Review of Performance: VEE 266 Rotating Machinery (Independent Study) No. of Student: 1
Submitted by: Cirilo Recana Semesters: Spring 2015

Institutional Student Learning Outcomes (ISLO's)

1. Effective oral communication
2. Effective written communication
3. ***Critical thinking***
4. Problem solving
5. Intercultural knowledge and competence
6. Information literacy
7. **Foundations and skills for life-long learning**
8. Quantitative reasoning

Program Learning Outcomes (PLO's)

1. Practice safety and occupational health procedures in the workplace.
2. Use electricity hand and power tools competently.
3. ***Test electrical equipment.***
4. Interpret schematic wiring diagrams and waveforms.
5. Determine the amount of load per circuit.
6. Install residential wiring circuits according to given specification and plan.
7. Identify and interpret basic solid state (electronics) symbols and circuits schematics commonly found in the electrical industry.
8. ***Analyze circuit operation on basic motors.***
9. ***Perform basic troubleshooting on basic motors.***
10. Install and perform basic maintenance on air-conditioning units.
11. Interpret and install circuits according to rules and regulations of the National Electrical Code book.
12. Install and analyze basic motor control circuits.

<table>
<tr><th>SLO#</th><th>PLO</th><th>I, D, M</th><th>ISLO</th><th>Reflection/Comment</th></tr>
<tr><td>SLO#1
Describe the various devices
that are called rotating machinery.</td><td>3</td><td>I (introduced level)</td><td>3</td><td>SLO was assessed by written test questions using the assessment criteria as stated in the course outline. Result of assessment is shown below:

<table><tr><th>No. of students</th><th>Score</th><th>Comment</th></tr><tr><td>0</td><td>69 or lower</td><td>Failed</td></tr><tr><td>1</td><td>70 or better</td><td>Passed</td></tr></table></td></tr>
</table>

<table>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>100% of the students passed

Observation: Due to the pace of the class, most parts of hands-on experimentation were not delivered because of needed additional time spent on theoretical concept and circuit calculation.</td>
</tr>
<tr>
<td>SLO#2
Describe the operating characteristics of DC & AC Motors and Generators.</td>
<td>3</td>
<td>I,D (introduced and demonstrate level)</td>
<td>8</td>
<td>SLO was assessed by written test questions using the assessment criteria as stated in the course outline. Result of assessment is shown below:

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</table>
100% of the students passed

Observation: Due to the pace of the class, most parts of hands-on experimentation were not delivered because of needed additional time spent on theoretical concept and circuit calculation.</td>
</tr>
<tr>
<td>SLO#3
Describe Stepper Motor and its operating characteristics.</td>
<td>3</td>
<td>I,D (introduced and demonstrate level)</td>
<td>8</td>
<td>SLO was assessed by written test questions using the assessment criteria as stated in the course outline. Result of assessment is shown below:

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100% of the students passed

Observation: Due to the pace of the class, most parts of hands-on experimentation were not delivered because of needed additional time spent on theoretical concept and circuit calculation.</td>
</tr>
</table>

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<tr>
<td>SLO#4
Observe and troubleshoot DC & AC motors.</td>
<td>3, 9</td>
<td>D, M (demonstrate and mastery level)</td>
<td>7</td>
<td>SLO was assessed by written test questions using the assessment criteria as stated in the course outline. Result of assessment is shown below:

<table>
<tr><th>No. of students</th><th>Score</th><th>Comment</th></tr>
<tr><td>0</td><td>69 or lower</td><td>Failed</td></tr>
<tr><td>1</td><td>70 or better</td><td>Passed</td></tr>
</table>
100% of the students passed

Observation: For better understanding of motor/generator principle, class conducted plant visit to have students gain hands-on experience.</td>
</tr>
</table>

FINAL GRADES BREAKDOWN:
A = 1 **B** = 0 **C** = 0 **D** = 0 **F** = 0

Recommendations: Laboratory equipments such as different types of motors must be sufficiently provided so that lab exercises will be able to perform by the students. It is suggested that at least a maximum of 15 students per class with a 1:3 lab equipment ratios.

Course modification is suggested to include motor driven servicing appliance at the end of the course to effectively test competency learned by the students in this course.

Signature: **Cirilo B. Recana**
Electrical Instructor

Date Submitted: May 2015