Standards and Competencies for Advanced Principles of Agr (Course # 5155)

		Begin-End Yr
Standard 1 - Analyze the career opportunities available in the agriculture industry and develop plans for entry into the area of personal interest.		2009 -
	1.1 - Specify and explain career opportunity requirements in the area of agriculture at the local, regional, state, national and international levels.	2009 -
	1.2 - Prepare categories of employment in non-agricultural careers that may have resulted from instruction or training in agriculture.	2009 -
	1.3 - Determine and explain the role of agencies that lend support to the agriculture industry.	2009 -
Standard 2 - Demonstrate skills needed for career planning, keeping records and leadership in the agriculture industry.		2009 -
	2.1 - Plan, conduct and maintain records on an SAEP, supervised agricultural experience program.	2009 -
	2.2 - Relate the knowledge and skills learned in the SAEP to an agriculture career.	2009 -
	2.3 - Assess skills that may be developed by individuals in leadership roles.	2009 -
	2.4 - Demonstrate public speaking skills.	2009 -
	2.5 - Demonstrate methods and techniques of parliamentary procedure.	2009 -
	2.6 - Conduct and facilitate group discussions and planning committees.	2009 -
Standard 3 - Relate the basic principles of animal science to livestock selection, health and maintenance.		2009 -
	3.1 - Determine the function of the anatomical parts of an animal.	2009 -
	3.2 - Evaluate the digestive processes of ruminant and nonruminant animals and the terminology associated with these processes	2009 -
	3.3 - Explain terminology, ration formulation, and feeding techniques necessary for maximizing livestock gains and cost efficiency.	2009 -
	3.4 - Recognize symptoms of disease and parasites and determine what treatment and control method is to be used.	2009 -
	3.5 - Relate terminology associated with livestock selection and evaluation.	2009 -
Standard 4 - Relate the principles of soil formation, management and capability to crop production and construction uses.		2009 -
	4.1 - Relate the basic principles of soils to plant science and crop production.	2009 -
	4.2 - Determine the physical properties of soil necessary for selecting crops and determining conservation techniques.	2009 -
	4.3 - Determine the factors that influence the rate of soil erosion.	2009 -
	4.4 - Recommend soil management practices necessary for proper soil conservation.	2009 -
	4.5 - Specify the land capability classes.	2009 -
	4.6 - Prescribe the procedures for taking a soil sample.	2009 -
Standard 5 - Demonstrate the basic principles of agricultural mechanics, including metalworking, plumbing, electricity, land leveling and land		2009 -
	5.1 - Demonstrate safety precautions used in agricultural mechanics.	2009 -
	5.2 - Complete a safety test with 100 percent accuracy.	2009 -
	5.3 - Demonstrate a working knowledge of metalwork necessary for the basic maintenance of an agricultural enterprise.	2009 -
	5.4 - Discuss the use of plumbing tools and equipment necessary for agricultural maintenance.	2009 -
	5.5 - Demonstrate various techniques used to measure and calculate a plot of land.	2009 -
	5.6 - Demonstrate techniques of profile and differential leveling in determining land elevation.	2009 -
	5.7 - Specify and explain a working knowledge of electricity.	2009 -
Standard 6 - Implement the integration of academic competencies in Advanced Principles of Agricultural Sciences.		2009 -
	6.1 - Calculate square footage to determine acreage in a plot of ground.	2009 -
	6.2 - Properly use a measurement device to determine length and width.	2009 -
	6.3 - Calculate cost per unit in a bill of materials.	2009 -
	6.4 - Convert from the metric measurements to English measurements and the reverse conversion	2009 -
	6.5 - Assess chemical properties related to soil productivity.	2009 -
	6.6 - Analyze soil fertility and composition.	2009 -
	6.7 - Examine chemical properties used in fusing metal.	2009 -
	6.8 - Analyze anatomy and physiology of animals.	2009 -
	6.9 - Determine nutritional needs of animals, based on energy needs.	2009 -
	6.10 - Compare the effects of diseases and pests on animal health.	2009 -
Standard 7 - Demonstrate premier leadership and personal growth in the area of Advanced Principles of Agricultural Sciences.		2009 -
	7.1 - Explain the importance of a positive work ethic and attitude.	2009 -
	7.2 - Develop problem-solving skills associated with a supervised agriculture experience program.	2009 -
	7.3 - Demonstrate the ability to conduct meetings in accordance with Roberts Rules of Order.	2009 -
	7.4 - Prepare speeches to communicate the needs, concerns and challenges of the agricultural community.	2009 -