



CLR151 Mechanical & Electrical Syllabus

Course Information

Credits	3
Campus	Washburn Institute of Technology
Address	5724 SW Huntoon
City/State/Zip	Topeka, Kansas 66604
Office Fax	785-273-7080

Description

Through classroom and/or lab/shop learning and assessment activities, in this course students will: determine how to diagnose steering and suspension; diagnose electrical concerns; complete headlamp and fog/driving lamp assemblies and repairs; demonstrate self-grounding procedures for handling electronic components; determine diagnosis, inspection and service needs for brake system hydraulic components; examine components of heating and air conditioning systems; determine the inspection, service and repair needs for collision damaged cooling system components; distinguish between the under car components and systems; and determine the diagnosis, inspection and service requirements of active and passive restraint systems.

Textbooks

none

Student Learning Outcomes:

- A. Communicate effectively.
- B. Integrate technology.
- C. Learn effectively - use academics effectively.
- D. Demonstrate cooperative/teamwork skills.
- E. Apply safety.
- F. Think critically and creatively.
- G. Demonstrate responsible work ethics.

Competencies

1. Determine how to diagnose steering and suspension.
2. Diagnose electrical concerns.
3. Complete headlamp and fog/driving lamp assemblies and repairs.
4. Demonstrate self-grounding procedures for handling electronic components.
5. Determine diagnosis, inspection and service needs for brake system hydraulic components.
6. Examine components of heating and air conditioning systems.
7. Determine the inspection, service and repair needs for collision damaged cooling system components.
8. Distinguish between the under car components and systems.
9. Determine the diagnosis, inspection and service requirements of active and passive restraint systems.

Guidelines for Success

Assessment Plan

Assessment is an integral part of the educational process at Washburn Tech and accurate feedback is an important tool in continuously improving the institution's technical programs. Students can expect to participate in assessment activities prior to entry into programs, within specific courses and following program completion for specific fields of study.

Grading Scale:
93% or higher A
85-92% B
76-84% C
69-75% D
Less than 68% F

Grading Breakout

Lab Activities25%
Daily Performance.....30%
Classroom Activities15%
Weekly Quizzes.....10%
Final Exams.....20%

Attendance

No make-up is available for missed time. Textbook class assignment and comprehensive exams can be made up upon approval by the instructor within one week of the absence. Makeup exams must be coordinated with the instructor in advance.

Disability

The Special Support Services (SSS) Office is responsible for assisting in arranging accommodations and for identifying resources at Washburn Institute of Technology for persons with disabilities. Qualified students with disabilities MUST register and provide documentation with the office to be eligible for services. New requests for accommodations should be submitted two months or more prior to the date services should begin; however, contact the SSS Office as soon as a need may arise. Depending on the accommodation request, four to eight week lead time may be needed for timely and effective provision of services. SSS coordinates and assist in arranging services it deems appropriate of eligible students on a case-by-case basis.

If you are a student with a disability that may substantially limit your ability to participate in this class and believe you will need accommodations, it is your responsibility to contact:

Special Support Services Coordinator
Phone: 785-228-6356
E-Mail: ssscoordinator@washburn.edu

