Course Prefix, Number, and Title: DT 102 Department: Diesel Instructor: Chris Minnier Academic Year: 2023-2024 Section Number(s): is this a GenEd class? Yes___ No_x_

Complete and submit your assessment report electronically to your department chair. As needed, please attach supporting documents and/or a narrative description of the assessment activities. You may use as many or as few outcomes as necessary.

| Class/Course Outcomes | Assessment Measures | Assessment Results | Any Changes Made as a Result of Assessment |
|--|---|--|--|
| In the boxes below, summarize the outcomes assessed in your class or course during the last year. If this is a GenEd class, include the appropriate GenEd objectives. | In the boxes below, summarize the methods used to assess course outcomes during the last year. Include the criterion you'll use to judge whether or not students have achieved the expected outcome. | In the boxes below, summarize the results of your assessment activities during the last year. Include your judgment as to whether or not the criterion for student achievement has been met. | In the boxes below, summarize how you plan to use the results to improve student learning. |
| Outcome #1: Understand ohm's Law; the relationship between voltage, current, and resistance in a circuit | Assessment Measure: (1) Written Examination (2) Practical Evaluation – Students will be asked to show competence by kinesthetic demonstration. (3) Verbal – Students demonstrate competence by presenting oral demonstrations in groups and individually. Criterion for achievement: 80 % efficient | Results: 95 percent of students understand these concepts. Criterion Met: Yes | Action Plan: Continue to teach but also develop more hands on exercise to strengthen their skills. Add a text book and require reading and homework to reinforce the principles. More reading and review of basic theory |
| Outcome #2: Know how to make voltage, voltage drop, current and resistance measurements to determine the condition of circuits and components | Assessment Measure: 1) Written Examination (2) Practical Evaluation – Students will be asked to show competence by kinesthetic demonstration. (3) Verbal – Students demonstrate competence by presenting oral demonstrations in groups and individually. Criterion for achievement: 80 % efficient: | Results: most know how to do the measurement with the exception of voltage drops. Some still struggle with amp measurement. Some struggle with volt drop testing Criterion Met: Yes | Action Plan: Make more lab exercises for measuring voltage drops. Use homework and reading to reinforce the principles. Use more video on voltage drop testing. More real life lab problems using a volt meter |

| Outcome #3: Know and demonstrate how to load test electrical components using voltage drops | Assessment Measure: 1) Written Examination (2) Practical Evaluation – Students will be asked to show competence by kinesthetic demonstration. (3) Verbal – Students demonstrate competence by presenting oral demonstrations in groups and individually. Criterion for achievement: 80 % efficient | Results: The students do fairly well with starters but other type of electrical devices they struggle more. Students struggle the application beyond what is being demonstrated. Criterion Met: Yes | Action Plan: Develop other load exercise that does not deal with the starter directly. Such as a vent door motor or window motor. Use of video and lab exercises to help them gain a better understanding of the concept. Use the concepts in other classes that are being taught. Use it other Diesel classes to reinforce it home with them that it works |
|--|--|--|--|
| Outcome #4: ➤ Know and demonstrate how to load test batteries | Assessment Measure: 1) Written Examination (2) Practical Evaluation – Students will be asked to show competence by kinesthetic demonstration. (3) Verbal – Students demonstrate competence by presenting oral demonstrations in groups and individually. Criterion for achievement: 80 % efficient | Results: Most students understand this concept by the end of class. They struggle with problems out of the normal operation of the battery. Criterion Met: Yes | Action Plan: More real situations that is hard to simulate in the lab. Look for ways to make them more real to life. |
| Outcome #5: ➤ Know and demonstrate how to solder repair wiring | Assessment Measure: 1) Written Examination (2) Practical Evaluation – Students will be asked to show competence by kinesthetic demonstration. (3) Verbal – Students demonstrate competence by presenting oral demonstrations in groups and individually. Criterion for achievement: 80 % efficient | Results: The students do really well with this concept. Criterion Met: Yes | Action Plan: Keep teaching it as it has been already. |

| Outcome #6: | Assessment Measure: | Results: | Action Plan: |
|-----------------------------|--|--------------------|--|
| • Demonstrate the ability | | | More activities of pulling information |
| to locate sources of | (1) Written Examination | | from the service manual and reading |
| information related to | | | schematics. |
| electrical systems. (1,2,3) | (2) Practical Evaluation – Students will | | |
| | be asked to show competence by | | |
| | kinesthetic demonstration. | Criterion Met: Yes | |
| | | | |
| | (3) Verbal – Students demonstrate | | |
| | competence by presenting oral | | |
| | demonstrations in groups and | | |
| | individually. | | |
| | | | |
| | Criterion for achievement:80 % | | |

Notes:

I have reviewed this report:

Revised 9/12

| Department Chair | | |
|------------------|--|--|

Date_____

Dean

Date_____

Vice President of Academic Affairs and Student Services

Date_____