Career and Technical Education

Programs • Erie 1 BOCES • Potter Rd, Harkness and Ken Ton

A student whose absence from scheduled instruction exceeds 10% of the possible days of attendance will not be eligible to attend the BOCES program. Three tardies will constitute an absence. Students requesting a program at the Potter, Harkness or Kenton Career Centers will be required to attend an orientation and meeting with a parent/quardian.

*Please note that students may be responsible for purchasing supplies/equipment for various programs.

Animal Science I and II (Potter)

3.75 credits per year- 2 year program
Animal Science exposes students to careers in
the veterinary and animal management fields.
This program teaches basic and advanced skills
in nutrition, health and disease, animal handling
and restraint, grooming, pet first aid, and
medical terminology.

Auto Technician Training I and II (Potter)

3.75 credits per year- 2 year program
This program is certified through the National
Automotive Technician Education Foundation
(NATEF). It provides an excellent foundation for
students looking to enter an automotive college
program or the entry-level workforce. Students
are trained on the latest technical equipment by
instructors that are Automotive Service
Excellence (ASE) certified. Students who
successfully complete this program will be
eligible to sit for the ASE student certification in
Auto Maintenance and Light Repair. Passing this
exam will qualify for a Pathway graduation
option

Aviation Technology I and II (Harkness)

3.75 credits per year- 2 year program Experience flight by hands-on operation of a Piper Warrior and take off with a licensed pilot as your teacher. Experience maintenance procedures with the aircraft in class. Create, develop and test modifications to aircraft designs in an engineering exploration style.

Baking and Pastry Arts I and II (Harkness)

3.75 credits per year- 2 year program Students will not only produce baked goods in both large and small quantities, but understand the science behind them. Students will create beautiful show pieces, plated desserts, chocolates and individual pastries in extensive hand-on classes. This program is certified by the American Culinary Federation (ACF).

Barbering I and II (Harkness)

3.75 credits per year- 2 year program Leave your mark on the ever changing world of fashion and beauty. Prepare for the NYS Master Barber's licensing exam. Cut, color, and style male and female clients. Learn to communicate effectively with clients and colleagues.

Building Trades I and II (Potter)

3.75 credits per year- 2 year program
This program offers instruction in carpentry and associated trade areas. Students participate in construction modules of introduction to carpentry, foundation and floor framing, wall framing, ceiling and roof framing, interior and exterior finish, cabinet making and remodeling with an introduction to masonry, plumbing and electrical systems. Practical experience through a variety of in shop projects plus internship opportunities with regional contractors and businesses are provided to all students.

Collision Repair I and II (Harkness)

3.75 credits per year- 2 year program The first 10 weeks of this program will consist of a core introduction to the automotive industry. Students will then specialize in collision repair for the remainder of the program. The program will cover the total process of auto body restoration: metal straightening, glass and panel replacement, fiberglass repair and all painting preparation and finishing techniques. Students will also perform repairs on donated vehicles, their own family vehicles, and participate in an internship at a local automotive collision repair facility. This program aligns with iCar curriculum and standards. Students will work towards iCar industry certifications in "Non-Structural Technician" and "Refinish Technician" and will qualify for a graduation pathway.

Cosmetology I and II (Potter)

3.75 credits per year- 2 year program
This two-year program prepares students to
work in the salon industry. During the active,
Customer Care Clinic, students put their skills
into action by working on actual clients from the
community. Local salon owners regularly visit
classrooms to share the latest trends in cutting,
coloring, and styling. In the second year,
students participate in internships by working in
the salon of their choice. Upon graduation, Erie 1
BOCES will assist students in completing the
1,000 instructional hours required to obtain a
cosmetology license in NYS.

Criminal Justice I and II (Potter)

3.75 credits per year- 2 year program Criminal Justice students explore the major areas of the field including law enforcement, courts, corrections, investigations and forensics, homeland security and private security.

Culinary Arts I and II (Potter)

3.75 credit per year- 2 year program
Culinary arts brings new tastes and worldly
adventures to the class everyday. Students will
spend their days preparing and serving meals.
This program is certified by the American
Culinary Federation (ACF). Graduates receive a
certificate that they attended an American
Culinary Federation Accredited (ACF) Program
and a Certified Fundamentals Cook (CFC)
designation.

Cybersecurity and Networking I and II (Harkness)

3.75 credits per year- 2 year program
Use the latest software to analyze data traffic on a network. Design computer networks and program routers and switches. Learn to troubleshoot PC hardware and operating systems. Get industry standard Network+ and Cisco CCNA certifications while still in high school.

<u>Dental Laboratory Technology I and II (Harkness)</u>

3.75 credits per year- 2 year program
Dental laboratory technology is the art and science of the fabrication of corrective devices and replacements for natural teeth. The course covers five specialties of dental laboratory technology: complete denture, partial denture, crown and bridge restoration, porcelain and ceramics and orthodontics.

Digital Media I and II (Harkness)

3.75 credits per year- 2 year program Create impressive graphics, stunning video and eye-popping animation alongside industry professionals. Develop design skills for digital screens and print layouts, YouTube videos, photography and animation. Early Childhood Education I and II (Harkness) 3.75 credits per year- 2 year program Work sidy-by-side with a certified teacher in a daycare or elementary classroom. Create and teach your own lessons in a preschool program run right out of the Harkness school.

Electrical Systems I and II (Potter)

3.75 credits per year- 2 year program
This course deals with the application of electrical technologies in all phases of the electrical Industry. It prepares students for the planning, installation, maintenance and troubleshooting of wiring systems in residential and light industrial settings according to the standards of the National Electrical Code. Instruction in principles of electricity, reading of blueprints and wiring diagrams, and renewable technologies. Installation of solar and wind technology is emphasized.

<u>Electronics and Computer Technology I and II</u> (<u>Harkness</u>)

3.75 credits per year- 2 year program
Learn about the latest technology in personal
computing, cellular communications, HDTV,
virtual reality, Bluetooth, game machines and car
audio/video systems. Learn to use soldering
irons, hand tools, meters and oscilloscopes to
build computers, robots, amplifiers, speakers,
wireless devices, power supplies and other "high
tech" projects.

Emergency Medical Services I and II (Kenton)

3.75 credits per year- 2 year program
Build a foundation in emergency response
methods and learn to function as part of a
healthcare team including: patient assessment,
treatment and transportation. Gain knowledge
of emergency response methods, dispatch
procedures and emergency communication
protocols.

Engineering and Robotics I and II (Harkness)

3.75 credits per year- 2 year program
Learn how to build a trebuchet, help us to
develop the technology necessary to create a 3D
printed "bobblehead", or create 3D printable
parts and artwork from blackadn white pictures.
WE build a variety of robots for competition
within the classroom, at Tech Wars, and for First
Robotics, held annually at RIT.

Fashion Design Technology I and II (Harkness)

3.75 credits per year 2 Year Program
Experience what it's like to produce a "NYC
Fashion Week" show. Learn to dress, style and
create trends based on design elements and the
fashion cycle. Create a successful business plan
for a fashion boutique combining your design
aesthetics with merchandising concepts.

Health Careers and Health Careers II (Intro to Nursing) (Potter)

3.75 credits per year- 2 year program This program is designed to help students explore and deepen their knowledge of careers in health care so that they can make informed college and career choices. Students learn the importance of health and wellness promotion as an integral element of any health related career. The study of medical terminology and the human body in health and disease and insight for the student pursuing any medical/health career. The core curriculum provides basic skills, knowledge and attitudes common to present and emerging health careers. Units of study in the first year of this program form the basic foundation for more specialized study in basic nursing skills for the 2nd year.

<u>Plumbing, Heating and Air Conditioning I & II</u> (Potter)

3.75 credits per year- 2 year program HVAC and plumbing is a lucrative, high demand trade. In this program, students will learn the fundamentals of residential and light commercial plumbing, heating, and air conditioning installation, service and repair. Be part of a team that constructs a modular home and gets training on the latest green and solar technology.

Sports Science Careers I and II (Potter)

3.75 credits per year- 2 year program Sports Science students turn their love of health and fitness into a career in one of the fastest growing industries in the country with careers in physical therapy, sports medicine, and personal training.

<u>Video Production and Recording Arts I and II</u> (<u>Harkness</u>)

3.75 credits per year- 2 year program
Learn to create and produce your own original
films and music. The video and recording
industry is always changing and a VPRA student
will have the opportunity to gain experience
with cutting edge technology and network with
industry professionals.

Web Technologies & Game Programming I and II (Potter)

3.75 credits per year- 2 year program
Web Technologies and Game Programming is a
fun and creative program that teaches students
of all skill levels how to create dynamic Web
sites. The foundations of programming are also
covered as students learn how to plan the logic
of game design.

Welding I and II (Potter)

3.75 credits per year- 2 year program There is great opportunity for employment due to the large shortage of welders in the United States. Instruction is given in methods of measurement, layout, equipment setup and operation. Students will become familiar with the tools and equipment of the metal fabrication industry including: blueprint reading, oxyacetylene and plasma cutting, brazing, shielded metal arc welding, gas metal arc welding, flux core arc welding and gas metal and tungsten arc welding of ferrous and non-ferrous materials. Essential shop mathematics and English are taught throughout the course, which align with the NYS learning standards. Students are taught the skills needed to meet the guidelines of the American Welding Society to qualify as an entry level welder. Students completing the course will have a career portfolio. Students may choose to enter the workforce or continue their education to further develop their knowledge and skills in the welding and fabrication industry. Students that pass the NOCTI Welding assessment will qualify for a graduation pathway.

New Visions (Options for Honors Level Seniors)

Connections: Health Related Careers

4 credits per year- 1 year program
Experience a day in the life of a practicing
medical professional as they interact with
colleagues, patients and families. Students
directly observe professionals while providers
care and treat a variety of patient conditions.
**requires an application and interview.
*current immunization, PPD and physical exam

- required prior to the start of class.
- *must provide own transportation to class and clinics.
- *professional dress is required daily. A lab coat is to be purchased at the beginning of the school year.

<u>Legal Academy</u>

4 credits per year- 1 year program Students will develop a network of professional connections through extensive field experiences across WNY. Shadow college level legal courses. Participate in the Erie County Bar Association's Mock Trial Competition.

- *requires an application and interview.
- *students must provide their own transportation to Canisius College and internship sites.

Zoo Wildlife & Conservation Careers

4 credits per year- 1 year program
This program allows highly motivated, college bound seniors the opportunity to explore options in the many areas related to wildlife, conservation and zoo-based careers. This program includes daily access to zoo grounds, internships with keepers, behind the scenes tours, and diverse guest speakers. The school year will culminate with a project in which students research and design their own animal exhibit with input from the Buffalo Zoo's animal experts.

Achievement Award

To encourage students to reach their full potential and to recognize their accomplishments and efforts, Career and Technical Education Achievement Awards are issued. Awards are given to students who develop the essential skills required for the workplace.

Award Requirements:

- Completion of all program requirements •
- Average of at least 85% for the two years •
- Good attendance (15 days absence per year Maximum of 30 days for two years)
 - Punctuality (Maximum of 10 days late per year)
 - Portfolio in program area with 75% average •

Regents Diploma with a Technical Endorsement

Students enrolled in a New York State approved Career and Technical Education program who successfully complete all requirements are eligible to have a technical endorsement affixed to their High School Diploma. Requirements for a technical endorsement include:

- Completion of the required units of credit for graduation
 Passing grades on the 5 required Regents examinations or approved alternatives
 Successful completion and passing of a national technical assessment (NOCTI)
- Successful completion of portfolio
 The technical endorsement is imprinted on a seal to be affixed to the Diploma and says: "Career and Technical Endorsement".