

# **Annual Course Report**

(Electromagnetic Wave Theory)

# **A-Basic Information**

1	Title and Code	Electromagnetic Wave Theory <b>EC322</b>			
2	Programme(s) on which this course is given	EC			
3	Academic year / Level of programme	3 <sup>rd</sup> year / 1 <sup>st</sup> semester (2012/2013)			
4	Units/Weekly hours				
	Lecture 4 Tutorial/Practical 2	Total 6			
5-	Names of lecturers contributing to the deliver	ry of the course			
	Dr. Mahmoud Gaber Elkholy				
	Course coordinator: Dr. Mahmoud Gaber Elkholy				
	External evaluators:				
B-	Statistical Information				
	No. of students attending the course: No.	337 % 100			
	No. of students completing the course: No. 333 % 98.8				
	Results:				
	Passed:         No.         256         %         76.88         Failed:	No. 77 % 23.12			
	Grading of successful students:				
	Excellent: No. 41 % 12.31 Very C	Good: No. 51 % 15.32			
	Good: No. 44 % 13.2 Pass:	No. 120 % 36.04			

# **Professional Information**

## 1. Course Teaching

Content Topics	No of hours	Lecture	Tutorial	Achieved ILOS
Vector analysis, electrostatic fields	18	12	6	a1, a4,a23, b2, b3,c2d1
Transmission line at UHF- Plane wave propagation	24	16	8	a3, a4,a20, b5, b11, c6,c7,d7
Rectangular and circular Guides	18	12	6	a3, a4,a23,b2,c6 ,c7,d1, d9
Microstrip Lines	18	12	6	a1, a4, b5,b11,c2,c6 ,d7, d9
sum	78	52	26	

## Topics taught as a percentage of the content specified:

<u>>90 %</u>

70-90 %

<70%

## 2. Teaching and Learning Methods:

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Lectures:	√
Practical Training/ Laboratory:	$\checkmark$
Seminar/Workshop:	
Class Activity:	ل
Case Study:	1
Other Assignments/Homework:	1

**Case Study** 

Other assignments/homework: A real world project assigned.

3. Student Assessment:

Method of Assessment	Percentage of total	
Written examination	70	
Midterm exams	15	
Oral Examination	0	
Practical/laboratory work	0	
Other Assignments/class work	15	
Total	100 %	

#### **Members of Examination Committee:** Prof. Prof. Prof.

**Role of external evaluator:** 

## 4. Facilities and Teaching Materials:

Totally adequate	$\checkmark$	
Adequate to some extent		
Inadequate		

#### 5. Administrative Constraints

- Students need extra hours.....
- Insufficient class rooms and halls.
- Insufficient assistant staff members.
- Insufficient Lab. Technicians.

#### 6. Student Evaluation of the course: Response of Course Team

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- Insufficient background in field theory -
- Lack of measurements and waves
- Algorithms for vector analysis

#### 7. Comments from external evaluator(s):

#### 8. Course Enhancement:

- 1- Modification of the distribution of topics to lectures.
- 2- Inclusion of up to date topics in the field of microwave

Improvement Field	Weak points	Action required	Person Responsible	Completion Date
Assessment Methods	Good	-	- Faculty - Department	2012
Quality of Teaching and Learning	Good	-	- Faculty - Department	2013
Learning resources	- No lab is allowed for this topic.	Establishment of a lab for this subject		2012
Course content	<ol> <li>The lectures are not properly distributed.</li> <li>Vector analysis is a topic studied in mathematics and doesn't deserve 4 lectures</li> <li>The time allowed for this subject is very large compared to the contents.</li> <li>An important topic like the waveguide and its application is missing</li> </ol>	<ol> <li>Modification of the distribution of topics to lectures.</li> <li>Inclusion of up to date topics in the field of microwave</li> </ol>		2013

## 9. Action Plan for Academic Year 2012–2013

## **Course Coordinator: Dr. Mahmoud Gaber Elkholy**

## Authorized by Department Council in :

## Authorized by Faculty Council in:

## Head of Department:

Prof. Saber H. Zainud-Deen

Date: /