



Course Descriptions

2021-2022

Automotive Technology I

Available to: Juniors and Seniors

This course is designed to prepare students for an entry-level job or advanced training in the automotive service and diesel technology field. Students will develop skills in the design, theory, function, and diagnostic procedures of gasoline and diesel engines. In addition, all aspects of the vehicle will be covered, including safety, basic maintenance, braking systems, engine repair, suspension and steering, electrical/electronic, which include modern computer controls and emissions systems. Students will perform automotive service work with an emphasis on shop operating safety procedures.

Automotive Technology II

Prerequisite: Successful Completion of Automotive Technology I

Students will enhance the skills learned in Automotive Technology I as well as develop new skills. Students will learn to use advanced tools and equipment through hands-on experience with the latest technology in the automotive industry. Specific topics that will be covered in depth include safety, basic maintenance, braking systems, engine repair, suspension and steering, electrical/electronic, which include modern computer controls and emissions systems. The students will perform automotive service work with an emphasis on real world shop operating scenarios using teacher and community vehicles.

Barbering I & II

Available to: Sophomores, Juniors, and Seniors

There are tremendous opportunities for a great career in the barbering industry. As a barber, you'll devote your talents to making others look and feel their best. You'll keep up with current trends through practice, instructor demonstrations, and working on mannequins. The barbering industry offers many options for personal growth and many career paths to choose from. Students attend Hairmasters which is a Pivot Point Legacy School. While attending, students demonstrate competencies in several of the classroom modules needed for the required Illinois State Board Exam. All students will focus on one module in the first year and another module in the second year. Classes will also attend the Midwest Beauty Show in Chicago, IL where they are able to network with over 50,000 barbering and cosmetology industry professionals. **Module One** will consist of the basic skills in men's and women's haircutting and styling. Students will practice these skills until they have mastered them based upon industry standards. **Module Two** will consist of furthering skills in men's and women's haircutting and styling as well as adding skills in perming, relaxing, and coloring services. Students then practice these skills until they have mastered them based upon industry standards. All hours accumulated during the student's time at BACC Hairmasters Barbering are credited towards the completion of the 1,500 hour course and licensure.

Computer Technology & Networking I

Available to: Sophomores, Juniors, Seniors

The Computer Technology & Networking course is designed to equip both the novice and experienced students with entry-level computer technician proficiencies. Students will work closely with the instructor, an educational technology department, and local technology businesses to better their understanding of the material covered in class. The course

will help students become adept with customer support techniques and key computer hardware architecture components, such as: the motherboard, processor, memory, drives, networks, power supplies, and peripheral devices for both desktop and laptop computers. Additionally, students will install, configure, and troubleshoot the significant operating systems utilized today. Significant lab time is provided to offer the student authentic hands-on experiences in working with computers. The goal is to prepare these students to take the COMPTIA A+ Certification (starting point for a career in IT) and have them available to assist schools' technology departments in a variety of manners. In addition to hardware curriculum, the class will also be working on basic networking knowledge and skills; connecting to a network, connecting to the internet through an ISP, network addressing, network services, wireless technologies, basic security, and troubleshooting your network.

This class is Dual Credit with Heartland Community College, Computer Science 101, 4 credits, Networking 151, 3 credits, and Networking 160, 3 Credits.

Computer Technology & Networking II

Prerequisite: Successful Completion of Computer Technology & Networking I

This course builds on the skills introduced in Computer Technology & Networking I. Students learn how to connect and install multiple computers and peripherals together to create a computer network. Students build, configure, and maintain network servers along with installing and configuring various network operating systems such as Novell, Windows, and Linux. Students learn to use troubleshooting services, system monitoring utilities, and data backup and recovery systems. Other topics include learning how to connect various network components such as servers, computers, and printers together using data cabling, hubs, and switches. Students learn to run, terminate, and troubleshoot data cabling. In addition, students learn how to install and upgrade software across the network, as well as map drives and share resources such as printers, software, and files. The course includes setting up and configuring various network services such as TCP/IP, DHCP, DNS, VPN, terminal services, e-mail, and web services. Students learn how to secure and protect network servers and data as well as setting up and configuring a firewall, intrusion detection system, and encryption software for identifying and preventing potential network attacks.

This class is Dual Credit with Heartland Community College, Networking 150, 3 Credits, Networking 166, 3 Credits, and Networking 167, 3 Credits.

Computer Technology & Networking III

Prerequisite: Successful Completion of Computer Technology & Networking I and II

This course builds on the skills introduced in Computer Technology & Networking I and II. Internships will be a part of this course along with independent study in the students' area of interest. Cybersecurity is currently the main focus of this course through an online lab simulation application.

Construction I

Available to: Sophomores, Juniors, Seniors

This course provides an opportunity for students who are planning on entering a post-secondary educational program in construction or entering into the workforce at entry level. The focus of the class is the construction by the students of a residential home, with emphasis on foundations, framing, exterior and interior finish and roofing. Students will develop workplace skills in basic math, hand and power tools, basic blueprint reading, safe work habits, proper job attitudes,

technical jargon and learn about the wide variety of opportunities in the field of construction.
OSHA 10-hour safety certification and CertainTeed Master Shingle Applicator Certification
This class is dual credit with Heartland Community College, Construction 101, 3 credit hours.

Construction II

Prerequisite: *Successful Completion of Construction I*

This course provides an opportunity for students who are planning to enter a postsecondary educational program in construction or enter into the workforce at entry level. Students will enhance workplace skills in blueprint reading, mechanical systems, electrical wiring, and construction estimating and scheduling, while developing leadership roles.

Cosmetology I, II, & III

Available to: Sophomores, Juniors, Seniors

Do you want to learn how to braid, style, and perm long and short hair? Then this is the program for you! Students attend Hairmasters, which is a Pivot Point Legacy School. While attending, students demonstrate competencies in two of the five classroom modules needed for the required Illinois State Board Exam. All students will focus on one module in the first year and another module in the second year. Classes will also attend the Midwest Beauty Show in Chicago, where they are able to network with over 50,000 hair, skin, and nail professionals. **Module One** will consist of styling hair in the wet and dry state. Training on manikins will develop an understanding of the shape of the head. Observation will be made of different ways of styling long and short hair. These methods may include braiding, curling, straightening, up and down styles, and many more. Students then practice these methods until they have mastered these techniques based upon industry standards. **Module Two** will consist of understanding the texture of the hair. This will include adding and removing texture to hair, as well as multicultural texture reformation. Observation will be made of different ways of perming using different chemicals and rod styles, and relaxing hair using different chemical relaxers. Students then practice these methods until they have mastered these techniques based upon industry standards. All hours accumulated during the student's time at BACC Hairmasters Cosmetology are credited towards the completion of the 1,500-hour course and licensure.

First and second year students may also attend extra hours on Saturday and attend night school to complete their certification early with the approval of their instructor. The Bloomington Area Career Center will pay for one night school class and may pay for some Saturday hours.

This program pathway can be completed at Hairmasters where they will prepare you to take the Illinois State mandated exam.

Criminal Justice & Law Enforcement I

Available to: Sophomores, Juniors, Seniors

This program is designed to acquaint students with the various aspects of the criminal justice system, including the structure of law enforcement; procedures of criminal law; the court system; corrections; and juvenile justice. Students will first learn the basics of the criminal justice system and become familiar with criminal law and how it applies to individual rights. United States Supreme Court landmark cases will be examined to have a better understanding of their importance in today's role in our criminal justice system. Students will also hear from experts who will expand their knowledge about the multitude of career opportunities within the criminal justice field. Students will take part in field trips to various locations within the criminal justice specialty areas to see and learn about their daily operations. Students will also take part in various hands-on activities similar to the duties of a police officer, as well as explore aspects of various roles within the police departments, including exploration in forensic science, evidence processing, and steps to properly process a crime scene.

Criminal Justice & Law Enforcement II

Prerequisite: *Successful Completion of Criminal Justice & Law Enforcement I*

During this phase of the program, students will have the opportunity to explore more concise and detailed operations of the criminal justice field. Students will participate in various job-shadowing opportunities and off-site visits to select venues to gain a better understanding of specialties and characteristics within the criminal justice field. Independent study units will be used to allow a more advanced insight, as students will research and analyze actual police cases to examine findings and submit recommendations. Students will also have the opportunity to take on leadership and mentoring roles to first-year students and utilize their first-year experiences to assist in guiding students toward a successful year.

Culinary Arts I

Available to: Juniors and Seniors

This course provides students considering a career in culinary arts and the food service industry with classroom instruction and lab experiences to develop job-related competencies. Students start with basic sanitation and workplace safety, and then continue with instruction on food handling, preparation, quantity production, quality control, planning, operation, and presentation. Commercial quality food service equipment will be used to prepare food and provide hands-on instruction for each area of food study. Students will have the opportunity to earn the Foodservice Food Handler Certification.

This class is Dual Credit with Joliet Junior College: CA 106, 2 credits. Through this Dual Credit course, students will have the opportunity to earn the ServSafe Food Handler and Servsafe Food Production Manager Certification through ServSafe, which is endorsed by the National Restaurant Association.

Culinary Arts II

Prerequisite: *Successful Completion of Culinary Arts I*

This course provides students with leadership opportunities and responsibility for food service management. Students in this class have the opportunity to cater many different events. Students have the opportunity to plan menus, select food, supervise food preparation, develop pricing strategies, order food, and maintain safety and sanitation, while mastering operation of all food preparation equipment. Students develop skills that will prepare them for postsecondary education and employment opportunities.

EMT (EMERGENCY MEDICAL TECHNICIAN)-BASIC

Available to: Seniors

This course will introduce the care and handling of the critically ill and injured. Emphasis is on the development of skills in assessment of illnesses and the application of proper emergency care procedures. This course will meet federal and state guidelines for basic EMT training. Students who successfully complete this course will be able to sit for the Illinois State or National Registry EMT-Basic licensure exam after turning 18 years of age and graduating from high school.

This class is Dual Credit with Heartland Community College, EMT 101, 8 credits.

Fire Science I

Available to: Juniors, Seniors

This program allows students to explore and prepare for a possible career in Fire Service and as an Emergency Medical Responder (EMR). Professional Firefighters teach the course. Students will gain lab experience on-site at Bloomington and Normal Fire Stations and will learn technical and manipulative skills. Those skills include, but are not limited to, the following areas of study: fire behavior, safety, self-contained breathing apparatus, turnout gear use, portable fire

extinguishers, ladders and ladder use, fire hose and appliances, building construction, forcible entry, ventilation, water supply, nozzles and fire streams, rescue, fire control, and ropes and knots. The students will be offered the opportunity to participate in Skills USA, a competition of other fire science students in Illinois. Students must be in good physical condition to enroll in the course, as training will include climbing stairs and crawling with additional equipment and supplies.

This program is Dual Credit with Illinois Central College: Fire Science 110, 3 credits & Fire Science 113, 3 credits.

Graphic Design & Video Production I

Available to: Sophomores, Juniors, Seniors

Do you want to know how to turn your ideas into digital graphics? Have a skill at conceptualizing advertising graphics and want to turn them into usable pieces? Well here is a class for you. Students in this course will develop skills used by digital media graphic designers, desktop publishers, and other members of the multimedia/communications industry. Students will be using industry standard software packages, such as: Photoshop, Illustrator, Final Cut Pro X, and more. Students will be introduced to drawing techniques, digital photography, page assembly, multimedia production and print technologies, as well as vinyl printing. Students will also utilize the steps necessary to mass produce digital media designs. If you are considering a career in graphic arts, this is the class for you!

This class is Dual Credit with Heartland Community College, Digital Media 101, 3 credits. Students have the opportunity to become Adobe certified in Illustrator CC and Photoshop CC.

Graphic Design & Video Production II

Prerequisite: Successful Completion of Graphic Design & Video Production I

Students in this class will receive intensive study in advanced digital media design. Students will have the opportunity to establish a leadership role within the print shop, and partner with outside resources to create projects for distribution. This class is recommended for students who are considering a career in the industry as well as preparing for post-secondary education.

This class is Dual Credit with Heartland Community College, Digital Media 120, 3 credits.

Graphic Design & Video Production III

Prerequisite: Successful Completion of Graphic Design & Video Production I and II

Curriculum will be based on student interest, market trends, and business demands. Internships will also be a primary part of the coursework.

Health Careers and Medical Terminology

Available to: Sophomores, Juniors, Seniors

Health Careers and Medical Terminology is a one-year program offered to sophomore, junior and senior students interested in pursuing a career in the medical field or in public safety. Students will learn basic human anatomy and physiology, a solid foundation in medical terminology, and injury/disease processes. Students will have many opportunities for hands-on training and skills development. It will provide a clear understanding of the first aid process in an emergency situation. The course will include field trips to local hospitals to see the skills firsthand with the potential for job shadowing. The course will explore many medical career options such as Physical and Occupational Therapy, Radiology, Dental Assistant, Nursing, Sports Medicine, X-Ray Technician, as well as Physician specialties. It will give students an up-close look at employment opportunities and educational pathways.

This class is Dual Credit with Heartland Community College, Health 110, 3 credits.

Nurse Assistant

Available to: Juniors, Seniors

Are you contemplating a career in health care? Well, this is the class for you! The opportunities are unlimited for trained professionals in the healthcare field. Upon successful completion of this course, students are eligible to take the state competency exam to become certified nursing assistants (CNAs). Classroom instruction includes certification in Basic Life Support/CPR and fundamental healthcare principles. Some of these healthcare principles include infection control, safety, patient confidentiality, measuring vital signs, bathing and grooming techniques, nutrition, and transferring residents. Students will participate in hands-on care of residents in long-term care facilities as part of the clinical requirements. Attendance is essential due to the number of state-mandated hours that are required. This class is recommended for students planning for post-secondary education or career attainment. Excellent attendance and communication skills are necessary.

This class is Dual Credit with Heartland Community College, Nursing 110, 8 credits.

Advanced CNA

Prerequisite: Completion of Nurse Assistant program, CNA certification, and approval from Nurse Assisting instructors

Are you interested in getting hands-on experience in local hospitals, clinics, and medical offices? The Advanced CNA program is an internship program in which students gain learning experiences in local health care facilities. Students will benefit from speakers within the industry, enhance their technical skills, and develop workplace readiness. Students who have completed the BACC Nurse Assistant program have an opportunity to apply for the Advanced CNA program. The top 15 students are chosen based on their clinical skills, grades, attendance, professionalism, communication skills, and leadership qualities. Participating internship sites include, but are not limited to: Carle Bromenn Medical Center, OSF St. Joseph Medical Center, Center for Wound Healing and Hyperbaric Medicine, and Illinois Cancer Care. This class is recommended for students planning for post-secondary education or career attainment.

Robotics & Engineering

Available to: Sophomores, Juniors, Seniors

Students enrolled in this course will demonstrate the knowledge and skills necessary for robotic and engineering industries. Through implementation of the design process, students will apply concepts learned in physical science and physics classes to mechanical devices. Students will develop skills in mechanical design (CAD), and construction as they work in teams to build simple and complex robotic devices. They will build prototypes or use simulation software to test their designs. Additionally, students will explore career opportunities, employer expectations, and educational needs in the engineering fields.

Satellite Campus

Geometry in Construction

Prerequisite: Successful Completion of Algebra I

Location: Normal Community High School and Normal Community West High School

Geometry in Construction is an integrated geometry in construction course. The common core aligned geometry curriculum is taught in the context of construction. The course is team-taught by a math teacher and a technology teacher. The concepts within the course are organized to complement the skills and the knowledge needed in the building process starting with foundational concepts. The students in this course will have math days as well as build days. On the build days, the students will be working together to build a tiny house, shed, or assist with a Habitat for Humanity house. This course will provide students with the opportunity to immediately apply what they are learning in the classroom to what they are doing on the build site. Students will receive two credits for this year long, blocked course; one elective credit, one math credit.

Laborers' Training

Available to: Juniors, Seniors

Are you interested in concrete finishing, bridging, mason tending, landscaping, GPS, blueprint reading, and pipe laying? The options and specializations available to Union Laborers are incredible! Upon successful completion of this program, students are eligible to apply for the Laborer's Union apprenticeship program with thirteen of the fifteen required classes for the Laborer's Union Apprenticeship Program. This course is a combination of both classroom instruction and hands-on experiences. Attendance is important for this course. This class is recommended for students who are highly interested in joining the Laborer's Union upon graduation. An interest in hands on work and a willingness to try new things are essential for this course.

Welding I

Available to: Juniors, Seniors

Location: Heartland Community College and Tri-Valley High School

This course is designed for students with an interest in the field of manufacturing, which includes machining, sheet metal, computerized machines, and welding. Classroom instruction will include workplace safety, blueprint reading, applied math, training of hand and power tools, and instruction on proper procedures of laboratory equipment. Specialized laboratory learning experiences include planning, manufacturing, assembling, and metal fabricating process. Students may work towards the American Welding Society (AWS) certification in Shielded Metal Arc Welding (SMAW). Students will develop skills necessary to continue with post-secondary education or obtain an entry-level position in the manufacturing occupations. Students will also benefit from the business partnership with Caterpillar.

This class is Dual Credit with Heartland Community College, Welding 110, 3 credits.

Welding II

Program held at Heartland Community College and Tri-Valley High School

Prerequisite: Successful Completion of Welding I

Students enrolled in this course will enhance their opportunities for obtaining employment in manufacturing. Students will specialize in an area of interest while mastering blueprint reading, applied math, training of hand and power tools, and instruction on proper procedures of laboratory equipment. Students will also increase the amount of lab experience in the area of Computer Numerical Control (CNC) by using a lathe and vertical mill. Students experience 95% hands-on activities during the second year and may work towards the American Welding Society (AWS) certification in the Shielded Metal Arc Welding (SMAW). Students will also benefit from the business partnership with Caterpillar.

This class is Dual Credit with Heartland Community College, Manufacturing 115 and Welding 116, 3 credits each.

****Dual Credit is subject to change at the discretion of the community college.****

SkillsUSA

SkillsUSA is a nationally recognized organization that helps high school and college students enhance traits and skills that will help them succeed in the workforce. Members participate in local chapter meetings to develop leadership, teamwork, citizenship, character, and self-confidence as they attend classes to learn career and technical skills. State and National level competitions allow students to display the leadership and occupational skills they have learned throughout the year, and students are assessed by industry-driven standards. SkillsUSA provides access to postsecondary scholarships and training to prepare workers for a lifetime of success in and out of the workplace. Any student enrolled in a BACC program is eligible to participate in SkillsUSA.