Advanced Engines & Electronics

DST - 2045 001

Course Student Learning Outcomes

- Demonstrate proficiency in Automotive Service Excellence-Education Foundation (ASE-T1,T2,T6) Diesel Engines Systems Master Medium/Heavy Truck Technician Tasks in accordance with industry standards.
- Assigned lab work to complete in a professional manner, by working in teams in Diesel labs that emulate industry Heavy Duty shops.

Course Prerequisites

Must complete first year certificate to enter classes

Engagement Plan

Example language:

- I will respond to email within 48. I will offer feedback on major assignments within 48. The best way to contact me is via the Canvas Inbox, as I will prioritize this email over other modes of communication.
- In this course I will be posting interactive announcements which will offer specific opportunities for class questions and extra credit every other week.
- Additionally, I will be participating in the discussion forums with you to share my perspective within the discipline and to offer some nuances of interpretation that may not be present in your textbook.
- Lastly, we'll be holding small group Q & A sessions, where we can learn from our peers (and faculty) on some of the more difficult units within the course.

Keys for Success (how to succeed in the course)

Be to class, engage in lecture. Participate in lab and ask needed questions.

Additional Materials

Basic hand tools required

Brief Description of Assignments/Exams

1. Introduction: This course will provide the student with the opportunity to develop the necessary skills and knowledge required to seek and keep employment in the Field of Heavy-Duty Trucking and Heavy-Duty equipment. Students will receive training in the following areas:
2. Students will be using text, service manuals and handouts in the study of practical application of theory principals for the assessment, disassembly, evaluation, assembly and diagnostic testing of various components problems to enable the student to develop basic skills, critical thinking, judgment, teamwork, leadership and written and oral communication skills.
3. Emphasis will be placed on safety and maintenance of all systems and components. Proper use of specialized tools and equipment will be stressed along with safety aspects involved in operating and using these special implements.
4. Organization:
    1. Course Content and time allotment:
    2. A lecture will be held one hours per day, five days a week. (Monday - Friday)
    3. Lab will be held 4 hours per day, five days a week. (Monday -Friday)
5. Training Format:
    1. A number of classroom sessions will involve presentations of related information on the materials and process of preventive maintenance and servicing. This will be done through the media of lectures, discussion of assignments, and audio-visual aids.
    2. A number of demonstrations will be given to clarify operation and maintenance difficulty concerning certain components and assemblies.

3. All technical bulletins will be provided as necessary. Handouts on specific assignments will be provided by the instructor.

6. Evaluation: Theory class assessments are based on:
    1. Unit quiz scores (max 100 points each)
    2. Final exam (max 100 points)
    3. Daily attendance (25 days @ 4 pts per day = 100 points on time.
       Note, 2 pts for class 2 pts for Lab
       See DISCIPLINE for DEDUCTIONS
    4. Active participation in Lab and assignments (max 100 points)
    5. Completion of theory Assignments (max 100 pts.)

Assignment Schedule

Due Date	Assignment Name	Assignment Type	Points
	Introduce Yourself	Discussion	0
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	Roll Call Attendance	Assignment	100
11/10/21	Homework 1 signal Processing	Assignment	100
11/12/21	test 1	Quiz	100
11/17/21	Homework 2 Sensors	Assignment	100
11/19/21	Test 2	Quiz	100
12/1/21	Homework 3 Injection pumps (Electronic)	Assignment	100
12/3/21	test 3	Quiz	100

Due Date	Assignment Name	Assignment Type	Points
12/8/21	Homework 4 Injectors 7 Cummins Unit Injection	Assignment	100
12/10/21	Attendence	Assignment	100
12/10/21	Final test	Quiz	100
12/10/21	lab grade	Assignment	100

Grading Scale

A-. (90-93%)	C-. (70-73%)
B+. (87-89%)	D+. (67-69%)
B. (84-86%)	D. (64-66%)
B-. (80-83%)	D- (63%)
C+. (77-79%)	E. (below 63%)

Academic Integrity

If caught cheating will be removed from class and fail course

How to Navigate to Canvas

Institutional Policies

As members of our academic community, we would like to invite you to review the Institutional Syllabus which covers important policies and procedures. This document contains important links for students on the code of student rights and responsibilities,

academic integrity, and grading policies, Title IX and other important acknowledgements. By familiarizing yourself with this information, you can help us create a safe and respectful environment for everyone.

For more information, navigate to the Institutional Policies tab on the Institutional Syllabus page.

Learning Support and Tutoring Services

We are pleased to offer a range of tutoring and learning support services to help you achieve your academic goals. Whether you need assistance with a specific subject or want to improve your study skills, you have many options for tutoring or other support.

To learn more about the services we offer and how to access them, visit the Institutional Syllabus page under the Tutoring and Learning Support tab. We encourage you to take advantage of these resources to help you succeed in your studies. If you have any questions or would like to schedule a tutoring session, please don't hesitate to reach out to us. We are here to support you in any way we can.

Advising and Counseling Support Services

At our institution, we are committed to supporting your academic and personal growth. That's why we offer a range of advising and counseling services to help you navigate the challenges of college life. To learn more about the resources available to you and how to access them, visit the Institutional Syllabus page under the Advising and Counseling Support Services tab. Our advising team and the support centers across campus are here to support you in achieving your goals and overcoming any obstacles you may face.

Student Academic Calendar

As students you should be aware of all important dates in the semester, such as the day that courses begin and end, as well as the drop date and the last day to withdraw. To learn more about those dates, navigate to the Student Academic Calendar below:

SLCC Student Academic Calendar