Standards and Competencies for Principles of Agriculture Sciences (Course # 5154)

		Begin-End Yr
Standard 1 - Explain the importance of agriculture in society.		2009 -
	1.1 - Summarize the importance of agriculture to Tennesseeċs economy.	2009 -
	1.2 - Explain the political impact of Agriscience at the local, state, national and international levels.	2009 -
	1.3 - Specify and explain role of the major careers in Agriscience and agriculture.	2009 -
	1.4 - Specify and explain the impact of technological advancement in agriculture.	2009 -
	1.5 - Analyze the relationships of plants and animals in our society.	2009 -
	1.6 - Analyze the desired effects of leadership on world agriculture production.	2009 -
Standard 2 - Evaluate the theories of animal science as they pertain to the following areas: animalċs role in the ecology, animal anatomy and taxonomy, nutrition, facilities, basic genetics and reproduction and identification and function		2009 -
	2.1 - Analyze the basic role of animals in the environment.	2009 -
	2.2 - Specify and explain the relationship between companion and production animals in society.	2009 -
	2.3 - Examine and explain the concepts of basic animal anatomy and taxonomy, including lifeċs basic unit (cell) and the functions of the organ systems.	2009 -
	2.4 - Describe the classes of feed needed by animals.	2009 -
	2.5 - Evaluate and explain the importance of waste management.	2009 -
	2.6 - Summarize the basic principles involved in reproduction and genetics.	2009 -
	2.7 - Recognize and describe the functions of the basic breeds of livestock.	2009 -
Standard 3 - Determine the fundamental relationships of wildlife populations and environmental conditions in our natural habitats.		2009 -
	3.1 - Summarize terms associated with ecology and conservation.	2009 -
	3.2 - Analyze the major components of a food chain in nature.	2009 -
	3.3 - Analyze the main parts of the water cycle.	2009 -
	3.4 - Examine the main flow of carbon dioxide and oxygen between plants and animals.	2009 -
	3.5 - Diagram the parts of the nitrogen cycle.	2009 -
	3.6 - Distinguish types of pollution and their sources.	2009 -
	3.7 - Determine how the carrying capacity of an ecosystem is affected by interactions among species and organisms.	2009 -
Standard 4 - Summarize the basic principles involved in agribusiness, including recordkeeping, leadership, principles of supply and demand and associated agribusiness careers.		2009 -
	4.1 - Illustrate the basic principles of supply and demand and their relationship to production.	2009 -
	4.2 - Summarize the basic principles involved in financial recordkeeping and accounting.	2009 -
	4.3 - Demonstrate the ability to keep records for a Supervised Agricultural Experience program.	2009 -
	4.4 - Evaluate career opportunities in agriculture.	2009 -
	4.5 - Analyze the principles involved in reading a financial statement and planning a budget.	2009 -
	4.6 - Utilize the principles involved in problem solving.	2009 -
	4.7 - Identify and explain the roles of oral and written communications in agribusiness.	2009 -
	4.8 - Explain and demonstrate basic parliamentary law used in business.	2009 -
Standard 5 - Investigate the principles involved in soil structure and formation, plant taxonomy, soil conservation and water quality, soil and plant relationships and ecology.		2009 -
	5.1 - Examine the basic principles of soil texture, structure and formation.	2009 -
	5.2 - Analyze the relationship between soil, plants and nutrients.	2009 -
	5.3 - Evaluate the role of ecology in the environment.	2009 -
	5.4 - Assess the importance of soil, water and air quality.	2009 -
	5.5 - Relate plant processes to plant health and growth.	2009 -
	5.6 - Differentiate between sexual and asexual reproduction.	2009 -
Standard 6 - Utilize mathematical computations and agricultural lab equipment for basic agricultural construction.		2009 -
	6.1 - Identify and demonstrate general safety precautions involved in general shop work and tool use, metalworking and electricity.	2009 -
	6.2 - Identify and categorize common tools, give the application of each and describe its maintenance.	2009 -
	6.3 - Outline principles and fundamentals of internal combustion engines.	2009 -
	6.4 - Specify common building materials and estimate the cost of the materials.	2009 -
	6.5 - Use the formula involved in figuring areas of different geometric figures.	2009 -
	6.6 - Use a measurement device to determine materials needed for a project.	2009 -
	6.7 - Complete a safety test with 100 percent accuracy.	2009 -
Standard 7 - Demonstrate premier leadership and personal growth in the area of Agriculture.		2009 -
	7.1 - Demonstrate a positive work ethic and attitude.	2009 -
	7.2 - Demonstrate proper time management skills.	2009 -
	7.3 - Apply problem-solving skills.	2009 -
	7.4 - Describe career plans that develop critical life-long thinking skills and allow for life long learning.	2009 -
	7.5 - Write a grammatically correct speech on the importance of agriculture in our society.	2009 -
	7.6 - Demonstrate the ability to conduct a meeting in accordance with Roberts Rules of Order.	2009 -