eDynamicLearning
CAREER & ELECTIVE COURSES

eDynamic Learning Course Title: Agriscience 1: Introduction to Agriscience

State: Texas
State Course Title: Principles of Agriculture, Food, and Natural Resources
State Course Code: 130.2
State Standards: Principles of Agriculture, Food, and Natural Resources, 130.2
Date of Standards: 2017-18

Standards	Unit Name(s)	Lesson(s) Numbers
(1) The student demonstrates professional standards/employability skills as required by business and industry.		
(A) identify career development, education, and entrepreneurship opportunities in the field of agriculture, food, and natural resources;	Unit 6: Careers in Agriscience	L1 and L2
(B) apply competencies related to resources, information, interpersonal skills, problem solving, critical thinking, and systems of operation in agriculture, food, and natural resources;	Unit 3: Plant Science	Agriscience Project 3
(C) demonstrate knowledge of personal and occupational safety, environmental regulations, and first-aid policy in the workplace;	Unit 5: Animal Anatomy	L7
(D) analyze employers' expectations such as appropriate work habits, ethical conduct, legal responsibilities, and good citizenship skills;	Unit 4: The Animal Element	L7
(E) identify careers in agriculture, food, and natural resources with required aptitudes in science, technology, engineering, mathematics, language arts, and social studies.	Unit 6: Careers in Agriscience	L1 and L2
(2) The student develops a supervised agriculture experience program.		
(A) plan, propose, conduct, document, and evaluate a supervised agriculture experience program as an experiential learning activity;	Unit 7: Careers in Agriscience	L4
(B) apply proper record-keeping skills as they relate to the supervised agriculture experience;	Unit 7: Careers in Agriscience	L4
(C) participate in youth leadership opportunities to create a well-rounded experience program;	Unit 7: Careers in Agriscience	L4
(3) The student analyzes concepts related to global diversity.		
(A) compare and contrast global agricultural markets, currency, and trends;	Unit 1: The Importance of Agriscience	L4
(B) evaluate marketing factors and practices that impact the global markets.	Unit 1: The Importance of Agriscience	L4
(4) The student analyzes concepts related to global diversity.		
(A) define the scope of agriculture;	Unit 1: The Importance of Agriscience	L1
(B) analyze the scope of agriculture, food, and natural resources and its effect upon society;	Unit 1: The Importance of Agriscience	L1

(C) evaluate significant historical and current agriculture, food, and natural resources developments;	Unit 1: The Importance of Agriscience	L1
(D) identify potential future scenarios for agriculture, food, and natural resources systems, including global impacts;	Unit 1: The Importance of Agriscience	Agriscience Project 1
(E) describe how emerging technologies and globalization impacts agriculture, food, and natural resources;	Unit 1: The Importance of Agriscience	L2
(F) compare and contrast issues impacting agriculture, food, and natural resources such as biotechnology, employment, safety, environment, and animal welfare issues.	Unit 1: The Importance of Agriscience	Lab Questions
(5) The student analyzes the structure of agriculture, food, and natural resources leadership in organizations.		
(A) develop and demonstrate leadership skills and collaborate with others to accomplish organizational goals and objectives;	Unit 8: Agribusiness Management	L5
(B) develop and demonstrate personal growth skills and collaborate with others to accomplish organizational goals and objectives;	Unit 7: Careers in Agriscience	L5
(6) The student demonstrates appropriate personal and communication skills.		
A) demonstrate written and oral communication skills appropriate for formal and informal situations such as prepared and extemporaneous presentations;	Unit 1: The Importance of Agriscience	L5
(B) demonstrate effective listening skills appropriate for formal and informal situations.	Unit 1: The Importance of Agriscience	Lesson 1 Podcast
(7) The student applies appropriate research methods to agriculture, food, and natural resources topics.		
(A) discuss major research and developments in the fields of agriculture, food, and natural resources;	Unit 1: The Importance of Agriscience	Agriscience Project 1
(B) use a variety of resources for research and development;	Unit 1: The Importance of Agriscience	Agriscience Project 1
(8) The student applies problem-solving, mathematical, and organizational skills in order to maintain financial and logistical records.		
(A) develop, maintain, and analyze records.	Unit 2: Agriscience and the Environment	Agriscience Project 2
(9) The student uses information technology tools to access, manage, integrate, and create information related to agriculture, food, and natural resources.		
(A) apply technology applications such as industry-relevant software and Internet applications;	Unit 1: The Importance of Agriscience	Agriscience Project 1
(B) use collaborative, groupware, and virtual meeting software;	Unit 1: The Importance of Agriscience	L5
(C) analyze the benefits and limitations of emerging technology such as online mapping systems, drones, and robotics;	Unit 6: Technology and Agriscience	L1
(D) explain the benefits of computer-based and mobile application equipment in agriculture, food, and natural resources.	Unit 7: Careers in Agriscience	Lab Questions
(10) The student develops technical knowledge and skills related to soil systems. The student is expected to		
(A) identify the components and properties of soils;	Unit 3: Plant Science	L6
(11) The student develops technical knowledge and skills related to plant systems.		
(A) describe the structure and functions of plant parts;	Unit 3: Plant Science	L3 and L4
(B) identify plants of importance to agriculture, food, and natural resources;	Unit 1: The Importance of Agriscience	L2

(C) use tools, equipment, and personal protective equipment common to plant systems.	Unit 7: Careers in Agriscience	L3
(12) The student develops technical knowledge and skills related to animal systems.		
(A) identify animal anatomy and physiology;	Unit 5: Animal Anatomy	L1
(B) explain animal selection, reproduction, breeding, and genetics.	Unit 4: The Animal Element	L2
(13) The student describes the principles of food products and processing systems.		
(A) evaluate food products and processing systems;	Unit 6: Technology and Agriscience	L3
(B) determine trends in world food production;	Unit 7: Careers in Agriscience	Lab Questions
(C) discuss current issues in food production;	Unit 6: Technology and Agriscience	L3
(D) use tools, equipment, and personal protective equipment common to food products and processing systems.	Unit 7: Careers in Agriscience	L3
(14) The student safely performs basic power, structural, and technical system skills in agricultural applications.		
(A) identify major areas of power, structural, and technical systems;	Unit 7: Careers in Agriscience	L3
(B) identify building materials and fasteners;	Unit 7: Careers in Agriscience	L3
(C) use tools, equipment, and personal protective equipment common to power, structural, and technical systems.	Unit 7: Careers in Agriscience	L3
(15) The student explains the relationship between agriculture, food, and natural resources and the environment.		
(A) determine the effects of agriculture, food, and natural resources upon safety, health, and the environment;	Unit 1: The Importance of Agriscience	Lab Questions
(B) identify regulations relating to safety, health, and environmental systems in agriculture, food, and natural resources;	Unit 1: The Importance of Agriscience	Lab Questions
(C) identify and design methods to maintain and improve safety, health, and environmental systems in agriculture, food, and natural resources;	Unit 6: Technology and Agriscience	L3
(D) research and analyze alternative energy sources that stem from or impact agriculture, food, and natural resources;	Unit 2: Agriscience and the Environment	L5
(E) evaluate energy and water conservation methods.	Unit 2: Agriscience and the Environment	L4