

# **2014 – 2015 Career and Technical Education Programs of Study and Course Descriptions**

*It is expected that the scope and sequence as well as course recommendations for each program of study be followed as listed. Any additional prerequisites are listed in the course description.*

***Please note that all CTE courses will not receive final approval through the State Board of Education until March 2014. The following information is subject to change.***

Career Cluster: Agriculture, Food, & Natural Resources		Offered At: MCHS Academy, NWHS	
PROGRAM OF STUDY: Veterinary and Animal Science			
<b>Agriscience</b>	<b>5957</b>	<b>Credit/s: 1</b>	<b>Year 1</b>
<p><i>Agriscience</i> is an introductory laboratory science course that prepares students for biology, subsequent science and agriculture courses, and postsecondary study. This course helps students understand the important role that agricultural science and technology serves in the 21st century. In addition, it serves as the first course for all programs of study in the Agriculture, Food and Natural Resources Cluster. Standards in this course are aligned with Tennessee Common Core State Standards for English Language Arts &amp; Literacy in Technical Subjects, Tennessee Common Core State Standards in Mathematics, and Tennessee state standards in Anatomy and Physiology, Biology I, Biology II, Chemistry I, Chemistry II, Environmental Science, Physical Science, Physics, and Physical World Concepts, as well as the National Agriculture, Food and Natural Resources Career Cluster Content Standards. This course counts as a lab science credit toward graduation and college entrance requirements.*</p>			
<b>Small Animal Science</b>	<b>5958</b>	<b>Credit/s: 1</b>	<b>Year 2</b>
<p><i>Small Animal Science</i> is an applied course in animal science and care for students interested in learning more about becoming a veterinarian, vet tech, vet assistant, or pursuing a variety of scientific, health, or agriculture professions. This course covers anatomy and physiological systems of different groups of small animals, as well as careers, leadership, and history of the industry. Standards in this course are aligned with Tennessee Common Core State Standards for English Language Arts &amp; Literacy in Technical Subjects, Tennessee Biology I standards, Tennessee Biology II standards, Tennessee Anatomy and Physiology standards, as well as National Agriculture, Food and Natural Resources Career Cluster Content Standards.*</p>			
<b>Large Animal Science</b>	<b>TBD</b>	<b>Credit/s: 1</b>	<b>Year 3</b>
<p><i>Large Animal Science</i> is an applied course in veterinary and animal science for students interested in learning more about becoming a veterinarian, vet tech, vet assistant, or pursuing a variety of scientific, health, or agriculture professions. This course covers anatomy and physiological systems of different groups of large animals, as well as careers, leadership, and history of the industry. Standards in this course are aligned with Tennessee Common Core State Standards for English Language Arts &amp; Literacy in Technical Subjects, as well as Tennessee Anatomy and Physiology standards and National Agriculture, Food and Natural Resources Career Cluster Content Standards.*</p>			
<b>Veterinary Science</b>	<b>5961</b>	<b>Credit/s: 1</b>	<b>Year 4</b>
<p><i>Veterinary Science</i> is an advanced course in animal science and care for students interested in learning more about becoming a veterinarian, vet tech, vet assistant, or pursuing a variety of scientific, health, or agriculture professions. This course covers principles of health and disease, basic animal care and nursing, clinical and laboratory procedures, and additional industry-related career and leadership knowledge and skills. Standards in this course are aligned with Tennessee Common Core State Standards for English Language Arts &amp; Literacy in Technical Subjects, Tennessee Anatomy and Physiology, Tennessee Biology I, and Tennessee Biology II standards, as well as National Agriculture, Food and Natural Resources Career Cluster Content Standards.* <i>Dual Credit/Dual Enrollment options currently exist at University of Tennessee Martin, Tennessee Tech University, and Volunteer State Community College.</i></p>			
<b>and/or</b>			
<b>WBL Internship at Vet Office</b>	<b>TBD</b>	<b>Credit/s: TBD</b>	<b>Year 4</b>
<p><b>Supervised Agricultural Experience (SAE)(Optional)5964 ½ credit each year, up to a maximum of 2 credits</b>  <i>Supervised Agricultural Experience (SAE)</i> is a structured experiential learning opportunity that takes place in a setting outside of regular school hours. Individual LEAs can choose whether or not to offer credit, provided participating students demonstrate mastery of the standards outlined below. SAEs allow students to experience the diversity of agriculture and natural resources industries and to gain exposure to agricultural-related career pathways. SAEs require a documented formal project scope,</p>			

accurate recordkeeping, and student advisor supervision. The following SAE standards align to the overarching framework of the Tennessee Common Core State Standards for English Language Arts & Literacy in Technical Subjects, the National Agriculture, Food, and Natural Resources (AFNR) Career Cluster Content Standards, and the Partnership for 21st Century Skills Framework for 21st Century Learning.\*

<b>Career Cluster: Agriculture, Food, &amp; Natural Resources</b>		<b>Offered At: CHS, MCHS Academy</b>	
<b>PROGRAM OF STUDY: Horticulture Science</b>			
<b>Agriscience 5957</b>	<b>Credit/s: 1</b>	<b>Year 1</b>	
<p><i>Agriscience</i> is an introductory laboratory science course that prepares students for biology, subsequent science and agriculture courses, and postsecondary study. This course helps students understand the important role that agricultural science and technology serves in the 21st century. In addition, it serves as the first course for all programs of study in the Agriculture, Food and Natural Resources Cluster. Standards in this course are aligned with Tennessee Common Core State Standards for English Language Arts &amp; Literacy in Technical Subjects, Tennessee Common Core State Standards in Mathematics, and Tennessee state standards in Anatomy and Physiology, Biology I, Biology II, Chemistry I, Chemistry II, Environmental Science, Physical Science, Physics, and Physical World Concepts, as well as the National Agriculture, Food and Natural Resources Career Cluster Content Standards. This course counts as a lab science credit toward graduation and college entrance requirements.*</p>			
<b>Principles of Plant Science and Hydroculture TBD</b>	<b>Credit/s: 1</b>	<b>Year 2</b>	
<p><i>Principles of Plant Science and Hydroculture</i> focuses on essential knowledge and skills related to the science of plant growth. This course covers principles of plant health, growth, reproduction, and biotechnology, as well as fundamental principles of hydroponics and aquaponics. Standards in this course are aligned with Tennessee Common Core State Standards for English Language Arts &amp; Literacy in Technical Subjects, Tennessee Biology I standards, Tennessee Biology II standards, Tennessee Ecology standards, and Tennessee Environmental Science standards, and National Agriculture, Food and Natural Resources Career Cluster Content Standards.*</p>			
<b>Greenhouse Management 5954</b>	<b>Credit/s: 1</b>	<b>Year 3</b>	
<p><i>Greenhouse Management</i> is a applied-knowledge course designed to prepare students to manage greenhouse operations. This course covers principles of greenhouse structures, plant health and growth, growing media, greenhouse crop selection and propagation, and management techniques. It provides students with the technical knowledge and skills needed to prepare for further education and careers in horticulture production. Greenhouse Management is a dual credit course with statewide articulation. Standards in this course are aligned with Tennessee Common Core State Standards for English Language Arts &amp; Literacy in Technical Subjects, Tennessee Common Core State Standards for Mathematics, and Tennessee state standards for Biology I and Biology II, as well as National Agriculture, Food and Natural Resources Career Cluster Content Standards.* <u><i>A state-wide articulation exists for this course for students to earn dual credit at Tennessee public postsecondary institutions, which offer agriculture. For more information, please visit <a href="http://www.tn.gov/education/opca/">www.tn.gov/education/opca/</a>.</i></u></p>			
<b>Landscaping and Turf Science 5951</b>	<b>Credit/s: 1</b>	<b>Year 4</b>	
<p><i>Landscaping and Turf Science</i> is a applied-knowledge course designed to provide challenging academic standards and relevant technical knowledge and skills needed for further education and careers in landscape design, maintenance, and turf management. Content includes site analysis and planning, principles of design, and plant selection and care techniques. Standards in this course are aligned with Tennessee Common Core State Standards for English Language Arts &amp; Literacy in Technical Subjects, Tennessee Common Core State Standards for Mathematics, and Tennessee state standards for Biology II, as well as National Agriculture, Food and Natural Resources Career Cluster Content Standards.*</p>			

**Supervised Agricultural Experience (SAE)(Optional)5964 ½ credit each year, up to a maximum of 2 credits**  
*Supervised Agricultural Experience (SAE)* is a structured experiential learning opportunity that takes place in a setting outside of regular school hours. Individual LEAs can choose whether or not to offer credit, provided participating students demonstrate mastery of the standards outlined below. SAEs allow students to experience the diversity of agriculture and natural resources industries and to gain exposure to agricultural-related career pathways. SAEs require a documented formal project scope, accurate recordkeeping, and student advisor supervision. The following SAE standards align to the overarching framework of the Tennessee Common Core State Standards for English Language Arts & Literacy in Technical Subjects, the National Agriculture, Food, and Natural Resources (AFNR) Career Cluster Content Standards, and the Partnership for 21st Century Skills Framework for 21st Century Learning.\*

<b>Career Cluster: Architecture &amp; Construction</b>		<b>Offered At: MCHS, NEHS, RHS, WCHS</b>	
<b>PROGRAM OF STUDY: Carpentry</b>			
<b>Construction Core 6073</b>	<b>Credit/s: 1</b>	<b>Year 1</b>	
<i>Construction Core</i> is a course that will introduce students to basic skills and knowledge applicable to all construction trades. Topics covered include safety, construction drawings, site layout, hand and power tools, linear and angular measurements, and application of algebraic and geometric principles to construction problems.			
<b>Carpentry I 6035</b>	<b>Credit/s: 1</b>	<b>Year 2</b>	
<b>Recommended Prerequisites: Algebra I</b> <i>Carpentry I</i> is a course that will introduce students to basic skills and knowledge related to residential and commercial carpentry. Topics covered include wood, metal, and concrete building materials; fasteners; hand and power tools; fabrication based on construction plans; and framing of platform and post-and-beam structures, in both wood and metal. This course gives students an introduction to the skill and knowledge base typically required for apprentice carpenters.			
<b>Carpentry II 6036</b>	<b>Credit/s: 2</b>	<b>Year 3</b>	
<b>Recommended Prerequisites: Algebra I, Geometry, Physical Science</b> <i>Carpentry II</i> is a course in which students will extend their skills and knowledge related to residential and commercial carpentry. Topics covered include stairs, installation and trim of windows and doors, installation and repair of gypsum wallboard, advanced site layout, exterior finish work, thermal and moisture protection, and an introduction to welding. This course gives students a substantial skill and knowledge foundation typically required for apprentice carpenters. <u>Students enrolled in the Carpentry Program of Study are eligible to participate in Dual Enrollment with the Tennessee College of Applied Technology/Nashville.</u>			
<b>Entrepreneurship 5934</b>	<b>Credit/s: 1</b>	<b>Year 4</b>	
<i>Entrepreneurship</i> includes enhanced marketing information as it relates to entrepreneurial activities. Subject matter includes introductory entrepreneurial concepts, business plan development, management responsibilities, and legal and ethical issues of business ownership.			

Career Cluster: Architecture & Construction		Offered At: KHS
<b>PROGRAM OF STUDY: HVAC/R</b>		
<b>Construction Core 6073</b>	<b>Credit/s: 1</b>	<b>Year 1</b>
<p><i>Construction Core</i> is a course that will introduce students to basic skills and knowledge applicable to all construction trades. Topics covered include safety, construction drawings, site layout, hand and power tools, linear and angular measurements, and application of algebraic and geometric principles to construction problems.</p>		
<b>HVAC/I 6076</b>	<b>Credit/s: 1</b>	<b>Year 2</b>
<p><b>Recommended Prerequisites: Algebra I</b></p> <p><i>HVAC/R I</i> is a course that will introduce students to basic to entry-level skills and knowledge related to residential and commercial heating, ventilation, air conditioning, and refrigeration (HVAC/R). Topics covered include tools and equipment, safety, hazards unique to HVAC/R work, physics principles, mechanical refrigeration cycle, and installation and servicing of HVAC/R systems. Course content provides students with skill and knowledge to advance to <i>HVAC/R II</i>. Students completing HVAC/R I will be eligible to take the Core, Type I and Type II technician certification of the EPA Proper Refrigerant Usage and Handling examination.</p>		
<b>HVAC/R II 6077</b>	<b>Credit/s: 2</b>	<b>Year 3</b>
<p><b>Recommended Prerequisites: Algebra I, Geometry, Physical Science</b></p> <p><i>HVAC/R II</i> is a course in which students will extend their skills and knowledge related to residential and commercial heating, ventilation, air conditioning, and refrigeration (HVAC/R). Topics covered include electricity, thermodynamics, psychometrics, diagnostic, forced air furnaces, air distribution systems, and heating/cooling load analysis. This course gives students a substantial skill and knowledge foundation typically required for apprentice HVAC/R technicians. Course content provides school based and work based learning opportunities for students. Course content prepares students for entry-level employment, advanced training in HVAC/R, and entry into postsecondary education. <u>Students enrolled in the HVAC/R Program of Study are eligible to participate in Dual Enrollment with the Tennessee College of Applied Technology/Nashville.</u></p>		
<b>Entrepreneurship 5934</b>	<b>Credit/s: 1</b>	<b>Year 4</b>
<p><i>Entrepreneurship</i> includes enhanced marketing information as it relates to entrepreneurial activities. Subject matter includes introductory entrepreneurial concepts, business plan development, management responsibilities, and legal and ethical issues of business ownership.</p>		

Career Cluster: Arts, Audio/Visual Technology & Communication		Offered At: RHS Academy
<b>PROGRAM OF STUDY: Design Communications</b>		
<b>Digital Arts and Design I 6084</b>	<b>Credit/s: 1</b>	<b>Year 1</b>
<p><i>Digital Arts and Design I</i> is a course that provides a foundation in visual communication concepts and design strategies. Course content is designed to foster skills and understanding that are essential in modern digital graphics, motion graphics, publishing, Web, film/video, photography, and animation graphic industries. Focus will be on developing <u>understanding</u> of key design concepts and strategies, along with design challenges that translate into creative communication solutions which accurately and effectively reach targeted audiences. Along with study of design principles, conceptualization processes and techniques, students will explore various applications of design through extensive study of typography, style, composition, visual elements, color, creative technical software and various problem-solving tasks, that <u>encourages higher order thinking</u>. Exploration of career opportunities, development of leadership, teamwork, collaborative and technical skills requisite in many aspects of life.</p>		

<b>Digital Arts and Design II 6086</b>	<b>Credit/s: 1</b>	<b>Year 2</b>
<b>Prerequisites: Digital Arts and Design I</b>		
<p><i>Digital Arts and Design II</i> is a course that builds on the foundational core elements of visual communication concepts and design strategies, learned in (Digital Arts and Design I) Course content is designed to reinforce skills and support understanding that are essential in modern digital graphics, motion graphics, publishing, Web, film/video, photography, and animation graphic industries. Focus will be on developing <u>understanding</u> of key design concepts and strategies, along with design challenges that translate into creative communication solutions which accurately and effectively communicate. Along with <u>continued</u> study of design principles, conceptualization processes and techniques, students will gain mastery of various applications of design through continued study of typography, style, composition, visual elements, color, creative technical software and more focused problem-solving tasks, that <u>encourages higher order thinking</u>. Exploration of career opportunities, development of leadership, teamwork, collaborative and technical skills requisite in many aspects of life and industry which are creative and multi-faceted will be developed. Course content is also related to other pathways.</p>		
<b>Digital Arts and Design III 6087</b>	<b>Credit/s: 2</b>	<b>Year 3</b>
<p><i>Digital Arts and Design III</i> with the confluence of technologies, visual arts and creative practices have changed dramatically over the past several years. Increasingly, the design studio functions as a dynamic and vital space for learning, exploring, and innovation. Negotiating complex relationships, developing communication strategies that leverage new technologies and provide robust opportunities for the application of knowledge, skills, and critical thinking associated with an array of contemporary creative and studio practices is the new industry standard. Course content is selected to broaden the foundation of design concepts and understanding related to modern communication design. This course will foster advanced integrated skills that are essential in digital graphics, motion graphics, publishing, Web, film/video, photography, and animation graphic industries. Students will be exposed to real world design challenges in a laboratory facility through projects that simulate industry objectives. Course content is also related to other pathways. <u>Upon completing the Program of Study students are eligible to sit for a Dual Credit exam with Nashville State Community College.</u></p>		

<b>Career Cluster: Arts, Audio/Visual Technology &amp; Communication</b>		<b>Offered At: KHS, WCHS</b>
<b>PROGRAM OF STUDY: Journalism and Broadcasting</b>		
<b>Broadcasting I 6049</b>	<b>Credit/s: 1</b>	<b>Year 1</b>
<p><i>BROADCASTING I</i> is offered for students interested in either the Audio and Video Technologies sub-cluster or the Journalism and Broadcasting sub-cluster of the arts and communication cluster. The overlap in these industries is extensive as can be witnessed in television, film, music, radio, newspaper, Web-cast, and entertainment just to name a few. This course is the entry-level course to prepare students for the media industry. Course content provides a broad-based exposure to audio, video, and journalism and broadcasting within the media industry. Upon completion of this course, students will be prepared to pursue advanced coursework in either audio and video technology or journalism and broadcasting.</p>		
<b>Broadcasting II 6050</b>	<b>Credit/s: 1</b>	<b>Year 2</b>
<p><i>Broadcasting II</i> is offered in the audio and video technology sub-cluster to students who have completed Broadcasting I or obtained instructor's approval. Course content focuses on broadcast production technologies utilizing simulated and/or real-life projects. This course centers on production of various broadcasting products including, commercials, music, news, and interactive programming. The student will gain valuable insight into the many facets of broadcast production, including but not limited to concept creation, scripting, sound design, visual design, engineering, editing, budgeting, and producing, as well as exploring some of the latest advances in industry technology. Upon completion of this course, students will be prepared to pursue advanced coursework.</p>		

<b>Broadcasting III 6083</b>	<b>Credit/s: 2</b>	<b>Year 3</b>
<p><i>Broadcasting III</i> is offered in the audio and video technology sub-cluster to students who have completed Broadcasting I or obtained instructor's approval. Course content focuses on broadcast production technologies utilizing simulated and/or real-life projects. This course centers on production of various broadcasting products including, commercials, music, news, and interactive programming. The student will gain valuable insight into the many facets of broadcast production, including but not limited to concept creation, scripting, sound design, visual design, engineering, editing, budgeting, and producing, as well as exploring some of the latest advances in industry technology. Upon completion of this course, students will be prepared to pursue advanced coursework.</p>		

<b>Career Cluster: Arts, Audio/Visual Technology &amp; Communication</b>		<b>Offered At: KHS</b>
<b>PROGRAM OF STUDY: Fashion Design</b>		
<b>Visual Art I 3501</b>	<b>Credit/s: 1</b>	<b>Year 1</b>
<b>Foundations of Fashion Design TBD</b>	<b>Credit/s: 1</b>	<b>Year 2</b>
<p><i>Foundations of Fashion Design</i> introduces students to the rich history of the fashion industry and the basic design principles that are integral to its operation. This course covers the production as well as the marketing of fashion goods and services, with particular attention paid to business practices that support fashion-related enterprises, including forecasting, merchandizing, and product management and promotion. Upon completion of this course, students proficient in Foundations of Fashion Design will develop a firm understanding of both the creative and the business sides of fashion design, and explore a range of career options in the fashion industry. Standards in this course are aligned with Common Core State Standards for English Language Arts &amp; Literacy in Technical Subjects.</p>		
<b>Fashion Design TBD</b>	<b>Credit/s: 1</b>	<b>Year 3</b>
<p><i>Fashion Design</i> is an applied-knowledge course intended to prepare students to pursue careers in the fashion industry. Building on the knowledge acquired in Foundations of Fashion Design, this course places special emphasis on textiles, apparel manufacturing, and marketing applications for the promotion of fashion products. In addition, students will explore trends in fashion design and engage with industry-specific technologies used to produce a variety of fabrics, garments, and accessories. Standards in this course are aligned with Common Core State Standards for English Language Arts &amp; Literacy in Technical Subjects and Common Core State Standards for Mathematics.</p>		
<b>Advanced Fashion Design TBD</b>	<b>Credit/s: 1</b>	<b>Year 4</b>
<p><i>Advanced Fashion Design</i> is the capstone course in the Fashion Design program of study. This course is designed to prepare students for further education and careers in the fashion industry. Through exposure to crucial business activities such as project management and product promotion, students will acquire advanced skills related to business professionalism, ethics, policies, and communication in the fashion industry. In addition, students will complete a capstone project during which they will create artifacts to include in a professional portfolio. While not required, student internships can provide an alternative route for students to master required course standards. Students who have the opportunity to participate in internships may be responsible for the following tasks: assisting in client presentations, resource updating and vendor management, assisting designers, and participating with design teams. Upon completion of this course, students will be proficient in creative and technical skills applied within a project-based environment. Standards in this course are aligned with Common Core State Standards for English Language Arts &amp; Literacy in Technical Subjects.*</p>		

Career Cluster: Business Management & Administration		Offered At: CHS Academy	
<b>PROGRAM OF STUDY: Business Management</b>			
<b>Computer Applications 5891</b>	<b>Credit/s: 1</b>	<b>Year 1</b>	
<p><i>Computer Applications</i> is a foundational course intended for students to learn the concepts associated with key application software, basic computing fundamentals, and ethics and appropriate behavior while using technology as a tool in the classroom and in life. The Computer Applications student will become proficient at a basic level in application for word processing, spreadsheets, databases and presentations, and able to proceed to more advanced coursework in any of these areas.</p>			
<b>Business Principles 5905</b>	<b>Credit/s: 1</b>	<b>Year 2</b>	
<p><i>Business Principles</i> is a core course in which students are introduced to all aspects of business: the domestic and international economies, financial principles, management strategies, administrative and information systems, ethics, and organizational and professional leadership. Students will analyze the elements of the business environment and focus on attitudinal and problem-solving skills inherent to success. (This course provides access to a computerized workstation for each student to complete computer applications using appropriate software.)</p>			
<b>Accounting I 5910</b>	<b>Credit/s: 1</b>	<b>Year 3</b>	
<p><b>Recommended Prerequisites: Algebra I</b></p> <p><i>Accounting I</i> introduces concepts and principles based on a double-entry system of maintaining the electronic and manual financial records for a sole proprietorship, a partnership, and a corporation. It includes analyzing business transactions, journalizing, posting and preparing worksheets and financial statements. (This course provides access to a computerized workstation for each student to complete financial applications using accounting and spreadsheet software.)</p>			
<b>Business Management 5889</b>	<b>Credit/s: 1</b>	<b>Year 4</b>	
<p><i>Business Management</i> will develop a foundation in the many activities, problems, and decisions that are intrinsic to the management of a successful business, as well as an appreciation for the importance of these responsibilities. Areas to be examined include business organization, ethical and legal responsibilities, communication, decision-making, personnel, safety, professional development, and related careers. By gaining an understanding of these areas, students will be better prepared to enhance the business decisions of tomorrow. (Specific activities will require use of Internet, word processing, and spreadsheet software.) <i>After completing the course students are eligible to sit for a Dual Credit exam with Nashville State Community College.</i></p>			
<b>and/or</b>			
<b>Virtual Enterprise International 5900</b>	<b>Credit/s: 1-2</b>	<b>Year 4</b>	
<p><i>Virtual Enterprises International (VE)</i> is a simulated business environment. The VE students will be involved in actual on-the-job work experiences, including accounting, personnel administration, management, and marketing. The only difference between the VE and an actual business is that no material goods are produced or legal tender exchanged. However, services will be provided. Working teams, students will develop and enhance oral and written communication skills through initiative, responsibility, and creativity. The VE experience will weave together several academic disciplines and occupational subjects, thereby overcoming fragmentation of subjects. The course will link learning to application and real life experiences. The goal is to create a learning environment that, through a series of activities, integrates school and workplace to enhance learning. Laboratory facilities and experiences simulate those found in business and industry. Virtual Enterprise International 1 credit substitutes for Economics credit. (This course requires a computerized workstation for each student with use of Internet, word processing, web design and electronic publishing software.)</p>			





<b>Career Cluster: Business Management &amp; Administration</b>		<b>Offered At: NWHS Academy</b>	
<b>PROGRAM OF STUDY: Health Services Administration</b>			
<b>Computer Applications</b>	<b>5891</b>	<b>Credit/s: 1</b>	<b>Year 1</b>
<i>Computer Applications</i> is designed to develop computer technology skills. Students will use a variety of computer software and hardware tools and features of an electronic information network. Students will explore the social, business, and ethical issues of using computer technology. The students will develop skills that will assist them with efficient production of word processing documents, spreadsheets, databases, and presentations. (This course requires a computerized workstation for each student with operating system, word processing, database, spreadsheet, presentation, and networking resident software.)			
<b>Health Science Education</b>	<b>5998</b>	<b>Credit/s: 1</b>	<b>Year 2</b>
<i>Health Science Education</i> is an introduction to broad standards that serve as a foundation for Health Care Occupations and functions across health services. Units included are academics in health care communications systems, legal responsibilities, ethics, teamwork, and safety practices.			
<b>Administrative Management</b>	<b>5895</b>	<b>Credit/s: 1</b>	<b>Year 3</b>
<i>Administrative Management</i> provides advanced training, including hands-on experiences, for students pursuing a career in business management & administration. Skills developed in previous courses will be incorporated and enhanced through a multi-tasking environment using a variety of input technologies. Procedures and concepts are related to information processing systems, administrative/information management, problem solving, reasoning, team-building, time management, business standards, feasibility studies, cost/budgeting, professional leadership, ethical and legal issues, ethical and legal issues, mathematics, and communications. Production and administrative skills are developed to meet industry standards. The student will play a variety of roles in completing tasks. Team activities will be evaluated as a group. Collaboration with other courses can enhance student' learning and expand their experiences. This course may articulate to a post-secondary program. (A computerized workstation with dedicated office suite, voice technology, and page layout software and Internet connectivity is necessary for each student.)			
<b>Health Information Technology</b>	<b>5997</b>	<b>Credit/s: 1</b>	<b>Year 4</b>
<i>Health Information Technology</i> will provide knowledge of ways to document an individual's care in the home, hospital, long term care facility, outpatient situation, and other placements. Careers could include medical records, health management, risk management, unit coordinator, computer operator, social worker, patient advocate, hospital chaplain, clinical department director, community services specialist, computer security specialist, data analyst, health writer, medical librarian, medical video producer, and others.			

<b>Career Cluster: Education and Training</b>		<b>Offered At: CHS, NWHS, WCHS</b>	
<b>PROGRAM OF STUDY: Teaching as a Profession (K-12)</b>			
<b>Fundamentals of Education</b>	<b>TBD</b>	<b>Credit/s: 1</b>	<b>Year 1</b>
<i>Fundamentals of Education</i> is a foundation course in the Education and Training career cluster for students interested in learning about becoming a school counselor, teacher, librarian, or speech-language pathologist. This course covers the history of education in the United States, careers in education, and the influence of human development on learning. Artifacts will be created for inclusion in a portfolio, which will continue throughout the full sequence of courses. Standards in this course are aligned with Tennessee Common Core State Standards for English Language Arts & Literacy in Technical Subjects and Tennessee state standards in Biology I, Psychology, and U.S History, as well as National Standards for Family and Consumer Sciences Education, Second Edition.*			

<b>Teaching as a Profession I 6010</b>	<b>Credit/s: 1</b>	<b>Year 2</b>
<i>Teaching as a Profession I (TAP I)</i> is an applied-knowledge course for students interested in learning more about becoming a school counselor, teacher, librarian, or speech-language pathologist. This course covers the components of instruction, teaching strategies, types of assessments, student learning, special populations, and educational technology. Students in this course will conduct observations of educators at work and create artifacts for a course portfolio. Standards in this course are aligned with Tennessee Common Core State Standards for English Language Arts & Literacy in Technical Subjects and Tennessee Psychology, Sociology, and Scientific Research standards, and the National Standards for Family and Consumer Sciences Education, Second Edition.*		
<b>Teaching as a Profession II TBD</b>	<b>Credit/s: 1</b>	<b>Year 3</b>
<i>Teaching as a Profession II (TAP II)</i> is an applied knowledge course for students interested in learning more about becoming a teacher, school counselor, librarian, or speech-language pathologist. This course covers classroom management, concepts of higher order thinking, differentiating instruction, and strategies of effective classroom planning. Students in this course will demonstrate their skills in laboratory settings while building a course portfolio of work. Standards in this course are aligned with Tennessee Common Core State Standards for English Language Arts & Literacy in Technical Subjects and Tennessee Psychology, Scientific Research, and Sociology standards, and National Standards for Family and Consumer Sciences Education, Second Edition.*		
<b>Teaching as a Profession III TBD</b>	<b>Credit/s: 1</b>	<b>Year 4</b>
<i>Teaching as a Profession III (TAP III)</i> is a capstone course in the Education and Training Cluster for the students interested in learning more about becoming a teacher, school counselor, librarian, or speech-language pathologist. The course covers classroom professionalism, ethics, policies, communications, and career requirements in education fields. In addition, students will complete an internship and continue to create artifacts for their student portfolios. Standards in this course are aligned with Tennessee Common Core State Standards English Language Arts & Literacy in Technical Subjects and Tennessee Psychology, and Sociology standards, and National Standards for Family and Consumer Sciences Education, Second Edition.*		

<b>Career Cluster: Finance</b>		<b>Offered At: CHS Academy</b>
<b>PROGRAM OF STUDY: Banking and Finance</b>		
<b>Computer Applications 5891</b>	<b>Credit/s: 1</b>	<b>Year 1</b>
<i>Computer Applications</i> is a foundational course intended for students to learn the concepts associated with key application software, basic computing fundamentals, and ethics and appropriate behavior while using technology as a tool in the classroom and in life. The Computer Applications student will become proficient at a basic level in application for word processing, spreadsheets, databases and presentations, and able to proceed to more advanced coursework in any of these areas.		
<b>Business Principles 5905</b>	<b>Credit/s: 1</b>	<b>Year 2</b>
<i>Business Principles</i> is a core course in which students are introduced to all aspects of business: the domestic and international economies, financial principles, management strategies, administrative and information systems, ethics, and organizational and professional leadership. Students will analyze the elements of the business environment and focus on attitudinal and problem-solving skills inherent to success. (This course provides access to a computerized workstation for each student to complete computer applications using appropriate software.)		
<b>Accounting I 5910</b>	<b>Credit/s: 1</b>	<b>Year 3</b>
<b>Recommended Prerequisites: Algebra I</b>		
<i>Accounting I</i> introduces concepts and principles based on a double-entry system of maintaining the electronic and manual financial records for a sole proprietorship, a partnership, and a corporation. It includes analyzing business transactions, journalizing, posting and preparing worksheets and financial		

statements. (This course provides access to a computerized workstation for each student to complete financial applications using accounting and spreadsheet software.)

<b>Banking and Finance 5889</b>	<b>Credit/s: 1-2</b>	<b>Year</b>
<p><i>Banking and Finance</i> is a course designed to challenge the student with real banking and financial situations through a partnership with a local financial institution that would bring resources of mentors, seminars, and hands on experience with day-to-day operations. Completion of this course will provide students with a basis for continuing education in finance and business administration specializing in job skills in banking and financial institutions. Ethical issues will be presented in the course. (Online Computer access will be required for accessing the Internet financial markets and related software.)            Note: If this course is part of an Academy curriculum, it is recommended that an internship experience be provided. Specific activities will require use of the of the Internet and application software. <i>After completing the course students are eligible to sit for a Dual Credit exam with Nashville State Community College.</i></p>		

<b>Career Cluster: Finance</b>		<b>Offered At: RHS</b>
<b>PROGRAM OF STUDY: Financial Planning</b>		
<b>Computer Applications 5891</b>	<b>Credit/s: 1</b>	<b>Year 1</b>
<p><i>Computer Applications</i> is a foundational course intended for students to learn the concepts associated with key application software, basic computing fundamentals, and ethics and appropriate behavior while using technology as a tool in the classroom and in life. The Computer Applications student will become proficient at a basic level in application for word processing, spreadsheets, databases and presentations, and able to proceed to more advanced coursework in any of these areas.</p>		
<b>Business Principles 5905</b>	<b>Credit/s: 1</b>	<b>Year 2</b>
<p><i>Business Principles</i> is a core course in which students are introduced to all aspects of business: the domestic and international economies, financial principles, management strategies, administrative and information systems, ethics, and organizational and professional leadership. Students will analyze the elements of the business environment and focus on attitudinal and problem-solving skills inherent to success. (This course provides access to a computerized workstation for each student to complete computer applications using appropriate software.)</p>		
<b>Accounting I 5910</b>	<b>Credit/s: 1</b>	<b>Year 3</b>
<p><b>Recommended Prerequisites: Algebra I</b>  <i>Accounting I</i> introduces concepts and principles based on a double-entry system of maintaining the electronic and manual financial records for a sole proprietorship, a partnership, and a corporation. It includes analyzing business transactions, journalizing, posting and preparing worksheets and financial statements. (This course provides access to a computerized workstation for each student to complete financial applications using accounting and spreadsheet software.)</p>		
<b>Financial Planning 5890</b>	<b>Credit/s: ½</b>	<b>Year 4</b>
<p><i>Financial Planning</i> is a course designed to develop skills in the use of financial principles in making business decisions. Students will research job qualifications and employment opportunities in finance. The course includes a study of the allocation of financial resources, the effects of finance and credit institutions on the business community, and the impact of financial decisions on the consumer market. Ethical issues will be explored in this course. (Online computer access will be required for accessing the Internet financial markets and related software.)</p>		

Career Cluster: Health Science		Offered At: NEHS	
<b>PROGRAM OF STUDY: Biotechnology Research</b>			
<b>Health Science Education 5998</b>	<b>Credit/s: 1</b>	<b>Year 1</b>	
<i>Health Science Education</i> is an introduction to broad standards that serve as a foundation for Health Care Occupations and functions across health services. Units included are academics in health care communications systems, legal responsibilities, ethics, teamwork, and safety practices.			
<b>Diagnostic Medicine 5994</b>	<b>Credit/s: 1</b>	<b>Year 2</b>	
<i>Diagnostic Medicine</i> creates a picture of an individual's health status at a single point in time. This could include following careers and career areas: audiologist, cardiology, imaging, medical laboratory, radiography, nuclear medicine, stereotactic radiosurgery, cytotechnology, clinical laboratory technician, pathologists, medical physician, histotechnologist.			
<b>Anatomy and Physiology 5991</b>	<b>Credit/s: 1</b>	<b>Year 3</b>	
<i>Anatomy and Physiology</i> is a course in which students will examine human anatomy and physical functions. They will analyze descriptive results of abnormal physiology and evaluate clinical consequences. A workable knowledge of medical terminology will be demonstrated. <u>Dual Enrollment with Nashville State Community College if teacher is Highly Qualified.</u>			
<b>Forensic Science 5996</b>	<b>Credit/s: 1</b>	<b>Year 4</b>	
<i>Forensic Science</i> is an overview of how science is applied to solving crimes. Topics include history of forensic sciences, collecting of evidence, analyzing results and hands-on applications of many laboratory techniques used in solving crimes and identifying people and future careers. Jobs include forensic nurses, odontologists, pathologists, psychiatrists, medical examiners/coroners, forensic technicians, toxicologists, wildlife specialists, forensic engineers, accountants, computer specialists, aviation and construction accident investigators, forensic photographers, skull reconstructionists, document and polygraph examiners.			

Career Cluster: Health Science		Offered At: MCHS, NWHS Academy, WCHS	
<b>PROGRAM OF STUDY: Therapeutic Nursing Services</b>			
<b>Health Science Education 5998</b>	<b>Credit/s: 1</b>	<b>Year 1</b>	
<i>Health Science Education</i> is an introduction to broad standards that serve as a foundation for Health Care Occupations and functions across health services. Units included are academics in health care communications systems, legal responsibilities, ethics, teamwork, and safety practices.			
<b>Medical Therapeutics 5999</b>	<b>Credit/s: 1</b>	<b>Year 2</b>	
<b>Prerequisites: Health Science Education</b>			
<i>Medical Therapeutics</i> is an applied course designed to prepare students to pursue careers in therapeutic services. Upon completion of this course, a proficient student will be able to identify careers in therapeutics services; assess, monitor, evaluate, and report patient/client health status; and identify the purpose and components of treatments. The student will incorporate communication, goal setting, and information collection skills to be successful in the workplace. Standards in this course are aligned with Tennessee Common Core State Standards for English Language Arts & Literacy in Technical Subjects, Partnership for 21st Century Skills Framework for 21st Century Learning, as well as Tennessee Anatomy and Physiology standards.*			
<b>Anatomy and Physiology 5991</b>	<b>Credit/s: 1</b>	<b>Year 3</b>	
<i>Anatomy and Physiology</i> is a course in which students will examine human anatomy and physical functions. They will analyze descriptive results of abnormal physiology and evaluate clinical consequences. A workable knowledge of medical terminology will be demonstrated. <u>Dual Enrollment with Nashville State Community College if teacher is Highly Qualified.</u>			
<b>and/or</b>			

<b>Medical Terminology 5883</b>	<b>Credit/s: 1</b>	<b>Year 3</b>
<p><i>Medical Terminology</i> is designed to develop a working knowledge of the language of health professions. Students acquire word-building skills by learning prefixes, suffixes, roots, combining forms, and abbreviations. Utilizing a body systems approach, students will define, interpret, and pronounce medical terms relating to structure and function, pathology, diagnosis, clinical procedures, and pharmacology. Students will use problem-solving techniques to assist in developing an understanding of course concepts. <u>Dual Enrollment with Nashville State Community College if teacher is Highly Qualified.</u></p>		
<b>Nursing Education 6000</b>	<b>Credit/s: 2</b>	<b>Year 4</b>
<p><i>Nursing Education</i> consists of 18 units of study dealing with direct bedside nursing care. Clinical experience will consist of supervised practice in the nursing home, as well as demonstrations in the classroom. Students can be registered by Tennessee Department of Health—after the completion of the course, 100 hours clinical and theory, passing a state test (both written and skills)—and will be job ready. Students may complete a clinical internship following this course. Jobs include registered nurse, clinical nurse specialist, nurse practitioner, nurse midwife, nurse anesthetist, forensic nurse, and other occupations.</p>		

<b>Career Cluster: Health Science</b>		<b>Offered At: NWS Academy</b>
<b>PROGRAM OF STUDY: Emergency Services</b>		
<b>Health Science Education 5998</b>	<b>Credit/s: 1</b>	<b>Year 1</b>
<p><i>Health Science Education</i> is an introduction to broad standards that serve as a foundation for Health Care Occupations and functions across health services. Units included are academics in health care communications systems, legal responsibilities, ethics, teamwork, and safety practices.</p>		
<b>Emergency Preparedness TBD</b>	<b>Credit/s: 1</b>	<b>Year 2</b>
<p><i>Emergency Preparedness</i> provides an overview of the involvement of public safety professionals and healthcare professionals in the response to various natural and unnatural emergencies. Upon completion of this course, a proficient student will be able to identify the magnitude of a natural or unnatural disaster and its effects on the many facets of communities. This course equips students with the skills and knowledge surrounding a Community Emergency Response Team (CERT) and teaches them how to apply those skills in a mock disaster scenario. Standards in this course are aligned with Tennessee Common Core State Standards for English Language Arts &amp; Literacy in Technical Subjects.*</p>		
<b>Anatomy and Physiology 5991</b>	<b>Credit/s: 1</b>	<b>Year 3</b>
<p><i>Anatomy and Physiology</i> is a course in which students will examine human anatomy and physical functions. They will analyze descriptive results of abnormal physiology and evaluate clinical consequences. A workable knowledge of medical terminology will be demonstrated. <u>Dual Enrollment with Nashville State Community College if teacher is Highly Qualified.</u></p>		
<b>and/or</b>		
<b>Medical Terminology 5883</b>	<b>Credit/s: 1</b>	<b>Year 3</b>
<p><i>Medical Terminology</i> is designed to develop a working knowledge of the language of health professions. Students acquire word-building skills by learning prefixes, suffixes, roots, combining forms, and abbreviations. Utilizing a body systems approach, students will define, interpret, and pronounce medical terms relating to structure and function, pathology, diagnosis, clinical procedures, and pharmacology. Students will use problem-solving techniques to assist in developing an understanding of course concepts. <u>Dual Enrollment with Nashville State Community College if teacher is Highly Qualified.</u></p>		
<b>Emergency Medical Services 5995</b>	<b>Credit/s: 2</b>	<b>Year 4</b>
<p><i>Emergency Medical Service (EMS)</i> is designed for students interested in a career in pre-hospital or emergency patient care. Career options may include emergency room physician, emergency medical technician, paramedic, or emergency room nurse. This course may be taught with a state recognized</p>		

First Responder Instructor to students who will be 17 years of age at the end of the course to qualify for the National First Responder test. The state recognized First Responder Instructor must teach at least 60 hours of the course for your students to qualify for the certification test.

<b>Career Cluster: Health Science</b>		<b>Offered At: KHS, RHS</b>
<b>PROGRAM OF STUDY: Therapeutic Clinical Services</b>		
<b>Health Science Education 5998</b>	<b>Credit/s: 1</b>	<b>Year 1</b>
<i>Health Science Education</i> is an introduction to broad standards that serve as a foundation for Health Care Occupations and functions across health services. Units included are academics in health care communications systems, legal responsibilities, ethics, teamwork, and safety practices.		
<b>Medical Therapeutics 5999</b>	<b>Credit/s: 1</b>	<b>Year 2</b>
<i>Medical Therapeutics</i> is an applied course designed to prepare students to pursue careers in therapeutic services. Upon completion of this course, a proficient student will be able to identify careers in therapeutics services; assess, monitor, evaluate, and report patient/client health status; and identify the purpose and components of treatments. The student will incorporate communication, goal setting, and information collection skills to be successful in the workplace. Standards in this course are aligned with Tennessee Common Core State Standards for English Language Arts & Literacy in Technical Subjects, Partnership for 21st Century Skills Framework for 21st Century Learning, as well as Tennessee Anatomy and Physiology standards.*		
<b>Rehabilitation Careers TBD</b>	<b>Credit/s: 1</b>	<b>Year 3</b>
<i>Rehabilitative Careers</i> will focus on enabling the person to live to the fullest capacity possible. Units will include sports medicine, physical therapy, occupational therapy, speech / language therapy, art, music, dance therapy, and others.		
<b>Anatomy and Physiology 5991</b>	<b>Credit/s: 1</b>	<b>Year 4</b>
<i>Anatomy and Physiology</i> is a course in which students will examine human anatomy and physical functions. They will analyze descriptive results of abnormal physiology and evaluate clinical consequences. A workable knowledge of medical terminology will be demonstrated. <u>Dual Enrollment with Nashville State Community College if teacher is Highly Qualified.</u>		
<b>and/or</b>		
<b>Clinical Internship 5993 (not at RHS)</b>	<b>Credit/s: 1</b>	<b>Year 4</b>
<i>Clinical Internship</i> may be chosen by students after completing Medical Therapeutics, Diagnostic Medicine, Health Informatics, Support Services, Rehabilitative Therapies, Nursing Education, Biomedical Applications or Emergency Medical Services. The internships should be completed in a hospital, nursing home, rehab center, medical office, or other health care related facility.		

<b>Career Cluster: Hospitality and Tourism</b>		<b>Offered At: RHS</b>
<b>PROGRAM OF STUDY: Culinary Arts</b>		
<b>Culinary Arts I 5979</b>	<b>Credit/s: 1</b>	<b>Year 1</b>
<i>Culinary Arts I</i> is the first level of Culinary Arts and prepares students for gainful employment and/or entry into post-secondary education in the food production and service industry. Designed to introduce students to food preparation concepts, terminology and practices in the modern commercial kitchen, the content provides students the opportunity to acquire marketable skills by examining both the industry and its career opportunities and by developing food preparation and service and interpersonal skills. Fundamental techniques and skills are taught with an emphasis on safety, sanitation, and proper equipment operation and maintenance. Laboratory facilities and experiences, which simulate commercial food production and service operations, offer school-based learning opportunities.		

<b>Culinary Arts II 5980</b>	<b>Credit/s: 1</b>	<b>Year 2</b>
<i>Culinary Arts II</i> is the second level of Culinary Arts and prepares students for gainful employment and/or entry into post-secondary education in the food production and service industry. Content provides students the opportunity to acquire marketable skills by demonstrating the principles of safety and sanitation, food preparation skills, and teamwork to manage an environment conducive to quality food production and service operations. Laboratory facilities and experiences, which simulate commercial food production and service operations, offer school-based learning and work-based learning opportunities.		
<b>Culinary Arts III 5981</b>	<b>Credit/s: 2</b>	<b>Year 3</b>
<i>Culinary Arts III</i> is the third level of Culinary Arts and it serves as a capstone course. It, too, prepares students for gainful employment and/or entry into post-secondary education in the food production and service industry. Content provides students the opportunity to apply the marketable culinary arts skills they have acquired by assuming increasingly responsible positions, including participation in a cooperative education experience. <i>Students who have completed the Culinary Arts Program of Study and ServSafe certified are eligible to sit for Dual Credit exam with Nashville State Community College.</i>		
<b>Entrepreneurship 5934</b>	<b>Credit/s: 1</b>	<b>Year 4</b>
<i>Entrepreneurship</i> includes enhanced marketing information as it relates to entrepreneurial activities. Subject matter includes introductory entrepreneurial concepts, business plan development, management responsibilities, and legal and ethical issues of business ownership.		

<b>Career Cluster: Hospitality and Tourism</b>		<b>Offered At: KHS</b>
<b>PROGRAM OF STUDY: Sports and Entertainment Management 5023</b>	<b>Credit/s: 1</b>	<b>Year 1</b>
<i>Marketing and Management I – Principles</i> focuses on the study of marketing concepts and their practical application. Students will examine risks and challenges marketers face to establish a competitive edge. Subject matter includes economics, marketing foundations/functions, and human resource leadership development. Skills in communication, mathematics, economics and psychology are reinforced in this course.		
<b>Travel and Tourism Operations 5003</b>	<b>Credit/s: 1</b>	<b>Year 2</b>
<i>Travel and Tourism Operations</i> is a growing industry encompassing a variety of businesses and employment opportunities. This course prepares students for gainful employment and/or post-secondary training in the industry of travel and tourism. Content provides students the opportunity to acquire marketable skills by examining both the industry and its career opportunities and by developing the human relations, communications and technical skills needed for advancement.		
<b>Sports and Entertainment Marketing 5939</b>	<b>Credit/s: 1</b>	<b>Year 3</b>
<i>Sports and Entertainment Marketing</i> is a specialized course designed to offer students an opportunity to gain knowledge and develop skills related to the growing sports and entertainment industry. Students will develop skills in the areas of facility design, merchandising, advertising, public relations/publicity, event marketing, sponsoring, ticket distribution, and career opportunities as they relate to the sports and entertainment industry.		
<b>Advertising and Public Relations 5936</b>	<b>Credit/s: 1</b>	<b>Year 4</b>
<i>Advertising and Public Relations</i> focuses on the concepts and strategies associated with promoting products, services, ideas, and events. This applied knowledge course addresses skills essential to the creative side of the industry and explores consumer behavior patterns and motivations for buying. Students will demonstrate proficiency in fundamental advertising and public relations concepts by creating an electronic portfolio of representative course projects demonstrating a progressive level of skills and knowledge. Standards in this course are aligned with Tennessee Common Core State Standards for English Language Arts & Literacy in Technical Subjects, Tennessee Common Core State Standards in Mathematics, as well as Tennessee Sociology and Psychology standards.*		



<b>Career Cluster: Human Services</b>		<b>Offered At: MCHS, RHS</b>	
<b>PROGRAM OF STUDY: Social and Mental Health Services</b>			
<b>Foundations of Social and Mental Health</b>	<b>TBD</b>	<b>Credit/s: 1</b>	<b>Year 1</b>
<p><i>Foundations of Social and Mental Health</i> is a foundational for students interested in becoming a public advocate, social worker, dietician, nutritionist, counselor, stay-at-home parent or community volunteer. This course covers the history of counseling, career investigation, stress management, mental illness, communication, and the counseling process. Artifacts will be created for inclusion in a portfolio, which will continue to build throughout the program of study. Standards in the course are aligned with Tennessee Common Core State Standards for English Language &amp; Literacy in Technical Subjects, as well as the Tennessee Psychology and Sociology standards, and the National Standards for Family and Consumer Sciences Education, Second Edition.*</p>			
<b>Lifespan Development</b>	<b>TBD</b>	<b>Credit/s: 1</b>	<b>Year 2</b>
<p><i>Lifespan Development</i> builds basic knowledge in human growth and development. The course standards include developmental theory, principles of growth, behavior of children from conception through adolescence, adult development and aging, and death and dying. Artifacts will be created for inclusion in a portfolio, which will continue to build throughout the program of study. Standards in the course are aligned with Tennessee Common Core State Standards for English Language Arts &amp; Literacy in Technical Subjects, as well as Tennessee Biology I, Psychology, and Sociology standards, and National Standards for Family and Consumer Sciences Education, Second Edition.*</p>			
<b>Family Studies</b>	<b>TBD</b>	<b>Credit/s: 1</b>	<b>Year 3</b>
<p><i>Family Studies</i> is an applied knowledge course that examines the diversity and evolving structure of the modern family. Course standards focus on the demographic, historical, and social changes of interpersonal relationships, as well as parenting, and the effect of stressors on the family. Artifacts will be created for inclusion in a portfolio, which will continue to build throughout the program of study. Standards in the course are aligned with Tennessee Common Core State Standards for English Language Arts &amp; Literacy in Technical Subjects, as well as Tennessee Psychology, Scientific Research, Sociology, and US History standards and the National Standards for Family and Consumer Sciences Education, Second Edition.*</p>			
<b>Human Services Practicum</b>	<b>TBD</b>	<b>Credit/s: 1</b>	<b>Year 4</b>
<p><i>Human Services Practicum</i> is a capstone course in the human services cluster that provides a practicum experience for students as they develop an understanding of professional and ethical issues. The capstone course will be based on the knowledge and skills from previous courses in the human services cluster. The essential knowledge and skills of these courses include communication, critical thinking, problem solving, information technology, ethical and legal responsibilities, leadership, and teamwork. Instruction may be delivered through school-based laboratory training or through work-based learning arrangements such as cooperative education, mentoring, and job shadowing. Standards in this course are aligned with Tennessee Common Core State Standards for English Language Arts &amp; Literacy in Technical Subjects as well as Tennessee state standards for Psychology and Sociology.</p>			
<b>and/or</b>			
<b>Psychology</b>	<b>3433</b>	<b>Credit/s: ½</b>	<b>Year 4</b>

Career Cluster: Human Services			Offered At: CHS, NEHS, NWHS
<b>PROGRAM OF STUDY: Cosmetology</b>			
<b>Principles of Cosmetology</b>	<b>5983</b>	<b>Credit/s: 1</b>	<b>Year 1</b>
<p><i>Principles of Cosmetology</i> is the first level of cosmetology, and it prepares students with work-related skills for advancement into the Design Principles of Cosmetology course. Content provides students the opportunity to acquire basic fundamental skills in both theory and practical applications of leadership and interpersonal skill development. Content stresses safety, environmental issues, and protection of the public and designers as integrated with principles of hair design, nail structure, and cosmetic procedures. Laboratory facilities and experiences simulate those found in the cosmetology industry.</p>			
<b>Design Principles of Cosmetology</b>	<b>5986</b>	<b>Credit/s: 1</b>	<b>Year 2</b>
<p><i>Design Principles of Cosmetology</i> is the second level of cosmetology and prepares students for work-related skills and advancement into the Chemistry of Cosmetology course. Content provides students the opportunity to acquire knowledge and skills in both theory and practical application. Advanced knowledge and skills in hair design, nail artistry, and cosmetic applications will be enhanced in a laboratory setting, which duplicates cosmetology industry standards. Upon completion and acquisition of 300 hours, students are eligible to take the Tennessee Board of Cosmetology Shampoo examination for a Tennessee Shampoo Technician License.</p>			
<b>Chemistry of Cosmetology</b>	<b>5984</b>	<b>Credit/s: 2</b>	<b>Year 3</b>
<p><i>Chemistry of Cosmetology</i> is the advanced level of cosmetology, and it prepares students to perform work-related services using chemicals in the cosmetology industry. Content provides students the opportunity to acquire foundation skills in both theory and practical applications. Laboratory facilities and experiences will be used to simulate cosmetology work experiences. Students completing this portion of the course of cosmetology will acquire the necessary hours to transfer to a post-secondary course of study to complete the hours needed to be eligible to take the Tennessee State Board of Cosmetology examination for the Tennessee Cosmetology License. Upon completion and acquisition of 300 hours, students are eligible to take the Tennessee State Board of Cosmetology Shampooing examination for a Shampoo Technician License. <u>Students enrolled in the Cosmetology Program of Study are eligible to participate in Dual Enrollment with the Tennessee College of Applied Technology/Nashville.</u></p>			
<b>Entrepreneurship</b>	<b>5934</b>	<b>Credit/s: 1</b>	<b>Year 4</b>
<p><i>Entrepreneurship</i> includes enhanced marketing information as it relates to entrepreneurial activities. Subject matter includes introductory entrepreneurial concepts, business plan development, management responsibilities, and legal and ethical issues of business ownership.</p>			

Career Cluster: Human Services			Offered At: KHS, NEHS
<b>PROGRAM OF STUDY: Dietetics and Nutrition Counseling</b>			
<b>Foundations of Social and Mental Health</b>	<b>TBD</b>	<b>Credit/s: 1</b>	<b>Year 1</b>
<p><i>Foundations of Social and Mental Health</i> is a foundational for students interested in becoming a public advocate, social worker, dietician, nutritionist, counselor, stay-at-home parent or community volunteer. This course covers the history of counseling, career investigation, stress management, mental illness, communication, and the counseling process. Artifacts will be created for inclusion in a portfolio, which will continue to build throughout the program of study. Standards in the course are aligned with Tennessee Common Core State Standards for English Language &amp; Literacy in Technical Subjects, as well as the Tennessee Psychology and Sociology standards, and the National Standards for Family and Consumer Sciences Education, Second Edition.*</p>			

<b>Nutrition Across the Lifespan</b>	<b>TBD</b>	<b>Credit/s: 1</b>	<b>Year 2</b>
<p><i>Nutrition across the Life Span</i> is for students interested in learning more about becoming a dietitian, nutritionist, counselor, or pursuing a variety of scientific, health, or culinary arts professions. This course covers human anatomy and physiological systems, nutrition requirements, as well as social, cultural, and other impacts on food preparation and integrity. Artifacts will be created for inclusion in a portfolio, which will continue to build throughout the program of study. Standards in this course are aligned with Tennessee Common Core State Standards for English Language Arts &amp; Literacy in Technical Subjects, as well as Tennessee Biology I, Chemistry I, Human Anatomy &amp; Physiology (A&amp;P), Scientific Research, and World Geography and the National Standards for Family and Consumer Sciences Education, Second Edition.*</p>			
<b>Nutrition Science and Diet Therapy</b>	<b>TBD</b>	<b>Credit/s: 1</b>	<b>Year 3</b>
<p><i>Nutrition and Diet Therapy</i> is an applied knowledge course in nutrition for students interested in the role of nutrition in health and disease. The course covers the development of a nutrition care plan as part of the overall health care process. Methods for analyzing the nutritional health of a community are explored. Finally, the relationship of diet and nutrition to specific diseases will be researched including the role of diet as a contributor to disease and its role in the prevention and treatment of disease. Artifacts will be created for inclusion in a portfolio, which will continue to build throughout the program of study. Standards in this course align to the Tennessee Common Core State Standards for English Language Arts &amp; Literacy in Technical Subjects, Tennessee Common Core State Standards for Mathematics as well as to Tennessee state standards for Biology I, Chemistry I, Human Anatomy &amp; Physiology (A&amp;P), and Scientific Research and the National Standards for Family and Consumer Sciences Education, Second Edition.*</p>			
<b>Human Services Practicum</b>	<b>TBD</b>	<b>Credit/s: 1</b>	<b>Year 4</b>
<p><i>Human Services Practicum</i> is a capstone course in the human services cluster that provides a practicum experience for students as they develop an understanding of professional and ethical issues. The capstone course will be based on the knowledge and skills from previous courses in the human services cluster. The essential knowledge and skills of these courses include communication, critical thinking, problem solving, information technology, ethical and legal responsibilities, leadership, and teamwork. Instruction may be delivered through school-based laboratory training or through work-based learning arrangements such as cooperative education, mentoring, and job shadowing. Standards in this course are aligned with Tennessee Common Core State Standards for English Language Arts &amp; Literacy in Technical Subjects as well as Tennessee state standards for Psychology and Sociology.</p>			
<b>and/or</b>			
<b>Psychology</b>	<b>3433</b>	<b>Credit/s: ½</b>	<b>Year 4</b>

<b>Career Cluster: Information Technology</b>		<b>Offered At: RHS Academy</b>	
<b>PROGRAM OF STUDY: Web Design</b>			
<b>Computer Applications</b>	<b>5891</b>	<b>Credit/s: 1</b>	<b>Year 1</b>
<p><i>Computer Applications</i> is a foundational course intended for students to learn the concepts associated with key application software, basic computing fundamentals, and ethics and appropriate behavior while using technology as a tool in the classroom and in life. The Computer Applications student will become proficient at a basic level in application for word processing, spreadsheets, databases and presentations, and able to proceed to more advanced coursework in any of these areas.</p>			
<b>Web Page Design I Foundations</b>	<b>6100</b>	<b>Credit/s: 1</b>	<b>Year 2</b>
<b>Recommended Prerequisites: Algebra I</b>			
<p><i>Web Page Design I Foundations</i> prepares students with work-related skills for advancement into postsecondary education or industry. Course content includes exposure to basic Web Design and the</p>			

dynamics of networking/Internetworking, Web hosting and Web design in e-commerce. The course content provides students the opportunity to acquire fundamental skills in both theory and practical application of Web Design and of leadership and interpersonal skill development. Laboratory facilities and experiences simulate those found in the Web Page Design and construction industry. (This course requires a computerized workstation and supportive software for required applications.)

**Web Page Design II Site Designer 6101 Credit/s: 1 Year 3**

**Recommended Prerequisites: Algebra I**

*Web Page Design II Site Designer* prepares students with work-related skills for advancement into postsecondary education or industry. Course content includes exposure to basic and advanced Web design, pixilated and vector-based Web graphics, Web animations, dynamics of Web hosting, and Web design in E-commerce. The course content provides students the opportunity to acquire fundamental skills in both theory and practical application of Web design and of leadership and interpersonal skill development. Laboratory facilities and experiences simulate those found in the Web page design and Web page construction industry. Further, this course maps to the Certified Internet Webmaster "Site Designer" national certification examination. (This course requires access to a computerized workstation for each student with Internet connection and webpage design and imaging software.)

**Web Page Design III eCommerce 6092 Credit/s: 1 Year 4**

**Recommended Prerequisites: Algebra I**

*Web Page Design III eCommerce* prepares students with work-related skills for advancement into postsecondary education or industry. Course content includes exposure to Web design in eCommerce with marketing, customer relations, and commercial Web site publication. The course content provides students the opportunity to acquire fundamental skills in practical application of Web development, leadership, and interpersonal skill development. Laboratory facilities and experiences simulate those found in the Web page design and Web page construction industry. This course correlates to the CIW certification "Web eCommerce."

**Career Cluster: Information Technology Offered At: NEHS Academy**

**PROGRAM OF STUDY: Programming and Gaming**

**Foundations of Game Programming 5915 Credit/s: 1 Year 1**

*Fundamentals of Game Programming* provides practical experiences in game/simulation conceptualization, design, storyboarding, development methodologies, and essential programming techniques. Legal issues affecting game developers and players will be explored.

**Game Design TBD Credit/s: 1 Year 2**

*Game Design* provides practical experiences in game/simulation conceptualization, design, storyboarding, development methodologies, 2D/3D animation design and production, and implementation issues.

**Game Programming TBD Credit/s: 1 Year 3**

*Game Programming* provides practical experiences in planning program design, coding programs, completing program maintenance, and executing enhanced program structures.

**Multiple User Game & Simulation Programming TBD Credit/s: 1 Year 4**

*Multiple User Game & Simulation Programming* is project-based and focuses on broad, transferable skills and stresses understanding and demonstration of the following rudiments of the game and simulation industry: production planning, elements of production design, storyboarding, elements of visual design, integration of digital audio and digital video into new game/simulation productions, and collaboration/teamwork.

**Career Cluster: Law, Public Safety, Corrections, & Security**    **Offered At: KHS, NEHS, NWHS, WCHS Academy**

**PROGRAM OF STUDY: Law Enforcement Services**

**Principles of Law, Corrections, and Security**    TBD    **Credit/s: 1**    **Year 1**

*Principles of Law, Corrections, and Security* is an introductory course designed to prepare students to pursue careers in the fields of law enforcement, legal services, corrections, and security. Upon completion of this course, a proficient student will be able to identify careers in these fields, summarize the laws that govern the application of justice, and draw key connections between the history of the criminal justice system and the modern legal system. In addition, students will model the professional, moral, and ethical standards required of professionals in the fields of law, legal services, corrections, and security. Standards in this course are aligned with Tennessee Common Core State Standards for English Language Arts & Literacy in Technical Subjects.\*

**Criminal Justice I**    5987    **Credit/s: 1**    **Year 2**

*Criminal Justice I* is the first level of study of criminal justice careers. It will prepare students for work-related knowledge and skills for advancement into the second level of criminal justice careers. Course content focuses on areas comprised of the three components of the criminal justice system, the police, courts, and corrections. The course is an overview of the criminal justice system and builds a better understanding of the development of laws and history on the state and federal levels. New technology and career opportunities in criminal justice are an integral part of the course content.

**Criminal Justice II**    5988    **Credit/s: 1**    **Year 3**

*Criminal Justice II* will offer an in-depth study of criminal justice in which current criminal justice careers issues will be discussed and debated. Local, state, federal, and international laws will be analyzed. Subject matter will include a comparison of the criminal justice careers in the United States with other countries. Students will have opportunities to participate in mock trials and field trips with criminal justice careers emphasis. Course content will introduce new technology, effects of forensic analysis, and career opportunities. The course content will include information for planning, managing, and providing judicial, criminal justices.

**Criminal Justice III: Investigation**    5989    **Credit/s: 1**    **Year 4**

*Criminal Justice III: Investigation* will provide students with an opportunity to explore the basic processes and principles of forensic science as it relates to criminal investigation. Students will learn the importance of the identification, collection, and processing of evidence and of its contribution to the criminal investigation. Students will learn of the legal responsibilities and challenges which the forensic investigator may encounter from initial response to the court room.

*Students who have completed all Criminal Justice courses are eligible to sit for a Dual Credit Exam with Nashville State Community College and may participate in a 10 hour Police Academy POST Certification.*

**Career Cluster: Law, Public Safety, Corrections, & Security**    **Offered At: WCHS Academy**

**PROGRAM OF STUDY: Legal and Correction Services**

**Principles of Law, Corrections, and Security**    TBD    **Credit/s: 1**    **Year 1**

*Principles of Law, Corrections, and Security* is an introductory course designed to prepare students to pursue careers in the fields of law enforcement, legal services, corrections, and security. Upon completion of this course, a proficient student will be able to identify careers in these fields, summarize the laws that govern the application of justice, and draw key connections between the history of the criminal justice system and the modern legal system. In addition, students will model the professional, moral, and ethical standards required of professionals in the fields of law, legal services, corrections, and security. Standards in this course are aligned with Tennessee Common Core State Standards for English Language Arts & Literacy in Technical Subjects.\*

<b>Criminal Justice I 5987</b>	<b>Credit/s: 1</b>	<b>Year 2</b>
<i>Criminal Justice I</i> is the first level of study of criminal justice careers. It will prepare students for work-related knowledge and skills for advancement into the second level of criminal justice careers. Course content focuses on areas comprised of the three components of the criminal justice system, the police, courts, and corrections. The course is an overview of the criminal justice system and builds a better understanding of the development of laws and history on the state and federal levels. New technology and career opportunities in criminal justice are an integral part of the course content.		
<b>Court Systems and Practices TBD</b>	<b>Credit/s: TBD</b>	<b>Year 3</b>

<b>Career Cluster: Manufacturing</b>		<b>Offered At: CHS</b>
<b>PROGRAM OF STUDY: Machining Technology</b>		
<b>Principles of Manufacturing 5922</b>	<b>Credit/s: 1</b>	<b>Year 1</b>
<i>Principles of Manufacturing</i> focuses on the essential principles that must be mastered for a person to be effective in manufacturing production work. The course is intended for students more interested in production than engineering. The course covers customers, quality principles and processes, systems, information in the workplace, the business of manufacturing, and statistical process control. The course is contextual by design. It connects what is being learned to the learner's current experience, past knowledge, and future conduct. Wherever possible, real-world or simulation hands-on experiences become the context in which instruction is delivered.		
<b>Principles of Machining I 5929</b>	<b>Credit/s: 1</b>	<b>Year 2</b>
<i>Principles of Machining I</i> focuses on the essential principles that must be mastered for a person to be effective in manufacturing production work. The course is intended for students who are interested in production that integrates machining and engineering. The course covers professional communications with customers, quality principles and processes, systems, information in the workplace, the process of product design to machine parts, and statistical process control. The course is contextual by design. It connects what is being learned to the learner's current experience, past knowledge, and future conduct. Wherever possible, real-world or simulation hands-on experiences become the context in which instruction is delivered.		
<b>Principles of Machining II 5923</b>	<b>Credit/s: 2</b>	<b>Year 3</b>
<i>Principles of Machining II</i> focuses on the concepts and practices that support careers in manufacturing, industrial maintenance, metrology, automation, industrial design, or industrial support. The course introduces the technology of machining and manufacturing processes. While working as team members, students will apply leadership and organizational skills relating to designing, producing, and maintaining a product. Emphasis is placed on quality control, codes and standards, and production systems. The course is contextual by design. The course connects what is being learned to the learner's current experience, past knowledge, and future conduct. Laboratory exercises provide active and cooperative learning opportunities.		
<b>Manufacturing Applications 5926</b>	<b>Credit/s: 2</b>	<b>Year 4</b>
<i>Manufacturing Applications</i> is a course for students interested in entering the workforce or pursuing higher education in the manufacturing area. The course requires students to solve problems in a real-world manufacturing context. Problems address critical areas identified by industry and supported by relevant national standards. The course is structured as a series of simulation units. The simulations require students to identify problems in a manufacturing company based on data supplied in typical management reports. Students work in teams of four to six. Teams test and refine proposed solutions with computer simulations. All teams work on the same problem concurrently. At the end of each unit, students present team findings and recommendations to the class and to a panel of manufacturing industry representatives, which acts as the board of directors. <u>Dual Enrollment offered at Tennessee College of Applied Technology/Dickson/Clarksville.</u>		

**Career Cluster: Marketing**

**Offered At: NWHS**

**PROGRAM OF STUDY: Entrepreneurship**

**Exploration of Organizational Leadership & Marketing 5941 Credit/s: 1 Year 1**

*Exploration of Organizational Leadership & Marketing* is designed to introduce and provide an overview of marketing and organizational leadership, as well as employment opportunities available in these fields. Students will explore important marketing concepts, personality traits, and communication skills. Students will also develop skills in teamwork, conflict resolution, and group problem-solving techniques used in business.

**Marketing and Management I: Principles 5931 Credit/s: 1 Year 2**

*Marketing and Management I – Principles* focuses on the study of marketing concepts and their practical application. Students will examine risks and challenges marketers face to establish a competitive edge. Subject matter includes economics, marketing foundations/functions, and human resource leadership development. Skills in communication, mathematics, economics and psychology are reinforced in this course.

**Marketing and Management II: Advanced Strategies 5932 Credit/s: 1 Year 3**

*Marketing and Management II: Advanced Strategies* is a study of marketing concepts and principles used in management. Students will examine challenges, responsibilities and risks managers face in today's workplace. Subject matter includes finance, entrepreneurship, risk management, marketing information systems, purchasing, human resource skills, and leadership development.

**Entrepreneurship 5934 Credit/s: 1 Year 4**

*Entrepreneurship* includes enhanced marketing information as it relates to entrepreneurial activities. Subject matter includes introductory entrepreneurial concepts, business plan development, management responsibilities, and legal and ethical issues of business ownership.

**and/or**

**Virtual Enterprise International 5900 Credit/s: 1-2 Year 4**

*Virtual Enterprises International (VE)* is a simulated business environment. The VE students will be involved in actual on-the-job work experiences, including accounting, personnel administration, management, and marketing. The only difference between the VE and an actual business is that no material goods are produced or legal tender exchanged. However, services will be provided. Working teams, students will develop and enhance oral and written communication skills through initiative, responsibility, and creativity. The VE experience will weave together several academic disciplines and occupational subjects, thereby overcoming fragmentation of subjects. The course will link learning to application and real life experiences. The goal is to create a learning environment that, through a series of activities, integrates school and workplace to enhance learning. Laboratory facilities and experiences simulate those found in business and industry. Virtual Enterprise International 1 credit substitutes for Economics credit. (This course requires a computerized workstation for each student with use of Internet, word processing, web design and electronic publishing software.)

Career Cluster: STEM		Offered At: KHS Academy	
<b>PROGRAM OF STUDY: Project Lead the Way</b>			
<b>Introduction to Engineering (PLTW) 6054</b>	<b>Credit/s: 1</b>	<b>Year 1</b>	
<i>Introduction to Engineering</i> will introduce students to the design process, research and analysis, teamwork, communication methods, global and human impacts, engineering standards, and technical documentation such as sketching and Computer Aided Design/Drafting. In this course, students use 3D modeling design software to help them design solutions to solve proposed problems. Students will learn how to document their work and communicate solutions to peers and members of the professional community.			
<b>Principles of Engineering (PLTW) 6052</b>	<b>Credit/s: 1</b>	<b>Year 2</b>	
<i>Principles of Engineering</i> will introduce students to some of the major concepts they'll encounter in a postsecondary engineering course of study. Students have an opportunity to investigate engineering and high-tech careers and to develop skills and understanding of course concepts. Students employ engineering and scientific concepts in the solution of engineering design problems. They develop problem-solving skills and apply their knowledge of research and design to create solutions to various challenges. Students also learn how to document their work and communicate their solutions to peers and members of the professional community.			
<b>Digital Electronics (PLTW) 6053</b>	<b>Credit/s: 1</b>	<b>Year 3</b>	
<i>Digital Electronics</i> is a course in which students will construct and test fundamental digital logic circuits such as gates, counters, oscillators, and switches. A/D and D/A convertors will be applied to signal processing. Microcontroller programs will be modified and microcontrollers applied to closed-circuit control systems. The course culminates in a group project to create a digital servo control loop. Emphasis is on hands-on activities, real-world equipment, and current technology.			
<b>Scientific Research (Academic)</b>	<b>Credit/s: 1</b>	<b>Year 4</b>	

Career Cluster: STEM		Offered At: NEHS	
<b>PROGRAM OF STUDY: Engineering by Design</b>			
<b>Foundations of Technology (EBD) 5917</b>	<b>Credit/s: 1</b>	<b>Year 1</b>	
<i>Foundations of Technology</i> prepare students to understand and apply technological concepts and processes that are the cornerstone for the high school technology program. Group and individual activities engage students in crating ideas, developing innovations, and engineering practical solutions. Technology content, resources, and laboratory/class-room activities apply student applications to science, mathematics and other school subjects in authentic situations.			
<b>Technological Design (EBD) 5885</b>	<b>Credit/s: 1</b>	<b>Year 2</b>	
<i>Technological Design</i> introduces students to the engineering scope, content, and professional practices are presented through practical applications. Students in engineering teams apply technology, science, and mathematics concepts and skills to solve engineering design problems and innovate designs. Students research, develop, test, and analyze engineering designs using criteria such as design effectiveness, public safety, human factors, and ethics. This course is an essential experience for students who are interested in technology, innovation, design, and engineering.			
<b>Advanced Design Applications (EBD) 5920</b>	<b>Credit/s: 1</b>	<b>Year 3</b>	
<i>Advanced Design Applications</i> course has been designed as an advanced study for students engaged in themed academies and general technology studies that lead to the capacity to understand how technology's development, control and use is based on design constraints, and human wants and needs. The structure of the course challenges students to use design processes so that they can think, plan, design and create solutions to engineering and technological problems. Students are actively involved in the organized an integrated application of technological resources, engineering concepts, and scientific procedures.			



And/or			
<b>Advanced Technological Applications (EBD)</b>	TBD	<b>Credit/s: 1</b>	<b>Year 3</b>
<i>Advanced Technological Applications</i> is a course that students study about four components of the Designed World, including Information Technology, Agriculture and Bio-related Technologies, Medical, and Entertainment/Recreation.			
<b>Engineering Design (EBD)</b>	5921	<b>Credit/s: 1</b>	<b>Year 4</b>
<i>Engineering Design</i> introduces engineering scope, content and professional practices through practical application. Students in engineering teams apply technology, science, and mathematics concepts and skills to solve engineering design problems and project-based learning. Students research, develop, test, and analyze engineering designs using criteria such as design effectiveness, public safety, human factors, and ethics.			

Career Cluster: Transportation, Distribution, and Logistics			Offered At: NWHS
PROGRAM OF STUDY: Automotive Maintenance Light Repair			
<b>Maintenance and Light Repair I</b>	5879	<b>Credit/s: 1</b>	<b>Year 1</b>
<i>Maintenance and Light Repair I (MLR I)</i> course prepares students for entry into Maintenance and Light Repair II. Students explore career opportunities and requirements of a professional service technician. Content emphasizes beginning transportation service skills and workplace success skills. Students study safety, tools, equipment, shop operations, basic engine fundamentals, and basic technician skills. Upon completing all of the Maintenance and Light Repair courses, students may enter automotive service industry as an ASE Certified MLR Technician. Hours earned in the Maintenance and Light Report courses may be used toward meeting National Automotive Technicians Education Foundation (NATEF) standards and Tennessee Department of Education standards. NATEF requires that 95% of the P-1 tasks, 80% of the P-2 tasks, and 50% of the P-3 tasks will be accomplished. These tasks are notated in these standards.			
<b>Maintenance and Light Repair II</b>	5880	<b>Credit/s: 1</b>	<b>Year 2</b>
<i>Maintenance and Light Repair II (MLR II)</i> course prepares students for entry into Maintenance and Light Repair III. Students study automotive general electrical systems, starting and charging systems, batteries, lighting, and electrical accessories. Upon completing all of the Maintenance and Light Repair courses, students may enter automotive service industry as an ASE Certified MLR Technician. Hours earned in the Maintenance and Light Report courses may be used toward meeting National Automotive Technicians Education Foundation (NATEF) standards and Tennessee Department of Education standards. NATEF requires that 95% of the P-1 tasks, 80% of the P-2 tasks, and 50% of the P-3 tasks will be accomplished. These tasks are notated in these standards.			
<b>Maintenance and Light Repair III</b>	5881	<b>Credit/s: 1</b>	<b>Year 3</b>
<i>Maintenance and Light Repair III (MLR III)</i> course prepares students for entry into Maintenance and Light Repair IV. Students study and service suspension and steering systems and brake systems. Upon completing all of the Maintenance and Light Repair courses, students may enter automotive service industry as an ASE Certified MLR Technician. Hours earned in the Maintenance and Light Report courses may be used toward meeting National Automotive Technicians Education Foundation (NATEF) standards and Tennessee Department of Education standards. NATEF requires that 95% of the P-1 tasks, 80% of the P-2 tasks, and 50% of the P-3 tasks will be accomplished. These tasks are notated in these standards.			
<b>Maintenance and Light Repair IV</b>	5882	<b>Credit/s: 1</b>	<b>Year 4</b>
<i>Maintenance and Light Repair IV (MLR IV)</i> course prepares students for entry into the automotive workforce or into post-secondary training. Students study and service automotive HVAC systems, engine performance systems, automatic and manual transmission/transaxle systems, and practice workplace			

soft skills. Upon completing all of the Maintenance and Light Repair courses, students may enter automotive service industry as an ASE Certified MLR Technician. Hours earned in the Maintenance and Light Report courses may be used toward meeting National Automotive Technicians Education Foundation (NATEF) standards and Tennessee Department of Education standards. NATEF requires that 95% of the P-1 tasks, 80% of the P-2 tasks, and 50% of the P-3 tasks will be accomplished. These tasks are notated in these standards. Students enrolled in the Automotive Maintenance and Light Repair Program of Study are eligible to participate in Dual Enrollment with the Tennessee College of Applied Technology/Nashville.

Career Cluster: Transportation, Distribution, and Logistics			Offered At: NWHS
<b>PROGRAM OF STUDY: Automotive Collision Repair</b>			
<b>Collision Repair: Non-Structural</b>	<b>6062</b>	<b>Credit/s: 2</b>	<b>Year 1</b>
<b>Recommended Prerequisites: Algebra I, Physical Science</b>			
<i>Collision Repair: Non-Structural</i> is a course that prepares students to analyze non-structural collision damage to a vehicle, determine the extent of the damage and the direction of impact, initiate an appropriate repair plan, and correctly use equipment to fit metal to a specified dimension within tolerances. Course content includes metal finishing, body filling, and glass panel replacements. The course prepares students for entry level employment and advanced training in collision repair technology, and post-secondary education. Students completing the Collision Repair: Non-Structural are eligible to take the ASE written examination for Non-Structural Analysis and Damage Repair.			
<b>Collision Repair: Painting and Refinishing</b>	<b>6063</b>	<b>Credit/s: 2</b>	<b>Year 2</b>
<b>Recommended Prerequisites: Algebra I; Physical Science</b>			
<i>Painting and Refinishing</i> is a course that prepares students to use plastics and adhesives in the repair and refinish processes and to apply automotive paint to a vehicle. Students learn to diagnose automotive paint finish problems and to perform the appropriate manufacturer-required techniques and processes to refinish the affected area or the complete vehicle. Course content provides the student with training in mixing, matching, and applying paint and finish to vehicles. Course content includes the application of plastics and adhesives in the repair and refinish processes. The course prepares students for entry level employment and advanced training in collision repair technology, and post-secondary education. Students completing Painting and Refinishing are eligible to take the ASE written examination for Painting and Refinishing.			
<b>Collision Repair: Structural</b>	<b>6064</b>	<b>Credit/s: 2</b>	<b>Year 3</b>
<b>Recommended Prerequisites: Algebra I, Physical Science</b>			
<i>Collision Repair: Structural</i> is a course that prepares students to analyze structural collision damage to a vehicle, determine the extent of the damage and the direction of impact, initiate an appropriate repair plan, and correctly use equipment to fit metal to a specified dimension within tolerances. Course content includes repairs to vehicle frames and glass. The course prepares students for entry level employment and advanced training in collision repair technology, and post-secondary education. Students completing the Collision Repair: Structural are eligible to take the ASE written examination for Structural Analysis and Damage Repair. <u>Students enrolled in the Automotive Collision Repair Program of Study are eligible to participate in Dual Enrollment with the Tennessee College of Applied Technology/Nashville.</u>			