

# COURSE SYLLABUS AUTOMOTIVE TECHNOLOGY II Fall 2021

PROGRAM TITLE: Automotive Technology II

**DOE CODE: 5546** 

RECOMMENDED GRADE LEVELS: 12
PREREQUISITES: Automotive Technology I

**HIGH SCHOOL CREDITS:** 3 per semester (6 total per school year)

**ELECTIVE INFORMATION:** Counts as a Directed Elective or Elective for all diplomas

**HOW WCC CAN HELP MEET GRADUATION PATHWAYS:** 

Pathway 1 High School Diploma = Directed Electives Pathway 2 Employability Skills = Work-Based Learning Pathway 3 Postsecondary Ready = CTE Concentrator Pathway 3 Postsecondary Ready = Dual Credit

Pathway 3 Postsecondary Ready = Industry-Recognized Certification

**INSTRUCTOR:** Brad Bever

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PROGRAM DESCRIPTION: Automotive Services Technology II focuses on electrical systems and engine performance. Additional areas of study include manual transmissions and differentials, automatic transmissions, air conditioning, and engine repair. Mathematical skills will be reinforced through precision measuring activities and cost estimation/calculation activities. Scientific principles taught and reinforced in this course include the study of viscosity, friction, thermal expansion, and compound solutions. Written and oral skills are also emphasized to help students communicate with customers, other students, and instructors. This program is NATEF (National Automotive Technicians Education Foundation) certified, and successful students in Automotive Technology II will receive ASE (National Institute for Automotive Service Excellence) certifications. Upon completion of this program, students are prepared for entry-level employment in the automotive service industry. Students may also continue their education in 2 and 4-year degree programs at the postsecondary level.

#### **MAJOR LEARNING OBJECTIVES:**

- 1. Apply and adapt appropriate workplace behaviors and characteristics to prepare for automotive careers.
- 2. Analyze vehicle electrical components and system operations to establich accurate diagnosis and repair procedures.
- 3. Analyze various vehicle system defects to determine necessary service.
- 4. Apply and adapt industry procedure to perform service and repairs on various vehicle components and systems.

### **REQUIRED TEXT/CURRICULUM MATERIALS:**

- PAC-Fundamentals of Automotive Technology; Jones & Bartlett Learning
- CDX Light Vehicle Online Curriculum; Jones & Bartlett Learning
- CDX Student Workbook; Jones & Bartlett Learning
- All-Data Online System
- Identafix
- SP2 Online Safety Training System

#### **EARLY COLLEGE PROGRAM:**

Whitewater Career Center is an Early College Career Center. Automotive Technology students may earn the Ivy Tech Maintenance and Light Repair Certificate by successfully completing all dual credit courses available in Automotive Technology I and II.

#### **DUAL CREDITS AVAILABLE:**

AUTI 121 Brake Systems

Ivy Tech 3 credits

Co-requisite applies. Qualifies for THD and Pathway Dual Credits.

**AUTI 122 Steering & Suspension Systems** 

Ivy Tech 3 credits

Co-requisite applies. Qualifies for THD and Pathway Dual Credits.

AUTI 131 Engine Performance Systems I

Ivy Tech 3 credits

Co-requisite applies. Qualifies for THD and Pathway Dual Credits.

#### **INDUSTRY CERTIFICATIONS AVAILABLE:**

ASE (Automotive Service Excellence) Student Certification – 8 areas

Testing required. Fees may apply. Qualifies for THD and Pathway Industry-Recognized Certification.

#### METHODS OF INSTRUCTIONAL DELIVERY:

This course will be delivered using a variety of delivery methods. Lecture, class discussion, lab work, and individual and group exercises and activities will be used to deliver the class material.

#### **EVALUATION METHODS:**

- Classroom work
- Lab work
- Test/Quizzes
- Homework
- Dual credit course projects and exams
- Certification projects and exams
- Participation and attendance

#### **GRADING SCALE:**

A+	99-100%	C+	78-79%
Α	92-98%	С	72-77%
A-	90-91%	C-	70-71%
B+	88-89%	D+	68-69%
В	82-87%	D	62-67%
B-	80-81%	D-	60-61%
		F	59% and below

# REQUIRED CONSUMABLE MATERIALS AND EQUIPMENT:

- Student uniforms
- Student kit
- 1" black view binder

## **CLASS POLICIES:**

- 1. Attend each day.
- 2. Communicate with your teacher when needed.
- 3. Put forth a good effort each day.
- 4. Stay on task.
- 5. Work well in assigned teams.
- 6. Do the work assigned in a timely manner.