Review of Performance: VEE 110/P1 Discrete Devices I
Submitted by: Cirilo Recana

No. of Student: 14
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 Explain the construction, principle of operation and testing method of semiconductor diodes.	3, 7	I (introduced level)	2, 4	12 out of 14 students got the passing mark. 86% was achieved by the students in this SLO.
SLO#2 Describe the operation and troubleshoot semiconductor diode limiter (clipper) and clamper circuits.	3, 4, 7	I,D (introduced and demonstrate level)	2, 4	10 out of 14 students got the passing mark. 71% was achieved by the students in this SLO.
SLO#3 Describe the purpose of an amplifier, the classes of operation and identify the three main BJT configurations.	3, 4, 7	I,D (introduced and demonstrate level)	2, 4	10 out of 14 students got the passing mark. 71% was achieved by the students in this SLO.

SLO#4 Describe the operating characteristics and measure the circuit parameters of the following amplifier types: Common Emitter Common Collector Common Base	3, 4, 7	D (demonstrate level)	2, 4	11 out of 14 students got the passing mark. 79% was achieved by the students in this SLO.
SLO #5 Describe the operation of the following types of rectification Half wave Full wave Bridge	3, 4, 7	I,D (introduced and demonstrate level)	2, 4	11 out of 14 students got the passing mark. 79% was achieved by the students in this SLO.
SLO#6 Describe the operation of various RC and RL filter circuits.	3, 7	I (introduced level)	2	11 out of 14 students got the passing mark. 79% was achieved by the students in this SLO.
SLO#7 Describe the operation of zener diodes and basic zener voltage regulators.	3, 7	I (introduced level)	2	10 out of 14 students got the passing mark. 71% was achieved by the students in this SLO.
SLO#8 Identify voltage regulator circuits and explain their operation.	3, 7	D (demonstrate level)	2, 4	14 out of 14 students got the passing mark. 100% was achieved by the students in this SLO.
SLO#9 Describe the purpose and operation of an I.C. Regulator.	3, 7	I,D (introduced and demonstrate level)	2	13 out of 14 students got the passing mark. 92% was achieved by the students in this SLO.
SLO#10 Explain the operation and advantages of Half and Full Wave Voltage Doublers.	3, 4, 7	I,D (introduced and demonstrate level)	2, 4	14 out of 14 students got the passing mark. 100% 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/laboratory activities.

Special comments: This assessment focuses on the theory and lab exercises that our students learned. Data showed that SLO's with laboratory rates a low marks due to insufficient lab equipment per class. Numbers of students shown are base on 1 group. Once the students perform the given task, we can then recommend them either Pass or Failed.

FINAL GRADES:
A = 3
B = 5
C = 6
D = 0
F = 0

Recommendations: Laboratory equipments must be sufficiently provided so that lab exercises will be well performed by the students per lesson. It is suggested that at least a maximum of 15 students per class with a 1:3 lab equipment ratios.

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
___x__ b. employs critical thinking *(& problem solving)*
_____ c. possess specific knowledge and skills in a major discipline or professional program of study
___x__ d. takes responsibility and develops skills for learning
_____ e. interact responsibly with people, cultures, and their environment

Signature: **Cirilo B. Recana** Date Submitted: May 2013
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