

GENERAL INFORMATION			
Name: Diane King	Phone #: 77021		
Course Prefix/Number: ETP2232C	Course Title: Power Plant Machines and Components 2		
Number of Credits: 4			
Degree Type	<input type="checkbox"/> B.A. <input type="checkbox"/> B.S. <input type="checkbox"/> B.A.S <input type="checkbox"/> A.A. <input checked="" type="checkbox"/> A.S. <input type="checkbox"/> A.A.S. <input type="checkbox"/> C.C.C. <input type="checkbox"/> A.T.C. <input type="checkbox"/> V.C.C		
Date Submitted/Revised: 03-07-2008	Effective Year/Term: 2011-1		
<input checked="" type="checkbox"/> New Course Competency <input type="checkbox"/> Revised Course Competency			
Course to be designated as a General Education course (part of the 36 hours of A.A. Gen. Ed. coursework): <input type="checkbox"/> Yes <input type="checkbox"/> No			
The above course links to the following General Education Outcomes: <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> <input checked="" type="checkbox"/> Communication <input type="checkbox"/> Numbers / Data <input checked="" type="checkbox"/> Critical thinking <input type="checkbox"/> Information Literacy <input type="checkbox"/> Cultural / Global Perspective </td> <td style="width: 50%; vertical-align: top;"> <input type="checkbox"/> Social Responsibility <input type="checkbox"/> Ethical Issues <input type="checkbox"/> Computer / Technology Usage <input type="checkbox"/> Aesthetic / Creative Activities <input type="checkbox"/> Environmental Responsibility </td> </tr> </table>		<input checked="" type="checkbox"/> Communication <input type="checkbox"/> Numbers / Data <input checked="" type="checkbox"/> Critical thinking <input type="checkbox"/> Information Literacy <input type="checkbox"/> Cultural / Global Perspective	<input type="checkbox"/> Social Responsibility <input type="checkbox"/> Ethical Issues <input type="checkbox"/> Computer / Technology Usage <input type="checkbox"/> Aesthetic / Creative Activities <input type="checkbox"/> Environmental Responsibility
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Course Description (limit to 50 words or less): This course continues the study of industrial machines begun in ETI2416C for students who are preparing for careers in industrial and/or power plant mechanical maintenance. Students learn the principles, concepts, and applications of various mechanical systems encountered in industrial applications, how to identify basic systems and components encountered in power plants, how to troubleshoot equipment problems, and basic procedures involved in maintaining and replacing component parts. Prerequisite: ETP2231C. Laboratory fee. A.S. degree credit only. (2 hr lecture; 4 hr lab).			
Prerequisite(s): ETP2231C	Co requisite(s):		

Course Competencies:

Competency 1: The student will demonstrate an understanding of the purpose and use of valves and valve packing's by:

1. Identifying the types of valves and valve packing, including: globe, gate, plug, vee ball, butterfly, check, relief and safety valves, and steam traps.
2. Explaining common defects, indicators of wear, or malfunctions of valves and valve packing's.
3. Discussing safety measures involved in the repair, replacement and maintenance of valves and valve packing's.
4. Performing troubleshooting activities on valves and valve packing's.
5. Replacing valves and valve packing's.

Competency 2: The student will demonstrate an understanding of the purpose and use of bearings and bushings by:

1. Identifying the types of bearings and bushings, including: roller, trust, and plain bearings.
2. Explaining common defects, indicators of wear, or malfunctions of bearings and bushings.
3. Discussing safety measures involved in replacing bearings and bushings.
4. Performing troubleshooting activities on bearings and bushings.
5. Replacing bearings and bushings.

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Reviewed By Director of Academic Programs Date: _____

Competency 3: The student will demonstrate an understanding of the purpose and use of seals by:

1. Identifying the types of seals, including: mechanical and static.
2. Explaining common defects, indicators of wear, or malfunctions of seals.
3. Discussing safety measures involved in the maintenance and replacement of valves and valve packing's.
4. Performing troubleshooting activities on seals.
5. Replacing seals.

Competency 4: The student will demonstrate an understanding of the purpose and use of pumps by:

1. Identifying the types of pumps, including: centrifugal, axial, mix flow, and positive displacement.
2. Explaining common defects, indicators of wear, or malfunctions of pumps.
3. Discussing safety measures involved in the maintenance and replacement of pumps.
4. Performing troubleshooting activities on pumps.
5. Replacing pumps.

Competency 5: The student will demonstrate an understanding of the purpose and use of compressors by:

1. Identifying the types of compressors used in a power plant.
2. Explaining common defects, indicators of wear, or malfunctions of compressors.
3. Discussing safety measures involved in the maintenance and replacement of compressors.
4. Performing troubleshooting activities on compressors.
5. Replacing compressors.

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