

Maintenance and Light Repair D

COURSE SYLLABUS 2016-2017 SCHOOL YEAR

School Name: Casey County ATC

School Address: 1723 East KY 70 Liberty, KY 42539

School Phone: (606) 787-6241

Instructor Name: Lance Baldwin

Instructor Email: christopher.baldwin@casey.kyschools.us

Office Hours: 7:45AM-3:45PM Monday-Friday

Program Name: Automotive Technology

KY Tech Course Name: Basic Automotive Electricity

High School Credit: 1

KCTCS Course Name: Basic Automotive Electricity

KCTCS Course Number: ADX 120 & ADX 121

Course Description:

This course introduces the student to the principles, theories, and concepts of the automotive electrical system that include the unique diagramming, coding and locating of wiring, and component devices.

Materials Used: Motor Automotive Technology textbook, safety glasses

TASK LIST

- 1 Use wiring diagrams during diagnosis of electrical circuit problems
- 2 Identify and interpret electrical/electronic system concern; determine necessary action
- 3 Research applicable vehicle and service information, such as electrical/electronic system operation, vehicle service history, service precautions, and technical service bulletins
- 4 Locate and interpret vehicle and major component identification numbers (VIN, vehicle certification labels, and calibration decals)
- 5 Diagnose electrical/electronic integrity for series, parallel and series-parallel circuits using principles of electricity (Ohm's Law)
- 6 Demonstrate the proper use of a digital multi-meter (DMM) during diagnosis of electrical circuit problems
- 7 Check electrical circuits with a test light; determine necessary action
- 8 Measure source voltage and perform voltage drop tests in electrical/electronic circuits using a voltmeter; determine necessary action
- 9 Measure current flow in electrical/electronic circuits and components using an ammeter; determine necessary action.
- 10 Check continuity and measure resistance in electrical/electronic

- circuits and components using an ohmmeter; determine necessary action
- 11 Check electrical circuits using fused jumper wires; determine necessary action
 - 12 Locate shorts, grounds, opens, and resistance problems in electrical/electronic circuits; determine necessary action
 - 13 Measure and diagnose the cause(s) of excessive key-off battery drain (parasitic draw); determine necessary action
 - 14 Inspect and test fusible links, circuit breakers, and fuses; determine necessary action
 - 15 Inspect and test switches, connectors, relays, solid state devices, and wires of electrical/electronic circuits; perform necessary action
 - 16 Repair wiring harnesses and connectors
 - 17 Perform solder repair of electrical wiring

Make Up Work: Test, Quizzes, and In Class and Lab Assignments

- Students can make up lost lab time from 3:00 pm to 3:45 pm with pre approval.
- Students will have three days to make up any excused absence and still received full credit.
- Students can be on homebound for no more than 2 weeks in any automotive class due to the majority of the class being focused on the lab.

Fees:

- Students will be furnished with one pair of safety glasses at the beginning of the year. If they become lost or broken students must purchase their own.
- Students will be provided Nitrile gloves to wear when deemed necessary.
- Students will be provided ear plugs to wear when using certain equipment or whenever deemed necessary by the instructor.
- Students must pay for any lost or damaged books at cost before graduation.
- Field trips may require a fee for registration and transportation.

Course Requirements:

1	Successfully complete all written assignments/tests successfully.
2.	Complete all lab projects
3.	Abide by all Lab Safety Rules

Evaluation Procedures:

1.	Daily Grade
2.	Performance Tests
3.	Tests/Quizzes

Grade Assignment:

90 – 100	A	60 – 69	D
80 – 89	B	0 - 59	F
70 – 79	C		

Classroom and Shop Rules for Automotive

1. **NO TOBACCO** use of any kind
2. Cell phones and other electronic devices must be kept out of sight while in classroom area.
3. **NO FOOD OR DRINK** allowed in classroom or shop area unless authorized by instructor.
4. No inappropriate language or jesters.
5. Safety glasses must be worn at **ALL** times while in shop area.
6. No hitting, pushing, running or any other type of horseplay will be tolerated.
7. Appropriate clothing must be worn. No shorts, tank tops, open toe shoes, jewelry or loose fitting clothing permitted. Long hair must be pulled back while in shop area.
8. **NO USE** of shop tools, machinery or lifts without instructor supervision or approval.
9. Be prepared and on time for class each day.
10. **Cleaning is everyone's job.**

I will abide by these rules of the shop and classroom.

Student-_____

Parent or Guardian-_____

Teacher- Mr. Baldwin

Date-_____

I have read the syllabus and understand the requirements of this course.

Student/Date-_____

Parent or Guardian/Date-_____