Review of Performance: VEM 212 National Electrical Codes (NEC) Submitted by: Cirilo Recana No. of Student: 6 Semesters: Spring 2013

Institutional Learning Outcomes (ILO's)

- 1. communicate effectively
- 2. employ critical thinking [& problem solving]
- 3. possess specific knowledge and skills in a major discipline or professional program of study
- 4. take responsibility and develop skills for learning
- 5. interact responsibly with people, cultures, and their environment

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	ILO	Reflection/Comment
SLO#1 Describe the purpose of the National Electrical Code (NEC).	11	I (introduced level)	3	5 out of 6 students got the passing mark. 83% was achieved by the students in this SLO.
SLO#2 Describe the structure of the National Electrical Code (NEC) book.	11	I (introduced level)	3	5 out of 6 students got the passing mark. 83% was achieved by the students in this SLO.
SLO#3 Define NEC terminologies.	11	I,D (introduced and demonstrate level)	3	5 out of 83 students got the passing mark. 100% was achieved by the students in this

				SLO.
SLO#4 Describe the organization of the NEC book.	11	D (demonstrate level)	3	5 out of 6 students got the passing mark. 83% was achieved by the students in this SLO.
SLO#5 Demonstrate navigating through the NEC book.	11	D,M (demonstrate and master level)	3	5 out of 6 students got the passing mark. 83% was achieved by the students in this SLO.
SLO#6 Identify the roles of other organizations.	11	M (mastery level)	3	5 out of 6 students got the passing mark. 83% was achieved by the students in this SLO.

Additional observations: In reference with the data presented above, high percentage showed students are interested in combining theoretical and hands-on activities in the class.

Special comments: This assessment focuses on the theory and lab exercises that our students learned. Data showed that SLO's with hands-on activities (navigating NEC) marks above average rate due to sufficient text book per students. Once the students perform the given task, we can then recommend them either Pass or Failed.

STUDENTS FINAL GRADES BREAKDOWN:

A = 1 B = 1 C = 3 D = 0 F = 1

Recommendations: Update NEC Book and Software to its latest edition regularly to keep the students aware to new changes and standards set by National Fire Protection Association – 70 (NFPA-70).

Please check which of the following were assessed in this course:

Institutional Learning Outcomes:

COM-FSM graduates will demonstrate that they can:

- _____a. communicate effectively
- ____x_ b. employs critical thinking (& problem solving)
- <u>x</u> c. possess specific knowledge and skills in a major discipline or professional program of study
- _____d. takes responsibility and develops skills for learning
- e. interact responsibly with people, cultures, and their environment

Signature: <u>Cirilo B. Recana</u> Electrical Instructor Date Submitted: May 2013