Florida CTE

Agriculture, Food, and Natural Resources: Orientation to Agriscience

Demonstrate knowledge and skills in agriscience research. The student will be able to: 1	**01.01** Define agriscience. 1.01
	01.02 Describe products of agriscience. 1.02
	01.03 Define the scope of research in agriscience. 1.03
	01.04 Discuss the impact of research on agriculture on consumer opinion. 1.04
	01.05 Identify the steps of the scientific method. 1.05
	01.06 Apply the scientific method to solve an agricultural problem. 1.06
Demonstrate knowledge and skills in the importance of agriculture. The student will be able to: 2	**02.01** Describe the historical evolution of agriculture and its impact on civilization. 2.01
	02.02 Discuss the scope of agriculture and its impact on daily life. 2.02
	02.03 Identify specific areas of commodity production in the state, nation and world. 2.03
	02.04 Describe the diversity of career opportunities in agriculture and its related fields through a Foundational SAE. 2.04
Demonstrate knowledge and skills in agriscience laboratories and workshops. The student will be able to: 3	**03.01** Identify tools, machines and equipment used in agriculture. 3.01
	03.02 Demonstrates proper laboratory/ workshop safety techniques. 3.02
	03.03 Complete a project demonstrating the safe use of agricultural tools, machinery or equipment. 3.03
	03.04 Discuss the impact of agricultural mechanization and engineering on society. 3.04
	03.05 Conduct an experiment using proper laboratory techniques. 3.05

Demonstrate knowledge and skills in plant sciences. The student will be able to: 4	**04.01** Distinguish between horticulture, forestry, and agronomy. 4.01
	04.02 Propagate and grow an agricultural plant. 4.02
	04.03 Identify supplies and services industries related to plant science. 4.03
	04.04 Develop a specimen collection of local plant materials. 4.04
	04.05 Demonstrate proper planting techniques. 4.05
	04.06 Discuss organic agriculture and conventional agriculture as it relates to plants. 4.06
Demonstrate knowledge and skills in animal sciences. The student will be able to: 5	**05.01** Distinguish between food, service and companion animals. 5.01
	05.02 Identify breeds of food, service and companion animals. 5.02
	05.03 Identify supplies and services industries related to animal science. 5.03
	05.04 Identify the needs of an animal and describe and describe proper care for that animal. 5.04
	05.05 Identify consumer foods and products derived from animals. 5.05
	05.06 Discuss organic and conventional agriculture as it relates to livestock production. 5.06
Demonstrate knowledge and skills in food science. The student will be able to: 6	**06.01** Describe the proper handling techniques and storage of food products from farm to plate. 6.01
	06.02 List and explain methods of food preservation. 6.02
	06.03 Conduct a food taste test. 6.03
	06.04 Develop a production and marketing plan for a food product. 6.04
	06.05 Read and interpret a food label. 6.05
Demonstrate product knowledge and skills in agricultural processing and marketing. The student will be able to: 7	**07.01** Define agricultural product processing and marketing. 7.01
	07.02 Describe the processing and marketing of an agriculture product from farm to consumer. 7.02
	07.03 Prepare, process, and market an agricultural product. 7.03
Demonstrate knowledge and skills in natural resources. The student will be able to: 8	**08.01** Define and identify renewable and nonrenewable natural resources. 8.01
	08.02 Describe agricultural management practices that conserve natural resources. 8.02

	08.03 Describe effects of pollution on the environment. 8.03
	08.04 Demonstrate how to recycle or conserve a natural resource. 8.04
Demonstrate leadership and communication skills. The student will be able to: 9	**09.01** Describe the aims and purposes of the FFA organization. 9.01
	09.02 Identify opportunities available to FFA members. 9.02
	09.03 Identify characteristics of a good leader. 9.03
	09.04 Participate in a cooperative leadership development activity or FFA Career Development Event. 9.04
	09.05 Identify the importance of effective communication skills. 9.05
	09.06 Demonstrate effective communication skills. 9.06
Integrate the use of science, mathematics, reading, geography, history, writing and communication in agriscience and technology. The student will be able to: 10	**10.01** Apply basic mathematic operations to solve agricultural problems. 10.01
	10.02 Correctly use measuring instruments and utilize measurements to solve agricultural problems. 10.02
	10.03 Prepare written and oral materials using correct English grammar. 10.03
	10.04 Identify the main idea in oral presentations and written materials. 10.04
	10.05 10.05 Locate, organize, and interpret information from a variety of agricultural sources. 10.05