

Review of Performance: VEE 103 Electronics Fundamental I (P3)  
 Submitted by: Cirilo Recana

No. of Student: 20  
 Semesters: Fall 2012

**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 electronics tools and test equipment competently.
3. Interpret schematic diagrams and waveforms.
4. Build electronics projects to a given specification.

SLO#	PLO	I, D, M	ILO	Reflection/Comment
SLO#1 Describe the fundamentals of voltage, current and resistance in basic electrical circuits.	2	I (introduced level)	2, 3	16 out of 20 students got the passing mark. 80% was achieved by the students in this SLO.
SLO#2 Describe the purpose of resistors and its parameters.	2, 3	I,D (introduced and demonstrate level)	2, 3	18 out of 20 students got the passing mark. 90% was achieved by the students in this SLO.
SLO#3 Explain the function and parameters of switches, fuses and circuit breakers.	2, 3	I,D (introduced level)	3, 4	20 out of 20 students got the passing mark. 100% was achieved by the students in this SLO.
SLO#4 Discuss magnetism and electromagnetism principles and characteristics.	2, 3	I, D, (introduced and demonstrate level)	2, 3	10 out of 20 students got the passing mark. 100% was achieved by the students in this SLO.
SLO#5 Describe the function and uses of digital and analog multimeters in actual electrical circuits.	1, 2	D, M (demonstrate and mastery level)	3, 4	18 out of 20 students got the passing mark. 90% was achieved by the students in this SLO.

SLO#6 Solve and measure electrical quantities using ohms law.	1, 2	D, M (demonstrate and mastery level)	2, 3	15 out of 20 students got the passing mark. 75% was achieved by the students in this SLO.
SLO#7 Describe and compute electrical quantities in series and parallel circuits, voltage divider and bridge circuits.	2,3	D, M (demonstrate and mastery level)	2, 3	15 out of 20 students got the passing mark. 75% was achieved by the students in this SLO.
SLO#8 Analyze and simplify complex circuits using electrical laws and theorem.	2,3	D, M (demonstrate and mastery level)	2, 3	14 out of 20 students got the passing mark. 70% was achieved by the students in this SLO.

**Additional observations:** In reference with the data presented above, low percentage showed students are having difficulties in mathematical manipulation specially in analyzing circuit parameters.

**Special comments:** This assessment focuses on the theory and lab exercises that our students learned. Data showed that SLO's with laboratory activities rates a good marks but when it comes to circuit analysis and mathematical calculations, students have difficulties most of the topics. Numbers of students shown are base on 1 group. Once the students perform the given task and were able to calculate circuit parameters, we can then recommend them either Pass or Failed.

**FINAL GRADES:**

- A = 2
- B = 6
- C = 9
- D = 1
- F = 2

**Recommendations:** Students taking electronics fundamental must have a high level of mathematical preparation so that they will be able to cope with fundamental laws involve in calculating circuit parameters. Technical math must be aligned to the needs of the students in order to prepare them with this course.

Please check or (x) 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

Signature: **Cirilo B. Recana**  
Electrical Instructor

Date Submitted: December 2012