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2025 - 2026

Middle School Approved Courses

Kentucky Department of Education

Office of Career and Technical Education

Kentucky Department of
EDUCATION

CAREER AND TECHNICAL EDUCATION
APPROVED COURSES - MIDDLE SCHOOL

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AGRICULTURE

Agriscience Exploration 030717

The course content focuses on exploring current and future agricultural careers as well as the historical events that molded the industry. The local agricultural industry is emphasized, and the local high school program activities are featured. Leadership development will be provided through the National FFA organization. Classroom, laboratory, and field trip experiences should be provided.

Recommended Grade Level: 6 -- 8

Students will:

1. Summarize careers in agriculture and list traits of workplace readiness.
2. Review the historical Importance of the agricultural industry and how agriculture shaped world history.
3. Identify and research careers in agriculture.
4. Conduct a career self-analysis.
5. Visit the agricultural department at the high school and become acquainted with the curricula.
6. Recognize the opportunities for leadership development provided by the National FFA organization.
7. Relate the Importance of agriculture in the local, state, national, and global economies.
8. Identify tools, equipment, and materials common in agriculture.
9. Identify current, major contemporary issues in agriculture.
10. Give examples of the new technological developments in agriculture.
11. Examine basic home and farm safety.

Principles of Agricultural Science and Technology 030714

This course provides instruction in the foundations of various segments of the agricultural industry. Agricultural career opportunities will be emphasized. Animal science, plant and land science, and agricultural mechanics skills will be the focus of the curriculum. The selection and planning of a supervised agricultural experience program and related record-keeping 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.

Recommended Grade Level: 8

Students will:

1. Develop a supervised agricultural experience program including the use of record keeping.
2. Explore basic agricultural skills needed, including math, communication, and employability skills.
3. Identify and examine general soil and plant sciences.
4. Identify and examine general animal sciences.
5. Demonstrate basic agricultural mechanics and construction skills.
6. Investigate basic environmental, food, and fiber interrelationships.
7. Demonstrate employability and social skills relative to the career cluster.
8. Maintain records on supervised agricultural experience programs and be able to summarize and analyze results in making financial decisions.
9. Participate in FFA leadership activities that are integrated into the course.

BUSINESS AND MARKETING

Business and Marketing Career Exploration 060195

This course provides students with a survey of skills needed for the school-to-work transition. Opportunities to explore the business and marketing career cluster and career paths, heighten self-awareness, and develop priorities and career decision-making skills are also provided. A variety of instructional resources, self-assessment instruments, and career interest surveys are included in the updating of the Individual Learning Plan (ILP). Interpersonal skill development and orientation to word processing, a computer spreadsheet, and a database are included. Leadership development will be provided through FBLA (Future Business Leaders of America) and/or DECA.

Recommended Grade Level: 8 – 9

Students will:

1. Reinforce basic skills in human relations in both written and oral communication including customer relations.
2. Develop a personal portfolio of careers to explore; research and prepare reports about business and marketing careers.
3. Complete self-assessment surveys to link interests, hobbies, skills, and school subjects to occupations.
4. Complete a career interest survey identifying general likes and dislikes, personal skills, and job values.
5. Complete a job application, compose a resume and a letter of application, and prepare for an interview.
6. Define the world of work vocabulary, explain concepts relating to the world of work, and explore the Importance of business ethics.
7. Develop and update Individual Learning Plans.
8. Develop decision-making, problem-solving, and critical thinking skills to become lifelong learners and self-directed individuals.
9. Develop and prepare a budget using spreadsheet and database software based on a desired adult lifestyle.
10. Identify and summarize why people need to work to meet basic needs.
11. Describe what academic skills are needed for a career in the business and marketing cluster.
12. Explain and evaluate resources that can be used for researching job and career information.
13. Describe and explain the Importance of good work habits and ethics in the workplace.
14. Explain how marketing jobs and careers have been created as a result of scientific and technological advancements.
15. Identify and explain skills used to seek, obtain, maintain, and change jobs or careers.
16. Apply communication skills within the technical content.
17. Demonstrate employability and soft skills relative to the career cluster.

Business and Marketing Concepts and Applications 080711

This course establishes basic foundations for further study in business and marketing courses and provides essential information for making financial and economic decisions. Students learn about the fundamentals of the American Free Enterprise System and work economics; the application of sound money management for personal and family finances; credit management, consumer rights and responsibilities; forms of business ownership; risk and insurance; and the Importance of international trade. Leadership development will be provided through FBLA (Future Business Leaders of America) and/or DECA.

Recommended Grade Level: 7

Students will:

1. Demonstrate proper keyboarding techniques.
2. Apply formatting to block-style letters, reports, charts/tables, spreadsheets, PowerPoint presentations, invitations, and brochures.
3. Demonstrate the Importance of communication skills.
4. Analyze and identify employee payroll, federal tax, state tax, insurance, and social security benefits for a company.
5. Explain the Importance of demographics and location in working with an enterprise.
6. Demonstrate organization and care of workstation.
7. Identify characteristics of positive work habits and a good work ethic.
8. Demonstrate real-life situations in a business environment and justify decisions made on behalf of a business.
9. Identify the career options in private enterprises as well as the advantages and disadvantages.
10. Demonstrate what it is like to own and operate a small business.
11. Analyze the effects of consumer demand for products and services and the role target markets play.

Computer and Technology Concepts 060160

This course is a 9–12-week course designed for students in 6th grade who have minimal keyboarding experience. Computer and Technology Concepts will develop the touch system of keying with added emphasis on the development of proper keying techniques, speed, and accuracy. The first six weeks will focus on proper techniques utilizing the touch system. The final three weeks will allow the students to develop and demonstrate knowledge of basic word processing skills, such as formatting letters in various letter styles, short reports with and without references, and tables. Additional emphasis will be placed on basic communication skills such as proofreading, grammar, word division, and the proper application of proofreaders' marks to demonstrate the Importance of mailable copy. Different telecommunications concepts may be addressed through simulation or application.

Recommended Grade Level: 6

Students will:

1. Demonstrate keying techniques.
2. Apply language rules and proofreaders' marks. Use reference materials.
3. Apply basic formatting procedures and manipulate data in letters, reports, simple tables, spreadsheets, graphs and charts, and databases.
4. Demonstrate electronic communications and telecommunications of the following: voice, data, image, text, and video.
5. Demonstrate how to properly organize and maintain a workstation.
6. Demonstrate how to transfer documents from a handwritten format into an electronic format.
7. Demonstrate correct composition of documents.
8. Demonstrate good work habits and a work ethic that impacts success at school and in the workplace.
9. Apply communication skills within the technical content.
10. Demonstrate employability and soft skills relative to the career cluster.

Introduction to Computer Science 219918

Students will discover computer science concepts and skills by creating personally relevant, tangible, and shareable projects. Throughout the unit, students will learn about programming for the physical world by blending hardware design and software development. They will design and develop a physical computing device, interactive art installation, or wearable and plan and develop code for microcontrollers that bring their physical designs to life. Participation in the Kentucky Technology Student Association will greatly enhance instruction.

Recommended Grade Level: 6 – 8

Keyboarding Applications 060113

This course is designed for students who have little or no keyboarding experience. Keyboarding Applications will develop the touch system of keying with added emphasis on the development of proper keyboarding techniques, speed, and accuracy. Six to nine weeks will be spent developing the touch system. The student will apply techniques for proofreading, editing, word division, capitalization, and punctuation for the production of mailable copies of letters, simple business forms, tabulated information, and manuscripts. After completion of Keyboarding Applications, a student may take either Word Processing or Digital Literacy. Leadership development will be provided through FBLA (Future Business Leaders of America) and/or DECA.

Recommended Grade Level: 7 – 8

Students will:

1. Demonstrate keyboard techniques.
2. Apply language rules and proofreaders' marks. Use reference materials.
3. Apply basic formatting procedures and manipulate data in letters, reports, simple tables, spreadsheets, graphics, graphs and charts, and databases.
4. Create or simulate electronic communications and telecommunications of the following: voice, data, image, text, and video.
5. Compose documents.
6. Research and analyze career opportunities in computer-related careers.
7. Complete a career portfolio that includes a letter of application, employment application, letter of reference, resume, interviewing techniques, follow-up letter, and letter of resignation.
8. Develop good work habits and a work ethic that impacts success at school and in the workplace.
9. Apply communication skills within the technical content.
10. Demonstrate employability and soft skills relative to the career cluster.

Touch Keyboarding 060114

In this six-to-nine-week course, students will develop skills in operating a keyboard by touch with an emphasis on entering the alphabet, numbers, and symbols with proper technique. Leadership development will be provided through FBLA (Future Business Leaders of America) and/or DECA.

Recommended Grade Level: 4 – 6

Students will:

1. Demonstrate proper keyboarding techniques.
2. Apply formatting to simple documents (letters, reports, and articles).
3. Apply standard rules of spelling, punctuation, grammar, and capitalization.
4. Organize and maintain workstation.

COMPUTER SCIENCE

Introduction to Computer Science 219918

Students will discover computer science concepts and skills by creating personally relevant, tangible, and shareable projects. Throughout the unit, students will learn about programming for the physical world by blending hardware design and software development. They will design and develop a physical computing device, interactive art installation, or wearable and plan and develop code for microcontrollers that bring their physical designs to life.

Recommended Grade Level: 6 – 8

ENGINEERING TECHNOLOGY

Automation and Robotics 219910

Students trace the history, development, and influence of automation and robotics as they learn about mechanical systems, energy transfer, machine automation, and computer control systems. Students use the VEX Robotics® platform to design, build, and program real-world objects such as traffic lights, toll booths, and robotic arms. Participation in the Kentucky Technology Student Association will greatly enhance instruction.

Recommended Grade Level: 6 – 8

Design and Modeling 219909

Students discover the design process and develop an understanding of the influence of creativity and innovation in their lives. They are then challenged and empowered to use and apply what they've learned throughout the unit to design a therapeutic toy for a child who has cerebral palsy. Participation in the Kentucky Technology Student Association will greatly enhance instruction.

Recommended Grade Level: 6 – 8

Energy and the Environment 219914

Students are challenged to think big and toward the future as they explore sustainable solutions to our energy needs and investigate the impact of energy on our lives and the world. They design and model alternative energy sources and evaluate options for reducing energy consumption. Participation in the Kentucky Technology Student Association will greatly enhance instruction.

Recommended Grade Level: 6 – 8

Exploration of Computer Graphic Technology 210122

An exploratory course designed to provide students with the skills and knowledge that are performed in the computer and communication industries. The types of activities may include but are not limited to developing images, digital photography, desktop publishing, computer-aided design, mechanical drafting, printing, computer animation, sublimation, screen printing, bindery, audio/video production, and file management through laboratory experiences. Participation in the Kentucky Technology Student Association will greatly enhance instruction**.**

Recommended Grade Level: 6 – 8

Students will:

1. Demonstrate the use of an engineering design process to solve real-world problems.
2. Demonstrate an understanding of the history of scientific principles and potential careers in the audio broadcasting industry.
3. Develop an appreciation of how communication technology has impacted our society.
4. Create graphic design projects with the use of various software programs.
5. Utilize the interactive (team) process for engineering design.
6. Utilize basic principles of design through the use of mechanical drawing.
7. Combine graphics, audio and video to create a multimedia presentation.
8. Explore design techniques and develop basic skills with the use of CAD (computer-aided design) programs.
9. Identify current and emerging careers related to construction technology.
10. Develop a safe and functional level of skill, efficiency, and effective use of technological tools, machines, instrumentation, materials, and processes.

Exploration of Construction Technology 210121

An exploratory course designed to investigate the types of activities performed in the construction industry. Through laboratory experiences, students explore the skills and technologies of this industry. Content includes the application of technology, the design of products and services, emerging and innovative technologies, safety and maintenance of technology marketing, and technology-related career explorations. Activities may include computer-aided design, architectural drafting, building models of buildings, and using construction tools and machines to design and build simple structures. Participation in the Kentucky Technology Student Association will greatly enhance instruction.

Recommended Grade Level: 6 – 8

Students will:

1. Demonstrate the use of an engineering design process to solve real-world problems.
2. Demonstrate an understanding of the history of construction.
3. Develop an appreciation of why construction technology is important to our society.
4. Describe the essential systems and processes involved in construction.
5. Identify materials and resources used in construction design.
6. Construct and test structural members with stress-testing devices.
7. Utilize the interactive (team) process for engineering design.
8. Utilize basic principles of design through the use of technical drawings.
9. Explore design techniques and develop basic skills with the use of CAD (computer-aided design) programs.
10. Identify current and emerging careers related to construction technology.
11. Develop a safe and functional level of skill, efficiency, and effective use of technological tools, machines, instrumentation, materials and processes.

Exploration of Manufacturing Technology 210120

An exploratory course designed to investigate the types of activities performed in the manufacturing industry. Through laboratory experiences, students explore the skills and technologies of this industry. Content includes the application of technology, the design of products and services, emerging and innovative technologies, the safety and maintenance of technology, and career explorations. Activities may include computer-aided drafting, manufacturing parts, CNC (computer numerical control) programming, computer control, and robotics. Participation in the Kentucky Technology Student Association will greatly enhance instruction.

Recommended Grade Level: 6 – 8

Students will:

1. Demonstrate the use of an engineering design process to solve real-world problems.
2. Demonstrate an understanding of the history of manufacturing.
3. Demonstrate an understanding of the social impact of manufacturing.
4. Describe the essential systems and processes involved in manufacturing.
5. Identify materials and resources used in manufacturing.
6. Develop and demonstrate strategies and work habits that will lead to success and prepare the student for future careers in a technological world.
7. Utilize the interactive (team) process for engineering design.
8. Use instruments to collect and analyze data.
9. Perform a pre-planned introductory manufacturing activity applying correct safety procedures, appropriate use of materials and processing operations.
10. Identify current and emerging careers related to manufacturing technology.
11. Develop a safe and functional level of skill, efficiency, and effective use of technological tools, machines, instrumentation, materials, and processes.

Exploration of Power Energy and Transportation Technology 210119

This course allows for the exploration of the many phases of Power Energy and Transportation through hands-on activities. This program of study facilitates STEM (Science, Technology, Engineering, and Math) principles to be applied in real-world situations. This course should include Aviation and Aerospace, Transportation Systems, Power and Energy, and Research. Participation in the Kentucky Technology Student Association will greatly enhance instruction.

Recommended Grade Level: 6 – 8

Students will:

1. Demonstrate the use of an engineering design process to solve real-world problems.
2. Develop and demonstrate strategies and work habits that will lead to success and prepare the student for future careers in a technological world.
3. Use instruments to collect and analyze data.
4. Identify current and emerging careers related to technology.
5. Develop competencies in the safe, efficient, and effective use of tools, machines, materials, and processes.
6. Independently and cooperatively explore areas of technology related to power, energy and transportation systems to discover technical abilities, career interests, and future educational directions.
7. Develop a safe and functional level of skill in the use of technological tools, machines, instrumentation, materials and processes.
8. Recognize and appreciate the impact and potential of technology so that students can exercise some control over the uses and consequences of technology.

Exploring Technology 210127

Students develop an understanding of the progression and scope of technology through exploratory experiences. In group and individual activities, students experience ways in which technological knowledge and processes contribute to effective design and solutions to technological problems. Students participate in design activities to understand how criteria, constraints, and processes affect designs. Brainstorming, visualizing, modeling, constructing, testing, and refining designs provide first-hand opportunities for students to understand the uses and impacts of innovations. Students develop skills in communicating design information and reporting results. Participation in the Kentucky Technology Student Association will greatly enhance instruction.

Recommended Grade Level: 6 – 8

Students will:

1. Demonstrate the use of an engineering design process to solve real-world problems.
2. Identify and become aware of the ways technology has been used to meet human needs in the home, school, community, and workplace.
3. Use technological terminology correctly.
4. Explore technological concepts and processes in the contexts of communication, transportation, manufacturing, construction, power and energy, medical, agriculture, and bio-related technological systems.
5. Develop and use problem-solving and decision-making skills to invent, design, and modify devices and systems.
6. Use tools, machines, and materials in a safe, efficient, and effective manner.
7. Gather, analyze, and communicate technical information by measuring, reading, and analyzing drawings and other technical sources.
8. Develop technical writing skills using appropriate forms, conventions and styles to communicate ideas and information.
9. Understand that computers and software are versatile tools used to collect, organize, process, and communicate information and ideas.
10. Explore employability and social skills relative to careers.
11. Analyze the evolution of technological systems and their impacts on society.
12. Develop and demonstrate strategies and work habits that will lead to success and prepare the student for future careers in a technological world.

Flight and Space 219912

The exciting world of aerospace comes alive through Flight and Space. During this unit, students delve into the history of flight and space, discover the science behind aeronautics, and explore traveling and living in space. Students are then challenged to use their knowledge to design, build, and test an airfoil. Participation in the Kentucky Technology Student Association will greatly enhance instruction.

Recommended Grade Level: 6 – 8

Green Architecture 219915

Today's students have grown up in an age of "green" choices. In this unit, students learn how to apply this concept to the fields of architecture and construction by exploring dimensioning, measuring, and architectural sustainability as they design affordable housing units using Autodesk's® 3D architectural design software. Participation in the Kentucky Technology Student Association will greatly enhance instruction.

Recommended Grade Level: 6 – 8

Introduction to Computer Science 219918

Students will discover computer science concepts and skills by creating personally relevant, tangible, and shareable projects. Throughout the unit, students will learn about programming for the physical world by blending hardware design and software development. They will design and develop a physical computing device, interactive art installation, or wearable and plan and develop code for microcontrollers that bring their physical designs to life. Participation in the Kentucky Technology Student Association will greatly enhance instruction.

Recommended Grade Level: 6 – 8

Invention and Innovation 210101

This course provides students with opportunities to apply the design process in the invention or innovation of a new product, process, or system. In this course, students will learn all about invention and innovation. They will have opportunities to study the history of inventions and innovations, including their impacts on society. They will learn about the core concepts of technology and about the various approaches to solving problems, including engineering design and experimentation. Finally, students learn about how various Invention and Innovations impact their lives. Students participate in engineering design activities to understand how criteria, constraints, and processes affect designs. Students are involved in activities where they learn about brainstorming, visualizing, modeling, constructing, testing, experimenting, and refining designs. Students also develop skills in researching for information, communicating design information, and reporting results. This course will make extensive use of a laboratory environment through a variety of instructional strategies. Participation in the Kentucky Technology Student Association will greatly enhance instruction.

Recommended Grade Level: 6 – 8

Students will:

1. Demonstrate the use of an engineering design process to solve real-world problems.
2. Define technology and use technological terminology correctly.
3. Identify and become aware of the ways technology has been used to satisfy human needs and environmental concerns.
4. Evaluate the impacts of technological Invention and Innovation on people, society, culture, and the environment.
5. Develop and use problem-solving and decision-making skills, including brainstorming, visualizing, modeling, constructing, testing, and refining to invent, design, create, and modify devices and systems.
6. Implement elements of form and function to the design process.
7. Use tools, machines, and materials in a safe, efficient, and effective manner.
8. Identify and analyze current and emerging issues (ethical, social, legal, environmental, political, and privacy) related to technology.
9. Describe the intended and unintended impacts of the application of technological solutions.
10. Identify appropriate and inappropriate applications of technology.
11. Analyze how and why society demands impact invention and innovation.
12. Identify that a product, system, or environment developed for one setting may be applied to another setting.
13. Develop an understanding that innovations are alterations of previous inventions.
14. Explore employability and social skills relative to careers involving invention and innovation.

Magic of Electrons 219913

Through hands-on projects, students explore electricity, the behavior and parts of atoms, and sensing devices. They learn knowledge and skills in basic circuitry design and examine the impact of electricity on the world around them. Participation in the Kentucky Technology Student Association will greatly enhance instruction.

Recommended Grade Level: 6 – 8

Medical Detectives 219916

Students play the role of real-life medical detectives as they analyze genetic testing results to diagnose diseases and study DNA evidence found at a “crime scene.” They solve medical mysteries through hands-on projects and labs, investigate how to measure and interpret vital signs, and learn how the systems of the human body work together to maintain health. Participation in the Kentucky Technology Student Association will greatly enhance instruction.

Recommended Grade Level: 6 – 8

Middle School STEM 300190

This course is designed to allow students to explore the sciences in a STEM (Science, Technology, Engineering, and Math) environment beyond the Kentucky Academic Standards. Students should, however, explore using science and engineering practices and crosscutting concepts. Science and engineering practices are skills students will use as they investigate the natural world and develop solutions to problems. Crosscutting concepts are conceptual ways of thinking that cross the domains in the STEM (Science, Technology, Engineering, and Math) fields.

Recommended Grade Level: 6 – 8

Science and Technology 219911

Science impacts the technology of yesterday, today, and the future. Students apply the concepts of physics, chemistry, and nanotechnology to STEM (Science, Technology, Engineering, and Math) activities and projects, including making ice cream, cleaning up an oil spill, and discovering the properties of nano-materials. Participation in the Kentucky Technology Student Association will greatly enhance instruction.

Recommended Grade Level: 6 – 8

Technological Systems 210103

This course is intended to teach students how technological systems work together to solve problems and capture opportunities. A system can be as small as two components working together (technical system/device level) or can contain millions of interacting devices (use system/network level). We often break down the macro-systems into less complicated micro-systems to understand the entire system better. However, technology is becoming more integrated, and systems are becoming more and more dependent upon each other than ever before. Electronic systems are interacting with natural (for example, biological) systems as humans use more and more monitoring devices for medical reasons. Electrical systems are interacting with mechanical and fluid-power systems as manufacturing establishments become more and more automated. This course will give students a general background on the different types of systems but will concentrate more on the connections between these systems. The goals of this course can be accomplished in a laboratory environment through a variety of instructional strategies. Participation in the Kentucky Technology Student Association will greatly enhance instruction.

Recommended Grade Level: 6 – 8

Students will:

1. Demonstrate the use of an engineering design process to solve real-world problems.
2. Define technological systems.
3. Explore technological concepts and processes in the contexts of energy and power, information and communication, transportation, manufacturing, construction, medical, agricultural, and bio-related technologies in emerging technological systems/sub-systems.
4. Design, test, evaluate, and modify models within technological systems.
5. Solve basic technological problems using tools, machines, materials, and processes in an applied project-based approach.
6. Analyze current and emerging issues (ethical, social, legal, environmental, political and privacy) related to a wide variety of technological systems.
7. Develop and demonstrate strategies and work habits that will lead to success and prepare the student for a future career in the technological world.
8. Demonstrate and apply an understanding of technological systems and the relationships between the resources/input, processes, output, and feedback elements of these systems.
9. Analyze the changing nature and impacts of a variety of technological systems.
10. Identify current and emerging occupations related to a variety of technological systems.
11. Identify, analyze, and compare current and emerging jobs, careers, and occupations relating to a variety of technological systems.

FAMILY AND CONSUMER SCIENCES

Introductory FACS Essentials 6th Grade 200110

This course introduces students to Family and Consumer Sciences through various units of instruction. The units relate to personal growth and development, consumer and management skills, goal setting and decision making, family studies, nutritional needs, food preparation and sanitation, career development and interpersonal relationships.

Recommended Grade Level: 6

Students will:

1. Explore opportunities for volunteerism to enhance personal development skills.
2. Identify developmental tasks of pre-adolescence and adolescence.
3. Demonstrate appropriate communication skills.
4. Practice steps in setting and achieving goals.
5. Identify and apply the steps of the decision-making process.
6. Determine the consequences of high-risk behaviors.
7. Identify personal grooming habits.
8. Examine qualities needed to maintain friendships.
9. Practice appropriate social skills in a given situation.
10. Examine different family types and the roles of each family member.
11. Identify the benefits of time management skills.
12. Identify sources and management of income opportunities relevant for teens.
13. Differentiate between wants and needs.
14. Apply consumer rights and responsibilities for purchasing decisions.
15. Examine the impact of consumer decisions on the environment.
16. Identify the influences of the different types of advertisements on the consumer.
17. Examine influences on eating habits.
18. Plan healthy meals and snacks based on the current Dietary Guidelines for Americans and MyPlate.
19. Calculate calories needed according to the Body Mass Index (BMI).
20. Describe the correct and safe use of kitchen appliances and utensils.
21. Use rules of sanitation and cleanliness in the kitchen.
22. Use correct methods and techniques in preparing food.
23. Analyze factors that influence clothing choice.
24. Design a plan for the care and storage of clothing.
25. Construct a textile project by hand or machine.
26. Predict the employment outlook based on the level of education.
27. Identify careers in Family and Consumer Sciences.
28. Predict ways computers will affect daily and work life in the future.
29. Examine employability skills relevant to the industry.
30. Utilize activities of the Family, Career and Community Leaders of America (FCCLA) student organization as an integral component of course content and leadership development.
31. Apply math, science, and communication skills within technical content.

Introductory FACS Essentials 7th Grade 200111

This course introduces students to Family and Consumer Sciences through various units of instruction. The units relate to personal growth and development, consumer and management skills, goal setting and decision making, family studies, nutritional needs, food preparation and sanitation, career development and interpersonal relationships.

Recommended Grade Level: 7

Students will:

1. Explore opportunities for volunteerism to enhance personal development skills.
2. Identify developmental tasks of pre-adolescence and adolescence.
3. Demonstrate appropriate communication skills.
4. Practice steps in setting and achieving goals.
5. Identify and apply the steps of the decision-making process.
6. Determine the consequences of high-risk behaviors.
7. Identify personal grooming habits.
8. Examine qualities needed to maintain friendships.
9. Practice appropriate social skills in a given situation.
10. Examine different family types and the roles of each family member.
11. Identify the benefits of time management skills.
12. Identify sources and management of income opportunities relevant for teens.
13. Differentiate between wants and needs.
14. Apply consumer rights and responsibilities for purchasing decisions.
15. Examine the impact of consumer decisions on the environment.
16. Identify the influences of the different types of advertisements on the consumer.
17. Examine influences on eating habits.
18. Plan healthy meals and snacks based on the current Dietary Guidelines for Americans and MyPlate.
19. Calculate calories needed according to the Body Mass Index (BMI).
20. Describe the correct and safe use of kitchen appliances and utensils.
21. Use rules of sanitation and cleanliness in the kitchen.
22. Use correct methods and techniques in preparing food.
23. Analyze factors that influence clothing choice.
24. Design a plan for the care and storage of clothing.
25. Construct a textile project by hand or machine.
26. Predict the employment outlook based on the level of education.
27. Identify careers in Family and Consumer Sciences.
28. Predict ways computers will affect daily and work life in the future.
29. Examine employability skills relevant to the industry.
30. Utilize activities of the Family, Career and Community Leaders of America (FCCLA) student organization as an integral component of course content and leadership development.
31. Apply math, science, and communication skills within technical content.

Introductory FACS Essentials 8th Grade 200112

This course introduces students to Family and Consumer Sciences through various units of instruction. The units relate to personal growth and development, consumer and management skills, goal setting and decision making, family studies, nutritional needs, food preparation and sanitation, career development and interpersonal relationships.

Recommended Grade Level: 8

Students will:

1. Explore opportunities for volunteerism to enhance personal development skills.
2. Identify developmental tasks of pre-adolescence and adolescence.
3. Demonstrate appropriate communication skills.
4. Practice steps in setting and achieving goals.
5. Identify and apply the steps of the decision-making process.
6. Determine the consequences of high-risk behaviors.
7. Identify personal grooming habits.
8. Examine qualities needed to maintain friendships.
9. Practice appropriate social skills in a given situation.
10. Examine different family types and the roles of each family member.
11. Identify the benefits of time management skills.
12. Identify sources and management of income opportunities relevant for teens.
13. Differentiate between wants and needs.
14. Apply consumer rights and responsibilities for purchasing decisions.
15. Examine the impact of consumer decisions on the environment.
16. Identify the influences of the different types of advertisements on the consumer.
17. Examine influences on eating habits.
18. Plan healthy meals and snacks based on the current Dietary Guidelines for Americans and MyPlate.
19. Calculate calories needed according to the Body Mass Index (BMI).
20. Describe the correct and safe use of kitchen appliances and utensils.
21. Use rules of sanitation and cleanliness in the kitchen.
22. Use correct methods and techniques in preparing food.
23. Analyze factors that influence clothing choice.
24. Design a plan for the care and storage of clothing.
25. Construct a textile project by hand or machine.
26. Predict the employment outlook based on the level of education.
27. Identify careers in Family and Consumer Sciences.
28. Predict ways computers will affect daily and work life in the future.
29. Examine employability skills relevant to the industry.
30. Utilize activities of the Family, Career and Community Leaders of America (FCCLA) student organization as an integral component of course content and leadership development.
31. Apply math, science, and communication skills within technical content.

HEALTH SCIENCE

Fundamentals of Healthcare 170236

This is an introductory course designed to provide students with the basic foundational principles of healthcare. Throughout the course, students will examine various aspects of the healthcare field, including personal traits, teamwork, government agencies, criminal and civil law, basic math used in the healthcare field, religious and cultural beliefs, common diseases, and many different body systems. It is a course that is designed to introduce the many aspects of the healthcare field.

Recommended Grade Level: 6 – 8

Students will:

1. Identify some of the personal traits and attitudes of a Healthcare worker, such as honesty, accountability, empathy, respect, patience, self-motivation, team player, and culture awareness.
2. Identify the roles and responsibilities of individual members and leaders of a Healthcare team.
3. Describe the benefits of teamwork when it comes to patient care.
4. Complete a teambuilding activity.
5. Explain the Importance of conflict resolution in a Healthcare setting.
6. State the difference between verbal and nonverbal communication in the healthcare setting.
7. List and describe various Healthcare facilities found in the United States, such as long-term care, home health, mental health, dental practices, etc.
8. Identify government and volunteer agencies that provide health care services in the United States, such as the Veterans Administration, CDC, FDA, American Heart, American Red Cross etc.
9. Compare and contrast the different types of health insurance, such as Medicare, Medicaid, Private insurance, and Workers' compensation.
10. Differentiate between criminal and civil law in relation to a healthcare setting.
11. Define HIPPA and its Importance in the healthcare setting. (include computer use, elevator conversations, etc.)
12. Demonstrate how to read military time and its Importance in the medical field.
13. Demonstrate the basic math skills used in Healthcare, such as averages, ratios, fractions, percentages, Roman numerals, metric systems, etc.
14. Recognize at least three situations that show improper ethical or legal behaviors in a healthcare setting. (maybe an ethical debate activity)
15. Explore different ways both religion and culture impact the healthcare given to certain patients, such as donating or receiving blood in certain religions, touching and physical space of certain cultures, etc.
16. Describe the organization of the body from the smallest unit to the largest.
17. Demonstrate the use of directional terms and body planes while using the anatomical position. (terms such as anterior, medial, proximal, superior, sagittal, midsagittal, coronal/frontal etc.
18. Describe organs of the body in relation to the body cavity or abdominal quadrant.

19. Describe the structure and functions of the different body systems (skeletal, muscular, integumentary, cardiovascular, lymphatic, respiratory, endocrine, nervous, digestive, urinary, and reproductive)
20. Describe the etiology, treatment, and prevention of common diseases or disorders of at least three body systems. (common disorders such as diabetes, hypertension, cancer, cystic fibrosis etc.)
21. Identify the benefits of regular exercise and maintaining a healthy diet.
22. Describe healthy strategies for managing stress.
23. Develop a budget and articulate financial goals within their chosen career path.

Introduction to Health Professions 170237

This course is designed to empower students with basic knowledge of the healthcare industry, enabling them to make an informed decision about their career path. Throughout the course, students will explore various careers within the healthcare industry, covering diagnostic, therapeutic, health informatics, support services, and biotechnology research fields. Students will gain insight into these sectors along with an understanding of the training requirements, salary ranges, job outlook, and basic skills within these sectors.

Recommended Grade Level: 6 – 8

Students will:

1. .Identify health science careers within the diagnostic, therapeutic, health informatics, support services, and biotechnology research and development systems.
2. Compare and contrast the roles and responsibilities of workers found in the diagnostic area, such as a pathologist, medical laboratory technologists, medical laboratory technicians, medical laboratory assistants, and phlebotomists.
3. Research the education, training requirements, salary ranges, job outlooks, and facilities of a diagnostic professional.
4. Differentiate between pathogenic and nonpathogenic microorganisms.
5. Identify the chain of infection.
6. Identify three ways to protect themselves against an infection.
7. Demonstrate at least one of the following: cleansing the skin in preparation for a capillary puncture, placing a tourniquet for a venipuncture, or testing simulated urine using a reagent strip.
8. Compare and contrast the roles and responsibilities of workers found in therapeutic services such as pharmacists, pharmacy technicians, registered nurses, licensed practical nurses, nursing assistants, physical therapists, occupational therapists, respiratory therapists, dieticians, medical assistants, paramedics, physician, surgical technician, athletic trainer, psychiatrist, community health worker, school counselor, etc.
9. Research the education, training requirements, salary ranges, job outlooks, and facilities of a therapeutic professional.
10. Demonstrate at least one or more of the following: list routes of medication administration, fill a written prescription, measure, demonstrate how to ambulate with crutches, conflict resolution, interpersonal problem-solving skills, active listening, and deep breathing exercises.
11. Demonstrate basic CPR and AED use during an emergency.
12. Correctly measure and chart a child's weight and height on a graph chart.
13. Correctly take and chart a patient's vital signs.
14. Compare and contrast the roles and responsibilities of workers found in health informatics services, such as a healthcare administrator, medical illustrators, health information technologists, medical coders, and health unit coordinators.
15. Research the education, training requirements, salary ranges, job outlooks, and facilities of a health informatics professional.

16. Identify what information is kept in a patient's medical record.
17. Define HIPPA and recognize the Importance of patient privacy.
18. Perform at least one of the following: proper phone etiquette and recording of a message, create an educational presentation about a healthcare issue, properly file a patient's chart (alphabetically), and create a medical illustration.
19. Compare and contrast the roles and responsibilities of workers found in the support services area of healthcare, such as medical librarians, central supply coordinators, central supply technicians, hospital maintenance, and housekeeping.
20. Research the education, training requirements, salary ranges, job outlooks and facilities of a support service worker.
21. Describe the safety standards if they were to work as a support worker and are exposed to any hazardous chemical on the job.
22. Perform at least one of the following: use simulated tools to wrap as if they were surgical instruments, research and list other ways that central supply may clean reusable medical devices and indicate how you would tell if the instrument had been sterilized.
23. Research the education, training requirements, salary ranges, job outlooks and facilities of workers found in the biomedical area, such as a cytologist, microbiologist, biochemist, genetic counselor, forensics, and electromedical equipment repairer.
24. Research the education, training requirements, salary ranges, job outlooks, and facilities of a biomedical health professional.
25. Identify at least three ethical concerns that have been raised since the beginning of DNA research, gene therapy or stem cell research.
26. Perform at least one of the following: separating DNA, testing simulated blood for ABO and Rh typing, fingerprinting, researching, and debating a bioethical issue.
27. Set a personal financial goal and develop a plan for reaching that goal. (Choose a career to meet the goal)