

Review of Performance: VEE 266 Rotating Machinery
 Submitted by: Cirilo Recana

No. of Student: 15
 Semesters: Fall 2013

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.

SLO#	PLO	I, D, M	ISLO	Reflection/Comment									
SLO#1 Describe the various devices that are called rotating machinery.	3, 8	I (introduced level)	3	SLO was assessed by written test questions using the assessment criteria as stated in the course outline. Result of assessment is shown below: <table border="1" style="width: 100%; margin-top: 10px;"> <thead> <tr> <th>No. of students</th> <th>Score</th> <th>Comment</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">3</td> <td style="text-align: center;">69 or lower</td> <td style="text-align: center;">Failed</td> </tr> <tr> <td style="text-align: center;">12</td> <td style="text-align: center;">70 or better</td> <td style="text-align: center;">Passed</td> </tr> </tbody> </table>	No. of students	Score	Comment	3	69 or lower	Failed	12	70 or better	Passed
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3	69 or lower	Failed											
12	70 or better	Passed											

				<p>20% failed, 80% passed</p> <p>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.</p>									
<p>SLO#2 Describe the operating characteristics of DC & AC Motors and Generators.</p>	3, 8,	I,D (introduced and demonstrate level)	3	<p>SLO was assessed by written test questions using the assessment criteria as stated in the course outline. Result of assessment is shown below:</p> <table border="1"> <thead> <tr> <th>No. of students</th> <th>Score</th> <th>Comment</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>69 or lower</td> <td>Failed</td> </tr> <tr> <td>14</td> <td>70 or better</td> <td>Passed</td> </tr> </tbody> </table> <p>7% failed, 93% passed</p> <p>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.</p>	No. of students	Score	Comment	1	69 or lower	Failed	14	70 or better	Passed
No. of students	Score	Comment											
1	69 or lower	Failed											
14	70 or better	Passed											
<p>SLO#3 Describe Stepper Motor and its operating characteristics.</p>	3, 8	I,D (introduced and demonstrate level)	3	<p>SLO was assessed by written test questions using the assessment criteria as stated in the course outline. Result of assessment is shown below:</p> <table border="1"> <thead> <tr> <th>No. of students</th> <th>Score</th> <th>Comment</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>69 or lower</td> <td>Failed</td> </tr> <tr> <td>13</td> <td>70 or better</td> <td>Passed</td> </tr> </tbody> </table> <p>13% failed, 87% passed</p> <p>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.</p>	No. of students	Score	Comment	2	69 or lower	Failed	13	70 or better	Passed
No. of students	Score	Comment											
2	69 or lower	Failed											
13	70 or better	Passed											

<p>SLO#4 Observe and troubleshoot DC & AC motors.</p>	<p>3, 9</p>	<p>D, M (demonstrate and mastery level)</p>	<p>3</p>	<p>SLO was assessed by written test questions using the assessment criteria as stated in the course outline. Result of assessment is shown below:</p> <table border="1" data-bbox="1230 321 1923 435"> <thead> <tr> <th>No. of students</th> <th>Score</th> <th>Comment</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>69 or lower</td> <td>Failed</td> </tr> <tr> <td>13</td> <td>70 or better</td> <td>Passed</td> </tr> </tbody> </table> <p>13% failed, 87% passed</p> <p>Observation: <i>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.</i></p> <p><i>For better understanding of motor/generator principle, class conducted plant visit to have students gain hands-on experience.</i></p>	No. of students	Score	Comment	2	69 or lower	Failed	13	70 or better	Passed
No. of students	Score	Comment											
2	69 or lower	Failed											
13	70 or better	Passed											

FINAL GRADES BREAKDOWN:

A = 2 B = 5 C = 8 D = [none] F = [none]

Recommendations: Laboratory equipments such as different types of motors must be sufficiently provided so that lab exercises will be well performed 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 enhance student theory and skills in this course.

Signature: Cirilo B. Recana
Electrical Instructor

Date Submitted: December 2013