

# Louisiana Delta Community College

## Academic Affairs Master Syllabus

**Course Name:** DRIVE TRAIN AND CLUTCH DIAGNOSIS AND REPAIR

Course Number: AUTO 1300

Credit Lecture hours: 0      Credit Lab Hours: 1      Contact Hours: 30

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 of diagnosis for manual drive trains and clutches. It also covers removal, installation, and adjustments of clutches.

**Prerequisites:** Must complete specified semester college theory level courses.

**Co-requisites:** None

### **Learning Outcomes:**

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

#### General Drive Train Diagnosis

1. Identify and interpret drive train concerns; determine necessary action. (P-1)
2. Research applicable vehicle and service information, such as drive train system operation, vehicle service history, service precautions, and technical service bulletins. (P-1)
3. Locate and interpret vehicle and major component identification numbers (VIN, vehicle certification labels, calibration decals). (P-1)
4. Diagnose fluid usage, level, and condition concerns; determine necessary action. (P-1)
5. Drain and fill manual transmission/transaxle and final drive unit. (P-2)

#### Clutch diagnosis and Repair

1. Diagnose clutch noise, binding, slippage, pulsation, and chatter; determine necessary action. (P-1)
2. Inspect clutch pedal linkage, cables, automatic adjuster mechanisms, brackets, bushings, pivots, and springs; perform necessary action. (P-1)

**Learning Outcomes continued:**

3. Inspect hydraulic clutch slave and master cylinders, lines, and hoses; determine necessary action. (P-1)
4. Inspect release \*throw-out) bearing, lever, and pivot; determine necessary action. (P-1)
5. Inspect and replace clutch pressure plate assembly and clutch disc. (P-1)
6. Bleed clutch hydraulic system. (P-1)
7. Inspect, remove, or replace pilot bearing or bushing (as applicable) (P-1)
8. Inspect flywheel and ring gear for wear and cracks; determine necessary action. (P-1)
9. Inspect engine block, clutch (bell) housing, transmission/transaxle case mating surfaces, and alignment dowels; determine necessary action. (P-3)
10. Measure flywheel runout and crankshaft endplay; 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](http://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.