AU3.296 Advanced Steering/Suspension/Brakes/ADAS

Course Syllabus for Spring term 2021, CRN: 40768

Instructor: Bryan Schiedler

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Class Schedule: Monday thru Thursday 8 am - 11:50 am

Course Description: In this class, you add to the skills already taught in Suspension, Steering and Braking Systems by learning to repair, replace and troubleshoot these advanced computerized systems. This course also includes 20 hours of advanced electrical troubleshooting techniques. Recommended: valid driver's license, proof vehicle insurance, clean driving record.

Couse objectives:

Upon successful completion of this course, students will be able to: Diagnose and Repair Steering, Suspension and Braking systems. Diagnose, adjust and repair wheel alignment issues. Diagnose and Repair power assist issues. Diagnose and Repair Traction and Stability Control Systems.

Required Text Book: 7th Edition Chassis Systems by James Halderman.

Grading System:

- Attendance......20% of final grade
- Labs......25% of final grade
- Homework Assignments.....30% of final grade
- ASE Style Final Exam.....25% of final grade

Professional Work Habits: Grade will be based on attendance, professional attitude, and participation in class.

Attendance: 2 of the 3 points you receive for attendance each day come from being punctual and present. You will get 2 points for showing up on time and staying the entire class period. You will only get 1 point if you are late or leave early. You will also receive 1 point a day for being professional. Zero points will be awarded for an absence. There are no excused absences. You are either here or not.

Professional attitude: Be respectful and courteous to everyone. You will be held accountable to the Student Code of Conduct, which outlines expectations pertaining to academic honesty (including cheating and plagiarism), on-line classroom conduct, and general conduct.

Homework Assignments: The textbook assignments are based on the chapter readings each week. The readings precede the class lectures, so it is important to do them on time. Assignments are due one week from opening. I will accept late assignments up to one week late at a 10% penalty.

ASE style Final Exam: The exam will be held on Thursday, June 11th in Moodle. The questions are based on information from chapters discussed in class. This is a multiple-choice ASE style exam. You will be taking this test online in Moodle. No late tests will be accepted unless other arrangements are made with the instructor prior to the start of the test being taken.

You will receive one of these letter grades.

A = 90 - 100% B = 80 - 89% C = 70 - 79% D = 60 - 69% F = 59% and below

IN - Incomplete must be contracted with the instructor

W - Withdraw must be entered in WebRunner by the student prior to deadline.

Note: The IN and W are non-completion grades for academic standing and financial aid. For a tuition/fees refund you must officially drop this class prior to Monday, May 11th.

Make-up Tests: Students absent for any evaluation will need to schedule an appointment with the instructor and together set a time/location to take the exam.

Reading Assignments: Assigned per topic covered, complete the Chapter Quizzes.

Class Timeline

Reading assignments:

WEEK 1: ABS Braking Systems Ch 17 and 18

WEEK 2: Electronic Stability Control systems / Regenerative Braking Ch 19 and 20

WEEK 3: Electronic Chassis systems Ch 27 and 31

WEEK 4: Intro To ADAS

WEEK 5: ADAS Systems Cont...

FINALS WEEK: Final Exam

College Policies

Disability services and emergency planning:

Students who may need accommodations due to documented disabilities, who have medical information that the instructor should know, or who need special arrangements in an emergency should speak with their instructor during the first week of class. If you believe you may need accommodations but are not yet registered with the Center for Accessibility Resources (CFAR), please visit the CFAR Website for steps on how to apply for services or call 541-917-4789.

LBCC Comprehensive Statement of Nondiscrimination

LBCC prohibits unlawful discrimination based on race, color, religion, ethnicity, use of native language, national origin, sex, sexual orientation, gender, gender identity, marital status, disability, veteran status, age, or any other status protected under applicable federal, state, or local laws. For further information, see Board Policy P1015 in our Board Policies and Administrative Rules. Title II, IX, & Section 504: Scott Rolen, CC-108, 541-917-4425; Lynne Cox, T-107B, 541-917-4806, LBCC, Albany, Oregon. To report: linnbenton-advocate.symplicity.com/public report.

Know your rights and responsibilities

LBCC students have rights: the right to free speech, the right to assemble, the right of a free press, etc. LBCC students also have responsibilities to their community: the responsibility to participate and engage in class, the responsibility to advocate for their needs (ask for help), the responsibility to support a respectful teaching and learning environment, the responsibility to treat all persons with respect, the responsibility to be truthful and honest in all work and communications, and the responsibility to follow staff directions, local, state, and federal laws.

Rights and responsibilities balance together to create the best learning environment. For example, while you have free speech in the café or courtyard, in class the instructor decides whose turn it is to talk and what the topics for conversation will be. Students are free to believe what they believe, but instructors may require students to learn and recite concepts, principles, or theories for a class even if the student does not believe those concepts. You play a role in creating a positive community at LBCC.

Please review your rights and responsibilities (http://linnbenton.edu/go/studentrights).

If you believe a student is violating your rights, ask to be treated with respect. If that does not cure the situation, report to Associate Dean Dr. Lynne Cox, Takena Hall Rm. 107. If you believe a faculty member or LBCC employee is violating your rights, please report to Human Resources, Scott Rolen, Calapooia Center Rm. 108 to receive credit.