

Louisiana Delta Community College

Academic Affairs Master Syllabus

Course Name: FUEL, AIR INDUCTION, AND EXHAUST SYSTEMS

Course Number: AUTO 1830

Credit Lecture hours: 0 **Credit Lab Hours:** 2 **Contact Hours:** 60

Textbook, Author, and Publisher: To be provided by College Campus

Instructor Information: To be provided by College Campus

Class Location: To be provided by College Campus

Course Description: This course teaches the procedures and methods necessary to diagnose and repair fuel supply and fuel delivery systems. It also teaches the repair procedures for intake and exhaust systems.

Prerequisites: None

Co-requisites: None

Learning Outcomes:

On completion of this course, the student will be able to:

1. Diagnose hot or cold no-starting, poor drivability, incorrect idle speed, poor idle, flooding, hesitation, surging, engine misfire, power loss, stalling, poor mileage, dieseling, and emissions problems on vehicles with carburetor-type fuel systems; determine necessary action. (P-3)
2. Diagnose hot or cold no-starting, poor drivability, incorrect idle speed, poor idle, flooding, hesitation, surging, engine misfire, power loss, stalling, poor mileage, dieseling, and emissions problems on vehicles with injector-type fuel systems; determine necessary action. (P-3)
3. Check fuel for contaminants and quality; determine necessary action. (P-3)
4. Inspect and test mechanical and electrical fuel pumps and pump control systems for pressure, regulation and volume; perform necessary action. (P-1)
5. Replace fuel filters. (P-1)
6. Inspect and test cold enrichment system and components; perform necessary action. (P-3)
7. Inspect throttle body, air induction system, intake manifold, and gaskets for vacuum leaks and/or unmetered air. (P-2)
8. Inspect and test fuel injectors. (P-2)
9. Check idle speed and fuel mixture. (P-2)
10. Adjust idle speed and fuel mixture. (P-3)
11. Inspect the integrity of the exhaust manifold, exhaust pipes, muffler(s), catalytic converter(s), resonator(s), tail pipe(s), and heat shield(s); perform necessary action. (P-2)
12. Perform exhaust system back-pressure test; determine necessary action. (P-1)
13. Test the operation of turbocharger/supercharger systems; determine necessary action. (P-3)

Assessment Measures: To be provided by the College Campus.

Library Resource Center:

The Delta Library and Learning Resource Center is committed to providing quality information and learning resources and services, including technology, in supporting the overall mission of Delta Community College and its commitment to lifelong learning.

Special Accommodations:

Louisiana Delta Community College complies with Section 504 of the Rehabilitation Act, as well as the Americans with Disabilities Act. Students with disabilities who attend the Monroe campus may make a request by contacting the Director of Counseling and Disability Services (See College Directory for contact information.) at the beginning of each semester. Reasonable accommodations will be attempted for students with documented disabilities. If an impairment is identified later in the semester, a non-retroactive accommodation plan will be developed. Students at satellite campuses should contact the Coordinator of Student Affairs at their particular campus.

Title IX:

Louisiana Delta Community College is committed to protecting the rights of students, which includes compliance with Title IX requirements. As such, the institution and members of our community will not tolerate the offenses of dating violence, domestic violence, sexual assault, and stalking. Students with Title IX concerns should contact the College's Title IX Coordinator (See College Directory for contact information.) Students are required to complete Sexual Assault Awareness and Prevention Online Training. Access to this online course will be sent out through the Delta email account.

Student Code of Conduct:

Louisiana Delta Community College encourages an environment of academic integrity and mutual respect. Students should read and follow both academic and behavioral expectations identified in the Code of Student Conduct that can be found online at www.ladelta.edu. Students are expected to act with integrity, respect the rights of others, and conduct themselves in a professional manner. The Honor Code prohibits academic misconduct such as cheating, engaging in unauthorized collaboration, and plagiarism. Violations of the Code of Student Conduct may result in disciplinary action as provided in the Code. Incidents are reported through the online Student Conduct system.