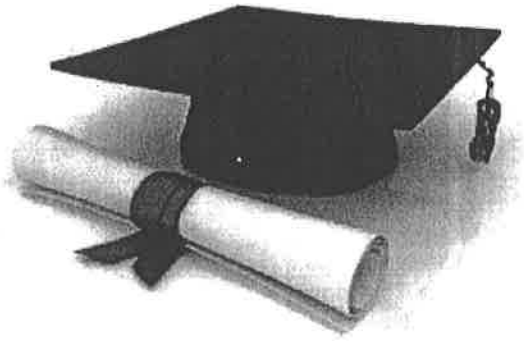
2021-2022
HIGH SCHOOL
PROGRAM of STUDY

HANCOCK COUNTY SCHOOLS
CAREER-TECHNICAL EDUCATION



HANCOCK COUNTY
HIGH SCHOOL PROGRAMS OF STUDY

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DISCRIMINATION PROHIBITED

As required by laws and regulations, the Hancock County Board of Education does not discriminate on the basis of sex, race, color, religion, surname, language-minority status, handicapping condition, age, and national origin in employment and in the administration of any of its educational programs and activities. Inquiries should be directed to the Hancock County Schools Title IX Coordinator and Section 504 Coordinator @ the Hancock County Board of Education Offices. That address is Post Office Box 1300, New Cumberland, WV 26047. Telephone contact is 304-564-3411; to the state elimination of sex discrimination project coordinator @ 304-558-7864; or the US Department of Education's Assistant Secretary for Civil Rights, telephone 800-421-4381.

CTE/SIM WORKPLACE "COMPLETER" PROGRAMS-WEIR HIGH AND OAK GLEN

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246500	COMPUTER INTEGRATED MANUFACTURING
246400	ENGINEERING DESIGN AND DEVELOPMENT

What is a completer? A completer is a student who finishes all four (4) required classes in that program area. Why become a completer? You will be recognized at senior recognition and receive a certificate of completion. Classes will prepare you for a job after graduation and/or will prepare you for college. You will be a part of a Simulated Workplace which prepares you for a job after high school or while in college.

COURSE DECRIPTIONS FOR COURSE OFFERINGS FROM CHART ABOVE AND LAST PAGE

140100 ACCOUNTING PRINCIPLES I

Accounting Principles I is taught for personal and vocational use. The course helps students learn how to handle personal money transactions. It acquaints the students with the relationship between accounting and business. It develops an understanding of the principles and procedures involved in handling cash, including petty cash. The student will learn the principles and methods of recording business transactions, the preparation of financial statements, and the interpretation of financial statements with considerable emphasis on the records of a small business.

140300 ACCOUNTING PRINCIPLES II

Accounting Principles II expands principles and procedures to include applications in corporate accounting and decision making based on financial reports. It provides preparation for employment or background for the study of accounting or accounting related fields in college. This course will be taught using computers.
PREREQUISITES: Accounting Principles I.

141100 BUSINESS COMPUTERS I

This area of study is designed to provide the learner with the opportunity to understand and apply integrated software to business applications. The students will achieve basic proficiency in word processing, spreadsheets, desktop publishing, computerized presentations, Internet and/or database applications.

141300 BUSINESS COMPUTERS II

This area of study is designed to develop entry-level skills appropriate to an area of specialization in information systems. Students will achieve proficiency in the use of software packages in the areas of database, word processing, spreadsheets and presentation/desktop publishing.

141100 BUSINESS COMPUTER APPLICATIONS MICROSOFT WORD-POWERPOINT

This course offering will provide students with training to obtain entry-level positions in computer and/or business offices. Students can obtain entry-level knowledge in a variety of applications that require an expertise in using Microsoft applications. Students in the will receive hands-on training using Excel, PowerPoint, Word and Publisher. Occupations available for students completing program requirements include the following: software applications user, help desk technician and end user support.

143900 BUSINESS AND MARKETING ESSENTIALS

1 credit; open to grades 9-12. This course is designed to develop student understanding and skills in such areas as business law, communication skills, customer relations, economics, emotional intelligence, financial analysis, human resources management, information management, marketing, operations, professional development, and strategic management. Students acquire knowledge of fundamental business activities and factors affecting business, develop verbal and written communication skills, use information literacy skills, utilize job-seeking strategies, and participate in career planning. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts.

151400 INTRODUCTION TO VISUAL COMMUNICATIONS

This course introduces the student to the skills required for visual communication in the 21st Century. Students will use digital cameras and professional software tools to create publications for print and the web. Units of Study: Page Layout, Desktop Publishing, Digital Publishing

151500 DIGITAL PHOTOGRAPHY

This course introduces the student to the skills required to produce professional quality photographs. Students will use DSLR cameras, various accessories such as filters and tripods, photo editing software, and an injet printer. Emphasis will be placed on photojournalism and advertising photography. Units of Study: Camera Basics, Photo Editing, Photo Printing.

151600 VIDEOGRAPHY

This course introduces the student to the skills required for multimedia production. Students will utilize digital camcorders as well as video editing and sound recording software to create multimedia projects. Areas of study include video and sound editing and motion graphics and effects. Units of Study: Videography Basics, Video Editing, Motion Graphics

151700 CROSS-MEDIA PUBLISHING

This course introduces the student to the emerging field of cross-media publishing. Students will explore the use of blogging, video sharing, and social media services as journalism and marketing tools. Students will research, write, and produce multimedia content to be disseminated across various platforms (print, video, and digital publishing). Units of Study: 21st Century Publishing, Marketing across Media, Content Marketing.

246500 COMPUTER INTEGRATED MANUFACTURING

Computer Integrated Manufacturing is a component of the Project Lead the Way (PLTW) pre-engineering curriculum. This course will introduce students to principles of robotics and automation and CAD design. The course builds on computer solid modeling skills developed in Computer Integrated Manufacturing, and Design and Drawing for Production. Students use CNC equipment to produce actual models of their three-dimensional designs. Fundamental concepts of robotics used in automated manufacturing and design analysis are included. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organizations, WV Skills USA or WV TSA (Technology Student Association). All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skill sets.

142900 DESKTOP PUBLISHING

This course will introduce students to a variety of ways that people use tools and resources to communicate. Students will explore various applications in desktop publishing through hands-on activities and experiences which may include brochures, pamphlets, newsletters, letterheads, tables (graphs, charts, etc.), memo forms, advertisements, banners, business cards, web pages, etc. They will identify desktop publishing concepts; demonstrate skills utilizing desktop software; and determine legal and ethical aspects of desktop publishing.

143100 DIGITAL IMAGING/MULTIMEDIA I

This course will introduce students to the basics of producing digital images for multimedia purposes. Students will explore various methods of producing images through hands-on activities and experiences which will include: operating a digital camera and a scanner, using imaging software to improve photos or to create special effects, creating simple animations, manipulating video images, and producing multimedia images.

143200 DIGITAL IMAGING/MULTIMEDIA II

An advanced creative, practical, and theoretical study of digital imaging as it is used in visual communication. Students will enhance their understanding of design and visual practice through thematic digital imaging assignments. Technical topics include advanced features of hardware and software and digital camera use. Theoretical concerns focus on the evolution of digital imagery, digital photography, and representation.

100300 EARLY CHILDHOOD EDUCATION I

This course is designed to provide both an overview of the field of early childhood education (ECE) and an introduction to child development. Topics include: ECE career paths; early childhood programs; regulatory and ethical requirements; physical development in early childhood years; social emotional development in early childhood year; cognitive development in early childhood years; language development in early childhood years; and an integrated approach to child development. Students will be involved in the ECE workplace as possible. Students will use reasoning processes, individually and collaboratively, to take responsible action in families, workplaces, and communities. Students will utilize problem solving techniques and participate in hands-on activities.

246400 ENGINEERING, DESIGN, AND DEVELOPMENT

Engineering Design and Development is a component of the Project Lead the Way (PLTW) pre-engineering curriculum. This is an engineering research course in which students work in teams to research, design, and construct a solution to an open-ended engineering problem. Students apply principles developed in the four preceding courses and are guided by a community mentor. They must present progress reports, submit a final written report, and defend their solutions to a panel of outside reviewers at the end of the school year. Safety instruction is integrated into all activities. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organizations, WV SkillsUSA or WV TSA (Technology Student Association). All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skill sets.

130100 FOUNDATIONS IN EDUCATION

This course explores the basics of teaching and different learning styles. The course will also explore the special needs student and how the exceptionalities affect the learning process. The students will research major physical, social, and personal challenges that impede successful learning. This course will research and explore the skills needed to design instruction, the personal strengths and areas for improvement of teachers, as well as appropriate instruction, observation, and analysis of the learner's development stages. The successful student in this course will display the characteristics of an outstanding teacher.

246100 INTRO TO ENGINEERING AND DESIGN

Introduction to Engineering Design is a component of the Project Lead the Way (PLTW) pre- engineering curriculum. This course teaches problem-solving skills using a design development process. Models of product solutions are created, analyzed, and communicated using solid modeling computer design software. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organizations, WV SkillsUSA. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skill sets.

145100 PERSONAL FINANCE

Deal or No Deal-is that the game you want to play with your financial future? Personal finance will show you how to balance and maintain a checking account and how to complete tax forms, and learn about the pitfalls of credit cards, benefits of insurance, investing for the future, stock market, and things to consider when purchasing a car or a house.

246300 PRINCIPLES OF ENGINEERING

Principles of Engineering is a component of the Project Lead the Way (PLTW) pre-engineering curriculum. This course will help students understand the field of engineering and engineering technology. Exploring various technology systems and manufacturing processes help students learn how engineers and technicians use math, science, and technology in an engineering problem solving process to benefit people. The course also includes concerns about social and political consequences of technological change. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organizations, WV SkillsUSA or WV TSA (Technology Student Association). All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skill sets.

130200 STUDENT LEARNING, DEVELOPMENT, AND DIVERSITY

This course will enhance the student's knowledge of educational theories and help the student understand a student's growth and development, also the different stages of growth and development. This course will also explore the environmental influences that affect physical, cognitive, social, moral, cultural, and emotional development. The current status of family life in our country is a topic of research and discussion. The impact of environmental influences on children through adolescence is explored. Also, the impact that diversity has on teaching and learning is explored. Current practices of standardized testing and evaluation strategies is emphasized.

113500 TEACHER PREPERATION: SEMINAR IN EDUCATIONAL PRACTICES

This course entails the students to explore and examine educational trends that are influencing issues in today's society and culture. Future educational trends are identified and emphasized as well. The positive and negative perceptions of education are researched and discussed as well as the structure of educational governance. Job application skills, interview skills, and teacher certification are also topics of this course. Praxis definition and proper preparation for this test are a key topic. Teacher Code of Conduct, HQT, and Nationally Certified teacher statuses are explained and researched. Professional education organizations are explored.

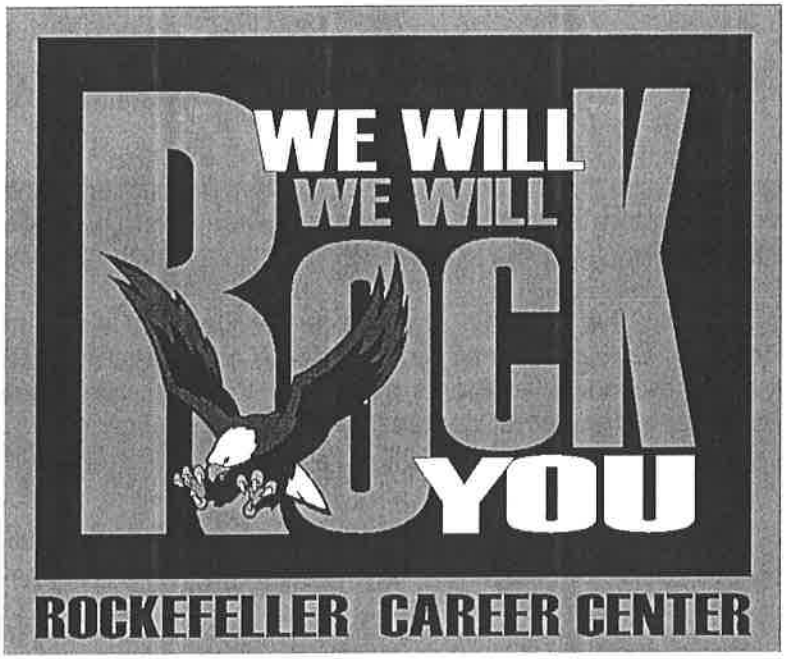
145500 WEBPAGE PUBLISHING

This course will introduce students to the basic web page design concepts and provide practice in creating web sites. Students will explore various applications in web page design through hands-on activities and experiences which may include: using web page development software, creating page layouts, adding images and frames, creating elements and components, creating tables, managing files, publishing to the Internet, creating hyperlinks, organizing tasks, and using HTML.

JOHN D. ROCKEFELLER IV

CAREER CENTER

COURSE OFFERINGS


WE WILL
WE WILL
ROCK
YOU
ROCKEFELLER CAREER CENTER

CAREER CENTER OFFERINGS

Note:

Many courses taught at the John D. Rockefeller IV Career Center are available for college credit through West Virginia Northern Community College. Check with your counselor for details.

Students attending the John D. Rockefeller IV Career Center must maintain a "C" average or better in each Career Center course attempted in order to progress to the next level of instruction. All students must also complete the required "Fundamentals" course prior to taking any other course in a particular discipline.

JDR4 CAREER CENTER

John D. Rockefeller IV
Career Center

CLASSES AND OFFERINGS AT THE JDR4CC

OPTION PATHWAY PROGRAM @ THE JOHN D. ROCKEFELLER CAREER CENTER

79010	OPTION PATHWAY	LA/READING
79020	OPTION PATHWAY	LA/WRITING
79030	OPTION PATHWAY	MATH
79050	OPTION PATHWAY	SCIENCE
79060	OPTION PATHWAY	SOCIAL STUDIES

Option Pathway is designed for students who have failed major core courses and are in the ninth, tenth, eleventh or twelfth grade. A second-semester junior or a senior must already be enrolled in and passing a CTE pathway unless the school has a CTE pathway that requires only one year to complete.

Students will earn a high school diploma and be counted as a graduate if they:

•Attend TASC™ preparation class and pass the TASC™ Tests as given.

•Per Policy 2510, the Option student must successfully complete the four courses of an approved State Department Career Technical Education (CTE) program of study or complete a local concentration approved by the County Board of Education consisting of four related courses correlating to the student's Personalized Education Plan (PEP). Programs may vary depending on what is offered in your county. Students must also complete any other CTE requirements outlined in Policy 2510.

CAREER TECHNICAL PROGRAMS

AUTO COLLISION REPAIR TECHNOLOGY

This area of study is designed to provide learners with skills in collision repair occupations. Major instructional concepts include: non-structural analysis and damage repair; structural analysis and damage repair; mechanical and electrical component; plastics and adhesive; painting and refinishing and general occupational information.

Students completing the following four core classes will be eligible to take the core content exam: Fundamentals of Collision Repair Technology; Non-Structural Analysis and Damage Repair; Structural Analysis and Damage Repair; and Surface Preparation and Refinishing.

Course Listing: IN SEQUENTIAL ORDER

1	**1671T *** **1672T**	**Fundamentals of Collision Repair Technology (CORE)** **Detailing and Interior Parts**
2	**1679T *** **1674T**	**Surface Preparation and Refinishing (CORE)** **Advanced Refinishing Techniques**
3	**1675T*** **1676T**	**Non-Structural Analysis and Damage Repair (CORE)** **Custom Finishing Process**
4	**1677T *** **1673T**	**Structural Analysis and Damage Repair (CORE)** **Mechanical and Electrical Components**

1671* - Fundamentals of Collision Repair Technology (1 credit): This course introduces the student to the knowledge base and technical skills as they relate to the field of Collision Repair Technology. Class areas of study include career opportunities and practices, integrated academics, knowledge of tools and equipment, panel straightening techniques, and introduction to vehicle preparation. Safety instruction is integrated into all activities. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts.

1672 – Detailing and Interior Plans (1 credit): This course will introduce students to the entry-level skills necessary in detailing and interior parts removal and repair.

1679* - Surface Preparation and Refinishing (1 credit): This course will continue to build student skill sets in preparing a surface for refinishing; inspect, clean and operate spraying equipment; detail a vehicle; and diagnose finish defects.

1674 - Advanced Refinishing Techniques (1 credit): This course will introduce students to the advanced fundamentals of automotive refinishing. Students will become familiar with tools, procedures and careers associated with advanced refinishing techniques.

1675* - Non-Structural Analysis And Damage Repair (1 credit**):** This course will continue to build student skill sets in non-structural analysis and repair of metal and composite parts.

1676 – Custom Finishing Processes (1 credit): This course will introduce students to the art of custom painting. Students will become familiar with the various materials and equipment related to this course.

1677* - Structural Analysis and Damage Repair (1 credit): This course will continue to build student skill sets in frame and unibody type vehicles using welding techniques, measuring equipment, and frame machines.

1673 - Mechanical and Electrical Components (1 credit): This course will introduce students to the entry-level skills necessary in mechanical and electrical repairs as they apply to collision repair technology.

AUTOMOTIVE TECHNOLOGY

This area of study is designed to provide learners with skills in automotive technology/service. The major instructional concepts include: fundamentals of automotive technology; basic automotive electrical systems; theory and operation of brake systems; fundamentals of steering and suspension systems; basic engine concepts; engine performance; passenger climate controls; power train fundamentals; and advanced automotive electronics.

Students completing the following four core classes will be eligible to take the core content exam: Fundamentals of Automotive Technology; Brakes; Suspension and Steering Diagnosis; and Basic Engine Concepts.

1	1631T* 1629T	Automotive Technology MLR-1 Automotive Technology AST-1
2	1623T* 1633T	Automotive Technology MLR-2 Automotive Technology AST-2
3	1625T* 1635T	Automotive Technology MLR-3 Automotive Technology AST-3
4	1637T* 1627T	Automotive Technology MLR-4 Automotive Technology AST-4

1631* -- Automotive Technology MLR-1 (1 credit): This course introduces the student to the knowledge base and technical skills as they relate to the field of Automotive Technology.

1629 – Automotive Technology AST-1 (1 credit): This course will introduce students to the skills, technology, and service of electrical/electronic systems of the automobile. Students will comply with personal and environmental safety practices associated with proper ventilation and the handling, storage, and disposal of chemicals in accordance with local, state, and federal safety and environmental regulations.

1623* -- Automotive Technology MLR-2 (1 credit): This course will introduce student skill sets in areas such as diagnosis and repair of hydraulic systems, diagnosis and repair of drum brakes, diagnosis and repair of disc brakes, power assist systems, antilock brake systems and steering/suspension diagnosis and repair.

1633 -- Automotive Technology AST-2 (1 credit): This course will continue to build student skill sets in areas such as diagnosis and repair of hydraulic systems, diagnosis and repair of drum brakes, diagnosis and repair of disc brakes, power assist systems, antilock brake systems and steering/suspension diagnosis and repair.

1625*— Automotive Technology MLR-3 (1 credit): This course will introduce student skill sets in areas such as electrical diagnosis and repair, general engines, diagnosis of cylinder head and valve train, diagnosis and repair of engine block, and diagnosis and repair of lubrication and cooling stystems.

1635 -- Automotive Technology AST-3 (1 credit): This course will continue to build student skill sets in areas such as electrical diagnosis and repair, general engines, diagnosis of cylinder head and valve train, diagnosis and repair of engine block, and diagnosis and repair of lubrication and cooling systems.

1637* -- Automotive Technology MLR-4 (1 credit): This course will introduce student skill sets in areas such as engine performance, automatic/manual transmission diagnosis and repair and HVAC systems diagnosis and repair.

1627 -- Automotive Technology AST-4 (1 credit): This course will continue to build students to skill set areas such as engine performance, automatic/manual transmission diagnosis and repair and HVAC systems diagnosis and repair.

BAKING AND PASTRY

This 1-year program will help students discover all that goes into creating delicious desserts as well as pastries, breads, cakes, cookies, and more.

The Baking and Pastry program prepares students for various aspects of the baking and pastry industry. Students will start with the very basics such as how ingredients work together in order for students to make a commercial, sellable product. Other content includes the making of various breads, cookies, pies, tortes, plated desserts, chocolates, and sugar work.

1	1980T	**Baking & Pastry Foundations**
2	1024T	**Baking & Pastry I**
3	1025T	**Baking & Pastry II**
4	1026T	**Baking & Pastry, Advanced**

1980 – Baking and Pastry Foundations (1 credit): This course focuses on the basic preparation and service of safe food, basic introduction to industry safety standards, restaurant equipment, kitchen essentials, and communication concepts in the baking industry. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts.

1024 – Baking and Pastry I (1 credit): This course will educate students on the basics of the industry. This course starts with teaching students about the various ingredients used for baking and pastry arts and how these ingredients react to each other to make products. It will also instruct students on various 4 breads such as quick breads, artisan and yeast breads, and laminated doughs.

1025 – Baking and Pastry II (1 credit): This course will instruct students on how to make cookies, pies, and cakes. It educates students about the various types of icings and frostings and introduces them to custards, sauces, and creams. This course also teaches students who to make ice cream and gives them some knowledge of how to adapt recipes to meet special dietary needs.

1026 – Baking and Pastry, Advanced (1credit): This course will educate students on how to make some of the more intricate products of the industry. It will introduce students to tortes and specialty cakes, petit fours, and plated desserts. This course also will give students some experience with chocolate and sugar work. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts.

CARPENTRY

This area of study is designed to provide learners with skills in general building construction occupations. The major instructional concepts include: general occupational information; all areas of carpentry; basic masonry and basic plumbing.

1	1842T* 1822T	**Carpentry I (CORE)** **Blueprint Reading for Construction**
2	1843T * 1829T	**Carpentry II (CORE)** **Masonry and Plumbing**
3	1844T * 1821T	**Carpentry III (CORE)** **Concrete Finishing**
4	1845T * 0520T	**Carpentry IV (CORE)** **Work-Based Integration and Transition**

1842* -- Carpentry I (1 credit): This course introduces the student to the knowledge base and technical skills of the carpentry industry.

1822 – Blueprint Reading for Constrtruction (1 credit): This course introduces the student to the knowledge base and technical skills for concepts in the Building Construction Concentration. Areas of study include identifying various blueprints, terms, symbols, components, dimensions, classifications and construction task objectives.

1843* -- Carpentry II (1 credit): This course will continue to build student skill sets in areas such as Reading Plans and Elevations; Floor Systems, Wall and Ceiling Framing; Roof Framing; Introduction to Concrete, Reinforcing Materials, and Forms; Windows and Exterior Doors; Basic Stair Layout.

1829 -- Masonry and Plumbing (1 credit): This course introduces the student to the knowledge base and technical skills for concepts in the Building Construction Concentration. Areas of study include estimation, masonry materials, and rough in plumbing systems and installation of finish plumbing.

1844* -- Carpentry III (1 credit): This course will continue to build student skill sets in areas of Commercial Drawings; Roofing Applications; Thermal and Moisture Protection; and Exterior Finishing.

1821 -- Concrete Finishing (1 credit): This course introduces the student to the knowledge base and technical skills for concepts in the Building Construction Concentration. Areas of study include estimation, concrete construction, finishing concepts, properties of concrete, tools and equipment, concrete placement, work site preparation, finishing techniques, curing and protecting and troubleshooting concrete problems. Emphasis will be placed on career exploration, job seeking skills and personal and professional ethics. Safety instruction is integrated into all activities.

1845* -- Carpentry IV (1 credit): This course will continue to build student skill sets in areas of Cold-Formed Steel Framing; Drywall Installation; Drywall Finishing; Doors and Door Hardware; Suspended Ceilings: Window, Door, Floor, and Ceiling Trim; Cabinet Installation; and Cabinet Fabrication.

0520 – Work-Based Integration and Transition (1 credit): The skill sets in this course give students the opportunity to integrate theory and practice by interacting with industry professionals. Students will

study various requirements for employability including ethics, communication, teamwork and professionalism. Students will participate in hands-on, digital or work-based experiences related to industry settings in order to practice skill sets and to transition from student to employee. A supervised project will be developed in one or more of the following categories: Entrepreneurship (ownership or operation of a business); Placement (employment or internship); Research and Experimentation (planning and/or conducting a scientific experiment); Exploration (exploration of related careers through activities such as shadowing employees in various work settings, conducting on-line research, attending professional development activities, etc.).

DIESEL EQUIPMENT TECHNOLOGY

The Diesel Equipment Technology concentration focuses on careers that will build a knowledge base and technical skills in all aspects of the Diesel Equipment Technology Industry. Students will have the opportunity to acquire hours towards ASE/NATEF Certification and be exposed to develop positive work ethics.

Course Listing: IN SEQUENTIAL ORDER

1	**1751T***	**Fundamentals of Diesel Equipment Technology (CORE)**
2	**1744T***	**Electronic Engine Controls (CORE)**
3	**1741T***	**Diesel Engine Components (CORE)**
4	**1747T***	**Diesel Support Systems (CORE)**

1751* -- Fundamentals of Diesel Equipment Technology (1 credit): This course introduces the student to the knowledge base and technical skills as they relate to the field of Fundamentals of Diesel Technology. In the Fundamentals of Diesel Equipment Technology class areas of study include personal and shop safety, career opportunities in the diesel technology industry, the proper use of hand and power tools, basic oxyacetylene cutting, electrical welding, and basic shop etiquette.

1744* -- Electronic Engine Controls (1 credit): This course introduces the student to the knowledge base and technical skills for concepts in diesel electronic engine controls. Areas of study include electronic control modules, electronic fuel injection, and electronic control test equipment.

1741* -- Diesel Engine Components (1 credit): This course introduces the student to the knowledge base and technical skills as they relate to the field of Diesel Equipment Technology. In the Diesel Engine Components class, areas of study include basic engine components, primary functions, service, inspection, and assembly procedures.

1747* -- Diesel Support Systems (1 credit): This course introduces the student to the knowledge base and technical skills as they relate to Diesel Support Systems. In the Diesel Support Systems class areas of study include areas such as lubricating and cooling systems, air intake and exhaust systems, starting and charging systems, engine retarders, fuel systems, and governor operation.

GRAPHIC DESIGN

1	**1851T* 1853T**	**Fundamentals of Illustration-(Core) Fundamentals of Computer Graphics**
2	**1857T* 1854T**	**Fundamentals of Graphic Design- (Core) Computer Graphics**
3	**1859T* 1855T**	**Graphic Design Applications- (Core) Fundamentals of Desktop Publishing**
4	**1861T* 1856T**	**Illustration- (Core) Desktop Publishing/Page Layout**

1851- Fundamentals of Illustration (Core) (1 Credit): This course will introduce students to the basic fundamental of safety, design elements, medium and art tool exploration, perspective, shadowing techniques, and various printing methods. The student will do a variety of art compositions using pen, pencil, marker, pastels, charcoal and paint. This course is a Fine Arts credit for students in the Skilled Pathway concentration of Career and Technical Education.

1853-Fundamentals of Computer Graphics (1 Credit): This course introduces the student to the knowledge base and technical skills necessary to create and manipulate computer graphics. Areas of study include production, design projects, intermediate processes, digital cameras, animation, and student organizations. Students will demonstrate knowledge and technical expertise in digital editing.

1857-Fundamentals of Graphic Design (Core) (1 Credit): In this full-year course, students will become familiar with safety in the graphic arts lab and basic techniques in drawing and illustration. Students will learn computer design software, demonstrate knowledge of career opportunities in graphic design and production, identify a variety of basic graphic design equipment and materials, identify legal restrictions regarding copy limitations, introduce design elements and principles to graphic applications and demonstrate the principles of job planning and layout when producing layouts to customer specifications. This course is a Fine Arts credit for students in the Skilled Pathway concentration of Career and Technical Education.

1854-Computer Graphics (1 Credit) **Elective**: This course provides the student the opportunity to study advanced concepts and master technical skills in the creation and manipulation of graphics.

1859-Graphic Design Applications (Core) (1 Credit): This full-year course will introduce students to basic advertising concepts, and hand and computer-generated layout procedures and paste-up/mechanical production. The student will establish demographics for various target markets and develop market research skills objectives; execute correct hand-generated, paste-up/mechanical preparation skills; use graphics software to properly execute a variety of computer-generated design projects. Through real-world learning, students will develop logo designs, letterheads, business cards, greeting cards, storyboard art and cartoons/caricatures. Students will be involved in development and production of their own video commercial. The students will be provided real-world learning instruction and projects.

1855-Fundamentals of Desktop Publishing (1 Credit) **Elective**: This course introduces the student to the knowledge base and technical skills in desktop publishing. Areas of study include production skills, design projects, portfolio development, and student organizations. Students will demonstrate knowledge and technical expertise in page layout.

1861-Illustration (Core) (1 Credit): This full-year course will introduce students to the fundamentals of color theory and figure drawing. The student will apply color theory to illustrations using paint, pastels, pencil, colored pencils and pen and ink. Students will apply rules of proportion to figure drawing and rendering the fashion figure and various textiles. This course is a Fine Arts credit for students in the Skilled Pathway concentration of Career and Technical Education.

1856-Desktop Publishing/Page Layout (1 Credit) **Elective**: This course improves the student's ability to produce real-world designs for clients. Areas of study include advanced page layout, employability skills, and student organizations. Emphasis will be placed on personal and professional ethics, and students will explore a variety of career opportunities. Students will utilize problem-solving techniques and participate in laboratory activities to develop an understanding of course concepts, and teachers should provide each student with real world learning opportunities and instruction related to graphic design occupations.

PRO-START RESTAURANT MANAGEMENT

The Pro-Start Restaurant Management concentration focuses on the skills needed for a successful employment in a restaurant environment. Pro-Start is a restaurant industry-driven curriculum developed by the National Restaurant Association Educational Foundation with input from thousands of restaurant professionals. Pro-Start curriculum integrates performance-based learning with academics, entrepreneurship, and technology skills to prepare students for successful employment in the 21st Century.

1	**1013T***	**Restaurant and Culinary Foundations (CORE)**
2	**1019T ***	**Advanced Principles in Food Production (CORE)**
3	**1014T***	**Restaurant Management Essentials (CORE)**
4	**1020T***	**Restaurant Professional (CORE)**

1013* -- Restaurant and Culinary Foundations (1 credit): This course focuses on the basic preparation and service of safe food, basic introduction to industry safety standards, basic introduction to restaurant equipment, kitchen essentials in knife skills, stocks and sauces, and communication concepts in the restaurant industry.

1019* -- Advanced Principles in Food Production (1 credit): This course is designed to examine advanced food production, nutrition, and cost control. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts.

1014* -- Restaurant Management Essentials (1 credit): This course is designed to focus management essentials in the restaurant industry, guest service, food production, and career exploration and pursuit.

1020* -- Restaurant Professional (1 credit): This course is designed to provide content-related global cuisine, sustainability, desserts, and baked goods, and marketing. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts.

THERAPEUTIC SERVICES

The Therapeutic Services Concentration allows the student to explore careers focused primarily on changing the health status of the patient over time. Health professionals in this concentration work directly with patients; they may provide care, treatment, counseling and health education information.

1	**0711T***	**Foundations of Healthcare (CORE)**
	0739T	**Nutrition and Wellness**
2	**0715T***	**Advanced Principals (CORE)**
	0721T	**Medical Terminology**
3	**0789T***	**Clinical Specialties (CORE)**
	0730T	**Health Science Clinical Experience**
4	**0790T***	**Clinical Specialty II/Community Emergency Response Team (CORE)**
	1060T	**Essentials of Addiction & Prevention**

0711* -- Foundations of Healthcare (1 credit): This course is designed to examine advanced food production, nutrition, and cost control. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts.

0739 -- Nutrition and Wellness (1 credit): Students will examine nutrition in relation to the maintenance and/or restoration of wellness. Topics include food composition, nutritional guidelines, therapeutic diets, eating disorders, menu planning and patient teaching.

0715* -- Advanced Principals (1 credit): Instructional content will focus on healthcare safety, environmental safety processes and procedures, ethical and legal responsiblities and mathematical computations. Medical terminology and the reinforcement, expansion and enhancement of biology content specific to diseases and disorders are an integral part of the course.

0721 -- Medical Terminology (1 credit): Through the study of medical terminology the student will learn the language of medicine. Students will gain an understanding of basic elements, rules of building and analyzing medical words, and medical terms associated with the body as a whole. Utilizing a systems approach, the student will define, interpret, and pronounce medical terms relating to structure and function, pathology, diagnosis, clinical procedures, oncology, and pharmacology. In addition to medical terms, common abbreviations applicable to each system will be interpreted. This course qualifies for EDGE credit and WVNCC credit.

0789* -- Clinical Specialties (1 credit): This course is designed to choose a career work-based experience from the following specialization: Certified Nursing Assistant.

0730 -- Health Science Clinical Experience (1 credit): This course is designed to be used in conjunction with a Health Science Education course that includes a clinical specialization experience. Instructional content focuses on extending career preparation and technical skills associated with a previously selected clinical specialization.

0790* -- Clinical Specialty II/Community Emergency Response Team (1 credit): CERT educates individuals about disaster preparedness for hazards that may impact their area and trains them in basic

disaster response skills, such as fire safety, light search and rescue, team organization, and disaster medical operations. Using training learned in the classroom and during exercises, CERT volunteers can assist others in their community following a disaster when professional responders are not immediately available to help.

1060 -- Essentials of Addiction & Prevention (1 credit): Students will examine the essentials of addiction and prevention strategies. This course aligns with domains, tasks and knowledge skills from the WV Certification Board for Addictions Prevention Professionals Certified Prevention Specialist Manual.

WELDING

The Welding concentration focuses on careers that will build a knowledge base and technical skills in all aspects of the Welding industry. Students will have the opportunity to earn both NCCER certification and the WV Welding Certification for each skill set mastered and be exposed to skills to develop positive work ethics.

1	**1862T*** **1983T**	**Welding I (CORE)** **Blueprint**
2	**1863T *** **1987T**	**Welding II (CORE)** **GMAW/Gas Metal Arc Welding**
3	**1864T *** **1982T**	**Welding III (CORE)** **ORNAMENTAL/Ornamental Metalwork**
4	**1865T *** **1989T**	**Welding IV (CORE)** **GTAW/Gas Tungsten Arc Welding**

1862* --Welding I (1 credit): This course is designed to introduce the student to the knowledge base and technical skills of the Welding industry.

1983 -- Blueprint Reading and Metallurgy (1 credit): This course will introduce students to the basic fundamentals of blueprint reading as it relates to the welding industry, and to the science and technology of extracting metals from their ores, refining them, and preparing them for use.

1863* -- Welding II (1 credit): This course will continue to build student skill sets in areas of Air Carbon Arc Cutting and Gouging; Base Metal Preparation: Weld Quality; SMAW-Equipment and Setup: Shielded Metal Arc Electrodes; SMAW-Beads and Fillet Welds; Joint Fit Up and Alignment; SMAW-Grove Welds with Backing: and SMAW-Open V-Groove Welds.

1987 -- GMAW/Gas Metal Arc Welding (1 credit): The Skill Sets in this course are representative of the basic knowledge included in a Career and Technical Welding concentration. Incorporated into this course are elements of introductory knowledge and skills necessary for a career in welding. This course is recommended as an Elective in Metals Technology and Welding.

1864 -- Welding III (1 credit): This course will continue to build student skill sets in areas of Welding Symbols; Reading Welding Detail Drawings; Physical Characteristics and Mechanical Properties of Metals; Preheating and Postheating of Metals; GMAW and FCAW-Equipment and Filler Metals; and GMAW and FCAW-Plate.

1982 -- Ornamental Metalwork (1 credit): This course will give students the opportunity to advance their skills in SMAW, GMAW, FCAW, GTAW and to have the opportunity to test to a state or national standard.

1865*-- Welding IV (1 credit) Welding IV will continue to build student skill sets in areas of GTAW-Equipment and Filler Metals; and GTAW-Plate.

1989 -- GTAW/Gas Tungsten Arc Welding (1 credit): The Skill Sets in this course are representative of the basic knowledge included in a Career and Technical Welding concentration. Incorporated into this course are elements of introductory knowledge and skills necessary for a career in welding. This course is recommended as an Elective in Metals Technology and Welding.

JDR4 CAREER CENTER
John D. Rockefeller IV
Career Center

Hancock County Schools

Embedded Credits for 2021-2022 School Year

Embedded credits are a 2-year opportunity to receive a Transition English credit or a Transition Math credit in certain programs at the John D. Rockefeller Career Center. A Trans ELA credit could be awarded after completion of the Therapeutic Services program. A Trans Math credit could be awarded after completion of the Carpentry, Welding and Auto Tech Programs.

4013C0 RLA	**Transition English/Language Arts for Seniors**	**Grades 10-11-12**	**1 Credit**

This course is delivered at the JDR4CC by the embedded ELA Teacher in the Therapeutic Services Program and the Pro-Start program. This course is expanded over one or two years that the student is enrolled in the CTE program. That credit will be in Transition ELA.

3052C0 Math	**Transition Math for Seniors**	**Grades 10-11-12**	**1 credit**

This course is delivered at the JDR4CC by the embedded Math Teacher in the Carpentry, Welding, and Auto Tech Programs. This course is expanded over one or two years that the student is enrolled in the CTE program. That credit will be in Transition Math