

جامعة المنوفية كلية الهندسة الالكترونية قسم هندسة الالكترونيات والاتصالات الكهريية

# **Annual Course Report**

(DIGITAL SIGNAL PROCESSING)

## **A-Basic Information**

1 Title and Code	DIGITAL SIGNAL PROCESSING EC 324
2 Programme(s) on which this course is given	EC
3 Academic year / Level of programme	3rd year / 2 <sup>nd</sup> Semester (2012/2013)
4 Units/Weekly hours	
Lecture 3 Tutorial/Practical 3	Total 6
5- Names of lecturers contributing to the delive	ery of the course
i- Prof Moawad I Desouky	

**Course coordinator:** Prof. Moawad I. Desouky

**External evaluators**:

## **B-** Statistical Information

No. of students attending the course:	<b>No.</b> 337 %	100		
No. of students completing the course:	No. 334 %	99.11		
Results:				
Passed:         No.         302         %         90.42         Fa	iled: No. 32	% 9.5	58	
Grading of successful students:				
Excellent: No. 32 % 9.58	Very Good: No.	60 <mark>%</mark>	17.96	
Good: No. 83 % 24.85	Pass: No.	127 %	38.024	

## **C** - Professional Information

### 1. Course Teaching

Content Topics	No of hours	lecture	Tutorial/	Achieved
			practical	ILOS
Introduction	6	3	3	a1, b2,b3
				C1,d2
Fundamentals of	12	6	6	a4 , a3, b11,
Discrete Time Signals				C2,C6, d3
and systems.				
Review study of Analog	6	3	3	a5, b15, C7,d4
Filters				
Digital Filter Design	12	6	6	a5, B7, C6,D6
Realization of Digital	18	9	9	A24, B3,b7,
Filter Design ,				C1,D9
Transform Algorithm	12	6	6	a1, b15,
(DFT , and FFT)				C6,d2,d3
Power Spectrum	12	6	6	a24, B2, C12,D9
Estimation				
Principle of Digital	6	3	3	a14, B5, C13,D6
Image Processing.				
SUM	84	42	42	

#### 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:

$\checkmark$

Practical Training/ Laboratory:

Seminar/Workshop:	
Class Activity:	$\overline{\checkmark}$
Case Study:	<u>الم</u>
Other Assignments/Homework 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 wo	rk 15
Total	100 %
Role of external evaluator:	
4. Facilities and Teaching Mater	ials:
Totally adequate	<u>الم</u>
Adequate to some extent	
Inadequate	
5. Administrative Constraints	
<ul> <li>Students need extra ho</li> <li>Insufficient class room</li> <li>Insufficient assistant st</li> <li>Insufficient Lab. Techn</li> </ul>	s and halls. aff members.
6. Student Evaluation of the cour	rse: Response of Course Team
- Insufficient background ir processing	n signal - -
- Lack of background in programming	software _

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

#### 8. Course Enhancement:

1- Removal of all unnecessary and redundant material.

2- Inclusion of modern topics in the field of signal processing

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

Improvement Field	Weak points	Action required	Person Responsible	Completion Date
Assessment Methods				
Quality of Teaching and Learning	- This subject required a lab	- Establishment for a lab for this course.	- Faculty - Department	2013
Learning resources	No resources	-Inclusion of several references		2013
Course content	1- some Topics like adaptive filters, Multirate signal processing, and digital image processing should be added in advance	<ol> <li>Removal of all unnecessary and redundant material.</li> <li>Inclusion of modern topics in the field of signal processing</li> </ol>		2014

**Course Coordinator:** Prof. Moawad I. Desouky **Authorized by Department Council in :** 

#### Authorized by Faculty Council in:

#### Head of Department:

Prof. Saber H. Zainud-Deen

Date: /