

# Assessment: Course Four Column



## Courses (CTE) - Industrial Millwright Tech

### IT 105: Mechanical Power Trans

Course Outcomes	Assessment Measures	Results	Actions
<p><b>Properties, classifications and types of lubricants</b> - Identify and explain properties, classifications and types of lubricants.</p> <p><b>Course Outcome Status:</b> Active</p> <p><b>Next Assessment:</b> 2020-2021</p> <p><b>Start Date:</b> 07/20/2016</p>	<p><b>Evaluation</b> - Written tests and performance evaluations.</p> <p><b>Criterion:</b> 70 % or higher on written tests. 100% on performance evaluations.</p>	<p><b>Reporting Period:</b> 2015-2016</p> <p><b>Criterion Met:</b> Yes</p> <p>5 of 7 passed written test the first time other 2 retook and passed criteria. 4 of 7 passed criteria the first time, 3 retook and passed criteria. (07/20/2016)</p>	<p><b>Action:</b> I have already purchased 3 more types of greases and 2 more grades of oil to show more examples in the future. With all of the three that did not pass the performance evaluation the first time the mistake was not on the application of the lubricant it was on the type and grade of the lubricant. So my hope is with more examples they will improve on this aspect.</p> <p>(07/20/2016)</p>
<p><b>Types of bearings and common bearing failure modes</b> - Identify types of bearings and common bearing failure modes and the conditions that cause them.</p> <p><b>Course Outcome Status:</b> Active</p> <p><b>Next Assessment:</b> 2020-2021</p> <p><b>Start Date:</b> 07/20/2016</p>	<p><b>Evaluation</b> - Written tests and performance evaluations.</p> <p><b>Criterion:</b> 70 % or higher on written tests. 100% on performance evaluations.</p>	<p><b>Reporting Period:</b> 2015-2016</p> <p><b>Criterion Met:</b> Yes</p> <p>3 of 7 passed written test the first time other 4 retook and passed criteria. 5 of 7 passed criteria the first time, 2 retook and passed criteria. (07/20/2016)</p>	<p><b>Action:</b> I plan on spending another 5 hour class period on this outcome next year. Increasing the time spent on this module in the future should help the test scores and performance evaluation. I also made a cutaway of a pillow block roller bearing that several students said after this module helped them greatly in understanding the parts of a bearing.</p> <p>(07/20/2016)</p>
<p><b>Parts of a bearing, remove and install bearings according to manufactures specifications.</b> -</p>	<p><b>Evaluation</b> - Written tests and performance evaluations.</p> <p><b>Criterion:</b> 70 % or higher on written</p>	<p><b>Reporting Period:</b> 2015-2016</p> <p><b>Criterion Met:</b> Yes</p>	<p><b>Action:</b> This part of the class is very lab intensive and most students excel</p>

<i>Course Outcomes</i>	<i>Assessment Measures</i>	<i>Results</i>	<i>Actions</i>
<p>Identify parts of a bearing, remove and install bearings according to manufactures specifications.  <b>Course Outcome Status:</b> Active  <b>Next Assessment:</b> 2020-2021</p>	<p>tests. 100% on performance evaluations.</p>	<p>6 of 7 passed written test the first time other 1 retook and passed criteria. (07/20/2016)</p>	<p>here. I plan on continuing this part of the class in the same manner because it is successful. I purchased two new bearings, tapered bushings and locknuts to replace the bearings we have been using for the past eight years. This is to add a more realistic and up to date experience for the students. (07/20/2016)</p>
<p><b>Types of seals and seal material and how to remove, inspect and install properly</b> - Identify and explain types of seals and seal material and how to remove, inspect and install properly.  <b>Course Outcome Status:</b> Active  <b>Next Assessment:</b> 2020-2021  <b>Start Date:</b> 07/20/2016</p>	<p><b>Evaluation</b> - Written tests and performance evaluations.  <b>Criterion:</b> 70% or higher on written tests. 100% on performance evaluations.</p>	<p><b>Reporting Period:</b> 2015-2016  <b>Criterion Met:</b> Yes  7 of 7 passed written test the first time. All seven passed Performance Evaluation the first try. (07/20/2016)</p>	<p><b>Action:</b> This part of the class was also mostly in the lab. I combined this lab activity with the installing and removing bearings lab, for the simple reason you have to remove and install seals to remove and install bearings. I purchased two new sets of seals to add a more realistic and up to date experience for the students. (07/20/2016)</p>
<p><b>Couplings and how to remove, inspect and, install them properly</b> - Identify various couplings and how to remove, inspect and, install them properly.  <b>Course Outcome Status:</b> Active  <b>Next Assessment:</b> 2020-2021  <b>Start Date:</b> 07/20/2016</p>	<p><b>Evaluation</b> - Written tests and performance evaluations.  <b>Criterion:</b> 70% or higher on written tests. 100% on performance evaluations.</p>	<p><b>Reporting Period:</b> 2015-2016  <b>Criterion Met:</b> Yes  7 of 7 passed written test the first time. All seven passed Performance Evaluation the first try. (07/20/2016)</p>	<p><b>Action:</b> Next year I am going to move this outcome into IT 220 and use the time I spent on this outcome to increase the time I spend on identifying bearings and common bearing failures. It will fit into the existing curriculum of IT 220 better and that class is longer and I can make it work better. (07/20/2016)</p>
<p><b>Belt and chains drives, how to remove, and install them properly.</b> - Identify and explain belt and chains drives, how to remove, and install them properly.  <b>Course Outcome Status:</b> Active  <b>Next Assessment:</b> 2020-2021  <b>Start Date:</b> 07/20/2016</p>	<p><b>Evaluation</b> - Written tests and performance evaluations.  <b>Criterion:</b> 70% or higher on written tests. 100% on performance evaluations.</p>	<p><b>Reporting Period:</b> 2015-2016  <b>Criterion Met:</b> Yes  7 of 7 passed written test the first time. 5 of 7 passed Performance Evaluation the first try, the other 2 retook two days later and passed. (07/20/2016)</p>	<p><b>Action:</b> I again plan on using some of the time spent on couplings that I am moving to IT 220 next year to lengthen the time spent on this outcome. I purchased several sets of pulleys for pumps we have to increase the opportunity for students to have more hands on experience. I am continually looking for more</p>

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chain driven equipment to use in the lab. (07/20/2016)

**Follow-Up:** I believe overall success of the class what good this year but continually adding more examples for identification and practical use will be an ongoing task in future years. I also am waiting to see if the NCCER curriculum that we use to teach this class and program gets updated. The curriculum is reviewed and changes are made on a five year cycle, but the latest edition has not been updated in ten years so I am expecting an update soon. (07/20/2016)