

**COLLINSVILLE AREA VOCATIONAL CENTER
O'FALLON TOWNSHIP HIGH SCHOOL
COURSE OFFERING GUIDE**

2027-2028



Where classrooms *and* careers meet.

**“LEARNING IS A TREASURE THAT WILL
FOLLOW ITS OWNER EVERYWHERE”**

COLLINSVILLE AREA VOCATIONAL CENTER

The Collinsville Area Vocational Center (CAVC) is a two-year, public vocational training center for high school juniors and seniors. CAVC is housed on the campus of Collinsville High School and accepts students from several area high schools. CAVC courses are offered as half-day programs in both the morning and afternoon. OTHS students enrolled at the CAVC will spend half of their school day at OTHS and half of their school day at CAVC. Students can provide their own transportation or use OTHS provided buses. Interested students must complete an application to the CAVC. Students must be on track to graduate and have room in their schedule for a half-day at CAVC.

CAVC PROGRAMS

11 th Grade	12 th Grade
Auto Body I Automotive Mechanical Technology I Aviation Mechanics Building Trades I (senior only currently) Clinical Health Occupations *Semester Course* Cosmetology I Criminal Justice I Dental Assistant *Semester Course* Electrical Trades Emergency Medical Technician (EMT) *Semester Course* Food Service I HVAC Landscape Management Precision Machining Technology I Teaching As A Profession Urban Agriculture Welding Technology I	All 11 th Grade Programs Plus: Building Trades II Cosmetology II Criminal Justice II Cyber Security I Education Practicum Food Service II Precision Machining Technology II

CAVC AUTO BODY 1 (1.5 Credits per semester)

Full Year

1.5 credits per semester

Open to Juniors and Seniors

PREREQUISITE(S): OTHS Beginning Welding, and OTHS Welding 1

SWIC Dual Credit Course

Instruction in this course emphasizes safety principles and best practices, including the proper handling of hazardous materials. Students will learn auto body terminology, the function of individual components, and how to use parts manuals to identify replacement parts. The course also covers the use of auto body and plastic/glass fillers, special repair tools, refinishing techniques, and paint preparation procedures. Students gain hands-on experience in repairing automotive bodies and fenders, developing both technical knowledge and practical skills needed to prepare vehicles for final paint application. Activities include writing and calculating damage estimates, removing and installing body panels, trim, and glass, straightening components with hammers, bucks, and jacks, and smoothing surfaces using files, grinders, and fillers. Students also learn to prime and prepare metal, fiberglass, or urethane surfaces for final refinishing. Students will also learn to detail the interior and exterior of vehicles. This is a dual credit course, which provides students with the opportunity to receive college credit for successful completion of this course.

State Course Code: 20116A001

CAVC AUTOMOTIVE MECHANICAL TECHNOLOGY 1 (1.5 Credits per semester)

Full Year

Open to Juniors and Seniors

PREREQUISITE(S): OTHS Small Engines

Do you like to work with your hands? Do you want to learn how everything works? Do you like lots of tools? If so, this is the class for you. This course provides an introduction to the automotive industry. Students begin by learning essential shop safety practices and proper use of automotive tools. From there, they gain hands-on experience performing maintenance on modern vehicles — including school cars, student vehicles, and cars brought in by friends.

The class begins with the study of brakes, suspension, steering, and alignment systems. Each student will then completely disassemble an engine, inspect and measure its components using precision tools, and reassemble it. Once rebuilt, the engine's fuel and ignition systems are installed, and the engine is tested on a stand. Through this process, students learn every step involved in an engine rebuild and develop diagnostic skills to identify and solve engine problems.

Instruction also covers the core systems found in automobiles and light trucks powered by gasoline, electricity, or alternative fuels. Key topics include engine performance, electrical and computer systems, lubrication, exhaust and emission control, steering and suspension, fuel and cooling systems, braking, and powertrain fundamentals.

State Course Code: 20104A001

CAVC AVIATION MECHANICS (1.5 Credits per semester)

Full Year

SWIC Dual Credit Course

Open to Juniors and Seniors

PREREQUISITE(S): OTHS Technical Drawing, OTHS Small Engine Repair

This year-long, 2.5-hour course introduces juniors and seniors to the foundational knowledge and hands-on skills of aircraft maintenance, aligned with FAA Part 147 curriculum standards. Students study general aviation topics such as safety, regulations, and basic physics while gaining practical experience with aircraft structures, electrical systems, hydraulics, and propulsion.

Emphasis is placed on inspection, troubleshooting, and proper maintenance procedures. The course prepares students for entry into postsecondary Aviation Maintenance Technician programs and eventual FAA Airframe and Powerplant (A&P) certification. Graduates will be well-prepared to continue advanced training or pursue high-demand careers in aviation and aerospace.

State Course Code: 20113A001

CAVC BUILDING TRADES 1 (1.5 Credits per semester)

Full Year

SWIC Dual Credit Course

Open to Seniors

PREREQUISITE(S): OTHS Technical Drawing, OTHS Carpentry, OTHS Construction 1, and OTHS Construction 2

This course gives students hands-on experience in the fundamentals of residential construction with a focus on craftsmanship. Projects cover all phases of house construction, from foundation to finish work.

Students learn to safely use hand and power tools while gaining skills in framing, insulation, drywall, plumbing, and electrical system installation. Instruction also includes masonry, carpentry, blueprint reading, cost estimating, and building codes. This is a dual credit course, which provides students with the opportunity to receive college credit for successful completion of this course.

State Course Code: 17002A0001

CAVC BUILDING TRADES 2 (1.5 Credits per semester)

Full Year

SWIC Dual Credit Course

Open to Juniors and Seniors

PREREQUISITE(S): CAVC Building Trades 1 & Instructor Approval

This course builds on the skills and knowledge gained in Building Trades I and provides students with advanced hands-on experiences in residential construction. Emphasis is placed on craftsmanship, safety, and quality work. Student's complete projects that cover all phases of construction, including the installation, maintenance, and repair of building structures and utilities. Instruction includes plumbing and electrical systems, foundation and footing work, framing, finish carpentry, masonry, and code applications. Learning activities focus on developing advanced technical abilities and job-ready skills for employment in the construction industry. This is a dual credit course that provides students with the opportunity to receive college credit for successful completion of this course.

State Course Code: 17002A002

CAVC CLINICAL HEALTH OCCUPATIONS (1.5 Credits per semester)

1 Semester

SWIC Dual Credit Course

Open to Juniors and Seniors

PREREQUISITE(S): OTHS Health Occupations and OTHS Medical Terminology

This course prepares students for entry-level work in nursing services through classroom instruction and hands-on clinical experiences. Students learn the essential skills required to perform as nurse assistants under the supervision of registered nurses.

Instruction covers medical terminology, patient care, special feeding techniques, psychological support, and long-term or end-of-life care. Students also study growth and development, hygiene, disease prevention, basic pharmacology, first aid, CPR, and professional ethics. Training includes taking vital signs, assisting with personal care, and maintaining a safe environment.

A forty-hour clinical experience at a local nursing home or hospital is required. **The course is approved by the Illinois Department of Public Health as a Certified Nursing Assistant Training Program, allowing eligible students to take the state certification exam.** Students also earn CPR certification during the course. This is a dual credit course, which provides students with the opportunity to receive college credit for successful completion of this course. Dual credit from Southwestern Illinois College is earned for Nurse Assisting (7 credit hours).

State Course Code: 14051A001

CAVC COSMETOLOGY 1 (2 Credits per semester)

Full Year

Open to Juniors and Seniors

PREREQUISITE(S): None

Cosmetology 1 introduces students to the foundational knowledge and skills required to become licensed cosmetologists. The course combines theory and hands-on practice in key areas such as tool use, shampooing, chemical applications, hair types, sanitation, hygiene, skin conditions, anatomy and physiology, electricity, professional ethics, nail technology, and esthetics. All instruction aligns with the Barber, Cosmetology, Esthetics, and Nail Technology Act. The knowledge and skills gained in this course prepare students for Cosmetology 2 while earning hours toward state licensure. All coursework, grades, and training hours completed in CAVC's Cosmetology program count toward the 1,500 clock hours required by the Illinois Department of Financial and Professional Regulation (IDFPR). The Cosmetology program is fully approved and licensed by the IDFPR's Division of Professional Regulation and meets all state and federal requirements.

Classes are held off-campus at Precision Point School of Cosmetology in Fairview Heights, Illinois. Students must provide their own transportation. This course meets beyond the regular school day from 12:00 to 4:00 p.m., with additional Saturday sessions offered as needed. See CAVC Director for more information.

State Course Code: 19101A001

CAVC COSMETOLOGY 2 (2 Credits per semester)

Full Year

Open to Seniors

PREREQUISITE(S): CAVC Cosmetology 1

Cosmetology 2 provides students with continued instruction in both theory and practical application as they advance their skills toward professional licensure. All coursework, grades, and training hours earned through the CAVC Cosmetology program count toward the 1,500 clock hours required by the Illinois Department of Financial and Professional Regulation (IDFPR).

The Cosmetology 2 program is fully approved and licensed by the IDFPR's Division of Professional Regulation and meets all state and federal requirements. Classes are held off-campus at Precision Point School of Cosmetology in Fairview Heights, Illinois.

Students must provide their own transportation. This course meets beyond the regular school day from 12:00 to 4:00 p.m., with one additional Saturday session each month. See CAVC Director for more information.

State Course Code: 19101A002

CAVC CRIMINAL JUSTICE 1 (1.5 Credits per semester)

Full Year

SWIC Dual Credit Course

Open to Juniors and Seniors

PREREQUISITE(S): None

This course introduces students to careers in law enforcement and the criminal justice system. Instruction covers the history and structure of law enforcement, the legal system, report writing, recordkeeping, and basic criminal investigation techniques. Students learn police procedures such as search and seizure, patrol methods, arrests, and traffic control, while also studying private security, community relations, and the three components of the justice system: policing, courts, and corrections. Hands-on learning includes communication

and dispatch training, simulations, police demonstrations, and guest speakers. The course also builds employability skills such as report writing, reading legal materials, applying math, practicing safety, and developing teamwork and professionalism. This dual credit course provides students with the opportunity to earn college credit upon successful completion.

State Course Code: 15054A001

CAVC CRIMINAL JUSTICE 2 (1.5 Credits per semester)

Full Year

SWIC Dual Credit Course

Open to Seniors

PREREQUISITE(S): CAVC Criminal Justice 1

This course builds on the foundation of Criminal Justice I and provides advanced hands-on training in criminal investigation and law enforcement practices. Students learn to conduct investigations, secure crime scenes, collect and preserve evidence, dust for fingerprints, make casts, and use portable crime lab equipment.

Instruction includes interviewing, report writing, courtroom testimony, traffic control, and law enforcement administration. Students also study police management, community relations, legal rights, and ethical decision-making, with an emphasis on professionalism and integrity. Career exploration opportunities include internships, demonstrations, facility tours, and job shadowing. Employability skills such as communication, teamwork, responsibility, and safety awareness are reinforced throughout the course. This dual credit course allows students to earn college credit upon successful completion.

State Course Code: 15054A002

CAVC CYBER SECURITY 1 (1.5 Credits per semester)

Full Year

Open to Seniors

PREREQUISITE(S): OTHS Cybersecurity and OTHS Computer Networking

This course introduces students to the core concepts of cybersecurity and foundational information technology. Students learn to identify and assess cyber risks to computers, networks, and software systems while developing strategies to prevent and mitigate these risks. Instruction also covers computer hardware, operating systems, and troubleshooting as preparation for the CompTIA A+ certification.

In addition, students explore the legal and ethical aspects of cybersecurity, emphasizing responsible and professional behavior in the digital environment. Successful completion of this course helps prepare students for entry-level roles in information technology and cybersecurity.

State Course Code: 10252A001

CAVC DENTAL ASSISTANT (1.5 Credits per semester)

1 Semester

Open to Juniors and Seniors

PREREQUISITE(S): OTHS Health Occupations and OTHS Medical Terminology

This course provides students with an introduction to dental sciences and career opportunities within the field of dentistry. Students will learn the skills needed to perform entry-level dental assisting and administrative tasks through a combination of classroom instruction and hands-on lab experiences. Instruction emphasizes dental safety practices, proper sanitation and infection control procedures, and the identification and use of common dental instruments and equipment. Students will practice chairside assisting techniques, patient preparation, and basic administrative tasks in a simulated dental office environment.

State Course Code: 14054A001

CAVC EDUCATION PRACTICUM (1.5 Credits per semester)

Full Year

SWIC Dual Credit Course

Open to Seniors

PREREQUISITE(S): CAVC Teaching As A Profession

This course provides students with hands-on work experience in education-related fields. Students are placed in district classrooms at various grade levels based on their chosen education career pathway. Coursework includes assessment strategies, family and community engagement, and scholarship preparation to support postsecondary education plans. Students must have completed, or be concurrently enrolled in, Early Childhood Education or Teaching as a Profession to participate in this course. This dual credit course allows students to earn six college credits through Southwestern Illinois College upon successful completion.

State Course Code: 19152A001

CAVC ELECTRICAL TRADES (1.5 Credits per semester)

Full Year

SWIC Dual Credit Course

Open to Juniors and Seniors

PREREQUISITE(S): OTHS Electronics 1 and OTHS Algebra 1 (completion or concurrent enrollment)

The CAVC Electrical program equips students with skills in residential, commercial, and basic industrial systems. Through hands-on projects, teamwork, and industry exposure, students learn circuits, wiring, troubleshooting, and conduit bending while practicing safety and NEC code compliance. The course prepares students for apprenticeships, entry-level certifications such as NCCER Electrical Level 1 and OSHA 10, and career readiness. Graduates leave with the technical expertise and professional skills needed to pursue further education or start a career in the electrical trade.

*State Course Code: 17104A001***CAVC EMERGENCY MEDICAL TECHNICIAN (EMT) (1.5 Credits per semester)**

1 Semester

Open to Juniors and Seniors

PREREQUISITE(S): OTHS Health Occupations and OTHS Medical Terminology

This semester-long, 2.5-hour course equips juniors and seniors with the knowledge and skills needed to respond effectively to medical emergencies. Students learn patient assessment, airway management, CPR, trauma care, and safe transport procedures while training with industry-standard equipment. Emphasis is placed on teamwork, communication, and professionalism in high-pressure environments. The course follows state and national EMT curriculum standards and prepares students to take the EMT certification exam. Graduates are prepared for immediate employment in emergency medical services or may continue their education in healthcare fields such as nursing, paramedicine, or other medical professions.

*State Course Code: 14055A001***CAVC FOOD SERVICE 1 (1.5 Credits per semester)**

Full Year

SWIC Dual Credit Course

Open to Juniors and Seniors

PREREQUISITE(S): OTHS Culinary 1 and OTHS Culinary 2

This course introduces students to the essential skills and knowledge needed for success in the culinary and food service industry. Students learn culinary terminology, math, safety, and sanitation practices while preparing for an industry-recognized sanitation exam. Hands-on experiences develop competencies in both front- and back-of-house operations, including event planning, customer service, baking and pastry arts, breakfast cookery, and various food service styles.

Students gain practical experience using commercial kitchen equipment and operating a quick-service restaurant, rotating through roles such as cook, server, cashier, and food preparer. Instruction emphasizes nutrition, catering, and cooking cuisines from diverse cultures. The course also explores career opportunities in the food service industry and aligns with college-level standards. This is a dual credit course, allowing students to earn college credit upon successful completion.

*State Course Code: 16052A001***CAVC FOOD SERVICE 2 (1.5 Credits per semester)**

Full Year

SWIC Dual Credit Course

Open to Juniors and Seniors

PREREQUISITE(S): CAVC Food Service 1 ('C' or better preferred) & Teacher Approval

This course builds on foundational culinary skills with advanced training in food service production, management, and leadership. Second-year students take on supervisory roles such as kitchen manager, dining supervisor, storeroom manager, menu planner, buyer, and head chef. Through the continued operation of a quick-service restaurant, students gain real-world experience managing people, operations, and customer service.

Coursework emphasizes operational management, personnel supervision, food cost accounting, inventory control, menu design, and marketing. Students also explore industry trends while refining advanced culinary techniques. Training takes place in facilities that replicate professional food service environments. This is a dual credit course, allowing students to earn college credit upon successful completion.

State Course Code: 16055A001

CAVC HVAC (1.5 Credits per semester)

Full Year

Open to Juniors and Seniors

PREREQUISITE(S): OTHS Technical Drawing

This year-long, 2.5-hour course introduces students to the fundamentals of heating, ventilation, and air conditioning systems. Through hands-on training, students gain experience with sheet metal fabrication, residential furnaces and air conditioners, commercial rooftop units (RTUs), and modern heat pump systems. Instruction emphasizes safety, system operation, troubleshooting, installation, and maintenance. Students also prepare for industry-recognized certifications that strengthen their employability. Designed for juniors and seniors, this course provides a direct pathway to employment or advanced technical training in the HVAC industry while building strong problem-solving and technical skills for a high-demand career field.

*State Course Code: 17056A001***CAVC LANDSCAPE MANAGEMENT (1.5 Credits per semester)**

Full Year

Open to Juniors and Seniors

PREREQUISITE(S): None

This course introduces students to the science and skills of maintaining healthy landscapes and turf areas. Instruction includes plant science, soil and growing media, plant identification, and landscape design principles. Students learn to apply this knowledge to the design, establishment, and maintenance of lawns, parks, golf courses, sports fields, and other outdoor spaces.

Emphasis is placed on safe work practices, proper tool and equipment identification, and routine maintenance of landscaping tools and machinery. Through hands-on projects and outdoor lab work, students gain real-world experience in creating and maintaining attractive, sustainable landscapes.

*State Course Code: 18051A001***CAVC PRECISION MACHINING TECHNOLOGY 1 (1.5 Credits per semester)**

Full Year

Open to Juniors and Seniors

PREREQUISITE(S): OTHS Technical Drawing and OTHS Drafting Engineering and Design**SWIC Dual Credit Course**

This course will strongly emphasize advanced layout, measurements, basic bench procedures, and basic machine operation. CNC programming and machining will be introduced with an emphasis on manual G and M code programming. Job opportunities and work-related skills needed in the machining field are taught throughout the course of this class. This course also includes a sequence of tasks planned to provide educational experiences that will enable students to develop advanced-level competencies needed for employment and/or continual education. This includes advanced processes on the lathe, milling machine, and surface grinder. This course will be offered under the dual credit agreement with SWIC offering students the opportunity to earn college credit.

*State Course Code: 13203A001***CAVC PRECISION MACHINING TECHNOLOGY 2 (1.5 Credits per semester)**

Full Year

Open to Seniors

PREREQUISITE(S): CAVC Precision Machining Technology 1**SWIC Dual Credit Course**

This course builds on foundational machining skills with a strong focus on advanced layout, precise measurement, bench procedures, and machine operation. Students are introduced to CNC programming and machining, with an emphasis on manual G and M code programming. Instruction includes advanced processes on the lathe, milling machine, and surface grinder, preparing students for real-world applications in the machining industry. Throughout the course, students also explore career opportunities and develop the professional and technical skills required for employment or continued education. This is a dual credit course offered through Southwestern Illinois College, allowing students to earn college credit upon successful completion.

*State Course Code: 13203A002***CAVC TEACHING AS A PROFESSION (1.5 Credits per semester)**

Full Year

Open to Juniors and Seniors

PREREQUISITE(S): OTHS Early Childhood Education**SWIC Dual Credit Course**

This course prepares students to develop the knowledge and skills needed to teach and guide others effectively. Students gain real-world experience through classroom observations and job shadowing at local education sites.

Coursework includes lesson planning, effective teaching strategies, learning styles, classroom management, and understanding diversity

in education. Students also explore a variety of careers in education while building their professional portfolios to support future college and career goals. This dual credit course allows students to earn six college credits through Southwestern Illinois College upon successful completion.

State Course Code: 19054A001

CAVC URBAN AGRICULTURE (1.5 Credits per semester)

Full Year

Open to juniors and seniors

PREREQUISITE(S): None

This course explores the principles and practices of urban agricultural production with a focus on sustainable growing methods and community impact. Students study urban crop production, harvesting techniques, and management strategies used in city-based farming systems. The course also examines the ethical, social, and environmental aspects of food production and the role of urban agriculture as a social movement. Participation in FFA activities and Supervised Agricultural Experience (SAE) projects is a key component, helping students build leadership skills, explore careers, and apply academic knowledge through hands-on learning.

State Course Code: 18309A001

CAVC WELDING TECHNOLOGY 1 (1.5 Credits per semester)

Full Year

SWIC Dual Credit Course

Open to Juniors and Seniors

PREREQUISITE(S): OTHS Beginning Welding, OTHS Welding 1, and OTHS Welding 2

This course provides students with hands-on training in the fundamentals of welding and metal joining, also known as fusion. Students learn the safe operation of oxyacetylene and arc welding processes, including SMAW (stick), GMAW (MIG), and GTAW (TIG). Through extensive practice, students develop welding skills using butt, lap, and T-joints in flat and horizontal positions. Cutting techniques are also taught using plasma arc, oxyacetylene torches, and automated equipment such as the PlasmaCam. Instruction includes blueprint reading and layout to strengthen students' technical understanding and career readiness in the welding field. This dual credit course allows students to earn six (6) college credits through Southwestern Illinois College upon successful completion.

Students may be able to test into CAVC Welding 2.

State Course Code: 13207A001