



Automotive Technology Syllabus

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Course Description:

Automotive Technology trains and prepares the students to become automotive technicians or for jobs in related fields. Students are trained on HACTC shop vehicles. Our emphasis is on safe, honest, ethical and professional work habits and skills. We follow a best practices approach to automotive repair. Students will utilize individual skills as well as team based learning to become proficient at problem solving and time management in addition to their automotive training. Qualified students will have the opportunity for a Cooperative Education placement with local automotive employers. The Automotive Technology program is ASE Education Foundation accredited. Students have the opportunity to participate in the Automotive and Collision Enthusiasts Club (ACE) as their Career Technical Student Organization (CTSO).

Classroom Expectations and Goals:

The classroom will have a safe, respectful environment where everyone can learn. We have a no cell phone policy. Everyone is required to wear safety glasses, Personal Protective Equipment (PPE), work pants and steel toe boots in the shop. No foul language or inappropriate conversations will be allowed.

In the beginning of the year, we also have a class activity where students create their own set of classroom expectations.

Our goal is for students to learn the skills, work ethic, and transferable skills necessary to succeed in the work force or to continue on to post-secondary training.

Embedded Credit: Science

Assignment Policy:

- Electude, ASE, Assignment and Task list
- Shop assignments in the eight ASE Categories
- Mitchell 1 ProDemand Service Manual For Procedures, Specifications and Information.
- Manager Plus for repair orders and invoices

Concurrent Enrollments Offered:

- Automotive Systems I, Lakes Region Community College, 3 credits

Industry Recognized Credentials:

- S/P2
- Lift it Right
- ASE End of Year Program Assessment (Student Certification)
- WorkKeys National Career Readiness Certification (NCRC)

Common Standards Assessed in Every Program:

Communication: ESS02.01 Select and employ appropriate reading and communication strategies to learn and use technical concepts and vocabulary in practice.

Leadership and Teamwork: ESS07.03 Employ teamwork skills to achieve collective goals and use team members' talents effectively.

Technical Skill: ESS10.01 Employ information management techniques and strategies in the workplace to assist in decision-making.

Problem Solving/Critical Thinking: ESS03.01 Employ critical thinking skills independently and in teams to solve problems and make decisions (e.g., analyze, synthesize and evaluate).

Units of Study:

Level I

- Safety I
- General Engine Diagnosis I
- Ignition System I
- Fuel and Exhaust Systems I
- Steering Systems
- Front Suspensions I
- Rear Suspensions I
- Wheel and Tire Service I
- Power Assist Units
- Hydraulic Brake System
- Drum Brake I
- Disc Brake I
- General Electrical Diagnosis I
- Battery Service
- Starting Systems I
- Charging System I
- Horn and Windshield Wiper I

Level II

- Safety II
- General Engine Diagnosis II
- Ignition System II
- Fuel and Exhaust Systems II
- Steering Systems
- Front Suspensions II
- Rear Suspensions II
- Wheel and Tire Service II
- Four Wheel Alignment
- Air Conditioner System
- Hydraulic Brake System
- Drum Brake II
- Disc Brake II
- Anti Lock Brake System
- General Electrical Diagnosis II
- Battery Service
- Starting Systems II
- Charging System II
- Horn and Windshield Wiper II
- Supplemental Restraint System
- Hybrid Vehicle Safety and Service

Articulation Agreements:

- Universal Technical Institute
- Lakes Region Community College
- University of Northwestern Ohio
- Lincoln Technical Institute

Grading Categories and Weights:

Communication	20%
Leadership & Teamwork	15%
Problem Solving/Critical Thinking	30%
Technical Skill	35%
Total	100%

Standards Unique to Automotive Technology:

ESS03.01.03 Describe the value of using problem-solving and critical thinking skills to improve a situation or process.

ESS03.01.04 Create ideas, proposals and solutions to problems.

ESS06.01.07 Use personal protective equipment according to manufacturer rules and regulations.

ESS02.02.05 Communicate effectively with customers and employees to foster positive relationships.

ESS10.02 Employ planning and time management skills and tools to enhance results and complete work tasks.