



جامعة المجمعة
Majmaah University

Course Report

College:
Program:
Course :

Engineering
Electrical
Basic Electronic Devices and Circuits

Muharram 1437 H



This form compatible with NCAAA Edition

Course Report

Institution :	Majmaah University	Date of CR	28 / 05 / 2017
College/ Department	Engineering / Electrical Engineering		

A Course Identification and General Information

1. Course title:	Basic Electronic Devices and Circuits.	Code	EE 111	Section	357	
2. Name of course instructor	Dr. Fathi KALLEL &		Location : Complex Building			
3. Year and semester to which this report applies:	2016/2017-Second Semester					
4. Number of students starting the course?	21	Students completing the course?	13			
5. Course components:						
	Lecture	Tutorial	Laboratory/ Studio	Practical	Other	Total
Contact Hours	45	15	00	0	0	60
Credit	3	0	0	0	0	3

B- Course Delivery:

1. Coverage of Planned Program

Topics Covered	Planned Contact Hours	Actual Contact Hours	Reason for Variations (*)
Semiconductor material and properties, Diode model, equivalent model and circuit analysis	12	12	None
Analysis of diode based circuits and Special diodes characteristics and applications	8	8	None
Bipolar Junction Transistor(BJT), Basic structure, Modes of operation, Types of Connection, dc biasing, dc and small signal models and its characteristics	16	16	None
Single stage BJT Amplifiers, FET, construction and operation, IV characteristics, dc biasing	8	8	None
Construction and operation Enhancement MOSFETS, I-V characteristics	8	4	Partially covered; early termination of the semester
Linear and non-linear applications of op-amp, negative and positive feedback CMOS logic gates, pass transistor logic gates and dynamic logic gates	8	0	Early termination of the semester

(*) if there is a difference of more than 25% of the hours planned



2. Consequences of Non-Coverage of Topics

Topics not Fully Covered (if any)	Effected Learning Outcomes	Possible Compensating Action
Linear and non-linear applications of op-amp, negative and positive feedback CMOS logic gates, pass transistor logic gates and dynamic logic gates	---	This topic will be covered in Electronic 2 (EE 314)
Construction and operation Enhancement MOSFETS, I-V characteristics topic is partially covered due to the early termination of the semester.	---	

3. Course learning outcome assessment.

List course learning outcomes		List methods of assessment for each LO	Summary analysis of assessment results for each LO
1.0	Knowledge		
1.1	.....	.....	.....
1.2	.....	.....	.....
1.3	.....	.....	.....
1.4	.....	.....	.....
1.5	.....	.....	.....
1.6	.....	.....	.....
2.0	Cognitive Skills		
2.1	Design circuit using diode	Final Exam	90%
2.2	Design amplifiers using BJT and FET transistor		
2.5	.....	
2.6	.....	
3.0	Interpersonal Skills & Responsibility		
3.1	.....	.....	.....
3.2	.....	.....	.....
3.3	.....	.....	.....
3.4	.....	.....	.....
3.5	.....	.....	.....
3.6	.....	.....	.....
4.0	Communication, Information Technology, Numerical		
4.1	Determine basic structure and I-V characteristics of PN junction diode	Final Exam	69%
4.2	Analyze BJT and FET based dc circuits		
4.5	.....	
4.6	.....	
5.0	Psychomotor		
5.1	.....	.....	.....
5.2	.....	.....	.....
5.3	.....	.....	.....



List course learning outcomes		List methods of assessment for each LO	Summary analysis of assessment results for each LO
5.4
5.5
5.6

Summarize any actions you recommend for improving teaching strategies as a result of evaluations in table 3 above.

The assigned teaching strategies are more than enough. Lab demonstration can be removed as a teaching strategy because the Lab related to this course is a separate course with other course specifications (EE 2012).

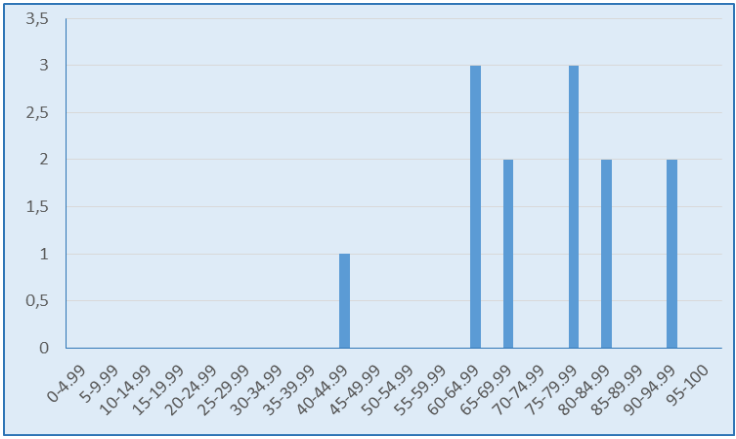
4. Effectiveness of Planned Teaching Strategies for Intended Learning Outcomes set out in the Course Specification

List Teaching Methods set out in Course Specification	Were They Effective?		Difficulties Experienced (if any) in Using the Strategy and Suggested Action to Deal with Those Difficulties.
	No	Yes	
Lecture		X	.....
research activities		X	.....
lab demonstrations	X		Lab demonstration can be removed as a teaching strategy because the Lab related to this course is a separate course with other course specifications.
projects		X	.....
case studies		X	.....
memorization and individual presentation		X	.....



C. Results

1. Distribution of Grades

Letter Grade	Number of Students	Student Percentage	Analysis of Distribution of Grades
A+	0	0%	<p>Results are calculated based on the number of students that are attended the final exam (13 students). The following figure illustrated the distribution of grades.</p> 
A	2	15%	
B+	0	0%	
B	2	15%	
C+	3	23%	
C	0	0%	
D+	2	15%	
D	3	23%	
F	1	9%	
Denied Entry	0	0%	
In Progress	0	0,0%	
Incomplete	0	0,0%	
Pass	12	57%	
Fail	1	5%	
Withdrawn	8	38%	

2. Analyze special factors (if any) affecting the results



3. Variations from planned student assessment processes (if any) .

a. Variations (if any) from planned assessment schedule (see Course Specifications)

Variation	Reason
Second Mid-term	Early termination of the semester
None	.....
None	.....

b. Variations (if any) from planned assessment processes in Domains of Learning

Variation	Reason
None
None
None

4. Student Grade Achievement Verification:

Method(s) of Verification	Conclusion
All final papers are reviewed by independent reviewer from the department who will double check the sum of the total marks.	Level of fairness in correction is fairly high
Grades approved by Head of department and the dean of the EC.	Approved

D. Resources and Facilities

Difficulties in access to resources or facilities (if any)	Consequences of any difficulties experienced for student learning in the course
The classroom was not equipped with operated smart board.	The learning process was not completely effective.
The required textbook is not available for students and instructor	-----.

E. Administrative Issues

Organizational or administrative difficulties encountered (if any)	Consequences of any difficulties experienced for student learning in the course
None
None
None



F Course Evaluation

1 Student evaluation of the course (Attach summary of survey results) [Will be attached next semester]

<p>a. List the most important recommendations for improvement and strengths</p> <ul style="list-style-type: none"> • Motivate students by varying instructional strategies: use lectures, demonstrations, discussions, case studies, groups... • Review the learning objectives with students and be sure that students know what they are expected to learn, to do, to know, etc. • Return assignments and tests to students as soon as reasonably possible. Provide constructive feedback • Give more examples for some topics which students have problems • Provide more opportunities for students to speak to the class and encourage them to share their ideas and comments. • Give students more real examples to see how the content relates to them and the world around them.
<p>b. Response of instructor or course team to this evaluation</p> <ul style="list-style-type: none"> • • • •

2. Other Evaluation:

SLO evaluation program is used to evaluate the assigned SLO (a, c) for the course. The results of evaluation are included in the course file.

<p>a. List the most important recommendations for improvement and strengths</p> <ul style="list-style-type: none"> • Course description of this course is not included in the course description file. • SLO 'e' should be considered instead of 'a'. • SLO 'k' should be added. • Some topics like Op-Amp, current mirror, CMOS logic gate, included in EE 111 course specification are covered also in the course Electronic 2 (EE 314). • EE 101 is indicated as a co-request for EE 111 course but I think it should be a pre-request.
<p>b. Response of instructor or course team to this evaluation:</p> <ul style="list-style-type: none"> • Course description file should be reviewed and included in course description file. • Course specification should be reviewed



G Planning for Improvement

1. Progress on actions proposed for improving the course in previous course reports (if any).

Actions recommended from the most recent course report(s)	Actions Taken	Action Results	Action Analysis
a) Add a detailed description of EE 111 in the course description file.	Action in progress	.....	.....
b) Review the course specification of EE 111 and update the textbook	Action in progress	.....	.....
c) Giving some tutorials about KCL and KVL during second and third weeks of the semester	Some examples about KVL, KCL... are given to students during the first and second weeks of each semester	Skills of students about circuit analysis are improved	.....

2. List what other actions have been taken to improve the course

3. Action Plan for Next Semester/Year

Actions Recommended for Further Improvement	Intended Action Points (should be measurable)	Start Date	Completion Date	Person Responsible
a) Add a detailed description of EE 111 in the course description file.	Updated course description	20/10/2017	31/01/2018	UPC
b) Reviewing the course specification of EE 111 and update the textbook	Updated CS Updated textbook	20/10/2017	31/01/2018	UPC
c) Consider SLO 'e' instead of SLO 'a' and add the SLO 'k'	Updated Course specification	20/10/2017	31/01/2018	UPC
d) Modify the course EE 101, indicated actually as a co-request for EE 111, to be a pre-request	Updated Course specification	20/10/2017	31/01/2018	UPC
e) Giving some tutorials about KCL and KVL during second and third weeks of the semester	Improving Skills of students about circuit analysis	20/09/2017	30/09/2017	Instructor



Course Instructor:

Name: Dr. Fathi Kallel

Signature:

Date Report Completed: 28/05/2017

Program Coordinator:

Name:

Signature:

Date Received :/...../2016



Important Notes:

- A separate Course Report (CR) should be submitted for every course and for each (section " Male & Female" or Academic Programme or campus location where the course is taught) even if the course is taught by the same person
- Each CR is to be completed by the course instructor (Separate reports attached) and given to the program coordinator At the end of each course
- Course Reports are to discuss by the academic (Programme) Department Council

