

Career and Technical Education							
ALSDE - approved CTE Course of Study Standards linked HERE .							
Supplemental Resources: Subject area courses may utilize the following supplemental resources:							
Below are the adopted textbooks for CTE courses as well as the course outline and description.							
Course	Textbook Title	Author	Edition	Publisher	Copyright Year	Tentative Course of Study	Course Descriptions
Advanced Agriscience	PRINCIPLES OF AGRICULTURE, FOOD, & NATURAL RESOURCES	Rayfield, Smith, Park, Croom	2nd Edition	Goodheart	2023	Alabama Course of Study - AFNR	Advanced Agriscience provides students with an increased understanding of Animal Science, Industrial Agricultural Technologies, and General Agriculture, three of the five pathways of the Agriculture, Food, and Natural Resources cluster.
Agricultural Industrial Maintenance	PRINCIPLES OF AGRICULTURE, FOOD, & NATURAL RESOURCES	Rayfield, Smith, Park, Croom	2nd Edition	Goodheart	2023	Alabama Course of Study - AFNR	Agricultural Industrial Maintenance prepares students for entry-level employment or advanced training in the agricultural industrial maintenance technologies field. Topics include proper use of power and stationary equipment; interpretation of technical information; basic electricity, construction, plumbing, hydraulics, and pneumatics; basic mechanical theory and application; basic welding theory, setup, and application for metal inert gas (MIG), tungsten inert gas (TIG), and shielded metal arc welding (SMAW); basic oxy-fuel use, setup and application; and basic plasma theory, setup, and application. This course is designed to be taught as a prerequisite for Poultry Industrial Maintenance and Forestry Industrial Maintenance.
Applied Agriscience	PRINCIPLES OF AGRICULTURE, FOOD, & NATURAL RESOURCES	Rayfield, Smith, Park, Croom	2nd Edition	Goodheart	2023	Alabama Course of Study - AFNR	Applied Agriscience provides students with an advanced understanding of Industrial Agricultural Technologies and General Agriculture, two of the five pathways in the Agriculture, Food, and Natural Resources cluster. Applied Agriscience emphasizes metal fabrication and power mechanics. Students should be allowed ample time in the laboratory to utilize content in real-world applications.
CTE Lab in AFNR	PRINCIPLES OF AGRICULTURE, FOOD, & NATURAL RESOURCES	Rayfield, Smith, Park, Croom	2nd Edition	Goodheart	2023	Alabama Course of Study - AFNR	This one-credit course is an extended laboratory experience to address the advancement and specialization of careers within Agriculture, Food and Natural Resources through individualized or small group instruction. This course allows students to enhance the essential and intermediate skills learned through program courses within the career cluster and prepare for industry credentialing opportunities.
Equine Science	PRINCIPLES OF AGRICULTURE, FOOD, & NATURAL RESOURCES	Rayfield, Smith, Park, Croom	2nd Edition	Goodheart	2023	Alabama Course of Study - AFNR	Equine Science enables students to become knowledgeable about caring for and managing horses. Topics include safety, history and development, anatomy and physiology, nutrition, health, and selection and conformation. Students also learn about tools, tack, and facilities necessary for the proper care of horses.
Forestry	PRINCIPLES OF AGRICULTURE, FOOD, & NATURAL RESOURCES	Rayfield, Smith, Park, Croom	2nd Edition	Goodheart	2023	Alabama Course of Study - AFNR	Forestry is designed to inform students about forestry management, woodlands conservation, and wood technology. Topics include safety, history, dendrology, silviculture practices, protection of forests, forestry equipment, forest products and marketing, tree measurement, and mapping.
Fundamentals of Agriscience	PRINCIPLES OF AGRICULTURE, FOOD, & NATURAL RESOURCES	Rayfield, Smith, Park, Croom	2nd Edition	Goodheart	2023	Alabama Course of Study - AFNR	Fundamentals of Agriscience is an introductory course that provides students with a general overview of Animal Science, Plant Science, Environmental Science, Industrial Agricultural Technologies, and General Agriculture, the five pathways within the Agriculture, Food, and Natural Resources cluster. Students are involved in classroom and/or laboratory activities in each of the five pathway areas. Emphases of Fundamentals of Agriscience include introduction to agriculture, technology, The National FFA, leadership, forestry, soils, wildlife, plants, aquaculture, animals, woodworking, welding, small engines, electricity, and plumbing. It is strongly recommended that Fundamentals of Agriscience be a prerequisite for all other Grades 9-12 courses in the cluster.
Horticulture Science	PRINCIPLES OF AGRICULTURE, FOOD, & NATURAL RESOURCES	Rayfield, Smith, Park, Croom	2nd Edition	Goodheart	2023	Alabama Course of Study - AFNR	Horticulture Science introduces students to plants, facilities, tools, and techniques used in the horticulture industry. Topics include plant physiology and propagation, growth requirements, facilities, horticulture crop production, pest management, and technological applications.
Intermediate Agriscience	PRINCIPLES OF AGRICULTURE, FOOD, & NATURAL RESOURCES	Rayfield, Smith, Park, Croom	2nd Edition	Goodheart	2023	Alabama Course of Study - AFNR	Intermediate Agriscience builds on basic understanding of the Plant Science, Environmental Science, Industrial Agricultural Technologies, and General Agriculture pathways within the Agriculture, Food, and Natural Resources cluster.
Introductin to Agricultural Construction	AGRICULTURAL MECHANICS	Herren	7th Edition	Cengage	2019	Alabama Course of Study - AFNR	Introduction to Agricultural Construction provides students with an overview of framing and building a structure. Topics include lumber, metal, material estimation, floor systems, framing systems (ceiling, wall, roof), and roofing materials for various structures.
Introduction to Animal & Dairy Science	PRINCIPLES OF AGRICULTURE, FOOD, & NATURAL RESOURCES	Rayfield, Smith, Park, Croom	2nd Edition	Goodheart	2023	Alabama Course of Study - AFNR	Introduction to Animal and Dairy Science introduces students to the field of livestock production and animal health and welfare. Students participate in activities related to the animal science field as they study the importance of the livestock industry, breed identification and characteristics, nutrition, disease and parasite control, genetics and reproduction, animal rights versus animal welfare, specialty animal production and animal products, livestock facilities and transportation, and regulatory agencies.
Equine Science	ICEV	NA	NA	CEV Multimedia, LLC.	2022	Alabama Course of Study - AFNR	Equine Science enables students to become knowledgeable about caring for and managing horses. Topics include safety, history and development, anatomy and physiology, nutrition, health, and selection and conformation. Students also learn about tools, tack, and facilities necessary for the proper care of horses.