

Intermediate Agriscience

Foundational Standards

- 1 Incorporate safety procedures in handling, operating, and maintaining tools and machinery; handling materials; utilizing personal protective equipment; maintaining a safe work area; and handling hazardous materials and forces.** F.1

- 2 Demonstrate effective workplace and employability skills, including communication, awareness of diversity, positive work ethic, problem-solving, time management, and teamwork.** F.2

- 3 Explore the range of careers available in the field and investigate their educational requirements, and demonstrate job-seeking skills including resume-writing and interviewing.** F.3

- 4 Demonstrate digital literacy by using digital and electronic tools appropriately, safely, and ethically.** F.4

- 5 Participate in a Career Technical Student Organization (CTSO) to increase knowledge and skills and to enhance leadership and teamwork.** F.5

- 6 Participate in Supervised Agricultural Experiences and/or work-based, experiential, and service learning.** F.6

Impact of Agriculture

- 1 Describe the impact of various agricultural commodities on Alabama's economy.** 1
 - a Discuss the effects of state and national legislation as it relates to contemporary issues in the agriculture industry. 1.A
 - b Describe Alabama's agricultural imports and exports. 1.B

- 2 Collect and input data utilizing electronic record keeping systems. Example: Agriculture Experience Tracker (AET)** 2

- 3 Apply advancements in agriculture technology as they relate to industry standards. Examples: electronic control systems, drones, Global Positioning Systems (GPS), Geographic Information System (GIS), satellite imaging systems** 3

Agribusiness Leadership

- 4 Describe the three-circle model as used in agriscience education. Examples: working toward FFA awards and degrees, participating in Career/ Leadership Development Events (CDE/LDE)** 4

Natural Resources and Environmental Management

5 Identify potential hazards to Alabama wildlife, forests, and forest professionals. Examples: topographic challenges, unsafe hunting practices 5

6 Explain basic forest management practices. 6

- a Identify common trees of Alabama. 6.A
 - b Demonstrate common forestry tools and calculations. Examples: Biltmore stick, clinometer, diameter tape, board feet, compass, mapping, timber cruising, saw timber volume 6.B
 - c Discuss timber stand improvement and best management practices in forestry. 6.C
-

7 Explain basic concepts of agronomy. 7

- a Evaluate soil texture. 7.A
 - b Determine slope of land. 7.B
 - c Analyze land capability classes. 7.C
-

Plant Systems

8 Classify plants based on life cycles and uses in agriculture. Examples: annuals, biennials, perennials; cool and warm season vegetables, ornamentals 8

9 Explain methods of sexual and asexual plant reproduction. Examples: seeds, pollination; cuttings 9

10 Describe macronutrients and micronutrients needed for plant growth. 10

11 Explore various settings for production of agricultural crops. Examples: greenhouse, garden, outdoor lear 11

12 Identify plants by common names and give descriptions of common agricultural crops in Alabama. 12

Industrial Agricultural Technologies

13 Utilize power equipment in order to manipulate materials. Example: Use a circular saw, drill, or welder to construct a project. 13

14 Perform routine care and maintenance on small engines. Examples: replace spark plugs, air filter, oil, and oil filter 14

15 Demonstrate procedures used in wiring electrical circuits. Examples: use a voltage meter, install wiring, draw a circuit 15

16 Demonstrate plumbing installation and maintenance. Examples: install irrigation lines, sweat copper, repair valves 16