Review of Performance: Course: **VEM 104 Basic Electricity II/P1** No. of Student: 14
Submitted by: Cirilo B. Recana Semesters: *Spring 2016*

Institutional Learning Outcomes (ILO'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.

<table>
<tr><th>SLO#</th><th>Program SLO#</th><th>IDM</th><th>ILO</th><th>Reflection/Comment</th></tr>
<tr><td>1 Describe electrical principles of alternating current and various AC waveforms.</td><td>4</td><td>I, D</td><td>4,6</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>2</td><td>69 or lower</td><td>failed</td></tr><tr><td>12</td><td>70 or better</td><td>passed</td></tr></table>
86% of the students passed this SLO.

Observation: students with low scores – reason was due to reading comprehension problem.</td></tr>
<tr><td>2. Competently use AC test equipment</td><td>3</td><td>I, D</td><td>6,7</td><td>SLO was assessed by written test questions and a performance exam using the assessment criteria as stated in the course outline. Result of assessment is shown below:</td></tr>
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Program needs to purchase 5 analog multi-meters

Note: Circuit board construction was also introduced to transform circuit sketching to actual circuits. Additionally, circuit analysis is also conducted to compare circuit calculations to circuit measurements.
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<td>3.Calculate resistance, inductance and capacitance of an AC circuit.</td>
<td>4</td>
<td>I,D</td>
<td>4,7</td>
<td>
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<tr><td>5</td><td>69 or lower</td><td>failed</td></tr>
<tr><td>9</td><td>70 or better</td><td>passed</td></tr>
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64% of the student passed this SLO.

Observation: students with low scores – reason was due to poor math skills, mainly the application of engineering (scientific) notations and using scientific calculators.

Observation: To master the use of testing equipment, students must first have a full understanding of the theoretical aspects of the testing equipment. Poor English skills were a contributing factor in mastering this SLO. In addition, SLO required more time for students to practice.
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<td>4.Calculate and perform RCL Circuit troubleshooting</td>
<td>4</td>
<td>I,D</td>
<td>4,7</td>
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Program needs to purchase 5 analog multi-meters

Observation: Contributing factors for low scores were due to poor English skills, poor math skills, and the lack of studying. 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.
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<td>5. Demonstrate transformer action and relays and electrical circuit.</td>
<td>3,4</td>
<td>D</td>
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I – Introduced, D – Developing, M - Mastery

FINAL GRADES:
A = 3 B = 3 C = 6 D = 0 F = 2

Recommendations:
*To improve fundamental knowledge and practical hands-on skills, utilize **more** circuit construction activities with bread-boarding techniques, in which will allow students to design, construct, analyze (calculation and measurement), and perform basic troubleshooting skills on series and parallel circuits.*

Signature: (Sgd.) **Cirilo B. Recana** Date: May 2016
Instructor