

Course Outline for NAUT ASCL
AUTOMOTIVE SUMMER CAMP HANDS ON
Effective: Summer 2021

I. CATALOG DESCRIPTION:
 NAUT ASCL — Noncredit

This is the hands-on lab section of the Automotive Summer Camp! To enroll in this class you must first be enrolled in Automotive Summer Camp (ASMC). Have you ever wanted to know more about your car but do not have time to take an 18-week course? Have you ever wanted to change your own oil? Learn what the cryptic code on the tire means? Learn general knowledge about cars? This is the class for you! From maintenance to oil changes to tires to smog to hybrids to jump starting. Speaking of jump starting, let's start!

Corequisite
 NAUT ASMC - Automotive Summer Camp

Grading Methods:
 Pass/No Pass

Discipline:
 • Automotive Technology

Noncredit Category
 I - Short-Term Vocational

	MIN	MAX
Total Noncredit Hours:	27.00	40.00

II. PREREQUISITE AND/OR ADVISORY SKILLS:

III. MEASURABLE OBJECTIVES:

Upon completion of this course, the student should be able to:

- A. Demonstrate an oil change
- B. Interpret different types of tire information
- C. Practice tire changing
- D. Perform a vehicles maintenance schedule to their own vehicle
- E. Demonstrate proper cautions under the vehicles hood
- F. Estimate vehicle repair costs.
- G. Operate jumper cables to jump start a vehicle
- H. Change a vehicles wiper blades.

IV. CONTENT:

- A. Oil Changes
 - 1. Interval
 - 2. Correct oil
 - 3. Additives
- B. Tire Safety
 - 1. Reading Date Code
 - 2. Reading Tire Size
 - 3. TPC Specs
 - 4. Tire Placard
 - 5. Tires
 - a. Tread Depth
 - b. Air Pressure
- C. Change a Spare Tire
 - 1. Where is the stuff?
 - 2. Spare tire changing, a how to.
 - 3. Jack placement
 - 4. Breaking loose the lug nuts
 - 5. Removing Tire
 - 6. New tire and lug nuts
 - 7. Tightening
 - 8. Lower tightening
- D. Checking Fluids/Filters/Maintenance
 - 1. Maintenance Schedule
 - a. Where is it?

2. Oil
3. Transmission
4. Brake
5. Clutch
6. Coolant/Antifreeze
7. Power Steering
8. Air filter
9. Cabin Air filter
10. Tires
 - a. Tread Depth
 - b. Air Pressure
- E. What is under the car's hood?
 1. Cautions
 2. Engine
 3. Belts/Hoses
 4. Fluids
 5. Hybrid Safety
- F. Taking your car in for Service
 1. Labor Rates
 - a. Shopkey Examples
 2. Estimates
- G. How to Jump Start
 1. Hook up
 2. Remove
- H. Instrument panel lights/gauges
 1. Color. Amber/Red, Green/Blue
 2. Check Engine
 3. TPMS
 4. Oil
 5. Coolant
 6. Brakes/ABS
 7. Suspension
 8. Airbag
- I. How to inspect/install wipers and fill washer fluid

V. METHODS OF INSTRUCTION:

- A. **Discussion** -
- B. **Demonstration** -
- C. **Lab** -

VI. TYPICAL ASSIGNMENTS:

- A. Lab work
 1. Change a spare tire
 2. Change oil on a vehicle
 3. Inspect tire date codes

VII. EVALUATION:

Methods/Frequency

- A. Class Participation
 - Every meeting
- B. Lab Activities
 - Every meeting

VIII. TYPICAL TEXTS:

1. Shopkey.com, Snap-on, (Current (website)).

IX. OTHER MATERIALS REQUIRED OF STUDENTS:

- A. Safety glasses