



The Navigator

Maxwell

January 2013

Maxwell High School of Technology

Volume 1, No. 3

INSIDE THIS ISSUE



Cosmetology p.8



Culinary Arts p.6



Auto Collision p.7



Scan Maxwell's QR code with your Smartphone to go directly to Maxwell's website.

Dianne Thompson speaks on personalities dynamic

Dianne Thompson, GCPS Director of Advisement and Counseling facilitates the Maxwell High School of Technology Work Ready Programs's January Conflict Resolution seminars. The seminars enabled Maxwell students who are looking to take the next step in college and career understand how to better communicate with other people. In addition, students participated in hands-on activities designed to not only make them more aware of their own personalities but also promote appreciation of individual differences in others. The Work Ready Program helps prepare students develop soft skills needed in college and the workplace.



In January, Dianne Thompson, GCPS Director of Advisement and Counseling, facilitated the Maxwell High School of Technology Work Ready Seminar on Conflict Resolution. The Maxwell Work Ready program is the school's advisement initiative and is designed to teach students the soft skills needed to be successful in college and the workplace.

During the seminar, all Maxwell students were asked to complete a True Colors Inventory designed to identify their individual personality styles. Based on research by Carl Jung, Myers-Briggs, and Keirsey-Bates, the assessments are

designed to help individuals better understand themselves and others.

The hands-on activities promoted self-awareness, enabling students to become aware of their own personality styles as well as promoting appreciation of individual differences.

As students shared about their own likes, needs, and challenges, they began to understand the preferred styles of their classmates. The seminar served as a team building exercise and demonstrated the value of improving individual effectiveness in working with others during class projects and the workplace.

The Principal's Message...

Greetings and Happy New Year from Maxwell! In this edition of our newsletter, we feature our many programs and the learning opportunities we afford students. As we begin registration for the 2013-2014 school year, I encourage you to better familiarize yourself with our programs and course offerings. In addition, Maxwell's online registration opened on February 1st. Be sure and look for Maxwell representatives who will visit each of the Gwinnett County home schools to coincide with the home school's elective registration event. Interested students will be able to register at the Maxwell table during these visits, or you can register online at home. I appreciate your support and wish you a wonderful spring semester. As always, please know our doors are always open to you, and go Navigators!



Dr. Jeff Hall, Principal

*Dr. Jeff Hall, Principal
Maxwell High School of Technology*

To schedule a tour of Maxwell High School, or if you have questions about registration, call Head Counselor Emily Latone @ 770-338-4605 or Curriculum AP Dr. Vicki Hoffmann @ 770-338-4601.

Healthcare offers four options

The Healthcare Science Pathway offers several options for students interested in pursuing a career in the healthcare industry or a general overview of medical services for those still undecided about a career in the healthcare field.

All students enrolled in the Healthcare pathway earn at least one science elective course: Introduction to Healthcare Science. After attending an informative student/parent meeting during the first semester, students and their parents choose between four healthcare specialities. The four options and the course pathways are as follows:

Medical Services

Introduction to Healthcare Science [Elective Science]
Application of Therapeutic Services [Elective Science]
General Medicine [Technical Elective]
Anatomy & Physiology [Board of Regents Science]

Emergency Services

Introduction to Healthcare Science [Elective Science]
Emergency & Disaster Preparedness [Elective Science]
Concepts of Emergency Medicine [Elective Science]
Anatomy & Physiology [Board of Regents Science]

Nursing (CNA: Certified Nursing Assistant)

Introduction to Healthcare Science [Elective Science]
Application of Therapeutic Services [Elective Science]
Nursing Essentials [Technical Elective]
Medical Terminology [Technical Elective]

Diagnostics

Introduction to Healthcare Science [Elective Science]
Basic Diagnostic Services [Technical Elective]
Clinical Laboratory Technician [Technical Elective]
Medical Terminology [Technical Elective]

The Maxwell Navigator

The Maxwell Navigator newsletter is a quarterly student publication. All photos and layout and design are produced by students. Special thanks to Graphic Design student photographers.

Raveena Singh
Graphic Design Intern

Michael Bates, Mark James
Graphic Design Instructors

Georgia Tomlin
Newsletter Adviser

Dr. Jeff Hall
Principal

Maxwell High School of Technology
990 McElvaney Lane
Lawrenceville, GA 30044
770-963-6838

Common registration questions answered

What is Dual Enrollment, how is the tuition paid, and does it affect the HOPE Scholarship?

Eligible students earn both high school and college credit while enrolled in a Dual Enrollment program. Dual enrollment opportunities with Gwinnett Technical College are available through Gwinnett County Public Schools and Maxwell High School of Technology with the following programs: Automotive Services, Healthcare Science, Interior Design, Law & Justice, and Welding. In 2013-2014, Culinary Arts and Early Childhood will be added. Tuition to Gwinnett Technical College is paid 90% through the HOPE Grant. Gwinnett Tech pays the remaining 10% and waives all other fees. The student's HOPE Scholarship is not impacted in any way for this dual enrollment opportunity.

What is duplicate credit and how does it help determine what program I choose?

Students may only earn credit for a high school course one time. Home high schools offer one or two courses in a technical pathway but do not always offer all the courses available in the pathway. Students who have taken one or more courses in a technical pathway at their home school are encouraged to select an alternative Maxwell program. Students who need only three credits to graduate may continue in the pathway they began at their home school, providing there are enough courses remaining in the Maxwell High School of Technology pathway to award credit without duplicating credit already earned.

What is a technical course pathway?

Maxwell prepares students to enter the service industry or a post-secondary institution by providing CTAE (Career Technical and Agricultural Education) training that encompasses valuable academic, technical, and employability skills. Students from all GCPS high schools may obtain three or four concentrated units of credit in a Georgia Career Pathway by successfully completing a Maxwell program. Individual course pathways are listed with each course listing in this newsletter.

What is embedded credit and how does it count towards graduation credits?

Embedded credit is credit earned in an academic area of study (English Language Arts, Math and/or Science) while enrolled in a CTAE program of study. The coursework for the academic subject is already embedded in the curriculum. Every Maxwell CTAE program offers embedded core subject credit in one of these academic areas as well as technical education credits. All embedded credit counts towards core subject credits needed to meet graduation requirements.

Are there prerequisites for registering for a Maxwell class?

Some classes have prerequisites for the course and they are listed under each class in this newsletter. All Maxwell High School of Technology programs recommend that a student has successfully completed at least two full credits of high school Academic Language Arts, Mathematics, and Science for student success in a Maxwell area of study. In addition, all applicants must be rising juniors or seniors, and have eight credits to apply and 11 credits to attend. Moreover, student applicants must be on track for graduation by the start of school in August.

How do I register for a Maxwell class and when does registration begin?

Online registration begins on February 1 for the 2013-2014 school year. Go to the Maxwell High School web page: maxwellhigh.com and click on the registration link. In addition, Maxwell representatives will visit home schools beginning in mid February through March 20 to coincide with the home school's elective registration events. Interested students will be able to register online at the Maxwell table during these visits. When completing the registration process, students are asked to indicate first and second choices on the online application. The application website will be closed March 28-April 3. On April 2, Maxwell will conduct a lottery drawing from the applications received during the Phase I registration process. Students whose names are drawn will be placed in their first or second program choice. All other students will be placed on a waiting list. After April 5, students will receive an email notification of class placement; a student's home school counselor will also receive the notification.

Maxwell's Online Registration begins on February 1!

Aircraft Flight Operations

This course is intended for students serious about pursuing a college degree and a career in the aviation industry. Students investigate physics concepts such as interactions of matter, energy, velocity, and energy momentum, through experience in laboratories and field work using the processes of inquiry.

Students best suited for this program should have been successful academically including a minimum of two credits of the same modern/classical language and an accelerated academic history.

Students build a solid knowledge base in the history of aviation, the principles of flight and navigation, the aerospace community, and aviation meteorology. Classroom and laboratory activities assure a thorough understanding of the aviation environment.

This course will help students make an informed college and/or career decision upon completion. Leadership development activities through the Civil Air Patrol (CAP), the Experimental Aircraft Association (EAA), and industry mentorship will prepare students with a competitive edge for the global marketplace.

Students earn two elective technical credits and the fourth Science elective graduation credit in this course.

Fundamentals of Aviation
Navigation and Communication
Aviation Meteorology [Science Elective]



Architecture, Drawing & Design



This program exposes students to blue print reading, measuring, sketching, and drawing through engineering, architecture, drafting, and design processes. All drawing is computer based using industry-standard software programs including AutoCAD, Auto CAD Architecture, and Revit Architecture.

Students best suited for this program have successfully completed geometry and cannot have earned credit in Introduction to Engineering, Drawing & Design, or Architectural Drawing & Design I and II.

Students use applications of mathematics and science to predict the success of an engineered solution and complete hands-on activities with tools, materials, and processes as they develop working projects and prototypes. Projects include 3-D drawings and a full set of residential architecture plans. Each student will create a portfolio of work to use as they enter post-secondary education or choose a career.

Students earn three elective technical credits and the fourth Language Arts graduation credit through the embedded Advanced Composition curriculum.

Intro to Engineering, Drawing & Design
Architecture Drawing & Design I
Architecture Drawing & Design II
Advanced Comp [Language Arts Academic]

Automotive Services



Classroom labs model a professional automotive shop setting that simulates an industry-standard service facility. Students perform automotive problem diagnosis, service, and repair in four basic areas: brakes, electrical/electronic systems, steering and suspension, and engine performance. This industry-certified course will directly prepare students for future employment by allowing them to apply automotive knowledge using factory donated vehicles in hands-on activities and repairs. Students who are interested in careers related to design, production, analysis, repair, and operation of devices that use electronics will benefit from this course.

The physics curriculum is designed to continue student investigations of the physical sciences that began in grades K-8 and provide students the necessary skills to be proficient in physics. This curriculum includes more abstract concepts such as interactions of matter and energy, velocity, acceleration, force, energy, momentum, and charge. Students investigate physics concepts through experiences in the Automotive Services laboratory and field work using the processes of inquiry.

The Auto Services program includes a Dual Enrollment curriculum option, and also the opportunity to earn the required Physics academic graduation credit. In addition, students not earning the Physics credit earn a fourth elective Science graduation credit. All students earn three elective technical credits.

Foundations of Transportation Logistics
Physics [Required Science Academic]
Electric/Electronic Systems
Chassis System & Design
Foundations of Electronics [Science Elective]



Students work in a professional facility equipped with industry standard equipment found in leading kitchens and restaurants. Students learn the essential skills of professional cooking from an industry expert including food preparation, knife skills, dining room service, menu development, restaurant accounting, and teamwork in the kitchen.

In order to qualify for the course, students cannot have earned credit in Introduction to Culinary Arts I, Culinary Arts II, or Food Science.

In addition, students study the advances in technology used in the food industry to expand and improve the food supply, and evaluate the effects of processing, preparation, and storage on the quality, safety, wholesomeness, and nutritive value of foods.

This course offers a Dual Enrollment credit program option and students earn three elective technical credits and a fourth Science elective graduation credit.

Intro to Culinary Arts

Culinary Arts I

Culinary Arts II

Food Science [Science Elective]

Culinary Arts

Auto Collision Repair



This industry-certified program teaches students how to perform automotive vehicle body repair and refinishing skills such as panel replacement, metal straightening, welding, and automotive painting. Students bring damaged vehicle components to their original condition using state-of-the-art equipment and technology in the automotive lab.

These skills can lead to excellent jobs as an estimator, body repair technician, refinishing technician, or employment in an autoshop office or insurance claim's office.

Mathematics concepts include the appropriate use of manipulatives and technology. Topics are represented in multiple ways such as concrete/pictorial, verbal/written, numeric/data-based, graphical, and symbolic.

Students earn three elective technical credits and the fourth academic Math graduation credit through the embedded math curriculum.

Introduction to Collision Repair
 Math of Industry & Government [Academic Math]
 Paint Refinishing I
 Paint Refinishing II

Construction

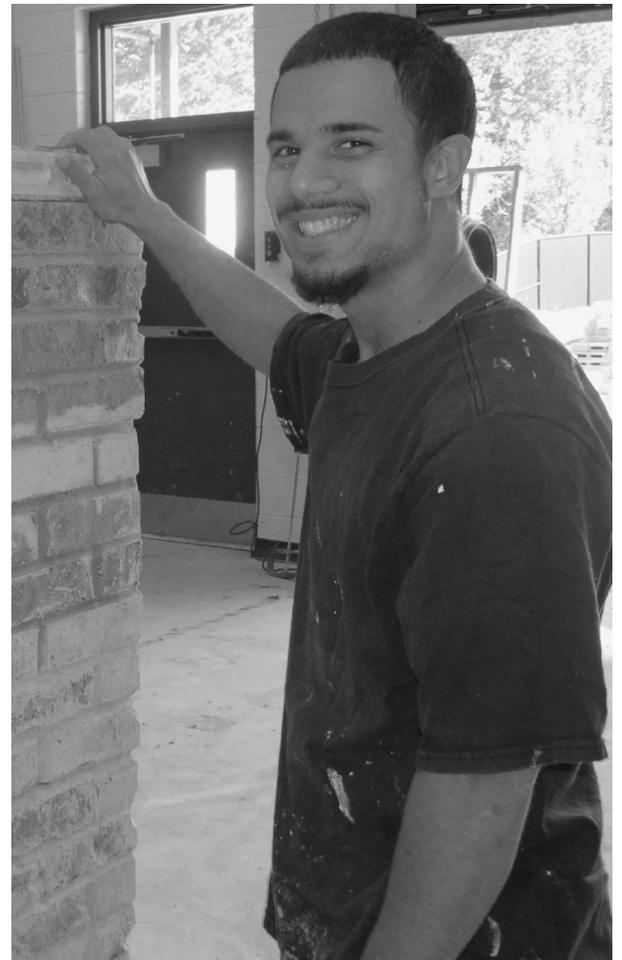
The construction program prepares students for a construction career with unlimited possibilities. Simulating real construction conditions, students gain skills in carpentry, plumbing, masonry, and electrical wiring with emphasis on safety, tool use and care, and blueprint reading. Students complete real life projects including building miniature houses built to code and completed with electrical wiring.

Mathematics concepts include the appropriate use of manipulatives and technology. Topics are represented in multiple ways such as concrete/pictorial, verbal/written, numeric/data-based, graphical, and symbolic. Concepts are introduced and used in the context of realistic construction skills.

All Maxwell programs recommend at least two full credits of high school Academic Language Arts, Mathematics and Science for student success.

Students earn three elective technical credits and the fourth academic Math graduation credit through the embedded math curriculum.

Introduction to Construction
 Occupational Safety Fundamentals
 Math of Industry & Government [Academic Math]
 Carpentry I



Cosmetology

This program shapes a student's ability to create and design using hair, skin and nails as a creative medium. In a true-to-life salon environment, students will learn theories and techniques in hair cutting and styling, manicures, perms, and facials, as well as record keeping and business practices for aspiring entrepreneurs.

In order to qualify for the course, a 75% average in biology and chemistry is recommended. Industry-related science and math terminology is emphasized. Anatomy & Physiology concepts include: organization of the body; protection, support and movement; providing internal coordination and regulation; processing and transporting; and reproduction, growth, and development.

Cosmetology credit hours from Maxwell are transferable to post-secondary schools as students prepare for the Georgia State Board of Cosmetology exam which is required to obtain a license to practice. This curriculum is extensively performance and laboratory based.

Students earn three elective technical credits and the fourth Science elective graduation credit.

Cosmetology Core I

Cosmetology Core II

Cosmetology Core III

Human Anatomy & Physiology [Science Elective]



Electronics/Robotics

This class prepares students for a career using electronics skills, or for further education in the modern field of electronics. Students learn the basic circuitry used to create complicated electronic devices.

In order to qualify for the course, a student must have completed at least one computer related class, and have a 75% average in Math.

In the class, circuit theory is proven by the use of hands-on laboratory experiments and computer simulations. Students will build circuits, motors, and amplifiers to become familiar with producing, testing, troubleshooting, and documenting electronics projects.

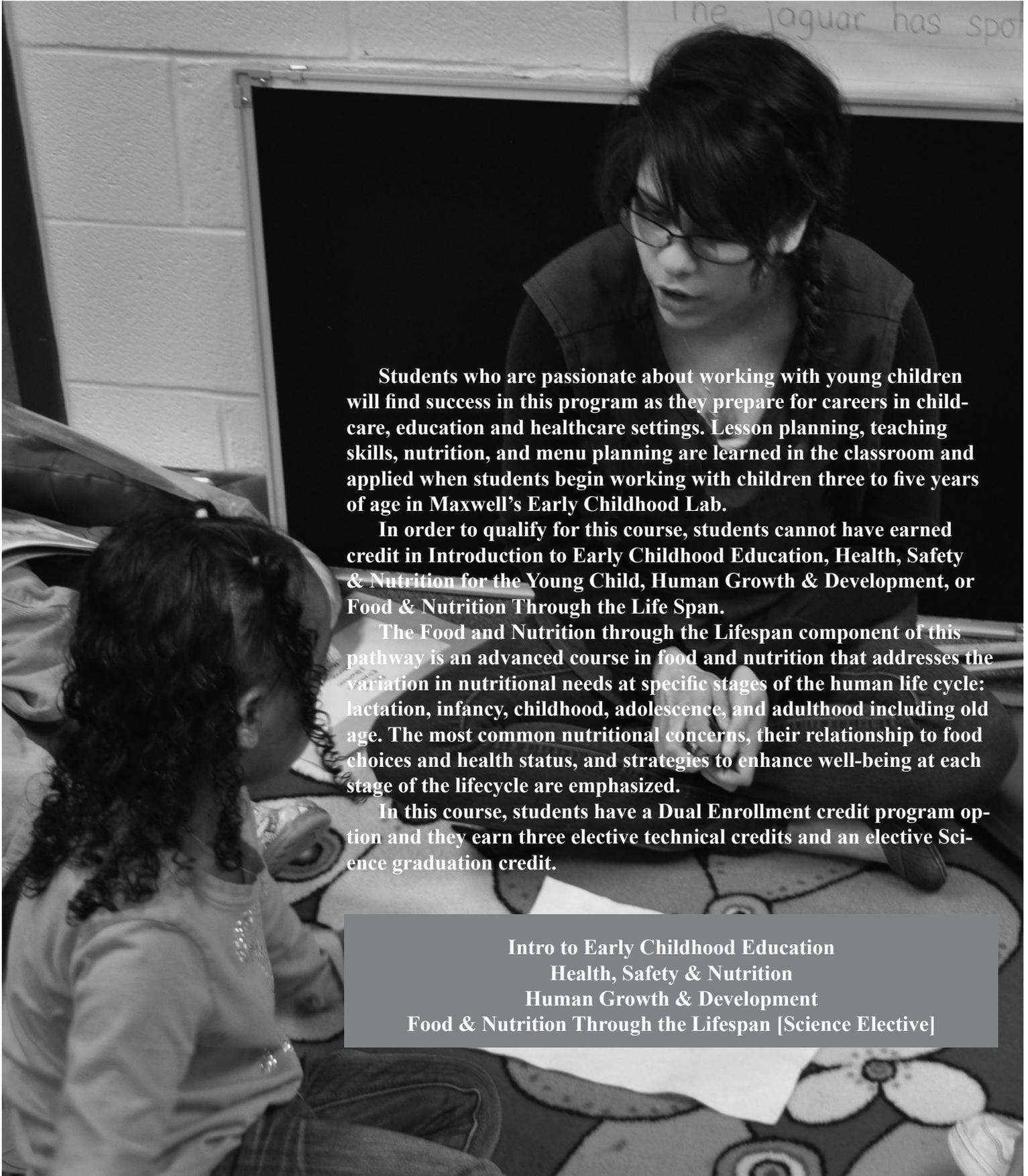
The three pathway courses can each count as either a science or technical elective credit.

Foundations of Electronics
[Science or Technical Elective]

Advanced AC & DC Circuits
[Science or Technical Elective]

Digital Electronics
[Science or Technical Elective]





Students who are passionate about working with young children will find success in this program as they prepare for careers in child-care, education and healthcare settings. Lesson planning, teaching skills, nutrition, and menu planning are learned in the classroom and applied when students begin working with children three to five years of age in Maxwell's Early Childhood Lab.

In order to qualify for this course, students cannot have earned credit in Introduction to Early Childhood Education, Health, Safety & Nutrition for the Young Child, Human Growth & Development, or Food & Nutrition Through the Life Span.

The Food and Nutrition through the Lifespan component of this pathway is an advanced course in food and nutrition that addresses the variation in nutritional needs at specific stages of the human life cycle: lactation, infancy, childhood, adolescence, and adulthood including old age. The most common nutritional concerns, their relationship to food choices and health status, and strategies to enhance well-being at each stage of the lifecycle are emphasized.

In this course, students have a Dual Enrollment credit program option and they earn three elective technical credits and an elective Science graduation credit.

Intro to Early Childhood Education
Health, Safety & Nutrition
Human Growth & Development
Food & Nutrition Through the Lifespan [Science Elective]

Early Childhood Education

Interior Design

This program teaches students the fundamentals of residential and commercial interior design. Students use industry-standard software and tools to prepare and present designs that will include appropriate furnishings, fixtures, equipment and textile selections.

In order to qualify for this program, a successful grade in Geometry is recommended. In addition, within the Interior Design course, English Language Arts concepts focus on a study of contemporary literature related to the interior design industry. Students will develop an understanding of current issues through the study of various literary models and connect these understandings by using rhetorical strategies to write about contemporary topics.

Interior Design students will be equipped with up-to-date knowledge that will make them competitive candidates as they pursue post-secondary options and internship positions.

In this course, students have a Dual Enrollment credit program option and they earn three elective technical credits. Moreover, students earn the fourth Language Arts graduation credit which is embedded in the Interior Design course curriculum.

Foundations of Interior Design
Interior Design Furnishings, Materials, and Components
Textile Science
Advanced Composition [Language Arts Academic]



Students learn graphic design skills so they can take a project from concept to finished output. The course also includes hands-on instruction employing illustration, electronic media, and printing. In addition, students create a webpage, experiment with animation, and produce products for their portfolios.

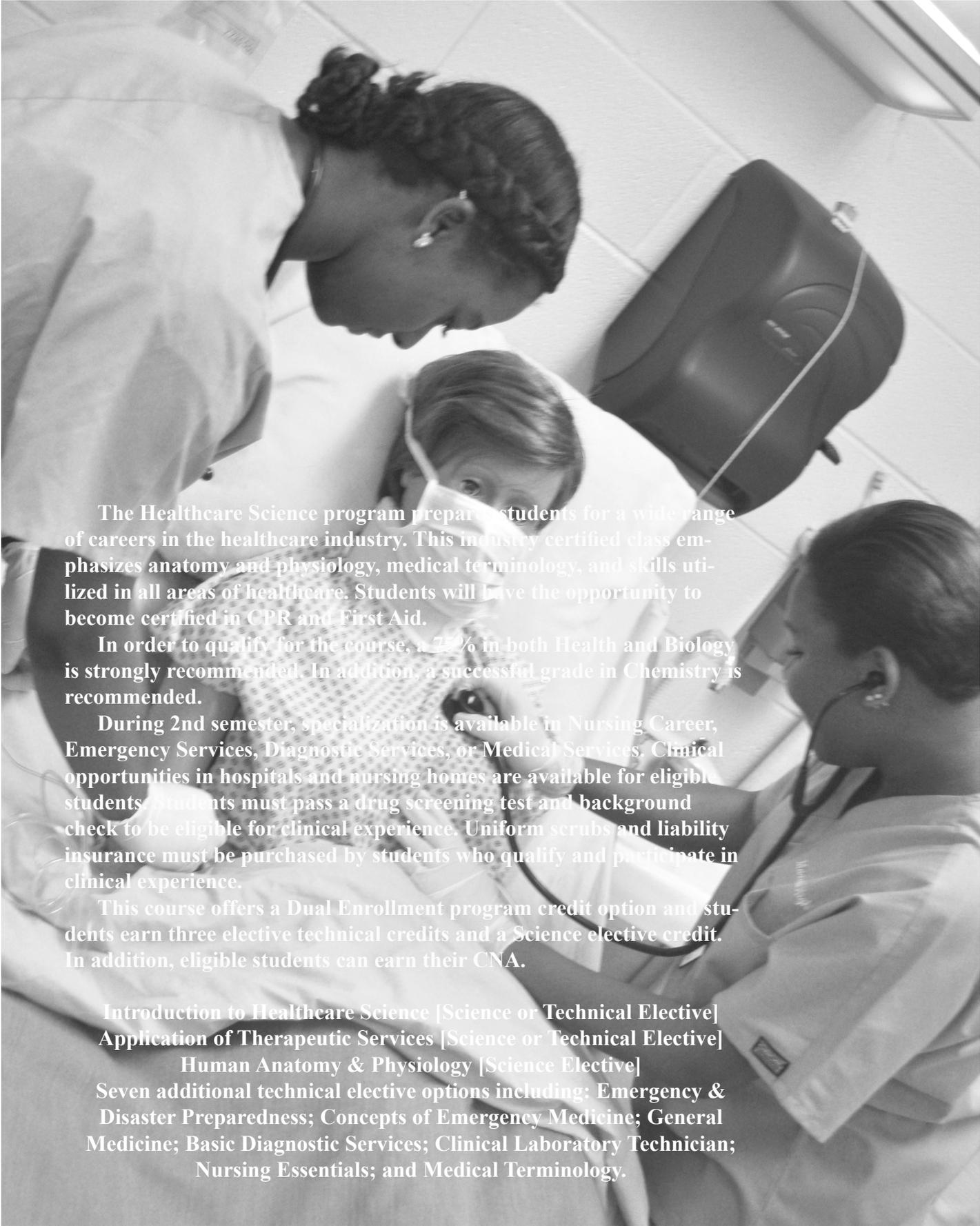
In order to qualify for this course, students should have successfully completed at least one computer related class and/or 2D or 3D Art or a related class.

Using state of the art computers and digital imaging equipment, students learn cutting edge software applications such as Adobe Photoshop, Illustrator, InDesign, Flash and Dreamweaver. Instruction is designed to give students maximum opportunity to learn image generation and manipulation for such projects as book covers and magazines, CD/video game art, advertising campaigns, posters, and websites. During 2nd semester, students will specialize in either Advanced Graphic Design or Graphic Output Processes.

English Language Arts concepts embedded in the course focus on a study of contemporary literature related to the graphics industry. Students earn three elective technical credits and the fourth Language Arts graduation credit.

Introduction to Graphics & Design
Graphic Design & Production
Graphic Output Processes OR
Advanced Graphic Design
Adv Comp [Language Arts Academic]

Graphic Communications



The Healthcare Science program prepares students for a wide range of careers in the healthcare industry. This industry certified class emphasizes anatomy and physiology, medical terminology, and skills utilized in all areas of healthcare. Students will have the opportunity to become certified in CPR and First Aid.

In order to qualify for the course, a 75% in both Health and Biology is strongly recommended. In addition, a successful grade in Chemistry is recommended.

During 2nd semester, specialization is available in Nursing Career, Emergency Services, Diagnostic Services, or Medical Services. Clinical opportunities in hospitals and nursing homes are available for eligible students. Students must pass a drug screening test and background check to be eligible for clinical experience. Uniform scrubs and liability insurance must be purchased by students who qualify and participate in clinical experience.

This course offers a Dual Enrollment program credit option and students earn three elective technical credits and a Science elective credit. In addition, eligible students can earn their CNA.

Introduction to Healthcare Science [Science or Technical Elective]
Application of Therapeutic Services [Science or Technical Elective]
Human Anatomy & Physiology [Science Elective]
Seven additional technical elective options including: Emergency & Disaster Preparedness; Concepts of Emergency Medicine; General Medicine; Basic Diagnostic Services; Clinical Laboratory Technician; Nursing Essentials; and Medical Terminology.

Healthcare Science

Welding

Students gain knowledge of industrial and construction welding, become proficient utilizing a variety of welding techniques, learn to read blueprints, interpret welding drawings and sketches, learn safety rules, and become eligible to earn certification in welding technologies.

Mathematics concepts include the appropriate use of hands-on manipulatives and technology. Math topics are presented in multiple ways, such as concrete/pictorial, verbal/written, numeric/data-based, graphical, and symbolic. Concepts are introduced and used in the context of realistic welding skills.

This course offers a Dual Enrollment credit program, and students earn three elective technical credits and a fourth Math elective graduation credit.

Introduction to Metals
Occupational Safety Fundamentals
Welding I
Math of Industry and Government
[Academic Math]



Focusing on the causes, prevention, investigation and prosecution of crime, the Law and Justice program allows students to explore the role and structure of government, the rights and responsibilities of citizens and police, the criminal justice system, and courts and corrections.

Students will explore the latest industry tools and techniques used in law enforcement such as radar guns, police scanners, DUI field sobriety tests, fingerprinting, handcuffing, evidence gathering, and more.

In addition, the Forensic Science curriculum is designed to build upon science concepts and to apply science to the investigation of crime scenes. Students will learn the scientific protocols for analyzing a crime scene, how to use chemical and physical separation methods to isolate and identify materials, and how to analyze biological evidence and the criminal use of tools including impressions from firearms, tool marks, arson, and explosive evidence.

This course offers a Dual Enrollment credit program, and students earn three elective technical credits and a Science elective graduation credit.

Introduction to Law & Justice
Law, Community Response & Policing
Criminal Investigation & Forensics
Forensic Science [Science Elective]

Law & Justice