

Complete Pathway of Study offered 2014 for Agriculture: Power, Structures, and Technical Systems

Agriscience- is a laboratory science course that prepares students for biology, subsequent science courses and postsecondary pursuits. The content area includes ecology, biological processes, sexual and asexual reproduction and a study of the chemical and physical laws that govern life processes. This course helps students understand the important role agricultural science serves as industry moves into the 21st century.

Advanced Principles of Agricultural Sciences- includes standards that challenge students to plan for one of the five career clusters in agriculture. Understanding the skills necessary to be successful in an agriculture career is important for students as they enter the agricultural industry in the 21st century.

Agricultural Power and Equipment- includes basic information and laboratory activities on small engines, tractors and agricultural equipment maintenance, repair and overhaul. The standards address competencies for electrical motors, hydraulic systems and fuel-powered engines.

Agricultural Mechanics- includes standards to prepare students for operational procedures for a shop or a home environment. Students learn basic skills in areas, including welding, electricity, land measurement, and plumbing. As students enter the 21st century, they need to have skills that can be used in a rural or an urban environment.

Landscaping and Turf Management- includes standards to prepare students for creating beautiful environments for homes and businesses. This course includes site analysis and preparation, landscape drawing, plant selection, and installation. Maintenance of healthy attractive landscapes and turf areas will be emphasized. With the increase of urban sprawl these career opportunities are increasing daily. Plant science and leadership skills taught in this class will prepare students to meet the demands of this exciting industry. (1/2 credit)

Greenhouse Management-This course is designed to prepare a student to manage a greenhouse operation. Students in this class will learn to produce various ornamental crops and food crops. An understanding of structures, crop selection, and growing systems will be explored. As populations continue to expand, the importance of food production in a climate controlled environment increases. Today's agriculture students are preparing to meet the needs of a growing world. (1/2 credit)

Wildlife Management and Recreation- emphasizes the awareness of conservation and preservation management practices utilized to ensure the sustainability of our outdoor resources. Integrated academics and experiential learning will build conservation awareness among students. This will, in turn, generate career interests and more responsible land ownership in the community as we enter the 21st century. (1/2 credit)

Small Animal Care- contains objectives to prepare students for careers in managing and caring for specialty and companion animals. As our population raises more specialty and companion animals for production purposes and personal value, careers that work with these animals in a safe environment will continue to expand. (1/2 credit)

Forestry Management- is designed to develop student knowledge of forestry technology. The student will develop skills in producing, harvesting, marketing and developing forestry products and public utilization. Forests are one of Tennessee's most valuable resources. (1/2 credit)

Horse science- is designed to develop basic understanding of equine handling, health, maintenance, reproduction, selection and management. Horse populations in the state have continued to grow and their economic impact has increased with this growth. This course is designed to help students prepare for the social and economic impact equine science will have in the 21st century. (1/2 credit)

Plant and soil science- is designed to address issues dealing with the use of natural resources and agronomic crops as we see the need for improved management methods to meet the needs of agricultural production while addressing concerns dealing with urbanization and soil conservation. (Online Course)

Animal Biotechnology-This course is to prepare students with interests in higher level, science based animal agriculture. Students will study rigorous standards related to taxonomy, anatomy and physiology, body systems, reproduction, hormonal and immune systems, nutrition, heredity and genetics (molecular biology), health, agri-medicine, wellbeing, DNA and biotechnology, and emerging technologies associated with companion and production animals. (Online Course)

Veterinary Science- challenges students to use advanced technologies and medical treatments to maintain the health of animals. The animal health industry continues to grow in importance and prominence as more people purchase animals for pleasure and sustenance. (Online Course)

Business Technology:

Two complete pathways-Business Management and Multimedia Management.

Computer Applications-This course is designed to develop computer technology skills. Students will use a variety of computer software and hardware tools and features of an electronic information network. Students will explore the social, business, and ethical issues of using computer technology. The students will develop skills that will assist them with efficient production of word processing documents, spreadsheets, databases, and presentations. (Both business Paths require this as their first class).

Accounting I- introduces concepts and principles based on a double-entry system of maintaining the electronic and manual financial records for a sole proprietorship, a partnership, and a corporation. It includes analyzing business transactions, journalizing, posting, and preparing worksheets and financial statements. (Offered each year)

Business Management-Students in Business Management will develop a foundation in the many activities, problems, and decisions that are intrinsic to the management of a successful business, as well as an appreciation for the importance of these responsibilities. Areas to be examined include business organization, ethical and legal responsibilities, communication, decision-making, personnel, safety, professional development and related careers. By gaining an understanding of these areas, students will be better prepared to enhance the business decisions of tomorrow. (Offered each year)

Virtual Enterprise- Virtual Enterprises International (VE) is a simulated business environment. The VE students will be involved in actual on-the-job work experiences, including accounting, personnel administration, management, and marketing. The only difference between the VE and an actual business is that no material goods are produced or legal tender exchanged. However, services will be provided. Working teams, students will develop and enhance oral and written communication skills through initiative, responsibility, and creativity. (Honors class that also counts for Economics credit required of all Seniors) Offered each year.

Students on Interactive Multimedia Path are invited as needed by instructor.

Advanced Computer Applications-This is a capstone course in which students will learn necessary skills in problem solving using current and emerging integrated technology to include a variety of input technologies in the production of professional quality business documents and presentations. The course focuses on student choice, accountability, and performance. Students increase their employability by working toward the attainment of high-level skills in the areas of integrated software applications, communication skills, ethical issues, human relations, leadership, self-management, and workplace management. Students may choose areas of specialization and achieve industry certification in areas such as word processing, spreadsheet applications, multimedia presentations, schedule and contact management, etc. This course may articulate to post-secondary education. (Taught on 3 year rotation)

Desktop Publishing-The student will apply keying, formatting, typography, layout, and design skills in developing electronic publishing documents. The student will develop skills in electronic publishing design, layout, composition, and photo journalism. Content provides the opportunity to acquire marketable skills and to prepare for gainful employment and or entry into postsecondary education in the graphic communications industry. Laboratory facilities and experiences simulate those found in the graphic communications industry. (Taught on 3 year rotation)

Interactive Multimedia-The student will apply keying, typography, layout, and design skills in this course. The student will be proficient in using interactive multimedia tools to develop electronic presentations. Creative design, persuasive communications, and language arts skills are applied through research, evaluation, validation, written, and oral communication. Typography, layout, and design guidelines are applied. Copyright laws and ethical practices are reinforced in creating and formatting various presentations that require imported data/graphics, digital, audio, and video clips. Team development will also be stressed as students work on multimedia project(s). Laboratory facilities and experiences simulate those found in business and industry. (Taught on 3 year rotation)

Family and Consumer Science

Pathways: Fashion Design and Family and Community Services

Family and Consumer Sciences (FACS)- is a comprehensive, foundation course designed to assist students in developing core knowledge and skills needed for successful life planning and management. Content includes human development; family and parenting education; resource management; housing and living environments; nutrition and foods; textiles and apparel; leadership development; and career preparation. A unique focus is on the management of families, work, and their interrelationships. The course provides a foundation for further study in specialized related career areas.

Fashion Design and Merchandising- is a specialized course designed to introduce students to the world of fashion. Areas of study include fashion fundamentals, principles and elements of design; career options and preparation; product selection and maintenance; and consumer strategies. Instruction includes academic integration and technology applications.

Textiles and Apparel- is a specialized course designed to build foundational skills in the selection, production, and alteration of textile and apparel products. Areas of study include social, psychological and physiological influences; fibers and fabrics; textile design and production influences; manufacturing systems; and career options and preparation. Instruction includes academic integration and technology applications.

Child and Lifespan Development- prepares students to understand the physical, social, emotional and intellectual growth and development throughout the lifespan. Experiences such as laboratory observations, job shadowing, service learning and laboratory participation will enhance the learning process. Instructional content includes child development theories and research; prenatal development; infants and toddlers; preschool years; middle childhood; adolescence; adulthood; geriatrics; death and dying; careers; and leadership, citizenship and teamwork.

Nutrition and Foods-is a specialized course designed to help students understand the nutrient value, appetite appeal, social significance and cultural aspects of food. Students will examine the role of nutrition in the prevention of health conditions, such as obesity, and the promotion of optimal body performance throughout the life span. The course offers students opportunities to develop skills in the safe and sanitary selection, preparation, storing, and serving of food; meal management to meet individual and family nutrition needs across the life span; and optimal use of food resources. Instruction includes academic integration and technology applications. Careers in nutrition and food industries will be explored.

Personal Finance- is a course designed to help students understand the impact of individual choices on occupational goals and future earnings potential. Real world topics covered will include income, money management, spending and credit, as well as saving and investing. Students will design personal and household budgets; simulate use of checking and saving accounts; demonstrate knowledge of finance, debt, and credit management; and evaluate and understand insurance and taxes. This course will provide a foundational understanding for making informed personal financial decisions. (satisfies Senior requirement)

Teaching As A Profession- is a course designed to capture the interest of secondary students as potential teachers, introduce students to teaching as a profession, and foster respect for the teaching profession. Students will gain knowledge and skills that will establish a foundation for a successful pathway to a teaching career. Content standards guide students to discover challenges, opportunities, and rewards of a teaching career. Content includes history and current issues of education; teacher roles, responsibilities, and characteristics; self-exploration and understanding; the teacher and learning processes; human growth and development; teaching career opportunities and preparation; and components of instruction. Students will learn through classroom observations and experiences, student organization activities, and the development of a professional portfolio.

Health Sciences

Pathway of study offered: Therapeutic Nursing Services.

Anatomy and Physiology- is a course in which students will examine human anatomy and physical functions. They will analyze descriptive results of abnormal physiology and evaluate clinical consequences. A workable knowledge of medical terminology will be demonstrated. (Online course)

Medical terminology- is designed to develop a working knowledge of the language of health professions. Students acquire word-building skills by learning prefixes, suffixes, roots, combining forms, and abbreviations. Utilizing a body systems approach, students will define, interpret, and pronounce medical terms relating to structure and function, pathology, diagnosis, clinical procedures, and pharmacology. Students will use problem-solving techniques to assist in developing an understanding of course concepts. (Offered Online)

Health Science Education-This course is an introduction to broad standards that serve as a foundation for Health Care Occupations and functions across health services. Units included are academics in health care communications systems, legal responsibilities, ethics, teamwork, and safety practices.

Medical Therapeutics-This course provides knowledge and skills to maintain or change to the health status of an individual over time. This could include such careers or career areas as dental, dietetics, medical assistance, home health, nursing, pharmacy, respiratory, social work, nutritionist, physician, psychiatrist, psychologist, veterinarian, gerontology service provider, medical practice owner, attorney for health care.

Nursing Education -consists of 18 units of study dealing with direct bedside nursing care. Clinical experience will consist of supervised practice in the nursing home, as well as demonstrations in the classroom. Students can be registered by Tennessee Department of Health—after the completion of the course, 100 hours clinical and theory, passing a state test (both written and skills)—and will be job ready. Students may complete a clinical internship following this course. Jobs include registered nurse, clinical nurse specialist, nurse practitioner, nurse midwife, nurse anesthetist, forensic nurse, and other occupations.