

Review of Performance: VEE 135 Digital Electronics I Spring 2018, (12 students, 11 males 1 female) 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.

SLO#	Program SLO#	I, D, M	ISLO	Reflection/Comment	
1. Tell the history and development of digital electronics.	3. Interpret schematic diagrams and waveforms.	I, D	6, 7	Course Result	SLO was assessed by written test questions using the assessment criteria as stated in the course outline. 12 (11 males & 1 female) out of 12 students (100%) completed the CSLO.
				Target Met	Yes
				Students need more time in hands-on and other practical procedure to reach mastery level performance.	

2. Describe and demonstrate the use of digital test equipment and its operating characteristics.	2. Use electronic tools and test equipment competently.	I,D	6, 7	<table border="1"> <tr> <td data-bbox="1024 238 1281 488">Course Result</td> <td data-bbox="1281 238 1898 488">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 demonstrate the operation of the different digital test equipment. 12 (11 males & 1 female) out of 12 students (100%) completed the CSLO.</td> </tr> <tr> <td data-bbox="1024 488 1281 527">Target Met</td> <td data-bbox="1281 488 1898 527">Yes</td> </tr> </table>	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 demonstrate the operation of the different digital test equipment. 12 (11 males & 1 female) out of 12 students (100%) completed the CSLO.	Target Met	Yes	<p>Students need more time in hands-on and other practical procedure to reach mastery level performance.</p>
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Target Met	Yes								
3. Examine the purpose of the 555 timer and digital integrated circuits.	3. Interpret schematic diagrams and waveforms.	I, D	6, 7	<table border="1"> <tr> <td data-bbox="1024 634 1281 885">Course Result</td> <td data-bbox="1281 634 1898 885">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 and explain the operation of the 555 timer using the NIDA trainers. 10 (9 males & 1 female) out of 12 students (83.33%) completed the CSLO.</td> </tr> <tr> <td data-bbox="1024 885 1281 924">Target Met</td> <td data-bbox="1281 885 1898 924">Yes</td> </tr> </table>	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 and explain the operation of the 555 timer using the NIDA trainers. 10 (9 males & 1 female) out of 12 students (83.33%) completed the CSLO.	Target Met	Yes	<p>Students need more time in hands-on and other practical procedure to reach mastery level performance.</p>
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Target Met	Yes								
4. Identify and describe the six basic logic gates and combinational circuits in digital electronics.	3. Interpret schematic diagrams and waveforms.	I, D	6, 7	<table border="1"> <tr> <td data-bbox="1024 1031 1281 1281">Course Result</td> <td data-bbox="1281 1031 1898 1281">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 and explain the operation of the different logic gates using the NIDA trainers. 10 (9 males & 1 female) out of 12 students (83.33%) completed the CSLO.</td> </tr> <tr> <td data-bbox="1024 1281 1281 1320">Target Met</td> <td data-bbox="1281 1281 1898 1320">Yes</td> </tr> </table>	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 and explain the operation of the different logic gates using the NIDA trainers. 10 (9 males & 1 female) out of 12 students (83.33%) completed the CSLO.	Target Met	Yes	<p>Students need more time in hands-on and other practical procedure to reach mastery level performance.</p>
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Target Met	Yes								

				Students need more time in hands-on and other practical procedure to reach mastery level performance.	
5. Recognize the number systems use in digital logic design and its conversion.	3. Interpret schematic diagrams and waveforms.	I, D,	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 convert different number system and perform experiment using the NIDA trainers. 10 (9 males & 1 female) out of 12 students (83.33%) completed the CSLO.
				Target Met	Yes
				Students need more time in hands-on and other practical procedure to reach mastery level performance.	
6. Identify and describe flip-flop circuits.	3. Interpret schematic diagrams and waveforms.	I, D	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 explain the operation of the different flip-flop circuits using the NIDA trainers. 10 (9 males & 1 female) out of 12 students (83.33%) completed the CSLO.
				Target Met	Yes
				Students need more time in hands-on and other practical procedure to reach mastery level performance.	

Special comments: 10 out of 12 (9 males 1 female) or 83.33 % of the students got a grade of C and higher and 2 got F or 16.67 %.

Summary of Grades:

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

Recommendations: Laboratory equipment (NIDA cards) for Digital Electronics 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.

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Instructor

Date: May 11, 2018