

# 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

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

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- 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

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

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

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- 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

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

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- 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

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**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
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**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
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## Plant Systems

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

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

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**10 Describe macronutrients and micronutrients needed for plant growth.** 10

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

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

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## 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

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

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

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