## Review of Performance:VEE 110 Discrete Devices I Spring 2018, (14 students, 13 males 1 female) P1Submitted 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.
- **IL07:** 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 electronics projects to a given specification.

SLO#	Program	I, D, M	ISLO		Reflection/Comment
	SLO#				
<ol> <li>Describe semiconductor diode parameters, operation and testing.</li> </ol>	escribe 2. Use electronic I, emiconductor diode tools and test arameters, operation d testing. 2. Use electronic I, equipment competently. 3. Interpret schematic diagrams and waveforms.	3	Course Result	SLO was assessed by written test questions and experiments using the assessment criteria as stated in the course outline. <b>13</b> ( <b>12</b> male & <b>1</b> female) out of <b>14</b> students ( <b>92.87%</b> ) completed the CSLO.	
				Target Met	Yes
			Students need more time in hands-on and other practical procedure to reach mastery level performance.		

2. Familiarize in bipolar transistor parameters, operation and testing.	<ol> <li>Use electronic tools and test equipment competently.</li> <li>Interpret schematic diagrams and waveforms.</li> </ol>	I,D	3	Course Result	SLO was assessed using hands-on experiment and written test questions using the assessment criteria as stated in the course outline. Students were able to familiarize themselves in bipolar transistor parameters, operation and testing. <b>12</b> ( <b>11</b> male & <b>1</b> female) out of <b>14</b> students ( <b>85.71%</b> ) completed the CSLO. Yes
				Students need more reach mastery level p	time in hands-on and other practical procedure to erformance.
3. Recognize Field effect Transistor (FET) parameters, operation and testing.	<ol> <li>Use electronic tools and test equipment competently.</li> <li>Interpret schematic diagrams and waveforms.</li> </ol>	I, D	3	Course Result Target Met Students need more reach mastery level p	SLO was assessed using hands-on experiment and written test questions using the assessment criteria as stated in the course outline. Students were able to recognize Field effect Transistor (FET) parameters, operation and testing. <b>11 (10</b> male & <b>1</b> female) out of <b>14</b> students <b>(78.57%)</b> completed the CSLO. Yes time in hands-on and other practical procedure to erformance.
<ol> <li>Describe Metal Oxide Field Effect Transistor (MOSFET) parameters, operations and testing.</li> </ol>	<ol> <li>Use electronic tools and test equipment competently.</li> <li>Interpret schematic diagrams and waveforms.</li> </ol>	I, D	3	Course Result	SLO was assessed using hands-on experiment and written test questions using the assessment criteria as stated in the course outline. Students were able to describe Metal Oxide Field Effect Transistor (MOSFET) parameters, operations and testing. <b>12</b> ( <b>11</b> male & <b>1</b> female) out of <b>14</b> students ( <b>85.71%</b> ) completed the CSLO.

				Students need mor reach mastery level	e time in hands-on and other practical procedure to performance.
5. Observe DC power supply operation.	<ol> <li>Use electronic tools and test equipment competently.</li> <li>Interpret schematic</li> </ol>	I, D,	3	Course Result	<ul> <li>SLO was assessed using hands-on experiment and written test questions using the assessment criteria as stated in the course outline. Students were able to observe DC power supply operation.</li> <li>12 (11 male &amp; 1 female) out of 14 students (85.71%) completed the CSLO.</li> </ul>
	diagrams and			Target Met	Yes
	wavelonns.			Students need mor reach mastery level	e time in hands-on and other practical procedure to performance.
6. Observe Integrated2. Use electronicI, D4,Circuit (IC) regulatortools and testequipmentequipmentand voltage doublerscompetently.3. Interpretschematicdiagrams anddiagrams anddiagrams anddiagrams and	4, 6,7	Course Result	SLO was assessed using hands-on experiment and written test questions using the assessment criteria as stated in the course outline. Students were able to observe Integrated Circuit (IC) regulator and voltage doublers operation. <b>12</b> ( <b>11</b> male & <b>1</b> female) out of <b>14</b> students ( <b>85.71%</b> ) completed the CSLO.		
	waveforms.			Target Met	Yes
				Students need mor reach mastery level	e time in hands-on and other practical procedure to performance.

Special comments: 12 out of 14 (11 males 1 female) or 85.71 % of the students got a grade of C and higher and 2 got F or 14.29 %.

Summary of Grades:

A+	=	0
Α	=	0
A-	=	2
B+	=	4
В	=	1
B-	=	3
C+	=	2
С	=	0
C-	=	0
D+	=	0
D	=	0
D-	=	0
F	=	2

**Recommendations** Additional laboratory equipment such as analog and digital multi-meter and oscilloscope must be provided so that lab exercises will be well performed by the students per lesson. It is suggested that at least a maximum of 15 students per class with a 1:3 lab equipment ratios.

DANILO S. IBARROLA Instructor Date: May 11, 2018