

Review of Performance: (**VEE 240 Signal Processing**, Fall 2015, 12 students)
 Submitted by: Nelchor Permitez Ed. D.

Institutional Student Learning Outcomes (ISLO):

- ILO1: Effective oral communication.
- ILO2: Effective written communication.
- ILO3: Critical Thinking
- ILO4: Problem Solving
- ILO5: Intercultural 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.
- PLO5: Practice a career in the Telecomm Industry.
- PLO6: Troubleshoot microwave, fiber optics and telephone system.

SLO#	Program SLO#	I, D, M	ISLO	Reflection/Comment						
1. Describe analog pulse modulation circuit operation.	Interpret schematic diagrams and waveforms.	D	7	The SLO was assess using hands-on troubleshooting and written test. Students need more time in hands-on and other practical procedure to reach mastery level performance.						
				<table border="1"> <thead> <tr> <th>Letter Grade</th> <th>Number of student</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>0</td> </tr> <tr> <td>B</td> <td>4</td> </tr> </tbody> </table>	Letter Grade	Number of student	A	0	B	4
Letter Grade	Number of student									
A	0									
B	4									

				C	7										
				D	1										
2. Describe Pulse coded modulation (PCM) circuit, operation and troubleshooting PCM circuit.	Interpret schematic diagrams and waveforms.	D	7	<p>The SLO was assess using hands-on troubleshooting and written test.</p> <p>Students need more time in hands-on and other practical procedure to reach mastery level performance.</p> <table border="1"> <thead> <tr> <th>Letter Grade</th> <th>Number of student</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>0</td> </tr> <tr> <td>B</td> <td>4</td> </tr> <tr> <td>C</td> <td>8</td> </tr> <tr> <td>D</td> <td>0</td> </tr> </tbody> </table>		Letter Grade	Number of student	A	0	B	4	C	8	D	0
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A	0														
B	4														
C	8														
D	0														
3. Describe Delta modulation (DM) circuit, operation and troubleshoot DM circuit.	Interpret schematic diagrams and waveforms.	M	7	<p>The SLO was assess using hands-on troubleshooting and written test.</p> <p>Students need more time in hands-on and other practical procedure to reach mastery level performance.</p> <table border="1"> <thead> <tr> <th>Letter Grade</th> <th>Number of student</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>0</td> </tr> <tr> <td>B</td> <td>3</td> </tr> <tr> <td>C</td> <td>9</td> </tr> </tbody> </table>		Letter Grade	Number of student	A	0	B	3	C	9		
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C	9														

4: Describe FSK (Frequency shift keying) circuit, operation and troubleshoot FSK circuit	Interpret schematic diagrams and waveforms.	M	7	<p>The SLO was assess using hands-on troubleshooting and written test.</p> <p>Students need more time in hands-on and other practical procedure to reach mastery level performance.</p> <table border="1" data-bbox="932 386 1911 578"> <thead> <tr> <th>Letter Grade</th> <th>Number of student</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>0</td> </tr> <tr> <td>B</td> <td>3</td> </tr> <tr> <td>C</td> <td>8</td> </tr> <tr> <td>F</td> <td>1</td> </tr> </tbody> </table>	Letter Grade	Number of student	A	0	B	3	C	8	F	1
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C	8													
F	1													
5. Describe Phase shift Keying (PSK) circuit, operation and troubleshoot PSK circuit.	Interpret schematic diagrams and waveforms.	M	7	<p>The SLO was assess using hands-on troubleshooting and written test.</p> <p>Students need more time in hands-on and other practical procedure to reach mastery level performance.</p> <table border="1" data-bbox="932 764 1911 956"> <thead> <tr> <th>Letter Grade</th> <th>Number of student</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>0</td> </tr> <tr> <td>B</td> <td>4</td> </tr> <tr> <td>C</td> <td>7</td> </tr> <tr> <td>F</td> <td>1</td> </tr> </tbody> </table>	Letter Grade	Number of student	A	0	B	4	C	7	F	1
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6. Describe and analyze Time and Frequency division multiplexing circuit operation and troubleshooting.	Interpret schematic diagrams and waveforms.	M	7	<p>The SLO was assess using hands-on troubleshooting and written test.</p> <p>Students need more time in hands-on and other practical procedure to reach mastery level performance.</p> <table border="1" data-bbox="932 461 1911 651"> <thead> <tr> <th data-bbox="932 461 1421 500">Letter Grade</th> <th data-bbox="1421 461 1911 500">Number of student</th> </tr> </thead> <tbody> <tr> <td data-bbox="932 500 1421 539">A</td> <td data-bbox="1421 500 1911 539">0</td> </tr> <tr> <td data-bbox="932 539 1421 578">B</td> <td data-bbox="1421 539 1911 578">4</td> </tr> <tr> <td data-bbox="932 578 1421 617">C</td> <td data-bbox="1421 578 1911 617">7</td> </tr> <tr> <td data-bbox="932 617 1421 651">F</td> <td data-bbox="1421 617 1911 651">1</td> </tr> </tbody> </table>	Letter Grade	Number of student	A	0	B	4	C	7	F	1
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Additional observations: Need to purchase additional set of NIDA cards to accommodate growing number of students enrolled in the course.

Special comments: 11 out of 12 or 92% students of the students got a grade of C or higher. 4 student got B, 7 students got C and 1 got F for not attending the class after the mid-term.

Recommendations: Need to increase the hands-on time of students' and buy additional NIDA cards for Signal Processing.

Signature: NELCHOR T. PERMITEZ
Professor

Date: December 10, 2015