

COURSE OBJECTIVE

Students will learn concepts and develop basic skills necessary to diagnose automotive electrical problems, to include electrical principles, use of basic electrical test equipment, and how to interpret wiring diagrams, and to gather and analyze information. In addition, students will diagnose and repair automotive batteries, starting, and charging, lighting systems, advanced automotive electrical systems, to include body electrical accessories, and basic computer control. Major emphasis will be in diagnostic procedures. Students will receive instruction necessary to take the Automotive Service Excellence examination.

NOTE: *Students should expect to study a minimum of 2-3 hours each night!
Nightly Homework assignments including weekends.*

REQUIRED SUPPLIES

1. TEXTBOOK:
 - A) AUTOMOTIVE ELECTRICITY ELECTRICITY, ELECTRONICS, AND COMPUTERS Price*: (\$84.00 new)
*used books may be available
 - B) Written by: Hollembeak - Publisher: Delmar
 - C) Available from the Skyline College Bookstore

2. TEXTBOOK:
 - A) ELECTRICAL 5 - BINDER WORKBOOK SET Price: (\$75.00)
 - B) Written by: K. Sullivan and Toyota Motor Sales
 - C) Available from the Instructor.

3. FINE-TIP COLOR HIGHLIGHTER PENS: Price: (\$6.00)
 - A) Highlight Colors: Blue, Green, Pink, Orange, and Yellow.)
 - B) Needed for learning wiring diagrams and tests.

4. BINDERS - REQUIRED Price: (\$6.00)
 - A) One Black 2" 3-Ring Binder
 - B) One package of 5-Tab dividers with labels.
 - C) Binder paper is required for notes and exercises.

5. SCANTRONS Price: (\$4.00)
 - A) Sixteen required for tests.
 - B) Available from the Skyline College Bookstore.

6. CALCULATOR Price: (\$3.00)
 - A) Optional, not required. Recommended

7. ELECTRICAL TOOL SUPPLEMENT SET:^{1, 2}
 - A) Must be of a professional quality.
 - B) Required in addition to the Basic Set.

8. SHOP ATTIRE
 - A) Safety Glasses.
 - B) Appropriate work shirt, pants, belt, and shoes.

Notes: ¹ Check with school before purchasing tools - **Student Discounts are available.**

² In addition to the above, all courses require students to have the approved Basic Tool Set.