Review of Performance: VEE 222 Discrete Devices II

Submitted by: Cirilo Recana

## **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.

No. of Student: 5

Semesters: Spring 2016

- 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:		
				No. of students	Score	Comment
				0	69 or lower	Failed
				5	70 or better	Passed

	100% of the students passed						
SLO#2 Describe UJT oscillator circuit operation.	4, 7	I,D (introduced and demonstrate level)	7	SLO was assessed by practical experimentation using the assessment criteria as stated in the course outline. Result of assessment is shown below:			
				No. of students	Score	Comment	
				0	69 or lower	Failed	
				5	70 or better	Passed	
				100% of the students passed			
SLO#3 Describe SCR trigger circuit operation.	4, 7	I,D (introduced and demonstrate level)	7	SLO was assessed by practical experimentation using the assessment criteria as stated in the course outline. Result of assessment is shown below:			
				No. of students	Score	Comment	
				1	69 or lower	Failed	
				4	70 or better	Passed	
				80% of the students	passed		
SLO#4 Describe SCR power control operation.	4, 7	D (demonstrate level)	7	SLO was assessed by practical experimentation using the assessment criteria as stated in the course outline. Result of assessment is shown below:			
				No. of students	Score	Comment	
				1	69 or lower	Failed	
				4	70 or better	Passed	
				80% of the students passed			
SLO#5 Identify the relationship among Triac, SCRs, Diac and four-layered devices.	7	I,D (introduced and demonstrate level)	6	SLO was assessed by written test using the assessment criteria as stated in the course outline. Result of assessment is shown below:			
				No. of students	Score	Comment	
				1	69 or lower	Failed	

				4	70 or better	Passed
				80% of the students passed		
SLO#6 Describe the construction, operation and application of Programmable Unijuction Transistor (PUT).		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
				1	69 or lower	Failed
				4	70 or better	Passed
				80% 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:

 $\mathbf{A} = 0$ 

B = 4 C = 1

 $\mathbf{D} = 0$ 

 $\mathbf{F} = 0$ 

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: (Sgd.) Cirilo B. Recana

Instructor

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