Rice High School
Career and Technical Education Courses

Agricultural Technology and Mechanical Systems

Course: Principles of Agricultural, Food, and Natural Resources
Prerequisites: None
Recommended Prerequisites: None
Principles of Agriculture, Food, and Natural Resources will allow students to develop knowledge and skills regarding career and educational opportunities, personal development, globalization, industry standards, details, practices, and expectations. To prepare for careers in agriculture, food, and natural resources, students must attain academic skills and knowledge in agriculture. To prepare for success, students need opportunities to learn, reinforce, experience, apply, and transfer their knowledge and skills in a variety of settings.

Course: Agricultural Mechanics and Metal Technologies
Prerequisites: None
Recommended Prerequisites: Principles of Agricultural, Food, and Natural Resources
This course deals with the basics of Ag mechanics, such as safety and tool identification. It also introduces students to welding, oxy-fuel work, and woodworking. The second semester develops skills in metal equipment assembly and joining processes.

Course: Agricultural Structures Design and Fabrication
Prerequisites: None
Recommended Prerequisites: Agricultural Mechanics and Metal Technologies
This is a second-year agricultural mechanics class that immerses the student in the welding industry. This double-blocked class will allow students to plan, budget, acquire materials and build metal projects. Students will start the industry certification process with the American Welding Society.

Course: Practicum in Agricultural, Food, and Natural Resources
Prerequisite:
Recommended Prerequisite: A minimum of one credit from an AFNR course
Practicum in Agriculture, Food, and Natural Resources is designed to give students supervised practical application of knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experiences such as employment, independent study, internships, assistantships, mentorships, or laboratories. The practicum course is a paid or unpaid capstone experience for students participating in a coherent sequence of career and technical education courses in the Agriculture, Food, and Natural Resources Career Cluster.

Plant Science

Course: Principles in Agricultural, Food, and Natural Resources

Prerequisites: None

Recommended Prerequisites: Agricultural Mechanics and Metal Technologies

Principles of Agriculture, Food, and Natural Resources will allow students to develop knowledge and skills regarding career and educational opportunities, personal development, globalization, industry standards, details, practices, and expectations. To prepare for careers in agriculture, food, and natural resources, students must attain academic skills and knowledge in agriculture. To prepare for success, students need opportunities to learn, reinforce, experience, apply, and transfer their knowledge and skills in a variety of settings.

Course: Horticulture

Prerequisites: At least one credit in a course from the AFNR career cluster

Recommended Prerequisites: None

Horticultural Science is designed to develop an understanding of common horticultural management practices as they relate to food and ornamental plant production. To prepare for careers in horticultural systems, students must attain academic skills and knowledge, acquire technical knowledge and skills related to horticulture and the workplace, and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations. To prepare for success, students need opportunities to learn, reinforce, apply, and transfer knowledge and skills in a variety of settings.

Course: Floral Design

Prerequisites: None

Recommended Prerequisites: None

Floral Design is designed to develop students' ability to identify and demonstrate the principles and techniques related to floral design as well as develop an understanding of the management of floral enterprises. Through the analysis of artistic floral styles and historical periods, students will develop respect for the traditions and contributions of diverse cultures. Students will respond to and analyze floral designs, thus contributing to the development of lifelong skills of making informed judgments and evaluations. To prepare for careers in floral design, students must attain academic skills and knowledge, acquire technical knowledge and skills related to horticultural systems, and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations. To prepare for success, students need opportunities to learn, reinforce, apply, and transfer their knowledge and skills and technologies in a variety of settings

Course: Advanced Plant and Soil Science

Prerequisites:

Recommended Prerequisites: Biology, Chemistry, Physics, at least one credit in a course from the AFNR career cluster.

This course is designed to explore the areas of plant and soil science. Students will develop knowledge and skills pertaining to the importance of soil nutrients and properties to the production of plants, plant physiology, solid chemistry,and cellular plant activity.

Course: Advanced Floral Design
Prerequisites: Floral Design
Recommended Prerequisites: None
Students are exposed to aspects of occasion-specific design through the Floral Design course, but there is not an advanced course to help students enrich and enhance their skills and interest in specialty designs or design planning for specific occasions and events. Freelance floral design for occasions and events is part of a $30 billion industry and is especially in-demand across the state of Texas. The goal of this course is to provide students with advanced-level floral design knowledge, skills, and experiences that can transition to floral design careers and advancement in the floral design industry.

Digital Communications

Course: Professional Communications
Prerequisites: None
Recommended Prerequisites: None
This course blends written, oral and graphic communication in a career-based environment. The student will concentrate on employability communication skills, critical-thinking skills, and developing leadership skills for the workforce.

Course: Principles of Arts, Audio/Video Technology, and Communications
Prerequisites: None
Recommended Prerequisites: None
The goal of this course is that the student understands arts, audio/video technology, and communications systems. Within this context, students will be expected to develop an understanding of the various and multifaceted career opportunities in this cluster and the knowledge, skills, and educational requirements for those opportunities.

Course: Audio/Video Production I
Prerequisites: None
Recommended Prerequisites: Principles of AAVTC
Careers in audio and video technology and film production span all aspects of the audio/video communications industry. Within this context, in addition to developing technical knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications Career Cluster, students will be expected to develop an understanding of the industry with a focus on pre-production, production, and post-production audio and video products.

Course: Audio/Video Production II
Prerequisites: Audio/Video Production I
Recommended Prerequisites: None
Careers in audio and video technology and film production span all aspects of the audio/video communications industry. Building upon the concepts taught in Audio/Video Production, in addition to developing advanced knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications Career Cluster, students will be expected to develop an advanced understanding of the industry with a focus on pre-production, production, and post-production products. This course may be implemented in an audio format or a format with both audio and video.

Course: Practicum in Audio/Video Production
Prerequisites: Audio/Video Production II
Recommended Prerequisites: None
Careers in audio/video production span all aspects of the audio/video communications industry. Building upon the concepts taught in Audio/Video Production II and its corequisite Audio/Video Production II Lab, in addition to developing advanced technical knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications Career Cluster, students will be expected to develop an increasing understanding of the industry with a focus on applying pre-production, production, and post-production audio and video products in a professional environment. This course may be implemented in an advanced audio/video or audio format. Instruction may be delivered through lab-based classroom experiences or career preparation opportunities.

Health Science

Course: Principles of Health Science
Prerequisites: None
Recommended Prerequisites: None
This course is designed to provide an overview of the therapeutic, diagnostic, health informatics, support services, and biotechnology research and development systems of the healthcare industry

Course: Medical Terminology
Prerequisites: None
Recommended Prerequisites: None
The Medical Terminology course is designed to introduce students to the structure of medical terms, including prefixes, suffixes, word roots, singular and plural forms, and medical abbreviations. The course allows students to achieve comprehension of medical vocabulary appropriate to medical procedures, human anatomy and physiology, and pathophysiology.

Course: Clinical Ethics
Prerequisites: None
Recommended Prerequisites: Principles of Health Science
Aa practical course that helps health professionals learn how to identify, analyze, and resolve ethical issues in clinical practice.

Course: Practicum in Nursing/Health Science
Prerequisites: Biology, Chemistry, and at least one Level 2 or higher course in Nursing Science
Recommended Prerequisites: Medical Terminology
The Practicum in Health Science course is designed to give students practical application of previously studied knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experience.

Culinary Arts

Course: Introduction to Culinary Arts
Prerequisites: None
Recommended Prerequisites: None
Introduction to Culinary Arts will emphasize the principles of planning, organizing, staffing, directing, and controlling the management of a variety of food service operations. The course will provide insight into the operation of a well-run restaurant. Introduction to Culinary Arts will provide insight into food production skills, various levels of industry management, and hospitality skills. This is an entry level course for students interested in pursuing a career in the food service industry. This course is offered as a classroom and laboratory-based course.

Course: Culinary Arts
Prerequisites: None
Recommended Prerequisites: Introduction to Culinary Arts
Culinary Arts begins with the fundamentals and principles of the art of cooking and the science of baking and includes management and production skills and techniques. Students can pursue a national sanitation certification or other appropriate industry certifications. This course is offered as a laboratory-based course.

Course: Advanced Culinary Arts
Prerequisites: Culinary Arts
Recommended Prerequisites: None
Advanced Culinary Arts will extend content and enhance skills introduced in Culinary Arts by in-depth instruction of industry-driven standards in order to prepare students for success in higher education, certifications, and/or immediate employment.

Course: Practicum in Culinary Arts
Prerequisites: Culinary Arts
Recommended Prerequisites: None
The practicum in Culinary Arts course is designed to give students practical application of previously studied knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experience.

Cosmetology and Personal Care Services

Course: Principles of Cosmetology
Prerequisites: None
Recommended Prerequisites: None
Students coordinate integration of academic, career, and technical knowledge and skills in this laboratory instructional sequence course designed to provide job-specific training for employment in cosmetology careers. Students will attain academic skills and knowledge as well as technical knowledge and skills related to cosmetology, design and color theory. Students will develop knowledge and skills regarding various cosmetology design elements such as form, lines, texture, structure and illusion or depth as they relate to the art of cosmetology. Instruction includes sterilization and sanitation procedures, hair care, nail care, and skin care and meets the TDLR requirements for licensure upon passing the state examination. Analysis of career opportunities, license requirements, knowledge and skills expectations, and development of workplace skills are included.

Course: Introduction to Cosmetology
Prerequisites: None
Recommended Prerequisites: None
In Introduction to Cosmetology, students explore careers in the cosmetology industry. To prepare for success, students must have academic and technical knowledge and skills relative to the industry. Students may begin to earn hours toward state licensing requirements.

Course: Cosmetology I
Prerequisites: None
Recommended Prerequisites: Introduction to Cosmetology
Students coordinate integration of academic, career, and technical knowledge and skills in this laboratory instructional sequence course designed to provide job-specific training for employment in cosmetology careers. Instruction includes sterilization and sanitation procedures, hair care, nail care, and skin care and meets the Texas Department of Licensing and Regulation (TDLR) requirements for licensure upon passing the state examination. Analysis of career opportunities, license requirements, knowledge and skills expectations, and development of workplace skills are included. The student demonstrates professional standards/employability skills as required by business and industry. The student applies academic skills to the field of cosmetology. The student demonstrates knowledge of rules and regulations established by the TDLR. establishment or school. The student demonstrates an understanding in the use of tools, equipment, technologies, and materials used in cosmetology. The student applies academic knowledge and practical skills to simulated and actual work situations. Must be taken with Intro to cosmetology. This course is the 1st year of a two-year program that encompasses theories and principles of cosmetology. Upon completion of this 2 year program, students will have learned the skills and knowledge to pass the required Texas Department of Licensing and Regulations (TDLR) state board exam. Students must clock a total of 900 hours to be eligible for the written exam. Students must pass the written exam with a minimum of 70% and clock 1000 hours to be eligible to take the practical exam. Students that have passed both written and practical exams with a minimum of 70 %, along with obtaining their high school diploma will need to pay the required license fee to TDLR, allowing them to become a licensed Cosmetologist in the state of Texas.

Course: Cosmetology II
Prerequisites: Cosmetology I
Recommended Prerequisites: None
Students will demonstrate proficiency in academic, technical, and practical knowledge and skills. The content is designed to provide the occupational skills required for licensure. Instruction includes advanced training in professional standards/employability skills; Texas Department of Licensing and Regulation (TDLR) rules and regulations; use of tools, equipment, technologies and materials; and practical skills. The student demonstrates professional standards/employability skills as required by business and industry. The student applies academic skills to the field of cosmetology. The student demonstrates knowledge of rules and regulations established by the TDLR. The student demonstrates proficiency in the use of tools, equipment, technologies, and materials used in cosmetology. The student applies academic knowledge and practical skills to simulated and actual work situations. The student analyzes career paths within the cosmetology industry. This course is the second year of a two-year program that encompasses theories and principles of cosmetology. Upon completion, students will have learned the skills and knowledge to pass the required Texas Department of Licensing and Regulations (TDLR) state board exam. Students must clock a total of 900 hours to be eligible for the written exam. Students must pass the written exam with a minimum of 70% and clock 1000 hours to be eligible to take the practical exam. Students that have passed both written and practical exams with a minimum of 70 %, along with obtaining their high school diploma

will need to pay the required license fee to TDLR, allowing them to become a licensed Cosmetologist in the state of Texas.

Business Management

Course: Business Management I
Prerequisites: None
Recommended Prerequisites: None
In this course students implement personal and interpersonal skills to strengthen individual performance in the workplace and in society and make a successful transition to the workforce and postsecondary education. Students apply technical skills to address business applications of emerging technologies, create word-processing documents, develop a spreadsheet, formulate a database, and make an electronic presentation using appropriate software.

Course: Business Management II
Prerequisites: Business Management I
Recommended Prerequisites: None
In Business Information Management II, students implement personal and interpersonal skills to strengthen individual performance in the workplace and in society and make a successful transition to the workforce or postsecondary education. Students apply technical skills to address business applications of emerging technologies, create complex word-processing documents, develop sophisticated spreadsheets using charts and graphs, and make an electronic presentation using appropriate multimedia software.

Course: Business Management
Prerequisites: None
Recommended Prerequisites: None
Business Management is designed to familiarize students with the concepts related to business management as well as the functions of management, including planning, organizing, staffing, leading, and controlling. Students will also demonstrate interpersonal and project-management skills.

Course: Statistics and Business Decision Making
Prerequisites: Algebra II
Recommended Prerequisites: None
Statistics and Business Decision Making is an introduction to statistics and the application of statistics to business decision making. Students will use statistics to make business decisions. Students will determine the appropriateness of methods used to collect data to ensure conclusions are valid.

Course: Practicum in Business Management
Prerequisites: None
Recommended Prerequisites: Business Management
Practicum in Business Management is designed to give students supervised practical application of previously studied knowledge and skills. Practicum experiences occur in a paid or unpaid arrangement and a variety of locations appropriate to the nature and level of experience. Students implement personal and interpersonal skills to strengthen individual performance in the workplace and in society and to make a successful transition to the workforce or postsecondary education. Students apply technical skills to address business applications of emerging

technologies. Students develop a foundation in the economic, financial, technological, international, social, and ethical aspects of business to become competent consumers, employees, and entrepreneurs. Students enhance reading, writing, computing, communication, and reasoning skills and apply them to the business environment. Students incorporate a broad base of knowledge that includes the legal, managerial, marketing, financial, ethical, and international dimensions of business to make appropriate business decisions.

Course: Career Preparation for Program of Study
Prerequisites: At least one Level 2 or Higher CTE course in any career cluster pathway
Recommended Prerequisites: None