

Review of Performance: VEM 240 Industrial Wiring
 Submitted by: Cirilo Recana

No. of Student: 10
 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 State the purpose and general principles of control components and circuits.	1, 4, 11, 12	I (introduced level)	3	9 out of 10 students got the passing mark. 90% was achieved by the students in this SLO.
SLO#2 Identify pilot devices both physically and schematically and describe their operating principles.	4, 6, 12	I,D (introduced and demonstrate level)	2, 3	9 out of 10 students got the passing mark. 90% was achieved by the students in this SLO.
SLO#3 Interpret motor control wiring, connection, and ladder diagrams.	11, 12	I,D (introduced and demonstrate level)	2, 3	8 out of 10students got the passing mark. 80% was achieved by the students in this SLO.
SLO#4 Select and size contactors, relays and timing relays and overload relays	11, 12	D (demonstrate level)	3, 4	9 out of 10 students got the passing mark. 90% was achieved by the

both physically and schematically and describe their operating principles.				students in this SLO.
SLO #5 Connect motor controllers for specific applications with emphasis on safety practices and in accordance with National Electrical Code (NEC) requirements.	11, 12	D,M (demonstrate and mastery level)	2, 3, 4	8 out of 10 students got the passing mark. 80% was achieved by the students in this SLO.
SLO#6 Troubleshoot control and motor control circuit for basic to intermediate level faults.	11, 12	D,M (demonstrate and mastery level)	2, 3, 4	9 out of 10 students got the passing mark. 90% 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 marks average rate due to insufficient lab equipment per class. Once the students perform the given task, we can then recommend them either Pass or Failed.

STUDENTS FINAL GRADES BREAKDOWN:

A = 1
 B = 2
 C = 6
 D = 0
 F = 1

Recommendations: Laboratory equipments must be sufficiently provided so that lab exercises will be well performed by the students. A ratio of 1:1 laboratory equipments per students is ideal. The Simutech Troubleshooting Skills series must now be updated periodical to the latest version.

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
- b. employs critical thinking (*& problem solving*)
- 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

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