

**Review of Performance:** VEE 103 Electronics Fundamentals I Fall 2017, (19 students) P2  
**Submitted by:** Danilo S. Ibarrola

**Institutional Student Learning Outcomes (ISLO):**

- ILO1:** Effective oral communication.
- ILO2:** Effective written communication.
- ILO3:** Critical Thinking
- ILO4:** Problem Solving
- ILO5:** Inter-cultural knowledge and competence.
- ILO6:** Information literacy.
- ILO7:** Foundations and skills for life-long learning.
- ILO8:** Quantitative reasoning.

**Program Learning Outcomes (PLO)**

- PLO1:** Practice Safety and occupational health procedures in the workplace.
- PLO2:** Use electronic tools and test equipment competently.
- PLO3:** Interpret schematic diagrams and waveforms.
- PLO4:** Build electronic projects to a given specification.

SLO#	Program SLO#	I, D, M	ISLO	Reflection/Comment	
1. Describe the fundamentals of voltage and current and the behavior of these parameters in simple electrical circuits.	3. Interpret schematic diagrams and waveforms.	I, D	6, 7	<b>Course Result</b>	SLO was assessed by written test questions using the assessment criteria as stated in the course outline. <b>16</b> (15 male & 1 female) out of <b>19</b> students ( <b>84.21%</b> ) completed the CSLO.
				<b>Target Met</b>	Yes
				Students need more time in hands-on and other practical procedure to reach mastery level performance.	

2. Explain the purpose and identify the various types of resistors and their symbols. Identify the value, power rating and tolerance of resistors using various types of industry codes.	3. Interpret schematic diagrams and waveforms.	I, D	6, 7	<b>Course Result</b>	SLO was assessed by written test questions using the assessment criteria as stated in the course outline. <b>17</b> (17 male & 0 female) out of <b>19</b> students ( <b>89.47%</b> ) completed the CSLO.
				<b>Target Met</b>	Yes
Students need more time in hands-on and other practical procedure to reach mastery level performance.					
3. Describe the purpose and types of switches, fuses and circuit breakers and identify their schematic symbols.	3. Interpret schematic diagrams and waveforms.	I, D	6, 7	<b>Course Result</b>	SLO was assessed by written test questions using the assessment criteria as stated in the course outline. <b>19</b> (18 male & 1 female) out of <b>19</b> students ( <b>100%</b> )
				<b>Target Met</b>	Yes
Students need more time in hands-on and other practical procedure to reach mastery level performance.					
4. Define magnetism and electromagnetism and their characteristics; describe how these characteristics are utilized in the operation of the relay, magnetic circuit breaker and meter.	3. Interpret schematic diagrams and waveforms.	I, D	6, 7	<b>Course Result</b>	SLO was assessed by written test questions using the assessment criteria as stated in the course outline. <b>19</b> (18 male & 1 female) out of <b>19</b> students ( <b>100%</b> )
				<b>Target Met</b>	Yes
Students need more time in hands-on and other practical procedure to reach mastery level performance.					
5. Describe the function of the multimeter and its controls. Safely and accurately use a multimeter to measure	1. Practice safety and occupational health	I, D, M	6, 7	<b>Course Result</b>	SLO was assessed by written test questions using the assessment criteria as stated in the course outline. <b>18</b> (17 male & 1 female) out of <b>19</b> students ( <b>94.74%</b> ) completed the CSLO.
				<b>Target Met</b>	Yes

<p>the circuit quantities of resistance, voltage, and current.</p>	<p>procedures in the workplace. 2. Use electronics tools and test equipment competently. 3. Interpret schematic diagrams and waveforms.</p>			<p>Students need more time in hands-on and other practical procedure to reach mastery level performance.</p>					
<p>6. Using Ohm's Law to define the relationship between resistance, voltage, current, and power in an electrical circuit. By experimentation prove Ohm's Law.</p>	<p>3. Interpret schematic diagrams and waveforms.</p>	<p>I, D</p>	<p>4, 6, 7</p>	<table border="1"> <tr> <td data-bbox="976 630 1241 776"><b>Course Result</b></td> <td data-bbox="1241 630 1915 776">SLO was assessed by written test questions using the assessment criteria as stated in the course outline. <b>17</b> (16 male &amp; 1 female) out of <b>19</b> students (<b>89.47%</b>) completed the CSLO.</td> </tr> <tr> <td data-bbox="976 776 1241 813"><b>Target Met</b></td> <td data-bbox="1241 776 1915 813">Yes</td> </tr> </table>	<b>Course Result</b>	SLO was assessed by written test questions using the assessment criteria as stated in the course outline. <b>17</b> (16 male & 1 female) out of <b>19</b> students ( <b>89.47%</b> ) completed the CSLO.	<b>Target Met</b>	Yes	<p>Students need more time in hands-on and other practical procedure to reach mastery level performance.</p>
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<b>Target Met</b>	Yes								
<p>7. Identify the following circuits, calculate and measure the circuit parameters of voltage, resistance, and current. Troubleshoot the series, parallel and series-parallel circuits. a. Series Circuit b. Parallel Circuit</p>	<p>3. Interpret schematic diagrams and waveforms.</p>	<p>I, D</p>	<p>4, 6, 7</p>	<table border="1"> <tr> <td data-bbox="976 954 1241 1101"><b>Course Result</b></td> <td data-bbox="1241 954 1915 1101">SLO was assessed by written test questions using the assessment criteria as stated in the course outline <b>17</b> (16 male &amp; 1 female) out of <b>19</b> students (<b>89.47%</b>) completed the CSLO.</td> </tr> <tr> <td data-bbox="976 1101 1241 1138"><b>Target Met</b></td> <td data-bbox="1241 1101 1915 1138">Yes</td> </tr> </table>	<b>Course Result</b>	SLO was assessed by written test questions using the assessment criteria as stated in the course outline <b>17</b> (16 male & 1 female) out of <b>19</b> students ( <b>89.47%</b> ) completed the CSLO.	<b>Target Met</b>	Yes	<p>Students need more time in hands-on and other practical procedure to reach mastery level performance.</p>
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<b>Target Met</b>	Yes								

c. Series and Parallel Circuit d. Voltage Divider Circuit e. Bridge Circuit					
8. Simplify and analyze complex circuits using the following methods: a. Kirchhoff's Laws b. Thevenin's Theorem c. Norton's Theorem.	3. Interpret schematic diagrams and waveforms.	I, D	6,7	<b>Course Result</b>	SLO was assessed by written test questions using the assessment criteria as stated in the course outline. . <b>18</b> (17 male & 1 female) out of <b>19</b> students ( <b>94.74%</b> ) completed the CSLO.
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**Special comments:** 18 out of 19 or 94.74% of the students got a grade of C and higher and 1 or 5.26% got a grade of D.

**Summary of Grades:**

**A+ = 0**  
**A = 0**  
**A- = 3**  
**B+ = 2**  
**B = 3**  
**B- = 3**  
**C+ = 2**  
**C = 3**  
**C- = 2**  
**D+ = 1**  
**D = 0**  
**D- = 0**  
**F = 0**

**Recommendations:** Laboratory equipment (NIDA cards) for Electronics Fundamentals I must be enough for at least 3 to 5 sets to be able for the students to perform their required experimentation. Additional quality analog and digital multi-meter must also be purchase so that more hands on experimentation can be done.

Signature:      DANILO S. IBARROLA  
                          Instructor

**Date:** DEC. 2017