

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title: Introduction to Agriscience, Technology, and Environmental Sciences

Occupational Area: Agriscience and Natural Resources

Secondary

Program Numbers 8100120
 CIP Number 0101.9921EX
 Grade Level 6-9, 30, 31
 Length 0.5 credits
 Certification AGRI @4
 AGRICULTUR 1 @2
 EXP AG @4
 VOC AGRI @4

I. **MAJOR CONCEPTS/CONTENT:** The purpose of this course is to introduce students to the broad area of agriculture and to stimulate personal aptitudes, abilities, and interests in agriculture prior to orientation and exploration of careers.

The content includes, but is not limited to, agricultural literacy, importance of agriculture, importance of environmental resources and key relationships, the role of science and technology in agriculture, math and science, plants and animals, and sources of consumer goods from agriculture.

II. **LABORATORY ACTIVITIES:** Hands-on laboratory experiences are an integral part of this course including the safe use of laboratory and field tools.

III. **SPECIAL NOTE:** None

IV. **INTENDED OUTCOMES:** After successfully completing this course, the student will be able to:

- 01.0 Identify the importance of agriculture.
- 02.0 Identify the importance of environmental resources.
- 03.0 Demonstrate the relationship between science, technology and agriculture.
- 04.0 Integrate the use of mathematics and communications in agriscience and technology.
- 05.0 Describe chains between producer and consumer for agricultural products.
- 06.0 Use selected techniques to produce finished products from agricultural materials.
- 07.0 Describe the importance of plants and animals in agriculture.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Introduction to Agriscience, Technology, and
Environmental Sciences
Secondary Number: 8100120
Postsecondary Number:

01.0 IDENTIFY THE IMPORTANCE OF AGRICULTURE--The student will be able to:

- 01.01 Define agriculture, including its diversity and scope. (LA.B.2.3.1)
- 01.02 Describe the importance of agriculture on a world, national, state and community scale. (LA.B.2.3.1)
- 01.03 Describe the importance of agriculture in each individual's life. (SC.D.2.3.1; LA.B.2.3.1)
- 01.04 Collect and discuss information on current agricultural events. (LA.A.2.3.6)
- 01.05 Trace the evolution of agriculture. (SS.A.2.3.3; SS.A.2.3.6; SS.A.4.3.1)
- 01.06 Identify conditions necessary for agricultural production (climate, soil, available land, etc.). (SS.B.1.3.3; SS.B.2.3.8; SC.D.1.3.3)
- 01.07 Identify the major agricultural production areas of the United States and Florida. SS.A.6.3.1; SS.A.6.3.2; SS.A.6.3.3; SS.A.6.3.4; SS.A.6.3.5; SS.B.1.3.1)
- 01.08 Describe the diversity of career opportunities in agriscience and technology. (LA.A.2.3.6)

02.0 IDENTIFY THE IMPORTANCE OF ENVIRONMENTAL RESOURCES--The student will be able to:

- 02.01 Define environmental resources. (SC.G.2.3.1; LA.A.1.3.4)
- 02.02 Describe the relationship between environmental resources and agriculture. (SC.B.2.3.2; SC.G.2.3.1; SC.G.2.3.2; SC.G.2.3.3; SC.G.2.3.4; LA.A.1.3.2)
- 02.03 Describe the relationship between environmental resources and the quality of life. (SC.D.2.3.2; SC.G.2.3.1; SC.G.2.3.2; SC.G.2.3.3; SC.G.2.3.4; LA.A.1.3.2)
- 02.04 Identify major threats to environmental resources. (SC.G.2.3.1; SC.G.2.3.2; SC.G.2.3.3; SC.G.2.3.4; LA.A.1.3.1)
- 02.05 Identify possible solutions to threats on environmental resources. (SC.G.2.3.1; SC.G.2.3.2; SC.G.2.3.3; SC.G.2.3.4; LA.A.2.3.8)

03.0 DEMONSTRATE THE RELATIONSHIP BETWEEN SCIENCE, TECHNOLOGY AND AGRICULTURE--The student will be able to:

- 03.01 Apply the scientific method to solve an agricultural problem (conduct an experiment). (MA.E.3.3.1; MA.E.2.3.1; SC.H.1.3.4; SC.H.1.3.5; SC.H.1.3.6; SC.H.1.3.7)
- 03.02 Describe the technology used in agricultural production. (SC.H.3.3.5; SC.H.3.3.6; SC.H.3.3.7; SC.A.2.3.3)

- 03.03 Describe the technology used in processing and marketing agricultural products. (SC.H.3.3.5; SC.H.3.3.6 SC.H.3.3.7; SS.A.2.3.3; SS.D.2.3.1; SS.D.2.3.2; SS.D.2.3.3; MA.B.3.3.1)
- 04.0 INTEGRATE THE USE OF MATHEMATICS AND COMMUNICATIONS IN AGRISCIENCE AND TECHNOLOGY--The student will be able to:
- 04.01 Apply basic mathematics operations to solve agricultural problems. (MA.A.1.3.4; MA.A.3.3.2; MA.A.3.3.3)
- 04.02 Correctly use measuring devices (rulers, thermometers, weight scales, etc.) and utilize measurements to solve agricultural problems. (MA.B.4.3.1; MA.B.4.3.2; MA.B.1.3.1; MA.B.1.3.3. MA.B.1.3.4; SC.A.1.3.1; SC.A.1.3.2)
- 04.03 Prepare written materials using correct English grammar. (LA.B.1.3.1; LA.B.1.3.2; LA.B.1.3.3)
- 04.04 Identify the main idea in oral presentations and written materials. (LA.A.2.3.1; LA.C.1.3.1; LA.C.1.3.4)
- 05.0 DESCRIBE CHAINS BETWEEN PRODUCER AND CONSUMER FOR AGRICULTURAL PRODUCTS--The student will be able to:
- 05.01 Identify the agricultural source of consumer products. (LA.A.2.3.6)
- 05.02 Trace the development of an agricultural product from the producer to the consumer (ex: wheat on farm to bread in grocery store). (SS.D.2.3.2)
- 06.0 USE SELECTED TECHNIQUES TO PRODUCE FINISHED PRODUCTS FROM AGRICULTURAL MATERIALS--The student will be able to:
- 06.01 Complete a project safely using agricultural tools, machinery or equipment. (HE.A.1.3.2; HE.A.1.3.5; HE.A.1.3.7; HE.B.1.3.2; HE.B.1.3.5; MA.B.1.3.4; MA.B.4.3.2; LA.A.1.3.2)
- 06.02 Prepare and process an agricultural product. (HE.A.1.3.7; HE.A.1.3.9)
- 06.03 Propagate environmental horticulture plants. (SC.F.2.3.1; SC.F.2.3.2; SC.F.2.3.3)
- 07.0 DESCRIBE THE IMPORTANCE OF PLANTS AND ANIMALS IN AGRICULTURE--The student will be able to:
- 07.01 Identify plants and animals important in agriculture. (SC.G.1.3.3)
- 07.02 Describe the responsibility of the animal industries regarding animal care and welfare. (SC.H.3.3.2; HE.A.1.3.9; LA.A.2.3.5)
- 07.03 Demonstrate the proper handling of small animals. (SC.H.3.3.2; HF.A.1.3.9; HE.B.1.3.2)