

# Louisiana Delta Community College

## Academic Affairs Master Syllabus

**Course Name:** SUSPENSION SYSTEMS DIAGNOSIS AND REPAIR

**Course Number:** AUTO 1420

**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 different types of suspension systems and the procedures and methods used for diagnose and repair.

**Prerequisites:** None

**Co-requisites:** None

### **Learning Outcomes:**

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

#### Front Suspension

1. Diagnose short and long arm suspension system noises, body sway, and uneven riding height concerns; determine necessary action. (P-1)
2. Diagnose strut suspension system noised, body sway, and uneven riding height concerns; determine necessary action. (P-1)
3. Remove, inspect, and install upper and lower control arms, bushings, shafts, and rebound bumpers. (P-3)
4. Remove, inspect, and install strut rods (compression/tension) and bushings. (P-2)
5. Remove, inspect, and install upper and/or lower ball joints. (P-2)
6. Remove, inspect, and install steering knuckle assemblies. (P-2)
7. Remove, inspect, and install short and long arm suspension system coil springs and spring insulators. (P-2)
8. Remove, inspect, install, and adjust suspension system torsion bars; inspect mounts. (P-3)
9. Remove, inspect, and install stabilizer bar bushings, brackets, and links. (P-2)
10. Remove, inspect, and install strut cartridge or assembly, strut coil spring, insulators (silencers), and upper strut bearing mount. (P-1)
11. Lubricate suspension and steering systems. (P-2)

**Learning Outcomes continued:**

Rear suspension

1. Remove, inspect, and install coil springs and spring insulators. (P-2)
2. Remove, inspect, and install transverse links, control arms, bushings, and mounts. (P-2)
3. Remove, inspect, and install leaf springs, leaf spring insulators (silencers), shackles, brackets, bushings, and mounts. (P-3)
4. Remove, inspect, and install strut cartridge or assembly, strut coil spring, and insulators (silencers). (P-2)

Miscellaneous Service

1. Inspect, remove, and replace shock absorbers. (P-1)
2. Remove, inspect, and service or replace front and rear wheel bearings. (P-1)
3. Test and diagnose components of electronically controlled suspension systems using a scan tool; 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.