



COURSE OUTLINE: MPF0121 - AUTO VEH SYST MAINT.

Prepared: Dan Tregonning

Approved: Martha Irwin, Dean, Community Services and Interdisciplinary Studies

Course Code: Title	MPF0121: AUTOMOTIVE VEHICLE SYSTEMS FOR CICE
Program Number: Name	1120: COMMUNITY INTEGRATN
Department:	C.I.C.E.
Academic Year:	2022-2023
Course Description:	This course is an automotive simulated workplace preparation course. The CICE student, with the assistance of a learning specialist, will perform entry level automotive maintenance, servicing and repairs. Topics will include: vehicle component and systems identification, performance of servicing suspension and steering systems including wheels and tires, vehicle lubrication and maintenance inspections, electrical systems testing and inspection, brake system service and inspection and fuel system service. Seasonal inspection programs will be outlined and oil life and tire monitor reset procedures will be performed. Work ethics and customer satisfaction will be stressed in preparation for the work place.
Total Credits:	2
Hours/Week:	4
Total Hours:	28
Prerequisites:	There are no pre-requisites for this course.
Corequisites:	There are no co-requisites for this course.
Essential Employability Skills (EES) addressed in this course:	<p>EES 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>EES 2 Respond to written, spoken, or visual messages in a manner that ensures effective communication.</p> <p>EES 3 Execute mathematical operations accurately.</p> <p>EES 4 Apply a systematic approach to solve problems.</p> <p>EES 5 Use a variety of thinking skills to anticipate and solve problems.</p> <p>EES 6 Locate, select, organize, and document information using appropriate technology and information systems.</p> <p>EES 7 Analyze, evaluate, and apply relevant information from a variety of sources.</p> <p>EES 8 Show respect for the diverse opinions, values, belief systems, and contributions of others.</p> <p>EES 9 Interact with others in groups or teams that contribute to effective working relationships and the achievement of goals.</p> <p>EES 10 Manage the use of time and other resources to complete projects.</p> <p>EES 11 Take responsibility for ones own actions, decisions, and consequences.</p>
Course Evaluation:	



Other Course Evaluation & Assessment Requirements:

The following semester grades will be assigned to students:

Grade
 Definition Grade Point Equivalent
 A+ 90 - 100% 4.00
 A 80 - 89%
 B 70 - 79% 3.00
 C 60 - 69% 2.00
 D 50 - 59% 1.00
 F (Fail) 49% and below 0.00

CR (Credit) Credit for diploma requirements has been awarded.
 S Satisfactory achievement in field /clinical placement or non-graded subject area.
 U Unsatisfactory achievement in field/clinical placement or non-graded subject area.
 X A temporary grade limited to situations with extenuating circumstances giving a student additional time to complete the requirements for a course.
 NR Grade not reported to Registrar's office.
 W Student has withdrawn from the course without academic penalty.

Books and Required Resources:

Automotive Technology: A Systems Approach by Erjavec Restole
 Publisher: Thomson Nelson Learning Canada Edition: 4th Canadian

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	Learning Objectives for Course Outcome 1
Use Motive Power Information systems to service and repair vehicles	<ul style="list-style-type: none"> • Access manufactures service information • Prepare documentation explaining a repair procedure • Document vehicle maintenance inspection results • Prepare a proper vehicle Work Order
Course Outcome 2	Learning Objectives for Course Outcome 2
Safely hoist and support vehicles for servicing and repairs	<ul style="list-style-type: none"> • Perform safe lifting procedures and a two post hoist • Perform safe lifting procedures and a four post hoist • Safely lift and support and vehicle using a floor jack and jack stands • Repair a damaged thread • Identify hand tools
Course Outcome 3	Learning Objectives for Course Outcome 3
Perform work place related electrical testing and repairs.	<ul style="list-style-type: none"> • Demonstrate proficiency at using a DVOM • Perform a wiring repair • Test starting and charging systems • Perform battery load test • Perform battery charging technique
Course Outcome 4	Learning Objectives for Course Outcome 4
Perform Hydraulic brake system inspection and servicing	<ul style="list-style-type: none"> • Inspect and report on braking system condition • Service disc and drum brakes • Report on fluid condition • Repair a brake line



	Course Outcome 5	Learning Objectives for Course Outcome 5
	Perform Steering and Suspension inspection and servicing	<ul style="list-style-type: none"> • Repair a tire • Balance tires • Inspect condition of shocks and struts • Lubricate steering and suspension components
	Course Outcome 6	Learning Objectives for Course Outcome 6
	Perform under hood servicing and testing of engine related components.	<ul style="list-style-type: none"> • Perform a vehicle maintenance inspection including engine oil and filter change • Service a cooling system • Remove and replace engine accessory drive belts • Test engine oil pressure
	Course Outcome 7	Learning Objectives for Course Outcome 7
	Perform Fuel systems inspection, servicing and testing	<ul style="list-style-type: none"> • Replace fuel filters • Repair gas lines • Test fuel pressure

Evaluation Process and Grading System:

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

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.
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
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:

December 18, 2022

Addendum:

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

