

Principles of Agriculture, Food, & Natural Resources

2021-2022

At a Glance - Lamar CISD

Professional Standards/Employability Skills/Technical Skills			
Ongoing Skills Imbedded All Year	1.A The student will identify career development, education, and entrepreneurship opportunities in the field of agriculture, food, and natural resources. 1.B The student will apply competencies related to resources, information, interpersonal skills, problem solving, critical thinking, and systems of operation in agriculture, food, and natural resources. 1.C The student will demonstrate knowledge of personal and occupational safety, environmental regulations, and first-aid policy in the workplace. 1.D The student will analyze employers' expectations such as appropriate work habits, ethical conduct, legal responsibilities, and good citizenship skills. 1.E The student will identify careers in agriculture, food, and natural resources with required aptitudes in science, technology, engineering, mathematics, language arts, and social studies. 6.A The student will demonstrate written and oral communication skills appropriate for formal and informal situations such as prepared and extemporaneous presentations. 6.B The student will demonstrate effective listening skills appropriate for formal and informal situations.		
	Safety		
14.B The student will use safe and appropriate laboratory procedures and policies. 15.A The student will determine the effects of agriculture, food, and natural resources upon safety, health, and the environment. 15.B The student will identify regulations relating to safety, health, and environmental systems in agriculture, food, and natural resources. 15.C The student will identify and design methods to maintain and improve safety, health, and environmental systems in agriculture, food, and natural resources.			
Grading Period	Unit Name	Estimated Time Frame	TEKS
Grading Period 1 8/23-10/1 28 Days	Introduction and Procedures	5 Days	1D, 1.B, 5.B,
	1.D The student will analyze employers' expectations such as appropriate work habits, ethical conduct, legal responsibilities, and good citizenship skills. 1.B The student will apply competencies related to resources, information, interpersonal skills, problem solving, critical thinking, and systems of operation in agriculture, food, and natural resources. 5.B The student will develop and demonstration personal growth skills and collaborate with others to accomplish organizational goals and objectives.		
	What is Agriculture?	5 Days	4.A, 4.B, 4.C, 4.D, 4.E, 4.F
	4.A The student will define the scope of agriculture. 4.B The student will analyze the scope of agriculture, food, and natural resource and its effect upon society. 4.C The student will evaluate significant historical and current agriculture, food, and natural resource developments. 4.D The student will identify potential future scenarios for agriculture, food, and natural resource systems including global impacts. 4.E The student will describe how emerging technologies and globalization impacts agriculture, food, and natural resources. 4.F The student will compare and contrast issues impacting agriculture, food, and natural resources such as biotechnology, employment, safety, environmental, and animal welfare issues.		
	Agriculture and the World Market Place	3 Days	3.A, 3.B
	3.A The student will compare and contrast global agricultural markets, currency, and trends. 3.B The student will evaluate marketing factors and practices that impact the global markets.		
	Introduction to FFA	5 Days	2.C, 2.D
	2.C The student will participate in youth leadership opportunities to create a well-rounded experience program. 2.D The student will produce and participate in a local program of activities using a strategic planning process.		
Leadership/ Parliamentary Procedure	10 Days	5.A, 5.B, 5.C	
5.A The student will develop and demonstrate leadership skills and collaborate with others to accomplish organizational goals and objectives. 5.B The student will develop and demonstrate personal growth skills and collaborate with others to accomplish organizational goals and objectives. 5.C The student will demonstrate democratic principles in conducting effective meetings.			

Grading Period 2 10/4-11/5 25 Days	Technology and Personal Management in Agriculture	5 Days	9.A, 9.B, 9.C, 9.D
	9.A The student will apply technology applications such as industry-relevant software and Internet applications. 9.B The student will use collaborative, groupware, and virtual meeting software. 9.C The student will analyze the benefits and limitations of emerging technology such as online mapping systems, drones, and robotics. 9.D The student will explain the benefits of computer-based and mobile application equipment in agriculture, food, and natural resources.		
	Supervised Agriculture Experience (AET)	10 Days	2.A, 2.B, 8.A, 8.B, 9.D
	2.A The student will plan, propose, conduct, document, and evaluate a supervised agricultural experience program as an experiential learning activity. 2.B The student will apply proper record-keeping skills as they relate to the supervised agricultural experience. 8.A The student will develop a formal business plan. 8.B The student will develop, maintain, and analyze records. 9.D The student will explain the benefits of computer-based and mobile application equipment in agriculture, food, and natural resources.		
Grading Period 3 11/8-12/17 25 Days	General Shop Safety and District Testing	10 Days	1.C, 14.B, 15.A, 15.B, 15.C, 14.A
	1.C The student will demonstrate knowledge of personal and occupational safety, environmental regulations, and first-aid policy in the workplace. 14.B The student will use safe and appropriate laboratory procedures and policies. 15.A The student will determine the effects of agriculture, food, and natural resources upon safety, health, and the environment. 15.B The student will identify regulations relating to safety, health, and environmental systems in agriculture, food, and natural resources. 15.C The student will identify and design methods to maintain and improve safety, health, and environmental systems in agriculture, food, and natural resources. 14.A The student will identify major areas of power, structural, and technical systems.		
	Specific Tool and Skill Projects	18 Days	1.C, 14.B, 15.A, 15.B, 15.C, 14.A
	1.C The student will demonstrate knowledge of personal and occupational safety, environmental regulations, and first-aid policy in the workplace. 14.B The student will use safe and appropriate laboratory procedures and policies. 15.A The student will determine the effects of agriculture, food, and natural resources upon safety, health, and the environment. 15.B The student will identify regulations relating to safety, health, and environmental systems in agriculture, food, and natural resources. 15.C The student will identify and design methods to maintain and improve safety, health, and environmental systems in agriculture, food, and natural resources. 14.A The student will identify major areas of power, structural, and technical systems.		
Grading Period 4 1/4-2/18 33 Days	Semester Review and Exams	7 Days	
	Review of and testing over all TEKS addressed during the semester.		
Grading Period 5 2/21-4/14 34 Days	Animal Breeds & Classes	33 Days	12.A, 12.B, 12.C, 12.D
	12.A The student will describe animal growth and development. 12.B The student will identify animal anatomy and physiology. 12.C The student will identify and evaluate breeds and classes of livestock. 12.D The student will explain animal selection, reproduction, breeding, and genetics.		
	Soil	9 Days	10.A, 10.B, 10.C
	10.A The student will identify the components and properties of soils. 10.B The student will identify and describe the process of soil formation. 10.C The student will conduct experiments related to soil chemistry.		
Grading Period 5 2/21-4/14 34 Days	Food Research	10 Days	7.A, 7.B, 7.C
	7.A The student will discuss major research and developments in the fields of agriculture, food, and natural resources. 7.B The student will use a variety of resources for research and development. 7.C The student will describe scientific methods of research.		
	Energy	5 Days	15.D, 15.E
	15.D The student will research and analyze alternative energy sources that stem from or impact agriculture, food, and natural resources. 15.E The student will evaluate energy and water conservation methods.		

Grading Period 6 4/19-5/26 28 Days	Plants	10 Days	11.A, 11.B, 11.C, 11.D, 11.E
	11.A The student will describe the structure and functions of plant parts. 11.B The student will discuss and apply plant germination, growth, and development. 11.C The student will describe plant reproduction, genetics, and breeding. 11.D The student will identify plants of importance to agriculture, food, and natural resources. 11.E The student will use tools, equipment, and personal protective equipment common to plant systems.		
	Shop	14 Days	14.C, 14.D, 14.E
	14.C The student will create proposals that include bill of materials, budget, schedule, drawings, and technical skills developed for basic power, structural, and technical system projects or structures. 14.D The student will identify building materials and fasteners. 14.E The student will use tools, equipment, and personal protective equipment common to power, structural, and technical systems.		
	Global Food System	7 Days	13.A, 13.B, 13.C, 13.D
13.A The student will evaluate food products and processing systems. 13.B The student will determine trends in world food production. 13.C The student will discuss current issues in food production. 13.D The student will use tools, equipment, and personal protective equipment common to food products and processing systems.			
Semester Review and Exams	7 Days		
Review of and testing over all TEKS addressed during the semester.			