



Automotive Technology Syllabus

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Course Description:

Automotive Technology trains and prepares students to become automotive technicians or for jobs in related fields through a mix of classroom learning and hands-on lab work. Students will be trained on HACTC shop vehicles. 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. Policies regarding live work and working on student personal vehicles will be determined.

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:

Our classroom focuses on safe, honest, respectful, and professional work habits and skills where everyone can learn, with the goal of being successful in this career or post secondary education.

We have a no cell phone policy.

Everyone is required to wear safety glasses, Personal Protective Equipment (PPE), work pants and closed toe shoes in the shop. Students are expected to behave and speak in a professional, respectful, and appropriate manner at all times.

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

Assignment Policy:

There will be hands-on lab work for each of the units. Students will be expected to write work orders during labs outlining what they learned. Some units will include cumulative tests.

Each day there will be ungraded opening and closing activities to complete. Quizzes, assessments, opening and closing activities will count as completed (100%) or not completed (50%).

Missing and late work: If a student misses a day there will be opportunities to make up assignments within a week's time.

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
- General Overview and Maintenance
- Engine Overview and Diagnosis
- Coolant System
- Fuel and Exhaust
- Steering
- Suspension - Front and Rear
- Brakes
- Electrical - Fundamentals and Systems
- Starting and Charging

Level II

- Safety and Review
- Engine Diagnosis II
- Fuel and Exhaust II
- Cooling and Heating II
- Brakes II and Anti Lock Brake System
- Starting and Charging II
- Steering II
- Suspension - Front and Rear Alignment II
- General Electronics II
- Supplemental Restraint Systems
- Hybrid Technology Introduction

Embedded Credit: Science

Concurrent Enrollments Offered:

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

Articulation Agreements:

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

Grading Categories and Weights:

Communication	25%
- Quizzes, opening/closing activities, self assessment	
Leadership & Teamwork	25%
- Life/college/career skills	
Problem Solving/Critical Thinking	25%
- Industry skills growth shown in lab	
Technical Skill	25%
- Industry skills and work habits shown in lab	
- Tests - summative end of unit	
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.