

030715 Principles of Agriculture → ½ credit/semester → Prerequisite: None → Co-Requisite: Animal Science or Intro to Greenhouse → Pathways: Agribusiness, Ag Power/Structure, Animal Science, Environmental Science, Horticulture/Plant Science	This course provides instruction in the foundations of various segments of the agricultural industry. Agricultural career opportunities will be emphasized. The curriculum will focus on animal, plant, and land science and agricultural mechanics skills. The selection and planning of a supervised agricultural experience program and related recordkeeping will be presented. Leadership development will be provided through the National FFA Organization. Students will receive personal guidance and counseling with preparatory instructional program selection.
030711 Agriscience → ½ credit/semester → Prerequisite: Principles of Agriculture, Animal Science or Intro to Greenhouse → Pathways: Agribusiness, Ag Power/Structure, Animal Science, Environmental Science, Horticulture/Plant Science	Agriscience introduces the scientific agricultural approach to animal science and selection and plant and land science. Agricultural career opportunities will be emphasized in each class. Laboratory experiences relating to basic and current technology will be part of the program. Content may be enhanced by utilizing appropriate computer applications. Leadership development will be provided through FFA. Each student will be expected to have a supervised agricultural experience program and keep appropriate records.
010241A/B Construction Skills → ½ credit/semester → Prerequisite: Principles of Agriculture, Animal Science, Agriscience → Pathways: Ag Power/Structure	Prepares students to construct and maintain agricultural structures and equipment. Develops basic skills such as: tool identification, interpreting plans, calculating a bill of materials, electrification, carpentry, welding, metal fabrication, plumbing, and masonry. Content may be enhanced with appropriate computer applications. Leadership development will be provided through FFA. Each student will be expected to have a supervised agricultural experience program. This course may be extended to two credits offered on a two-hour basis provided that instruction is enhanced with laboratory experience, project construction, and in-depth skill development.
010252A/B Lutherie → ½ credit/semester → Prerequisite: Teacher Recommendation → Pathways: Ag Power/Structure	Lutherie course work includes objectives related to construction skills and includes course work on building stringed instruments such as ukuleles, dulcimers, mandolins and guitars. During the course students demonstrate the proper use of hand tools, stationary and power equipment. Students also analyze project plans including blueprints and bill of materials for the construction of their stringed instruments. Students also investigate and consider possible careers in the luthier field and keep records of production for their SAE's.
030711A/B Ag Power/Machine → ½ credit/semester → Prerequisite: Principles of Agriculture, Animal Science, Agriscience → Pathways: Ag Power/Structure	This course provides instruction and hands-on experience in basic principles of agricultural machinery assembly, operation, maintenance, service, repair and safety. Content may be enhanced with appropriate computer applications. Leadership development will be provided through FFA. Each student will be expected to have a supervised agricultural experience program. This course may be extended to two credits and offered on a two-hour basis providing the instruction is enhanced with laboratory experience and in-depth skill development.

010641 Greenhouse Technology → ½ credit/semester → Prerequisite: Principles of Agriculture, Agriscience → Co-Requisite: Intro to Greenhouse/Crop Tech → Pathways: Agribusiness, Environmental Science, Horticulture/Plant Science	Greenhouse Technology provides instruction in greenhouse structures and greenhouse environment regulations. Plant growth, development, and propagation are included, as well as production and maintenance of bedding and container-produced plants. Fundamental principles of vegetable production and commercial production of vegetable crops, as well as the marketing of horticulture products, may be included. Leadership development will be provided through the National FFA Organization. Each student will be expected to have a supervised agricultural experience program.
020510 Equine Science → ½ credit/semester → Grade Level: 11-12 → Prerequisite: Principles of Agriculture/Animal Science, Agriscience → Pathways: Ag Power/Structure	Equine Science develops knowledge and skills pertaining to breed identification and selection, anatomy, physiology, nutrition, genetics and reproductive management, training principles, grooming, health disease, parasite control, and sanitation practices. Leadership development will be provided through the National FFA Organization. Each student will be expected to have an agricultural experience program.
010231 Small Power Equipment → ½ credit/semester → Prerequisite: Principles of Agriculture/Animal Science, Agriscience → Pathways: Ag Power/Structure	This course is designed to develop skills in maintenance, repair, and operation of equipment, small combustion-type engine and electric motors. Leadership development will be provided through FFA (Future Farmers of America). Each student will be expected to have a supervised agricultural experience program.
020511A/B Veterinary Science → ½ credit/semester → Prerequisite: Principles of Agriculture/Animal Science → Pathways: Animal Science	Veterinary science topics include safety, sanitation, anatomy and physiology, clinical exams, hospital procedures, parasitology, posology, laboratory techniques, nutrition, disease, office management, and animal management. Careers are also explored. Leadership development will be provided through the National FFA Organization. Each student will be expected to have an agricultural experience program.
030610 Forestry → ½ credit/semester → Prerequisite: None → Pathways: Environmental Science	This course introduces the science of silviculture. The course includes career opportunities, tree identification, tree production, forestry management, timber harvesting, wood utilization and the environmental and ecological aspects of forestry. Content may be enhanced with appropriate computer applications. Leadership development will be provided through FFA. Each student will be expected to have a supervised agricultural experience program.
020520 Aquaculture → ½ credit/semester → Prerequisite: Principles of Agriculture/Animal Science, Agriscience → Pathways: Animal Science, Environmental Science	This course is an introduction to aquaculture science. Instruction provides the fundamentals of aquatic plant and animal biology, anatomy/morphology and physiology in aquaculture, and the unique properties of water for aquaculture. Instruction also includes fish and aquatic crop production principles, management and marketing. Applications of biotechnology in aquaculture, and aquaculture as sustainable agriculture is also included. Content will be enhanced with appropriate applied scientific laboratory activities

	and computer applications. Leadership development will be provided through FFA. Each student will be expected to have a supervised agricultural experience program.
010611 Intro to Greenhouse/Crop Prod → ½ credit/semester → Prerequisite: Principles of Agriculture/Animal Science, Agriscience → Pathways: Environmental Science, Horticulture/Plant Science	Introduction to Greenhouse and Crop Production develops basic scientific knowledge and skills pertaining to management of soil and its effects on human and animal food and fiber production, the environment, and meeting basic needs of life. The relationship of soil to plant growth and horticulture will be emphasized. Plant anatomy, reproduction, growth, health, and current biotechnological advances will be included. Content may be enhanced with appropriate technological applications. Leadership development will be provided through FFA. Each student will be expected to have a supervised agricultural experience program
010621 Floral Design → ½ credit/semester → Grade Level: 11-12 → Prerequisite: Principles of Agriculture/Animal Science, Agriscience → Pathways: Environmental Science, Horticulture/Plant Science	Floral Design provides instruction to develop floral design techniques using silk, dried, and fresh flowers. Students will learn the operation and management techniques of a floral business as well as the identification, production, and cultural maintenance practices of plants used in floral design and interior landscaping. Leadership development will be provided through the National FFA Organization. Each student will be expected to have a supervised agricultural experience program.
010131 Agribusiness/Farm Management → ½ credit/semester → Prerequisite: Principles of Agriculture/Animal Science, Agriscience → Co-Requisite: → Pathways: Agribusiness	This course introduces the free enterprise system, the study of economic principles, risk management, business law, budgets, finance, recordkeeping, and careers in agribusiness. Basic skills will be developed to manage a farm or agribusiness. Material will include: managing production/inventory, equipment, credit and taxes, market analysis and developing a business/farm plan. Content may be enhanced with appropriate computer applications. Leadership development will be provided through FFA. Each student will be expected to have a supervised agricultural experience program.
030611 Wildlife Resources → ½ credit/semester → Prerequisite: Principles of Agriculture/Animal Science → Pathways: Animal Science, Environmental Science	Students develop an awareness of wildlife industry resources. This course includes a study of ecology and ecosystems, wildlife habitat, population dynamics, management techniques that deal with wildlife in all areas, and the regulations that affect the wildlife industry. Content may be enhanced with appropriate applied scientific laboratory activities. Leadership development will be provided through the National FFA Organization. Each student will be expected to have a supervised agricultural experience program.
010110 Ag Communication → ½ credit/semester → Prerequisite: None → Pathways: Pathways: Agribusiness, Ag Power/Structure, Animal Science, Horticulture/Plant Science	This course develops an understanding of the fundamental skills necessary to be successful in the agricultural communications industry. Provides guided practice and applied experience utilizing various communication styles, including oral, written, and electronic communications. Communication techniques will include traditional print media, brochure development, photography, videography, computer program applications, and internet usage, including e-mail. Leadership development will be provided through

	the National FFA Organization. Each student will be expected to have a supervised agricultural experience program.
010631 Landscape/Turf Management → ½ credit/semester → Prerequisite: Principles of Agriculture/Animal Science → Pathways: Horticulture/Plant Science	This course includes identifying landscape plants and their characteristics, site evaluation, site design, calculation of materials needed, costs for bidding, and installing landscape plans. Landscape plant maintenance will also be presented. Selection, culture, and management of turf species used for lawns, golf courses, athletic fields and erosion control may also be included. Leadership development will be provided through the National FFA Organization. Each student will be expected to have a supervised agricultural experience program.
020503 Small Animal Technology → ½ credit/semester → Prerequisite: Principles of Agriculture → Pathways: Agribusiness, Animal Science	This course develops scientific knowledge, management practices, and marketing strategies in small and specialty animal technology. The curriculum includes identification, anatomy, physiology, nutrition, health, selection, and care of small animals. Typically, species include dogs, cats, rabbits, companion birds, ostriches, emus, tropical fish, and furbearers. Content will be enhanced with appropriate applied scientific laboratory activities. Leadership development will be provided through the National FFA Organization. Each student will be expected to have a supervised agricultural experience program.
020501 Animal Science → ½ credit/semester → Prerequisite: Principles of Agriculture → Co-Requisite: Principles of Agriculture → Pathways: Animal Science	Animal Science develops basic knowledge and skills pertaining to animal identification, selection, nutrition, reproduction and genetics, health management, and marketing of farm and companion animals commonly produced in Kentucky. The latest production technologies, as well as biotechnological applications, will be included. Leadership development will be provided through the National FFA Organization. Each student will be expected to have a supervised agricultural experience program.
030790 Agricultural Education Co-op → ½ credit/semester → Grade level: 11-12 → Co-Requisite: Completer status or concurrent enrollment in a pathway course → Pathways: All Ag Education Pathways	Co-op provides a supervised work site experience related to the students identified career pathway. A student must be enrolled in an approved pathway course during the same year the course is completed or the student has already posted 4 credits on their transcript in the pathway. Students may earn 1-3 credits throughout their high school experience.