

AGRICULTURE, FOOD AND NATURAL RESOURCES

The Agriculture, Food and Natural Resources Career Cluster prepares learners for careers in planning, implementation, production, management, processing, and/or marketing of agricultural commodities and services, including food, fiber, wood products, natural resources, horticulture, and other plant and animal products. It also includes related professional, technical, and educational services.

AGRIBUSINESS SYSTEMS

AGRIBUSINESS MANAGEMENT01500.....6420

1 semester – course offered every other year (2009-10, 2011-12)

PREREQUISITE (S): Sophomore, Junior, or Senior

COURSE DESCRIPTION: This course is intended for students with an interest in learning about business concepts that applies to agribusiness and international agriculture. Today the agricultural industry is a technology-orientated industry that includes production, agriscience, and agribusiness. This course studies the kinds, sizes, fundamentals, and applications of this phase of the agricultural industry. Classroom and laboratory activities are supplemented through supervised agricultural experiences and leadership programs and activities.

AGRIBUSINESS LEADERSHIP01700.....6020

1 semester – course offered every other year (2010-11, 2012-13)

PREREQUISITE(S): Sophomore, Junior, or Senior

COURSE DESCRIPTION: this course is intended for students with an interest in agribusiness management, the enhancement of leadership, the development of personal growth, and career success in agribusiness. This course studies the skills needed for success in the agricultural industry: styles of leadership, communication, and speaking to groups, leading individuals and groups, managerial leadership skills, personal development, and transition to work skills. Classroom and laboratory activities are supplemented through supervised agricultural experiences and leadership programs and activities.

NATURAL RESOURCE AND ENVIRONMENTAL SERVICE SYSTEMS

NATURAL RESOURCES01300.....6040

1 semester – course offered every other year (2009-10, 2011-12)

PREREQUISITE(S): None

COURSE DESCRIPTION: Natural Resources is an opportunity for students to increase awareness of the close ties among living organisms as well as natural and environmental concerns with the interrelationships of living organisms and the world around us. This beginning course also studies the environment as it pertains to the agricultural industry. Areas of emphasis are: soil, water, air, cropland, range, forest, plant and animal systems, and public policy of the environment. Classroom and laboratory activities are supplemented through supervised agricultural experiences and leadership programs and activities.

WILDLIFE MANAGEMENT013001.....6035

1 semester – course offered every other year (2010-11, 2012-13)

PREREQUISITE(S): None

COURSE DESCRIPTION: Wildlife Management is a beginning course that studies the various wildlife forms - fish, waterfowl, upland birds, mammals and endangered species and their habitats. This course is about fish and wildlife ecology, relationships between wild creatures and their habitats, and human activities that impact fish and wildlife populations. Classroom and laboratory activities are supplemented through supervised agricultural experiences and leadership programs and activities.

PLANT SYSTEMS

INTRO TO HORTICULTURE/FLORICULTURE012000/012001.....

..... 6045
1 semester – course offered every other year(2010-11, 2012-13)

PREREQUISITE(S): None

COURSE DESCRIPTION: Horticulture/floriculture is a beginning level course that introduces students to the career opportunities in the industry, propagation and growing of plants, greenhouse management, hydroponics, types of crop production, floral design and arrangement, and the business practices best suited for success. Each student will be expected to grow their own plants and design several floral arrangements. Classroom and laboratory activities are supplemented through supervised agricultural experiences and leadership programs and activities.

LANDSCAPE DESIGN ANDNURSERY MANAGEMENT
012001.....6055

1 semester – course offered every other year (2009-010, 2011-012)

PREREQUISITE(S): Basic computer skills

COURSE DESCRIPTION: Landscape Design and Turf Management introduces students to the basic principles of landscaping a home or business through design principles, drawing, and color theory. Students will study: career opportunities, objectives of residential landscaping, landscape principles, proper selection of vegetation (trees, shrubs, plants) and structures/accessories, and proper landscape management.Each student will be expected to complete a landscape practicum. Classroom and laboratory activities are supplemented through supervised agricultural experiences and leadership programs and activities.

ANIMAL SYSTEMS

ANIMAL SCIENCE 1 011004(Large Animals)6060
1 semester

PREREQUISITE(S): None

COURSE DESCRIPTION: This course is designed for students who have an interest in working with animals. Animals studied will be large animals (horses, beef, dairy, swine, and sheep). Specific areas of study are: breed characteristics and conformation, behavioral issues, nutrition, growth patterns, safety handling, health issues, production management, consumer issues and food science.Classroom and laboratory activities are supplemented through supervised agricultural experiences and leadership programs and activities.

ANIMAL SCIENCE 2011006(Companion Animals)....6120
1 semester

PREREQUISITE(S): None

COURSE DESCRIPTION: This course is designed for students with an interest in the pet industry. Animals studied will be dogs, cats, gerbils, hamsters, mice, rats, guinea pigs, ferrets, rabbits, amphibians, reptiles, birds, fish, and other exotic animals. Areas of study are: species characteristics, care, management, nutrition, and health and consumer issues and career exploration.Classroom and laboratory activities are supplemented through supervised agricultural experiences and leadership programs and activities.

POWER, STRUCTURE AND TECHNICAL SYSTEMS

WELDING 1 101930.....6065

1 semester

PREREQUISITE(S): None

COURSE DESCRIPTION: This course is intended for students with a desire to learn basic shop skills, shop safety, and welding skills. Welding 1 introduces the foundation skills that are required for any competent welder. Emphasis will be on basic welding skills for Oxy Acetylene, welding communication, safety, equipment setup, and maintenance. Lab includes completing oxyacetylene welds without rod, with steel rod and brazing. Classroom and laboratory activities are supplemented through supervised agricultural experiences and leadership programs and activities.

WELDING 2 101940.....6320

1 semester

PREREQUISITE(S): WELDING 1

COURSE DESCRIPTION: A semester course designed to enhance student skills that were acquired in Welding 1. Skill development will concentrate on the basic skills needed for welding safety; setup, operation and maintenance of Arc welding equipment; setup, operation and maintenance of MIG welding equipment, plasma arc cutting, welding math and the design of projects. Classroom and laboratory activities are supplemented through supervised agricultural experiences and leadership programs and activities.

WELDING 3 016005.....6330

1 semester

PREREQUISITE(S): WELDING 1 & WELDING 2

COURSE DESCRIPTION: A semester course designed to enhance student skills that were acquired in Welding 1 and 2. Skill development will concentrate on welding safety, out of position welding, project design, the design and construction of student projects, welding math, and career development. Before the semester starts, student projects will be designed and approved by parents and instructor. Classroom and laboratory activities are supplemented through supervised agricultural experiences and leadership programs and activities.

BIOTECHNOLOGY EDUCATION LAB 109934.....6050

1 semester

PREREQUISITE(S): None

Course Description: This course equips students with a working knowledge of biotechnology as it is used in Agricultural, Food, Natural Resources, and Health Sciences. Students will diagram how classical processes have influenced trait improvement throughout history. Through application of DNA structure and gene insertion methods, students will demonstrate how genetic engineering has been applied to organism improvement and solving human health issues. Students will apply DNA and protein detection to determine presence of specific traits. Additionally, student will distinguish between scientific and societal biotechnology issues.