

Review of Performance: VEE 230 Radio Communication, Spring 2015, 7 students
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:** 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 LO#	I, D, M	ISLO	Reflection/Comment
1. Describe basic communication system and signal processing techniques.	5. Practice career in telecommunication industry. 6. Trouble - shoot microwave, fiber optic,	I	6	The SLO was assessed using hands-on troubleshooting and written quiz and examination. Students need more time in hands-on and other practical procedure to reach mastery level performance.

	radio communication and telephone system			<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>6</td> </tr> <tr> <td>C</td> <td>1</td> </tr> </tbody> </table>	Letter Grade	Number of student	A	0	B	6	C	1		
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A	0													
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2. Describe amplitude modulation (AM) and frequency modulation (FM) signals	<p>5. Practice career in telecommunication industry.</p> <p>6. Troubleshoot microwave, fiber optic, radio communication and telephone system</p>	D	6	<p>The SLO was assessed using hands-on troubleshooting and written quiz and examination.</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>3</td> </tr> <tr> <td>D</td> <td>1</td> </tr> </tbody> </table>	Letter Grade	Number of student	A	0	B	3	C	3	D	1
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3. Describe AM and FM signal path and circuit.	<p>5. Practice career in telecommunication industry.</p> <p>6. Troubleshoot microwave, fiber optic, radio communication and telephone system</p>	D	6	<p>The SLO was assessed using hands-on troubleshooting and written quiz and examination.</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>2</td> </tr> <tr> <td>D</td> <td>1</td> </tr> </tbody> </table>	Letter Grade	Number of student	A	0	B	4	C	2	D	1
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4. Describe AM and FM modulator and demodulator.	5. Practice career in telecommunication industry. 6. Troubleshoot microwave, fiber optic, radio communication and telephone system	I	6	<p>The SLO was assessed using hands-on troubleshooting and written quiz and examination.</p> <p>Students need more time in hands-on and other practical procedure to reach mastery level performance.</p> <table border="1" data-bbox="993 492 1974 678"> <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>2</td> </tr> <tr> <td>D</td> <td>1</td> </tr> </tbody> </table>	Letter Grade	Number of student	A	0	B	4	C	2	D	1
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5. Monitor and measure signal in AM and FM receiver.	5. Practice career in telecommunication industry. 6. Troubleshoot microwave, fiber optic, radio communication and telephone system	I	6&7	<p>The SLO was assessed using hands-on troubleshooting and written quiz and examination.</p> <p>Students need more time in hands-on and other practical procedure to reach mastery level performance.</p> <table border="1" data-bbox="993 954 1974 1101"> <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>4</td> </tr> </tbody> </table>	Letter Grade	Number of student	A	0	B	3	C	4		
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6. Troubleshoot AM and FM transmitter and receiver.	5. Practice career in telecommunication industry. 6. Troubleshoot	I	6&7	<p>The SLO was assessed using hands-on troubleshooting and written quiz and examination.</p> <p>Students need more time in hands-on and other practical procedure to reach mastery level performance.</p>										

	microwave, fiber optic, radio communicatio n and telephone system			<table border="1"> <thead> <tr> <th data-bbox="989 277 1482 315">Letter Grade</th> <th data-bbox="1482 277 1990 315">Number of student</th> </tr> </thead> <tbody> <tr> <td data-bbox="989 315 1482 352">A</td> <td data-bbox="1482 315 1990 352">0</td> </tr> <tr> <td data-bbox="989 352 1482 389">B</td> <td data-bbox="1482 352 1990 389">3</td> </tr> <tr> <td data-bbox="989 389 1482 427">C</td> <td data-bbox="1482 389 1990 427">4</td> </tr> </tbody> </table>	Letter Grade	Number of student	A	0	B	3	C	4
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Additional observations: Need to purchase additional set of Radio communication FM, AM and SSB NIDA cards to accommodate growing number of students enrolled in the course.

Special comments: 7 out of 7 or 100% of students got a grade of C.

Recommendations: Modify the course outline, must increase its credit number and include topics such as High Frequency (HF) radio transceiver, Citizens Band (CB) transceiver, and transceiver station setup and antenna installation in the topics and increase the allotted time for hands-on. In addition, cellular phone technology and servicing must be included on this course. Must buy FM and AM receiver card for NIDA radio communication activity, some of our cards are already non functional and need to be replace.

Signature : DANILO S. IBARROLA
 Instructor

Date: MAY 8, 2015