

Review of Performance: VEE 222 Discrete Devices II  
 Submitted by: Cirilo Recana

No. of Student: 11  
 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.

SLO#	PLO	I, D, M	ISLO	Reflection/Comment									
SLO#1 Describe the purpose and operation of Unijunction Transistor (UJT) and Silicon Controlled Rectifier (SCR).	7	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="margin-left: 20px;"> <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>9</td> <td>70 or better</td> <td>Passed</td> </tr> </tbody> </table>	No. of students	Score	Comment	2	69 or lower	Failed	9	70 or better	Passed
No. of students	Score	Comment											
2	69 or lower	Failed											
9	70 or better	Passed											

				82% of the students passed									
SLO#2 Describe UJT oscillator circuit operation.	4, 7	I,D (introduced and demonstrate level)	7	<p>SLO was assessed by practical experimentation 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>10</td> <td>70 or better</td> <td>Passed</td> </tr> </tbody> </table> <p>91% of the students passed</p>	No. of students	Score	Comment	1	69 or lower	Failed	10	70 or better	Passed
No. of students	Score	Comment											
1	69 or lower	Failed											
10	70 or better	Passed											
SLO#3 Describe SCR trigger circuit operation.	4, 7	I,D (introduced and demonstrate level)	7	<p>SLO was assessed by practical experimentation 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>10</td> <td>70 or better</td> <td>Passed</td> </tr> </tbody> </table> <p>91% of the students passed</p>	No. of students	Score	Comment	1	69 or lower	Failed	10	70 or better	Passed
No. of students	Score	Comment											
1	69 or lower	Failed											
10	70 or better	Passed											
SLO#4 Describe SCR power control operation.	4, 7	D (demonstrate level)	7	<p>SLO was assessed by practical experimentation 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>0</td> <td>69 or lower</td> <td>Failed</td> </tr> <tr> <td>11</td> <td>70 or better</td> <td>Passed</td> </tr> </tbody> </table> <p>100% of the students passed</p>	No. of students	Score	Comment	0	69 or lower	Failed	11	70 or better	Passed
No. of students	Score	Comment											
0	69 or lower	Failed											
11	70 or better	Passed											
SLO#5 Identify the relationship among Triac, SCRs , Diac and four-layered devices.	7	I,D (introduced and demonstrate level)	6	<p>SLO was assessed by written test 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>3</td> <td>69 or lower</td> <td>Failed</td> </tr> </tbody> </table>	No. of students	Score	Comment	3	69 or lower	Failed			
No. of students	Score	Comment											
3	69 or lower	Failed											

				8	70 or better	Passed
73% of the students passed						
SLO#6 Describe the construction, operation and application of Programmable Unijunction Transistor (PUT).	4, 7	I,D (introduced and demonstrate level)	7	SLO was assessed by written test questions using the assessment criteria as stated in the course outline. Result of assessment is shown below:		
				No. of students	Score	Comment
				2	69 or lower	Failed
				9	70 or better	Passed
82% of the students passed						

**Additional observations:** In reference with the data presented above, high percentage showed students are highly interested in hands-on experimentation or class activities.

**STUDENTS FINAL GRADES BREAKDOWN:**

**A = 3      B = 5      C = 3      D = 0      F = 0**

**Recommendations:** Laboratory equipments (NIDA cards) for discrete devices II must be enough for at least 3 to 5 sets to be able for the students to perform their required experimentation. Modify and combine discrete devices I & II or substitute a course for electrical students use so that it focus only on discrete devices that are needed in the electrical controls.

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

Date Submitted: May 2015