areas of study related to the forestry industry.

Learning Expectations		Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
9.1	Use basic math for calculating distances, area and volume.	$\frac{1}{2}$		
9.2	Use methods of triangulation to determine distances and location.	$\frac{1}{2}$		
9.3	Calculate ratios and proportions.	$\frac{1}{2}$		
9.4	Use basic algebraic equations to predict forest production.	1		
9.5	Apply the scientific method for developing best management practices for forest management.	1		
9.6	Relate physical laws to factors affecting forest growth.	1		
9.7	Summarize biological factors affecting forestry.	1		
9.8	Summarize genetic principles and reproduction that govern forest growth and production.	1		
9.9	Detect species of flora and fauna.	1		
9.10	Synthesize research data in an original work related to forest management and present the work.	1		
9.11	Use advanced publications to research career opportunities and skills needed in forestry.	1		

Standard 10.0 The student will develop premier leadership and personal growth needed for success and advancement in the forestry industry.

Learning Expectations		Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
10.1	Conduct meetings using appropriate rules of conduct and parliamentary procedure.	1/2		
10.2	Evaluate a code of ethics for business	1		
10.3	Develop public speaking skills needed to communicate in the forestry industry.	1		
10.4	Develop an SAEP, supervised agricultural experience program, based on forest utilization.	1/2		

Additional comments: _____
