CAREER AND TECHNICAL EDUCATION

All students must complete a Career Pathway during their high school years by taking three sequential courses in one career and technical area before graduation. Courses within each Pathway should be taken in the order listed. The areas in which a student may complete a pathway are as follows:

Agricultural Mechanics
Automotive Maintenance & Light Repair
***Barbering**
Business and Technology
***Criminal Justice**
Culinary Arts
Digital Technology
Early Childhood Care & Education
Engineering
Healthcare Science (Patient Care)
Healthcare Science (Allied Health)
Healthcare Science (Pharmacy)
Horticulture/Mechanical Systems
JROTC
Marketing & Management
***Nail Technician**

Other CTAE courses offered but NOT available in a pathway:
***Patient Care Technician**

*****Denotes Dual Enrollment courses offered by South Georgia Technical College (SGTC) on the ASHS campus. Students must take the Accuplacer entrance exam which is offered on the ASHS campus. These courses receive both high school and technical college credit.

CAREER PATHWAY: AGRICULTURE MECHANICS

Career Pathway Sequence of Courses:

- Basic Agricultural Science
- Agricultural Mechanics Technology I
- Agricultural Mechanics II

Basic Agricultural Science **02.4710001**

This course is designed as the foundational course for all Agriculture, Food & Natural Resources Pathways. The course introduces the major areas of scientific agricultural production and research; presents problem solving lessons and introductory skills and knowledge in agricultural science and agri-related technologies. Classroom and laboratory activities are supplemented through

supervised agricultural experiences and leadership programs and activities. This course is the prerequisite for all AFNR pathways and is intended for students in grades 8-10.

Agricultural Mechanics Technology I **01.4210033**

This laboratory course is designed to provide students with introductory level experiences in selected major areas of agricultural mechanics technology which may include small engine maintenance and repair, metal fabrication, woodworking, electrical wiring, and maintenance of agricultural machinery, equipment, and tractors. Learning activities include information, skill development, and problem solving.

Agricultural Mechanics Technology II **01.4220033**

The goal of this laboratory course is to offer students intermediate level experiences in selected major areas of agricultural mechanics technology which may include small engine maintenance and repair, metal fabrication, concrete construction, building construction, plumbing, electrical wiring, soil and water conservation, and maintenance of agricultural machinery, equipment and tractors. Learning activities include information, skill development, and problem solving.

CAREER PATHWAY: HORTICULTURE/MECHANICAL SYSTEMS

Career Pathway Sequence of Courses:

- Basic Agricultural Science
- General Agricultural Science & Technology
- Agricultural Mechanics I

Basic Agricultural Science **02.4710001**

This course is designed as the foundational course for all Agriculture, Food & Natural Resources Pathways. The course introduces the major areas of scientific agricultural production and research; presents problem solving lessons and introductory skills and knowledge in agricultural science and agri-related technologies. Classroom and laboratory activities are supplemented through supervised agricultural experiences and leadership programs and activities. This course is the prerequisite for all AFNR pathways and is intended for students in grades 8-10.

General Horticulture and Plant Science **01.4610001**

This course is designed as an introduction for the Horticulture-Plant Science Pathway Program of Study. The course introduces the major concepts of plant and horticulture science. Classroom and laboratory activities are supplemented through supervised agricultural experiences and leadership programs and activities.

Agricultural Mechanics Technology I **01.4210033**

This laboratory course is designed to provide students with introductory level experiences in selected major areas of agricultural mechanics technology which may include small engine maintenance and repair, metal fabrication, woodworking, electrical wiring, and maintenance of agricultural machinery, equipment, and tractors. Learning activities include information, skill development, and problem solving.

CAREER PATHWAY: AUTOMOTIVE MAINTENANCE & LIGHT REPAIR

Career Pathway Sequence of Courses:

- Basic Maintenance and Light Repair
- Maintenance and Light Repair 2
- Maintenance and Light Repair 3

Basic Maintenance and Light Repair **47.53110033**

This course is designed as the foundational course for the Automobile Maintenance and Light Repair pathway. Students in this course will learn the basic skills needed to gain employment as a maintenance and light repair technician. Students will be exposed to courses in automotive preventative maintenance and servicing and replacing brakes, and steering and suspension components. In addition, student will learn how to do general electrical system diagnosis, learn electrical theory, perform basic tests and determine necessary action. In addition, students will learn how to evacuate and recharge air-conditioning systems using the proper refrigerant. The hours completed in this course are aligned with ASE/NATEF standards and are a base for the entry-level technician. The prerequisite for this course is advisor approval.

Maintenance and Light Repair 2

47.5321000

Students will learn the basic skills needed to gain employment as a maintenance and light repair technician and will expose students to automotive preventative maintenance and servicing, as well as replacing brakes, and steering and suspension components. Students will also learn general electrical system diagnosis, electrical theory, basic test requirements, and determining necessary action. In addition, students will learn how to evacuate and recharge air-conditioning systems using the proper refrigerant. Standards for this course are aligned with ASE/NATEF standards and are an excellent foundation for the entry-level technician. The prerequisite for this course is Basic Maintenance and Light Repair.

Maintenance and Light Repair 3

47.5331000

Students will learn the basic skills needed to gain employment as a maintenance and light repair technician and will expose student to automotive preventative maintenance and servicing, replacing brakes, as well as steering and suspension components. Students will learn about general electrical system diagnosis, electrical theory, basic tests that are required, and determine the necessary action. In addition, students will learn how to evacuate and recharge air-conditioning systems using the proper refrigerant. The standards in this course are aligned with ASE/NATEF standards and are an excellent foundation for the entry-level technician. The prerequisite for this course is Maintenance and Light Repair 2.

CAREER PATHWAY: BUSINESS & TECHNOLOGY

Career Pathway Sequence of Courses:

- Introduction to Business & Technology (Required for graduation)
- Business & Technology
- Business Communications

Introduction to Business & Technology 07.4413001

Introduction to Business & Technology is the foundational course for Administrative Support, Small Business Development, and Human Resources Management pathways. The course is designed for high school students as a gateway to the career pathways above, and provides an overview of business and technology skills required for today's business environment. Knowledge of business principles, the impact of financial decisions, and technology proficiencies demanded by business combine to establish the elements of this course. Emphasis is placed on developing proficient fundamental computer skills required for all career pathways. Students will learn essentials for working in a business environment, managing a business, and owning a business. The intention of this course is to prepare students to be successful both personally and professionally in

an information-based society. Students will not only understand the concepts, but apply their knowledge to situations and defend their actions/decisions/choices through the knowledge and skills acquired in this course. Employability skills are integrated into activities, tasks, and projects throughout the course standards to demonstrate the skills required by business and industry. Competencies in the co-curricular student organization, Future Business Leaders of America (FBLA), are integral components of both the employability skills standards and content standards for this course.

Business & Technology **07.4410033**

Business and Technology is designed to prepare students with the knowledge and skills to be an asset to the collaborative, global, and innovative business world of today and tomorrow. Mastery use of spreadsheets and the ability to apply leadership skills to make informed business decisions will be a highlight of this course for students. Publishing industry appropriate documents to model effective communication and leadership will be demonstrated through project based learning. Students will use spreadsheet and database software to manage data while analyzing, organizing and sharing data through visually appealing presentation. Various forms of technologies will be used to expose students to resources, software, and applications of business practices. Professional communication skills and practices, problem solving, ethical and legal issues, and the impact of effective presentation skills are enhanced in this course to prepare students to be college and career ready. Employability skills are integrated into activities, tasks, and projects throughout the course standards to demonstrate the skills required by business and industry. Competencies in the cocurricular student organization, Future Business Leaders of America (FBLA), are integral components of the employability skills standard for this course. Business and Technology is the second course in the Business Management and Administration Cluster. Students enrolled in this course should have successfully completed Introduction to Business and Technology.

Business Communications **07.4510033**

What message are you sending when you speak, write, and listen? As one of the most important skills for employers, students will explore the value of communication in their personal and professional life. The digital presence and impact of written and visual communication in a technological society will be addressed. Students will create, edit, and publish professionalappearing business documents with clear and concise communication. Creative design, persuasive personal and professional communications will be applied through research, evaluation, validation, written, and oral communication. Leadership development and teamwork skills will be stressed as students work independently and collaboratively. Presentation skills will be developed and modeled for students

master presentation software in this course. Various forms of technologies will be used to expose students to resources, software, and applications of communications. Professional communication skills and practices, problem-solving, ethical and legal issues, and the impact of effective presentation skills are enhanced in this course to prepare students to be college and career ready. Employability skills are integrated into activities, tasks, and projects throughout the course standards to demonstrate the skills required by business and industry. Competencies in the co-curricular student organization, Future Business Leaders of America (FBLA), are integral components of the employability skills standard for this course. Business Communications is the third course in the Business and Technology pathway in the Business Management and Administration cluster. Students enrolled in this course should have successfully completed Introduction to Business and Technology and Business and Technology. After mastery of the standards in this course, students should be prepared to take the end of pathway assessment in this career area.

CAREER PATHWAY: Web and Digital Design

Career Pathway Sequence of Courses:

- Introduction to Digital Technology
- Digital Design
- Web Design

INTRODUCTION TO DIGITAL TECHNOLOGY **11.41500**

Introduction to Digital Technology is the foundational course for Web & Digital Communications, Programming, Advanced Programming, Information Support & Services, and Network Systems pathways. This course is designed for high school students to understand, communicate, and adapt to a digital world as it impacts their personal life, society, and the business world. Exposure to foundational knowledge in hardware, software, programming, web design, IT support, and networks are all taught in a computer lab with hands-on activities and project focused tasks. Students will not only understand the concepts, but apply their knowledge to situations and defend their actions/decisions/choices through the knowledge and skills acquired in this course. Employability skills are integrated into activities, tasks, and projects throughout the course standards to demonstrate the skills required by business and industry. Competencies in the cocurricular student organization, Future Business Leaders of America (FBLA), are integral components of both the employability skills standards and content standards for this course. Various forms of technologies will be highlighted to expose students to the emerging technologies impacting the digital world. Professional

communication skills and practices, problem-solving, ethical and legal issues, and the impact of effective presentation skills are taught in this course as a foundational knowledge to prepare students to be college and career ready. The knowledge and skills taught in this course build upon each other to form a comprehensive introduction to digital world. Introduction to Digital Technology is a course that is appropriate for all high school students.

Digital Design **11.45100**

Using web design as the platform for product design and presentation, students will create and learn digital media applications using elements of text, graphics, animation, sound, video and digital imaging for various format. The digital media and interactive media projects developed and published showcase the student skills and ability. Emphasis will be placed on effective use of tools for interactive multimedia production including storyboarding, visual development, project management, digital citizenship, and web processes. Students will create and design web sites that incorporate digital media elements to enhance content of web site. Various forms of technologies will be used to expose students to resources, software, and applications of media. Professional communication skills and practices, problem-solving, ethical and legal issues, and the impact of effective presentation skills are enhanced in this course to prepare students to be college and career ready. Employability skills are integrated into activities, tasks, and projects throughout the course standards to demonstrate the skills required by business and industry. Competencies in the cocurricular student organization, Future Business Leaders of America (FBLA), are integral components of the employability skills standard for this course. Digital Design is the second course in the Web and Digital Design pathway in the Information Technology cluster. Students enrolled in this course should have successfully completed Introduction to Digital Technology and Fundamentals.

Web Design **11.45200**

This course will equip students with the ability to plan, design, and create a website. Students will move past learning how to write code and progress to designing a professional looking website using graphical authoring tools that contains multimedia elements. Working individually and in teams, students will learn to work with web page layouts and graphical elements to create a professional looking website. Various forms of technologies will be used to expose students to resources, software, and applications of web design. Professional communication skills and practices, problem-solving, ethical and legal issues, and the impact of effective presentation skills are enhanced in this course to prepare students to be college and career ready. Employability skills are integrated into activities, tasks, and projects throughout the course standards to demonstrate the skills required by business and industry. Competencies in the co-curricular student organization,

Future Business Leaders of America (FBLA), are integral components of the employability skills standard for this course. Web Design is the third course in the Web & Digital Design pathway in the Information Technology cluster. Students enrolled in this course should have successfully completed Introduction to Digital Technology and Digital Design. After mastery of the standards of this course, students should be prepared to take the end of pathway assessment in this career area.

CAREER PATHWAY: CULINARY ARTS

Career Pathway Sequence of Courses:

- Introduction to Culinary Arts
- Culinary Arts I
- Culinary Arts II (Dual Enrollment Course)

Introduction to Culinary Arts **20.5310033**

Introduction to Culinary Arts is the foundational course designed to introduce students to fundamental food preparation terms, concepts, and methods in Culinary Arts where laboratory practice will parallel class work. Fundamental techniques, skills, and terminology are covered and mastered with an emphasis on basic kitchen and dining room safety, sanitation, equipment maintenance and operation procedures. The course also provides an overview of the professionalism in the culinary industry and career opportunities leading into a career pathway to Culinary Arts. Mastery of standards through project-based learning, technical skills practice, and leadership development activities of Family, Career and Community Leaders of America, (FCCLA) will provide students with a competitive edge for either entry into the education global marketplace and/or the post-secondary institution of their choice to continue their education and training. The prerequisite for this course is advisor approval.

Culinary Arts I
20.5321033

As the second course in the Culinary Arts Career Pathway, the prerequisite for this course is Introduction to Culinary Arts. Culinary Arts I is designed to create a complete foundation and understanding of Culinary Arts leading to

postsecondary education or a food-service career. This fundamentals course begins to involve in-depth knowledge and hands-on skill mastery of culinary arts.

Culinary Arts II (Dual Enrollment Course)
20.5331433

As the third course in the Culinary Arts Pathway, the prerequisite for this course is Culinary Arts I. Culinary Arts II is an advanced and rigorous in-depth course designed for the student who is continuing in the Culinary Arts Pathway and wishes to continue their education at the postsecondary level or enter the food-service industry as a proficient and well-rounded individual. Strong importance is given to refining hands-on production of the classic fundamentals in the commercial kitchen.

CAREER PATHWAY: EARLY CHILDHOOD CARE & EDUCATION

Career Pathway Sequence of Courses:

- Early Childhood Education I
- Early Childhood Education II
- Early Childhood Education III

Early Childhood Education I **20.5281001**

The Early Childhood Education I course is the foundational course under the Early Childhood Care & Education pathway and prepares the student for employment in early childhood education and services. The course addresses the knowledge, skills, attitudes, and behaviors associated with supporting and promoting optimal growth and development of infants and children. The prerequisite for this course is advisor approval.

Early Childhood Education II **20.5240033**

Early Childhood Education II is the second course in the Early Childhood Care and Education pathway and further prepares the student for employment in early childhood care and education services. The course provides a history of education, licensing and accreditation requirements, and foundations of basic observation practices and applications. Early childhood care, education, and development issues are also addressed and include health, safety, and nutrition education; certification in CPR/First Aid/Fire Safety; information about child abuse and neglect; symptoms and prevention of major childhood illnesses and diseases; and prevention and control of communicable illnesses. Mastery of standards through project based learning, laboratory application, technical skills practice, and leadership development activities of the career and technical student organizations will

provide students with a competitive edge for either entry into the education global marketplace and/or the post-secondary institution of their choice when continuing their education and training.

Early Childhood Education III **20.4250000**

Early Childhood Education III is the third course in the Early Childhood Care and Education pathway and one option for program completers who may not have the opportunity of participating in the Early Childhood Education Internship. The course provides in-depth study of early brain development and its implications for early learning, appropriate technology integration, and developmentally appropriate parenting and child guidance trends. Also addressed are collaborative parent/teacher/child relationships and guidance, child directed play, the changing dynamics of family culture and diversity, the causes and effects of stress on young children, and infant nutrition. Mastery of standards through project based learning, laboratory application, technical skills practice, and leadership development activities of the career and technical student organizations will provide students with a competitive edge for either entry into the education global marketplace and/or the post-secondary institution of their choice when continuing their education and training.

CAREER PATHWAY: ENGINEERING

Career Pathway Sequence of Courses:

- Foundations of Engineering and Technology
- Engineering Concepts
- Engineering Applications

Foundations of Engineering and Technology **21.4250033**

The Foundations of Engineering and Technology is the introductory course for the Engineering and Technology Education pathways. This STEM driven course provides the students with an overview of engineering and technology including the different methods used in the engineering design process developing fundamental technology and engineering literacy. Students will demonstrate the skills and knowledge they have learned through various project based activities while using an engineering design process to successfully master the “E” in STEM. The prerequisite for this course is advisor approval.

Engineering Concepts **1.4710033**

Engineering Concepts is the second course in the Engineering and Technology Pathway. Students will learn to design technical solutions to engineering problems using a whole systems approach to engineering design. Students will demonstrate the application of mathematical tools, teamwork, and communications skills in solving various design challenges, while maintaining a safe work environment. The prerequisite for this course is Foundations of Engineering and Technology.

Engineering Applications **21.4720044**

Engineering Applications is the third course in the Engineering and Technology Pathway. Students will apply their knowledge of Science, Technology, Engineering, and Math (STEM) to develop solutions to technological problems. Solutions will be developed using a combination of engineering software and prototype production processes. Students will use market research, cost benefit analysis, and an understanding of the design cycle to create and present design, marketing, and business plans for their solutions. A capstone project will allow students to demonstrate their depth of knowledge of the engineering design process and prepare them for future opportunities in the field of engineering. The prerequisite for this course is Engineering Concepts.

CAREER PATHWAY: HEALTH SCIENCE – PATIENT CARE

Career Pathway Sequence of Courses:

- Introduction to Healthcare Science
- Essentials of Healthcare
- Patient Care Fundamentals
- Patient Care Technician (Dual Enrollment course)

Introduction to Healthcare Science **25.5210033**

Students wishing to pursue a career in the Healthcare Industry will receive initial exposure to healthcare science skills and attitudes applicable to healthcare including the concepts of health, wellness, and preventive care. The changes in healthcare delivery systems and the subsequent impact on healthcare delivery for individual consumers is explored and evaluated. Medical terminology, microbiology, and basic life support skills are emphasized, as well as, the ethical and legal responsibilities of today's healthcare provider. Academics and other related sciences are integrated throughout the course. The students are required to meet both national and intrastate professional guidelines as designated by applicable regulatory agencies such as the Occupational Health and Safety Administration

(OSHA) and Center for Disease Control (CDC). Students may participate in opportunities for professional networking and the enhancement of their vocational portfolios by receiving recognition for their accomplishments through a variety of venues related to vocational student organizations – Health Occupations Students of America (HOSA), Vocational Industrial Clubs of America (VICA), as well as, other external agencies such as the American Red Cross and the American Heart Association. This course is considered broad-based with high impact and is a prerequisite for all Healthcare Science Technology Education courses.

Essentials to Healthcare **25.4400033**

Anatomy and Physiology is a vital part of most healthcare post-secondary education Programs. The Essentials of Healthcare is a medical-focused anatomy course addressing the physiology of each body system, along with the investigation of common diseases, disorders and emerging diseases. The prevention of disease and the diagnosis and treatment that might be utilized are addressed, along with medical terminology related to each system. This course provides an opportunity to demonstrate technical skills that enforce the goal of helping students make connections between medical procedures and the pathophysiology of diseases and disorders. The prerequisite for this course is Introduction to Healthcare.

Patient Care Fundamentals **25.4360000**

This course is designed to provide students interested in the careers that involve patient care with entry level skills most commonly associated with the career *Nursing Assistant*. The students are required to meet both national and intrastate professional guidelines as designated by applicable regulatory agencies such as the Occupational Health and Safety Administration (OSHA), Center for Disease Control (CDC), and the Department of Health and Human Services (HHS) with a specific focus on the Omnibus Budget Reconciliation Act of 1987 (OBRA) and the Health Insurance Portability and Accountability Act of 1996 (HIPAA). Upon completion of this course and its prerequisites, this course meets the Certified Nurse Assistant curriculum content as specified by the Georgia Medical Care Foundation. Students meeting all academic, attendance, and age requirements may sit for the Georgia Registry's Examination. Successful completion of the Georgia Registry Examination allows students to seek employment in the state of Georgia as a Certified Nurse Assistant.

Patient Care Technician

25.4490401

This dual enrollment course is not a pathway course. It is an extension course for Health Science Patient Care pathway completers. *Enrollment by application and teacher recommendation only.*

This optional fourth course is designed to offer senior students the opportunity to become effective and efficient multi-skilled healthcare providers by practicing skills learned in Patient Care Fundamentals and developing a working knowledge of advanced patient care skills, including basic cardiology, 12-lead EKG's, oxygen therapy, basic phlebotomy, and specimen collection and processing. When taken as the fourth course in the Therapeutic Services – Patient Care Fundamentals pathway, students successfully completing the requirements may be eligible to sit for Patient Care Technician Certification. The prerequisites for this course include Introduction to Healthcare Science, Essentials of Healthcare, and Patient Care Fundamentals. This is a stand-alone course and does not meet the pathway requirements.

CAREER PATHWAY: HEALTH SCIENCE - ALLIED HEALTH

Career Pathway Sequence of Courses:

- Introduction to Healthcare
- Essentials of Healthcare
- Allied Health & Medicine

Introduction to Healthcare Science **25.5210033**

Students wishing to pursue a career in the Healthcare Industry will receive initial exposure to healthcare science skills and attitudes applicable to healthcare including the concepts of health, wellness, and preventive care. The changes in healthcare delivery systems and the subsequent impact on healthcare delivery for individual consumers is explored and evaluated. Medical terminology, microbiology, and basic life support skills are emphasized, as well as, the ethical and legal responsibilities of today's healthcare provider. Academics and other related sciences are integrated throughout the course. The students are required to meet

both national and intrastate professional guidelines as designated by applicable regulatory agencies such as the Occupational Health and Safety Administration (OSHA) and Center for Disease Control (CDC). Students may participate in opportunities for professional networking and the enhancement of their vocational portfolios by receiving recognition for their accomplishments through a variety of venues related to vocational student organizations – Health Occupations Students of America (HOSA), Vocational Industrial Clubs of America (VICA), as well as, other external agencies such as the American Red Cross and the American Heart Association. This course is considered broad-based with high impact and is a prerequisite for all Healthcare Science Technology Education courses.

Essentials to Healthcare **25.4400033**

Anatomy and Physiology is a vital part of most healthcare post-secondary education Programs. The Essentials of Healthcare is a medical-focused anatomy course addressing the physiology of each body system, along with the investigation of common diseases, disorders and emerging diseases. The prevention of disease and the diagnosis and treatment that might be utilized are addressed, along with medical terminology related to each system. This course provides an opportunity to demonstrate technical skills that enforce the goal of helping students make connections between medical procedures and the pathophysiology of diseases and disorders. The prerequisite for this course is Introduction to Healthcare.

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Allied Health and Medicine **25.4370000**

This course is designed to offer students (preferably juniors or seniors) the opportunity to become effective and efficient multi-skilled healthcare providers as they develop a working knowledge of various allied health opportunities. Students focusing on a career path in the healthcare field may apply classroom/lab knowledge and skills in the clinical setting as they participate in direct or simulated client care. The curriculum allows instructors to provide options for classroom/student growth opportunities in areas of interest to the student. These options may be determined by community need, available resources, and/or student interest, etc. This course was developed according to a basic 50-minute class time frame, but may be adjusted according to local system schedules. Instructors may select which classroom content standards 1-14 best meet his/her individual classroom needs in addition to the required clinical/capstone project to equal total class time available for the course.

A. Clinical site or classroom simulated experience

This component of Allied Health is designed to give students practical application of previously studied knowledge and skills. These experiences can occur in a variety of locations (including classroom lab) appropriate to the student's level of experience and availability of community resources as determined by the instructor. These exercises should be designed to enhance and supplement the above standards.

Appropriate permission from school, parents, and the facility as well as other documentation requirements (such as transportation), and facility requirements (such as student insurance) must be adhered to and arranged. Any Healthcare Science course that includes a clinical component (excluding a shadowing experience field trip) must adhere to identified guidelines under (WBL) work-based learning (available at ctae.gadoe.org under WBL manual. Training for the Healthcare Science teacher on these guidelines will be provided.

B**. Allied Health Capstone Project Research academic requirements for a professional career of interest.**

a) Create a plan for academic achievement in a chosen field.

b) Present career interest project (HOSA career health display could be used as an example.).

c) Update personal portfolio to include: 1 resumes; 2 listings of technical skill competencies mastered for the chosen career field as developed by the instructor; 3. community service learning experiences (approved); and 4. reflection essays of the overall course and the student's career choice.

The prerequisite for this course is Introduction to Healthcare Science and Essentials of Healthcare.

CAREER PATHWAY: HEALTH SCIENCE - PHARMACY

Career Pathway Sequence of Courses

- Introduction to Healthcare
- Essentials of Healthcare
- Pharmacy Operations and Fundamentals

Introduction to Healthcare Science **25.5210033**

Students wishing to pursue a career in the Healthcare Industry will receive initial exposure to healthcare science skills and attitudes applicable to healthcare including the concepts of health, wellness, and preventive care. The changes in healthcare delivery systems and the subsequent impact on healthcare delivery for individual consumers is explored and evaluated. Medical terminology, microbiology, and basic life support skills are emphasized, as well as, the ethical and legal responsibilities of today's healthcare provider. Academics and other related sciences are integrated throughout the course. The students are required to meet both national and intrastate professional guidelines as designated by applicable regulatory agencies such as the Occupational Health and Safety Administration (OSHA) and Center for Disease Control (CDC). Students may participate in opportunities for professional networking and the enhancement of their vocational portfolios by receiving recognition for their accomplishments through a variety of venues related to vocational student organizations – Health Occupations Students of America (HOSA), Vocational Industrial Clubs of America (VICA), as well as, other external agencies such as the American Red Cross and the American Heart Association. This course is considered broad-based with high impact and is a prerequisite for all Healthcare Science Technology Education courses.

Essentials to Healthcare **25.4400033**

Anatomy and Physiology is a vital part of most healthcare post-secondary education Programs. The Essentials of Healthcare is a medical-focused anatomy course addressing the physiology of each body system, along with the investigation of common diseases, disorders and emerging diseases. The prevention of disease and the diagnosis and treatment that might be utilized are addressed, along with medical terminology related to each system. This course provides an opportunity to demonstrate technical skills that enforce the goal of helping students make connections between medical procedures and the pathophysiology of diseases and disorders. The prerequisite for this course is Introduction to Healthcare.

Pharmacy Operations and Fundamentals

25.4530001 ***This course is for seniors only. Limited seats are available. Teacher recommendation only.***

This course is an introduction to pharmacy technology professions, employment opportunities, and basic pre-pharmacy technician skills which may be utilized in either clinical or community settings such as retail, home health care, and ambulatory care pharmacies. Intensive pharmacy specific safety and security training are provided including potential drug addiction and abuse issues relative to pharmaceutical care such as robberies and identification of forgeries. Students are required to adhere to Federal Regulatory Agencies and Acts guidelines including Food, Drug, and Cosmetic Act, Controlled Substances Act (CSA), Joint Commission on Accreditation of Healthcare Organizations (JCAHO), Drug Enforcement Administration (DEA) in addition to the pharmacy regulatory agencies within the state of Georgia. This course is recommended for students planning on pursuing careers in the healthcare industry, which may require basic pharmaceutical knowledge, common healthcare mathematical applications, and/or technical proficiency in the administration medications. An overview of prescription and nonprescription medications, classifications, actions, and interactions is provided while critical thinking skills are developed throughout the course from initial calculations/conversions of drug dosage forms to the simulation of regulating IV infusion rates. Technical skills in the preparation and administration of medications are practiced in simulated clinical labs. Students must demonstrate the utilization of all professional and safety guidelines as designated by applicable Federal and State regulatory agencies and acts such as the Drug Enforcement Administration (DEA) and the Controlled Substance Act while performing simulations. The impact of pharmaceuticals on the provision of healthcare and the importance of client education are integrated throughout the course. Clinical experience is recommended to help prepare a student to potentially take the Pharmacy Technician exam when they are eligible. An internship course under the supervision of a Registered Pharmacist may also be utilized for this experience. After the completion of this course, students may be eligible to take the Pharmacy Technician Certification Exam (PTCE) through the Pharmacy Technician Certification Board (PTCB). The prerequisites for the course are Introduction to Healthcare Science and Essentials of Healthcare.

CAREER PATHWAY: JROTC - ARMY

ARMY JUNIOR RESERVE OFFICER TRAINING CORPS
PROGRAM OF
INSTRUCTIONAL LEADERSHIP EDUCATION AND
TRAINING

Career Pathway Sequence of Courses:

- Leadership Education 1
- Leadership Education 2
- Leadership Education 3
- Leadership Education 4

NOTE: Successful completion of at least three units of credit in the Army JROTC program will qualify students for advanced placement in a college JROTC program or accelerated promotion in the military service.

Leadership Education 1 **28.4310033**

Junior Reserve Officer Training Corps (JROTC) is a leadership education program. This program will help students build a strong knowledge base of self-discovery and leadership skills applicable to many leadership and managerial situations. Mastery of these standards through project-based learning, service learning and leadership development activities will prepare students for 21st Century leadership responsibilities.

This laboratory course is designed to introduce students to the history, customs, traditions and purpose of the Army JROTC program. It teaches students strategies to maximize their potential for success through learning and self-management. Basic leadership skills to include leadership principles, values and attributes and communications skills are integrated throughout the course.

High schools students develop an understanding of learning style preferences, multiple intelligences, emotional intelligence and study skills. These self-assessments will enable students to be self-directed learners. The JROTC curriculum is enhanced through physical fitness activities, extracurricular and co-curricular activities that support the core employability skills standards and McRel academic standards.

Leadership Education 2 **28.4320033**

This laboratory course is designed to build on the self-discovery skills sets taught in JROTC 1. As self-directed learners, students study the fundamentals citizenship skills, the foundation of the American political system and our Constitution. Personal responsibility and wellness is reinforced by diet, nutrition and physical fitness activities. Drug and alcohol awareness and prevention are reinforced. Students are placed in leadership roles that enable them to demonstrate an understanding of basic leadership principles, values and attributes.

The curriculum is enhanced through physical fitness activities, extracurricular and co-curricular activities that support the employability skills standards and McRel academic standards.

Leadership Education 3 **28.4330033**

This laboratory course is designed to build on the leadership experiences developed during JROTC Army 1 and 2. Basic command and staff principles are introduced and include an overview of organizational roles and responsibilities. Leadership strategies, managing conflict, leading others, planning and communications skills are evaluated to improve organizational effectiveness. Career planning is investigated.
The Junior ROTC curriculum is enhanced through physical fitness activities, extracurricular and co-curricular activities that support the core employability skills standards and McRel academic standards.

Leadership Education 4 **28.4340033**

Junior Reserve Officer Training Corps (JROTC) is a leadership education program. This program will help students build a strong knowledge base of self-discovery and leadership skills applicable to many leadership and managerial situations. Mastery of these standards through project-based learning, service learning and leadership development activities will prepare students for 21st Century leadership responsibilities.
This laboratory course is designed build on the leadership skills developed in JROTC 3. Students develop an in-depth understanding of the branches of military service. Intermediate leadership skills to include leadership principles, values and attributes and communications skills are integrated throughout the course. Financial planning skills are studied through the National Endowment for Financial Education. Fundamental teaching skills are introduced.

The JROTC curriculum is enhanced through physical fitness activities, extracurricular and cocurricular activities that support the core employability skills standards and McRel academic standards.

CAREER PATHWAY: MARKETING & MANAGEMENT

Career Pathway Sequence of Courses:

- Marketing Principles
- Marketing & Entrepreneurship
- Marketing Management

Marketing Principles **08.4740033**

Marketing Principles is the foundational course for the Marketing and Management, Fashion Merchandising and Buying, and Marketing Communications and Promotion Pathways. Marketing Principles addresses all the ways in which marketing satisfies consumer and business needs and wants for products and services. Students develop a basic understanding of Employability, Foundational and Business Administration skills, Economics, Entrepreneurship, Financial Analysis, Human Resources Management, Information Management, Marketing, Operations, Professional Development, Strategic Management, and Global Marketing strategies. Instructional projects with real businesses, work-based learning activities including School-Based Enterprises, and DECA application experiences should be incorporated in this course.

Marketing and Entrepreneurship **08.4410033**

Marketing and Entrepreneurship is the second course in the Marketing and Management Career Pathway. Marketing and Entrepreneurship begins an in-depth and detailed study of marketing while also focusing on management with specific emphasis on small business ownership. This course builds on the theories learned in Marketing Principles by providing practical application scenarios which test these theories. In addition, Marketing and Entrepreneurship focuses on the role of the supervisor and examines the qualities needed to be successful. In order to increase the number of application experiences, students should participate in (1) Work-Based Learning (WBL) activities in the classroom and possibly in a formal WBL Program; (2) DECA Career and Technical Student Organization competitive events that are directly

aligned with course standards and (3) a School-Based Enterprise. The prerequisite for this course is Marketing Principles.

Marketing Management **08.4420033**

Marketing Management is the third course in the Marketing and Management pathway. Students assume a managerial perspective by applying economic principles in marketing, analyzing operation's needs, examining channel management and financial alternatives, managing marketing information, pricing products and services, developing product/service planning strategies, promoting products and services, purchasing, and professional sales. This course also includes global marketing where students analyze marketing strategies employed in the United States versus those employed in other countries. In order to increase the number of application experiences, students should participate in (1) Work-Based Learning (WBL) activities in the classroom and perhaps in a formal WBL Program; (2) DECA Career Technical Student Organization (CTSO) competitive events that are directly aligned with course standards and (3) a School-Based Enterprise. The prerequisite for this course is Marketing and Entrepreneurship.

DUAL ENROLLMENT PATHWAY OPTIONS

CAREER PATHWAY – CORRECTIONS SERVICES

Career Pathway Sequence of Courses:

- Introduction to Law and Corrections
- Criminal Justice Essentials
- Applications of Corrections

Introduction to Law, Public Safety, Corrections and Security

Introduction to Law, Public Safety, Corrections, and Security (LPSCS) is the pre-requisite for all other courses within the Career Cluster. This course provides students with career-focused educational opportunities in various LPSCS fields. It examines the basic concepts of law related to citizens' rights and the responsibilities, and students will receive instruction in critical skill areas including: communicating with diverse groups, conflict resolution, ethics, CERT (Citizens Emergency Response Training, or similar program), basic firefighting, report writing, terrorism, civil and criminal law. Career planning and employability skills will be emphasized.

Criminal Justice Essentials

Criminal Justice Essentials provides an overview of the criminal justice system. Starting with historical perspectives of the origin of the system, the course reviews

the overall structure. Students will become immersed in criminal and constitutional law and will review basic law enforcement skills. The course ends with a mock trial to provide participants with a first-hand experience of the criminal justice system. The course will also provide in-depth competencies and components for the co-curricular Skills USA student organization that should be incorporated throughout instructional strategies of the course. Participation in additional student organizations that align with Law, Public Safety, Corrections and Security pathways (i.e. mock trial) is encouraged to enhance standards addressed in the curriculum. The prerequisite for this course is Introduction to Law, Public Safety, Corrections and Security. NOTE: Criminal Justice Essentials is designed to provide students with career-focused educational opportunities in various criminal justice fields. The course has elements which cover tactics, methods, and skills utilized by law enforcement that should be taken into consideration when assessing implementation options. School boards should evaluate criteria for student enrollment that account for successful completion of future background investigations required for entry into such careers.

Applications of Corrections

This course provides an analysis of all phases of the American Correctional System and practices, including the history, procedures and objectives. Topics include the history and
evolution of correctional facilities; legal and administrative problems; institutional facilities and procedures; probation, parole and pre-release programs; alternative sentencing; rehabilitation; effects and costs of recidivism; community involvement; and officer safety.

CAREER PATHWAY – NAIL TECH

Career Pathway Sequence of Courses:

- Introduction to Personal Care Services
- Nail Care Services II
- Nail Care Services III

Introduction to Personal Care Services

This course introduces both fundamental theory and practices of the personal care professions including nail technicians, estheticians, barbers, and cosmetologists. Emphasis will be placed on professional practices and safety. Areas addressed in this course include: state rules and regulations, professional image, bacteriology, decontamination and infection control, chemistry fundamentals, safety, Hazardous Duty Standards Act compliance, and anatomy and physiology. Students will experience basic hands on skills in each area to help them determine the pathway they are most interested in pursuing. By completing courses in the personal care

services pathways, students can potentially earn credit toward the hours required by the Georgia State Board of Barbering and/or Cosmetology or hours toward their license as an esthetician or nail technician. Prerequisite for this course is advisor approval.

Nail Care Services II

Nail Care II provides training in manicuring, pedicuring and advanced nail techniques. Topics include: implements, products and supplies, diseases and disorders, advanced manicure techniques, pedicure techniques, nail product and general safety precautions and practices, and advanced nail techniques (acrylics, wraps, tips and gel). By completing courses in nail care, students can potentially earn credit toward the hours required by the Georgia State Board of Cosmetology or hours toward their license as a nail technician. This course provides more in-depth competencies for the co-curricular student organization Skills USA and presents integral components that should be incorporated throughout the course. In addition, this course offers the possibility of meeting articulation alignment with the technical college standards. The prerequisite for this course is Introduction to Personal Care Services.

Nail Care Services III

This course is designed to provide advanced training for employment in nail care careers. Academic knowledge and skills related to cosmetology are reviewed. Instruction includes advanced training in disinfection and sanitation processes and nails care and meets the Georgia State Board of Cosmetology and Regulation requirements for licensure upon passing the state examination. Students apply, combine, and justify knowledge and skills to a variety of settings and problems. This course provides more in-depth competencies for the co-curricular student organization Skills USA and presents integral components that should be incorporated throughout the course. The prerequisites for this course are Introduction to Personal Care Services and Nail Care Services II.

CAREER PATHWAY – BARBERING

Career Pathway Sequence of Courses: Introduction to Personal Care Services
Barbering II
Barbering III

Introduction to Personal Care Services

This course introduces both fundamental theory and practices of the personal care professions including nail technicians, estheticians, barbers, and cosmetologists. Emphasis will be placed on professional practices and safety. Areas addressed in this course include: state rules and regulations, professional image, bacteriology, decontamination and infection control, chemistry fundamentals, safety, Hazardous Duty Standards Act compliance, and anatomy and physiology. Students will experience basic hands on skills in each area to help them determine the pathway they are most interested in pursuing. By completing courses in the personal care services pathways, students can potentially earn credit toward the hours required by the Georgia State Board of Barbering and/or Cosmetology or hours toward their license as an esthetician or nail technician. Prerequisite for this course is advisor approval.

Barbering II

This course is designed as an introductory level course for the Barbering Pathway and presents intermediate skills and knowledge related to barbering and scientific and mathematical corollaries. Clinical activities are included in this phase of study. Clinicals included in this course involve: individualized and precise designing, cutting, and shaping of the hair. Students will earn credit hours toward the completion of the 1500 credit hours required by Georgia State Board of Barbers. According to the State Board of Barbering, each student must obtain 280 total hours of theory training before the student is allowed to render clinical services. This course provides more indepth competencies for the co-curricular student organization Skills USA and presents integral components that should be incorporated throughout instructional strategies. In addition, this course offers the possibility of meeting articulation alignment with the technical college standards. The prerequisite for this course is Introduction to Personal Care Services.

Barbering III

This course will provide higher level skills that the students can transfer to postsecondary barber schools. Students are required to meet both national and intrastate professional guidelines as designated by applicable regulatory agencies such as the Occupational Health and Safety Administration (OSHA) and the Georgia Board of Barbering. The knowledge and skills gained through this course will assist students in the analysis and performance of professional services such as haircutting and styling, mustache and beard design, facials, shaves and scalp treatments. In addition, this course offers the possibility of meeting articulation alignment with the technical college standards. This course is considered broad-based with high impact in the personal care service industry. Students will achieve technical content skills necessary to pursue a full range of careers in this program. Mastery of these standards through project-based learning, technical skills practice, and leadership development activities of the career and technical student organization, Skills USA, will provide students with a competitive edge for either entry into the personal care services marketplace and/or the post-secondary institution of their choice to

continue their education and training. The prerequisites for this course are Introduction to Personal Care Services and Barbering II. *This course is located on the South Georgia Technical College campus.*