جامعة المجمعة
Majmaah University

Course Report

College: College of Engineering
Programme Electrical Engineering
Course : Electric Energy Utilization

Febrary 2017

This form compatible with NCAAA Edition

Course Report

Institution : Majmaah university	Date of CR 05 / 02/ 2017.
College/ Department .....Engineering / .....Electrical Engineering.....	

A Course Identification and General Information

1. Course title: **Electric Energy Utilization**	Code ٤٨٠EE	Section **126**	
2. Name of course instructor Dr. El Manaa Barhoumi	Location : **Electrical Engineering Department**		
3. Year and semester to which this report applies: 2016/2017			
4. Number of students starting the course? **27**	Students completing the course? **27**		

5. Course components:

	Lecture	Tutorial	Laboratory/ Studio	Practical	Other	**Total**
Contact Hours	45	15	0	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 (*)**
Introduction	08	08	
Illumination Illumination: types of lamps, illumination schemes, calculation of illumination, requirements of proper lighting.	08	08	
Electric Heating: advantages of electrical heating, heating methods, design of resistance heating element.	08	08	
Electric Welding: advantages of electric welding, welding methods, comparison between AC and DC arc welding, welding control circuits.	08	08	
Electrolytic Processes: laws of electrolysis, process of electro-deposition, factors affecting electro-deposition, manufacturing of chemicals by electrolysis process.	08	08	

Refrigeration and Air Conditioning: principle of air conditioning, refrigeration cycle, eco-friendly refrigerants, electrical circuits used in refrigerator and air-conditioner.	08	08	
Electric Traction: advantages of electric traction, systems of electric traction, types of motors used for electric traction, starting and braking of traction motors	12	12	.

(*) 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
None	…….	…….
…….	…….	…….
…….	…….	…….

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	**……**	…….	…….
2.0	**Cognitive Skills**		
2.1	The student will be able to solve problems related to the illumination.	1st Midterm Exam Final exams	71%
2.2	The student will be able to design electric heater for specific application	1st Midterm Exam	90%
٢,٣	The student will be able to identify different welding control circuits.	1st Midterm and 2nd Midterm exams	84%
٢,٤	The student will be able to solve problems related to electrolysis.	Final exams,	75%
٢,٥	The student will be able to identify the electrical circuits for refrigerators and air-conditioning systems.	2nd Midterm and final exams, Micro project	90%
٢,٦	The student will be able to solve problems related to electric traction.	2nd Midterm and final exams, Micro project	70%
3.0	**Interpersonal Skills & Responsibility**		
3.1	**……**	…….	…….
3.2	**……**	…….	…….

List course learning outcomes		List methods of assessment for each LO	Summary analysis of assessment results for each LO
4.0	**Communication, Information Technology, Numerical**		
4.1	**.....**	.....	.....
4.2	**.....**	.....	.....
5.0	**Psychomotor**		
5.1	**.....**	.....	.....
٥,٦	**.....**	.....	.....

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

More examples and problems related to the design of electric heaters and illumination systems are required.

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, free Discussion, Case Studies		Y	None
Slides, Implication Studies		Y	None

C. Results

1. Distribution of Grades

Letter Grade	Number of Students	Student Percentage	Analysis of Distribution of Grades
A+	3	11.11%	……
A	7	25.92 %	High percentage reflects good level of 26 % of students.
B+	5	18.51%	……
B	2	7.40%	
C+	3	11.11%	
C	1	3.7%	Normal distribution

D+	1	3.7%	Normal distribution
D	2	7.40%	Normal distribution
F	3	11.11%	Two students were absent during the first Mid-term exam.
Denied Entry	0	0%	……..
In Progress	0	0%	……..
Incomplete	0	0 %	……..
Pass	24	88.88 %	The most of topics in this course are based on previous courses and basics laws in electrical engineering (such as electrical heating, electrical welding and illumination) are based on Ohm law. The topic electric traction is related to electrical machines courses. The students presented a good ability to understand and solve the problems in this course.
Fail	3	11.11%	……..
Withdrawn	0	0 %	……..

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

- Good results, No special factors 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
None	……

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

Variation	Reason
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 are approved by Head of department and the dean of the Engineering College.	Grades approved by Head of department and the dean of the Engineering College

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 required textbook (Hard copy) was not available in the university library.	None (Softcopy available)

E. Administrative Issues

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

F Course Evaluation

1 Student evaluation of the course (Attach summary of survey results)

a. List the most important recommendations for improvement and strengths

- Principal knowledge and skills objectives of the course were not clear for students
- Offices hours were not clear to students
- Assignments were not clear to students
- Assignments and home works were not suitable to credit hours of the course

b. Response of instructor or course team to this evaluation

- Based on the student's evaluation of the course, the instructor will distribute and explain the courses' syllabi to students in the first lecture. He should explain the objectives, the Course outcomes and the course description at the first lecture.
- Also, the offices hours should be clear to students. The time table with the office hours is putted in the front of the instructor's office.
- The instructor will show for the students the results of their evaluations

2. Other Evaluation :

a. List the most important recommendations for improvement and strengths

b. Response of instructor or course team to this evaluation :

- ……
- ……
- ……
- ……

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
Text book should be updated Proposed text book; ***Generation and Utilization of Electrical Energy, S. Sivanagaraju and M. Balasubba, New Delhi, India 2010***	None	None	None
Topics are not conformed to the course description. Proposed rectification in attached file	Update of CLO and topic to be covered	CLO and topics updated	

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

- None
- ……
- ……
- ……

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) Update of Text book Proposed text book; ***Generation and Utilization of Electrical Energy, S. Sivanagaraju and M. Balasubba, New Delhi, India 2010***	Hard copies of updated text book available in the university library			UPC and HOD
b) Update Course Specifications	Course specifications and Course Syllabus conformed to the course description			UPC and HOD

Course Instructor:

Name: Dr El Manaa Barhoumi

Signature: ..... Date Report Completed: 05/02/2017

Program Coordinator:

Name: .....

Signature: ..... Date Received : ...../…../2017

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