



COURSE OUTLINE

MPF0130

Prepared: George Parsons Approved: Corey Meunier

Course Code: Title	MPF0130: TRUCK COACH VEHICLE SYSTEMS MAINT - CICE
Program Number: Name	1120: COMMUNITY INTEGRATN
Department:	C.I.C.E.
Semester/Term:	18W
Course Description:	You will learn the procedures for servicing truck and coach vehicle systems for the purpose of routine maintenance. This will involve servicing of the truck, bus or tractor and trailer combination vehicles on a monthly maintenance schedule. You will perform engine and power train lubrication fluid inspections and changes, as well as lubrication to chassis steering and suspension components and inspections of brake and brake adjustment systems. You will be required to record data from such vehicles and equipment into the service records similar to that used by trucking and bussing companies and fleets. This will include the creation and setup of such programs that could be adapted to electronic files and storage as so commonly used today. All servicing of this nature would be conducted by using proper safety and maintenance procedures as outline in the proper manufacturer service manuals.
Total Credits:	1
Hours/Week:	2
Total Hours:	14
Essential Employability Skills (EES):	<p>#1. Communicate clearly, concisely and correctly in the written, spoken, and visual form that fulfills the purpose and meets the needs of the audience.</p> <p>#2. Respond to written, spoken, or visual messages in a manner that ensures effective communication.</p> <p>#3. Execute mathematical operations accurately.</p> <p>#4. Apply a systematic approach to solve problems.</p> <p>#5. Use a variety of thinking skills to anticipate and solve problems.</p> <p>#6. Locate, select, organize, and document information using appropriate technology and information systems.</p> <p>#7. Analyze, evaluate, and apply relevant information from a variety of sources.</p> <p>#8. Show respect for the diverse opinions, values, belief systems, and contributions of others.</p> <p>#9. Interact with others in groups or teams that contribute to effective working relationships and the achievement of goals.</p> <p>#10. Manage the use of time and other resources to complete projects.</p> <p>#11. Take responsibility for ones own actions, decisions, and consequences.</p>



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Course Evaluation:

Passing Grade: 50%, D

Evaluation Process and Grading System:

Evaluation Type	Evaluation Weight
Assigned Shop Projects	50%
Shop - Practical	50%

Books and Required Resources:

Heavy Duty Truck Systems by Bennett
Publisher: Cengage Learning Edition: 6th

Course Outcomes and Learning Objectives:

Upon successful completion of this course, the CICE student, with the assistance of a Learning Specialist will acquire varying levels of skill development relevant to the following learning outcomes:

Course Outcome 1.

Properly raise, support and lower vehicles and equipment such as trucks, tractors and trailers for the purpose of performing lubrication and service.

Learning Objectives 1.

- Find lifting locations
- Safely raise and support assigned vehicles

Course Outcome 2.

Perform the applicable engine lube service and chassis lubrication service to a variety of on road vehicles and equipment.

Learning Objectives 2.

- Change engine oil and filters
- Lube chassis as required
- Lube steering linkage and driveline components as required



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Course Outcome 3.

Perform visual inspection, test and repair vehicle lighting systems.

Learning Objectives 3.

Check operation of all lighting systems
Replace and repair lighting as required

Course Outcome 4.

Perform a proper circle check inspection of a combination vehicle as well as a truck or tractor type vehicle according to Trucking Industry Standards.

Learning Objectives 4.

Inspect tire wear and record measurements and pressures
Measure brake chamber push rod stroke
Check wheel attachment
Check compressor mounting and air pressure build time
Listen for audible air leaks
Check fifth wheel for proper mounting
Visually inspect the frame for cracks

Course Outcome 5.

Perform Cooling System testing and Service using the proper methods and coolant handling equipment according to Manufacturers

Learning Objectives 5.

Test antifreeze freeze protection
Test PH and recommend the proper procedure to correct the problem
Check water pump drive system and fan
Check rad and hoses for condition, external leaks and cleanliness



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Course Outcome 6.

Perform scheduled maintenance inspections according to various Company oriented inspection criteria and record results.

Learning Objectives 6.

Perform A, B and C type inspections on forms supplied
Electronically store records of inspection results

Course Outcome 7.

Visually inspect batteries for loose and corroded cables and open circuit voltage. Check charging and starting system operation. Clean and service batteries as required. Perform battery load test with an electronic battery tester to confirm that the batteries are within the proper specifications.

Learning Objectives 7.

Perform wiggle test
Check battery voltage
Test charging voltage
Clean and service batteries as required
Perform electronic load test
Check charging system voltage at the batteries
Test cranking voltage
Perform starter current draw test

CICE Modifications:

Preparation and Participation

1. A Learning Specialist will attend class with the student(s) to assist with inclusion in the class and to take notes.
2. Students will receive support in and outside of the classroom (i.e. tutoring, assistance with homework and assignments, preparation for exams, tests and quizzes.)
3. Study notes will be geared to test content and style which will match with modified learning outcomes.



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4. Although the Learning Specialist may not attend all classes with the student(s), support will always be available. When the Learning Specialist does attend classes he/she will remain as inconspicuous as possible.

A. Further modifications may be required as needed as the semester progresses based on individual student(s) abilities and must be discussed with and agreed upon by the instructor.

B. Tests may be modified in the following ways:

1. Tests, which require essay answers, may be modified to short answers.
2. Short answer questions may be changed to multiple choice or the question may be simplified so the answer will reflect a basic understanding.
3. Tests, which use fill in the blank format, may be modified to include a few choices for each question, or a list of choices for all questions. This will allow the student to match or use visual clues.
4. Tests in the T/F or multiple choice format may be modified by rewording or clarifying statements into layman's or simplified terms. Multiple choice questions may have a reduced number of choices.

C. Tests will be written in CICE office with assistance from a Learning Specialist.

The Learning Specialist may:

1. Read the test question to the student.
2. Paraphrase the test question without revealing any key words or definitions.
3. Transcribe the student's verbal answer.
4. Test length may be reduced and time allowed to complete test may be increased.

D. Assignments may be modified in the following ways:

1. Assignments may be modified by reducing the amount of information required while maintaining general concepts.
2. Some assignments may be eliminated depending on the number of assignments required in the particular course.

The Learning Specialist may:

1. Use a question/answer format instead of essay/research format
2. Propose a reduction in the number of references required for an assignment
3. Assist with groups to ensure that student comprehends his/her role within the group



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- 4. Require an extension on due dates due to the fact that some students may require additional time to process information
- 5. Formally summarize articles and assigned readings to isolate main points for the student
- 6. Use questioning techniques and paraphrasing to assist in student comprehension of an assignment

E. Evaluation:

Is reflective of modified learning outcomes.

NOTE: Due to the possibility of documented medical issues, CICE students may require alternate methods of evaluation to be able to acquire and demonstrate the modified learning outcomes

Date:

Wednesday, September 6, 2017

Please refer to the course outline addendum on the Learning Management System for further information.