

# Manufacturing Engineering and Production Technology

B.Sc. Program Report (Credit Hours)

2016 - 2017





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# Manufacturing Engineering and Production Technology Program Report (Credit Hours) September 2017

# 1. General

# 1.1 Basic Information

1- Program title: Manufacturing Engineering and Production Technology BSc Program.

2- Program type: Single.

**3- Department offering the program:** Manufacturing Engineering and Prod. Tech. Dept.

4- Co-coordinator: Dr. Abdelmagid A. Abdalla

**5- Year of operation:** 2012-2013

# NOTE:

This program started in 2012/2013, which means that students who started this program are graduated in 2016/2017. This program report aims to monitor the education process in the academy and the procedure of following up the defects that arise and how these defects can be removed.

# 1.2 External Evaluators:

- **Prof. Dr. Tawfik Tawfik M. El-Midani**: Professor of Production Engineering, Production Engineering and Mechanical Design Department, Faculty of Engineering, Mansoura University.
- Prof. Dr. Fatheya Abdelhady Soliman, Emeritus Professor- Mechanical Design & Production Department, Faculty of Engineering, Cairo University.

# Comments of external evaluator and other stakeholders

#### a) Comments of stakeholders:

- 1) The department, as a part of the modern academy for engineering and technology has been established according to the decree no. 2003 dated 25/10/2000 and modified by the ministerial decree no. 296 dated 5/3/2002. The credit hour system has been introduced starting 2012/2013.
- 2) The major area for students studying (enrolled) in the department is manufacturing engineering and Production technology. However, other majors can be easily added as most of the needed subjects and most of the needed laboratories, as well as the needed teaching staff already exist.
- 3) Advanced and modern manufacturing methods are included in the curricula of the department.
- 4) Other important aspects of the educational system are totally regarded, that includes; implementation methods and techniques, full awareness of technical systems and computer related use.
- 5) Development of research skills and teamwork through the preparation of project research documents, fourth year and fifth year projects, and gathering data from similar projects.

# b) Comments of external evaluator



As the external evaluators reports were performed for the relevant program two years ago, and as this is the first program report for the credit hour system, the comments of the external reviewers will be stated.

# 1) First Evaluator

**Reviewer Comment** 

### Coordinator Response

- specific and consistent with the rest of the program specifications.
- The basic information included is accurate, Basic information listed is according to the ministerial decrees mentioned above.
- ➤ The program has а coordinator/coordinating team.
- designated > The department council has chosen the program coordinator and the coordinating team.

# 2) Second Evaluator

Reviewer Comment

# Coordinator Response

- specific and consistent with the rest of the program specifications.
- ➤ The basic information included is accurate, ➤ Basic information listed is according to the ministerial decrees mentioned above.
- ➤ The program coordinator/coordinating team.
- designated > The department council has chosen the program coordinator and the coordinating team.

# 2. Professional Information

# 2.1 Statistics

1-No. of students starting the program at 2013 - 2014 were 219 (students accepted in the Academy the academic year 2012/2013 were 1100 students with a ratio 19.9 %

Table (1): No. and percentage of students passing in each year/level/semester

Lev	el	Number of students	Percentage of passing students
First	2013-2014	218	NA
Second	2014-2015	172	NA
Third	2015-2016	113	N/A
Fourth	2016-2017	105	N/A

# 2.2 Academic Standards

# 2.2.1 Achievement of program intended learning outcomes, ILO's:

The following four tables include the contribution of the program courses in the program ILO's.



# Table (1) Program Mapping Matrix; Courses/Knowledge and Understanding (A's)

										Dra	rom I	nto-	المطا	00:	na ^	ıto o -	200 /	۸١							
Code	Subject	01	02	03	04	05	06	07	08	Prog 09	ram i	nten 11	ded L 12		ng O			<b>4)</b> 17	18	19	20	21	22	23	24
GEN 141	Contemporary Social Issues	UI	UZ	UU	04	UU	00	UI	00	1	10	- 11	12	10	14	10	10	17	10	13	20	41		20	24
	English Language									1	1														
	History of Engineering & Technology	1				1			1	1		1			1										
GEN 241										1	1		1												
GEN 242	Technical Report Writing				1						1	1													
GEN 351		1	1			1		1							1				1						
GEN 453	Elective 3				1					1		1							1	1					
	Elective 5					1	1			1	1	1													
GEN 353	<u> </u>						1	1			1		1								1				
GEN 354		1							1			1													
GEN 454		4						1	1	1	1	1		1											
CHE 100		1		1	1	1			1			1	1	4			4								
CMP 110 MEC 101	Program Design and Computer Language  Mechanics-1	1	1	1	1	1			1					1			1								
	Mechanics-1	1	1	1	1	1																			
	Math-1 (Algebra and Calculus)	1	1	- 1	ı	1																			
	Math-2 (Integration and Analytic Geometry)	1	-	1		1																			
	Math-3 (Differential Equations and Transforms)	1	1	-		1																			
MTH 207	Math-7 (Numerical Analysis)	1				1																			
MTH 305M	Math-5 (Introduction to Probability & Statistics)	1	1			1																			
PHY 101	Physics-1	1	1	1		1	1		1				1												
PHY 102	Physics-2	1		1	1	1								1	1	1									
ELC 316	Electro Engineering	1	1	1	1	1																			
ELC 317	Electric Machines	1	1	1	1	1									1	1	1								
	Introduction to Engineering Materials		1	1	1														1						
MNF 101			1		1	1			1		1														
	Principles of Production Engineering	1	1		1																				
MNF 211	Mechanics of materials		4	1	1	1					1			1					1						
	Fundamentals of materials Science	4	1	1	1									4					1						
	Mechanics of Machines-1 Machine Drawing-1	1	1	1	1		1				1			1					1						
	Mechanics of Machines-2	1	- 1	1	1		ı				ı			ı					ı						
	Machine Drawing-2		1			1	1												1	1					
	Fluid Mechanics	1	1	1	1	1								1	1				1	1					
MNF 312				1	1									•	•				•	•					
	Computer Applications-2	1			-	1	1		1					1		1	1		1				1		
MNF 314		1	1	1	1	1			1				1	1					1						
MNF 411	Mechanical Measurements			1	1																				
MNF 412	Industrial Operations Research	1	1			1							1		1		1								
	Automatic Control	1		1	1	1										1									
MNF 511	, ,						1								1						1	1			1
MNF 431	Elective 1	1	1	1	1	_																			
MNF 432		1		1	1	1			_					1					1						
	Elective 1	1				1		1	1		4		4	4						1	1				
MNE 222	Metal Cutting Processes  Materials Technology and Testing		4	1	4				1		1		1	1					4						
	Materials Technology and Testing  Metals Cutting Theory	1	1	1	1	1			1	-	1		1		1				1						-
MNE 321	Machine Design-1	1	1	1	1	1			-		-		-		ı				1						
	Foundry Technology	1	-	'	1				1			1		1					1	1					
MNF 324	Machine Design-2	'	1	1	1				-			-							1						
	Engineering Metrology			1	1											1									
MNF 421	Joining Processes	1		Ė	1				1					1		<u> </u>			1	1					
	Computer Numerical Control, CNC Machines	1							1					1		1	1	1				1	1	1	
MNF 423	Computer Aided Design (CAD)	1	1		1				1				1	1	1	1		1	1						
MNF 424	Advanced Materials and Composite			1					1				1	1											1
	Modern Manufacturing Methods	1	1	1	1										1	1						1			
	Computer Aided Manufacturing (CAM)	1			1	1			1				1	1		1						1	1		
MNF 522	Hydraulic Power Systems	1	1	1	1	1			1																
MNF 523	Production Aids Design	1			1									_		1			1						
	Industrial Thermal Systems	4		4	1	4			4					1		4		4	1						
	Elective 4	1		1	4	1			1					4		1		1	1						4
	Elective 4	1		1	1				4				4	1				4	1			4			1
IVIIVE 533	Elective 6				1	Ì			1	1			1	1			l	1	1	l	l	1	l		1



MNF 534	Elective 6					1		1			1	1			1				1	1	
MNF 535	Elective 7		1	1	1								1								
MNF 536	Elective 6	1	1	1	1																
MNF538	Elective 4	1		1	1			1									1	1	1		
MNF 530	Elective 7			1				1				1	1	1					1		
MNF 537	Elective 7	1		1				1				1	1			1			1		
MNF 361	Seminar-1.								1		1		1								
MNF 362	Seminar-2.								1		1		1								
MNF 461	Project-1													1				1			
MNF 462	Industrial Training(1)																1	1			
MNF 551	Elective 3	1		1	1		1	1	1		1	1						1			
MNF 552	Elective 3	1		1	1					1											
MNF 553	Elective 5					1			1		1			1		1		1			
MNF 561	Project-2a													1				1			
MNF 562	Industrial Training(2)																1	1			
MNF 563	Project-2b													1				1			



# Table (2) Program Mapping Matrix; Courses/Intellectual Skills (B's)

Code	Subject	01	02	03	04	05	06	07	08	09	Inte 10	ellecti 11	ual sk	ills <b>(B</b>	14	15	16	17	18	19	20	21	22
GEN 141	Contemporary Social Issues	UI	UZ	00	1	00	UU	UI	UU	1	IU	- 11	1	IJ	14	10	10	17	10	ıΰ	20	41	22
GEN 142	English Language				1					•			Ė										
GEN 143	History of Engineering and Technology	1	1				1	1															
GEN 241	presentation skills													1									
GEN 242	Technical Report Writing				1																		
GEN 351	Elective 2	1	1					1	1					1									
GEN 453	Elective 3			1		1				1													
GEN 352	Elective 5			1	1					1			1										
GEN 353	Management & International Business			1	1	1				1	1												
GEN 354	Sound System and Noise Pollution				1									1		1							
GEN 454	Basics of Engineering Syndicate Works								1	1		1		1									
CHE 100	Chemistry	1	1	1	1		1		1		1		1										
CMP 110	Program Design &Computer Language	1	1	1	1			1					1	1	1			1	1				
MEC 101	Mechanics-1	1	1																				
	Mechanics-2	1	1			1								1		1							
MTH 101	Math-1 (Algebra and Calculus)	1	1	1				1															
MTH 102	Math-2 (Integration & Analytic Geometry)	1	1	1	1			1				1											
MTH 203	Math-3 (Differential Equations and Transforms)	1	1	1				1															
MTH 207	Math-7 (Numerical Analysis)	1	1	1				4				1											
MTH 305M	Math-5 (Introduction to Probability &Statistics)	1	1	1				1				1											
PHY 101	Physics-1	1	1	1	4	4	4	1						4		4							
PHY 102	Physics-2	4	1	1	1	1	1			4				1	4	1							
ELC 316	Electro Engineering Electric Machines	1	1	4		1	4			1		4		1	1	1							
ELC 317	Introduction to Engineering Materials	4	1	1		4	1			1		1		4		4		4					
MNF 100 MNF 101	Eng. Graphics	1	1	1		1		1	1	1				1		1		1					
MNF 101	Principles of Production Engineering		1	1				I		I	1	-							1				
MNF 102	Mechanics of materials	-	1	H		1	1	1			-	-		1	1			1	- 1				
MNF 211	Fundamentals of materials Science	1	1			1	- 1	ı						1		1		1					
MNF 213	Mechanics of Machines-1	1	-			-								1		ı		-					
	Machine Drawing-1			1	1				1					-				1					
MNF 214	Mechanics of Machines-2	1		-	-	1			-					1	1	1		-					
MNF 216	Machine Drawing-2	-		1	1				1					'		1		1					
	Fluid Mechanics	1	1	-				1	'					1				1					
MNF 312	Computer Applications-1		i i	1	1			•	1					Ė				1					
MNF 313	Computer Applications-2			<u> </u>	•			1						1					1				1
MNF 314	Thermodynamics	1	1	1		1		-						1				1	-				
MNF 411	Mechanical Measurements				1	1			1		1			-			1				1		
MNF 412	Industrial Operations Research	1	1	1				1	1			1		1				1					
MNF 413	Automatic Control	1	Ė			1								1		1							
MNF 511	Quality Control and Quality Management				1	1						1											
MNF 431	Elective 1	1	1			1								1			1						
MNF 432	Elective 1	1	1											1									
MNF 433	Elective 1							1	1							1			1				
MNF 221	Metal Cutting Processes			1						1			1			1							
MNF 222	Materials Technology and Testing	1	1			1								1		1		1		1			
MNF 321	Metals Cutting Theory	1		1						1			1					1	1				
	Machine Design-1		1			1	1							1									
	Foundry Technology	1	1	1		1	1							1		1							
MNF 324	Machine Design-2		1			1	1							1									
MNF 325	Engineering Metrology				1	1			1			1			1		1				1		
MNF 421	Joining Processes		1	1		1	1							1			1					1	1
MNF 422	Computer Numerical Control, CNC MACHINES	1	1	1															1				
MNF 423	Computer Aided Design (CAD)	1	1	1		1			1			1		1		1							
	Advanced Materials and Composite		1	1				1					1					1	1	1			
MNF 425	Modern Manufacturing Methods	L.	1	L.		ļ.,				1	1			ļ.,	1			ļ.,	1				
MNF 521	Computer Aided Manufacturing (CAM)	1	1	1		1			1					1				1					
	Hydraulic Power Systems	1	1			1				1				1	1	1							
	Production Aids Design	1	1	1			L.												1				
	Industrial Thermal Systems	1	1	<b>L</b> .			1							1									,
MNF 535	Elective 7	1		1		1				4					_								1
	Elective 4	1		1	1	1	1		1	1			1	_	1			_	1				1
MNF537	Elective 7	1				1	<u> </u>			1				1	1			1					



	4																					
MNF 531	Elective 4	1	1	1		1		1				1		1				1			l '	
MNF 532	Elective 4						1					1										
MNF 533	Elective 6		1	1		1																
MNF 530	Elective 7	1			1				1						1	1			1			
MNF 551	Elective 3	1	1		1							1				1	1	1				
MNF 552	Elective 3									1												
MNF 553	Elective 5	1	1							1	1			1	1		1					
MNF 361	Seminar-1.		1					1		1	1											
MNF 362	Seminar-2.		1					1		1	1											
MNF 461	Project-1	1		1									1						1			
MNF 462	Industrial Training(1)				1							1										
MNF 561	Project-2a	1		1									1						1			
MNF 562	Industrial Training(2)				1							1										
MNF 563	Project-2b	1		1									1						1			
MNF 534	Elective 6	1	1											1	1		1		1			1
MNF 536	Elective 6	1	1			1								1			1			1		



# Table (3) Program Mapping Matrix; Courses/ Professional and practical skills (C's)

		1							Dra	·f	ional	a a d .	ti	ام اما	rilla.	C'-							
Code	Subject	01	02	03	04	05	06	07	08	09	ional 10	and	12	13	14	15	16	17	18	19	20	21	22
GEN 141	Contemporary Social Issues	1	02	03	04	1	00	01	00	03	10	11	12	13	14	IJ	10	17	10	13	20	21	22
GEN 142	English Language	<b>'</b>				'						1	1										
GEN 143	History of Engineering and Technology	1				1																	
GEN 241	presentation skills											1											
GEN 242	Technical Report Writing		1		1								1	1									
GEN 351	Elective 2	1				1		1		1												l	
GEN 453	Elective 3		1		1				1														
GEN 352	Elective 5	1				1				1												L	
GEN 353	Management & International Business	1				1																	
GEN 354	Sound System and Noise Pollution			3													1						
GEN 454	Basics of Engineering Syndicate Works					_			_		1	1	1	1								<sup> </sup>	
CHE 100	Chemistry	1	1	1	4	1	4	4	1				1		4	4							
CMP 110 MEC 101	Program Design and Computer Language Mechanics-1	1	1	1	1	1	1	1							1	1							
MEC 101	Mechanics-1	1	-	1		1																	
MTH 101	Math-1 (Algebra and Calculus)	1		-		'							1										
MTH 102	Math-2 (Integration & Analytic Geometry)	1						1															
MTH 203	Math-3(Differential Equations & Transforms)	1											1										
MTH 207	Math-7 (Numerical Analysis)	1				1		1					Ė										
MTH 305M	Math-5 (Introduction to Probability and Statistics)	1	1										1										
PHY 101	Physics-1	1	1			1						1											
PHY 102	Physics-2	1				1			1			1			1								
ELC 316	Electro Engineering	1		1		1	1						1				1	1				L	
ELC 317	Electric Machines	1			1	1			1													L	
MNF 100	Introduction to Engineering Materials	1	1																	1			
MNF 101	Eng. Graphics		1	1	1							1		1								L	
MNF 102	Principles of Production Engineering	1		1				1														L	
MNF 211	Mechanics of materials	1		1		1			1				1									<sup> </sup>	
MNF 212	Fundamentals of materials Science	1	1																	1		<sup> </sup>	
MNF 213	Mechanics of Machines-1	1																				<sup> </sup>	
MNF 214	Machine Drawing-1	1	1	1							1				1							<sup> </sup>	
MNF 215	Mechanics of Machines-2	1		1		1	1		1			1											
MNF 216	Machine Drawing-2	1	1								1			1	1							L	
MNF 311	Fluid Mechanics		1	1		1							1				1	1				<sup> </sup>	
MNF 312	Computer Applications-1	1	1	1							1				1		1					L	1
MNF 313	Computer Applications-2	1	1			1			1		1				1	1		1				1	1
MNF 314	Thermodynamics	1	1			1						1	1				1	1		1			
MNF 411	Mechanical Measurements		1	1		1											1					I	
MNF 412	Industrial Operations Research	1	1					1	1				1					1					
MNF 413	Automatic Control	1				1											1	1				ı	
MNF 511	Quality Control and Quality Management										1							1					
	Elective 1	1				1	1	1									1						
MNF 432	Elective 1	1	1	1			-	-									-	1					
MNF 433	Elective 1	1	1																	1		ı —	
MNF 221		-	-				1		1			1				1				1			
	Metal Cutting Processes	,							ı			1				ı							
MNF 222	Materials Technology and Testing	1	1																	1		 	
MNF 321	Metals Cutting Theory	1	1			1	1		1				1					1					
MNF 322	Machine Design-1	1		1									1	1								L	
MNF 323	Foundry Technology	1		1		1	1						1	1			1	1					
MNF 324	Machine Design-2	1		1									1	1									
MNF 325	Engineering Metrology		1	1		1											1						
MNF 421	Joining Processes	1	L	1	L	1	1	L		L	L	L	1	1		L	1	1				. 1 L	1
MNF 422	Computer Numerical Control, CNC Machines					1									1	1		1	1				
MNF 423	Computer Aided Design (CAD)	1	1																				
MNF 424	Advanced Materials and Composite			1		1			1							1		1		1		1	1
MNF 425	Modern Manufacturing Methods	$\perp$	L	L	L			L		L	L	L	L	L	1	1	1	1	1			. 1 L	
MNF 521	Computer Aided Manufacturing (CAM)	1	1			1	1			1	1		1		1			1					
MNF 522	Hydraulic Power Systems	1		1		1	1						1				1	1					
MNF 523	Production Aids Design	1		1																		L	
-	-	•																					



MNF 524	Industrial Thermal Systems	1	1	1												1					
MNF 531	Elective 4	1				1	1	1								1		1			
MNF 532	Elective 4				1										1	1					
MNF 533	Elective 6		1	1					1	1			1							1	
MNF 534	Elective 6					1	1	1					1								1
MNF 535	Elective 7	1	1	1		1	1												1		
MNF 536	Elective 6	1				1	1	1							1						
MNF 537	Elective 7	1	1	1		1	1				1	1				1					
MNF 538	Elective 4	1		1		1	1				1	1			1	1				1	
MNF 530	Elective 7		1	1			1								1	1			1		
MNF 361	Seminar-1.	1	1						1												
MNF 362	Seminar-2.	1	1						1												
MNF 461	Project-1	1	1			1			1		1	1			1		1				
MNF 462	Industrial Training(1)	1												1			1	1			
MNF 551	Elective 3								1	1	1										
MNF 552	Elective 3								1												
MNF 553	Elective 5	1	1	1		1	1	1			1										
MNF 561	Project-2a	1	1			1			1		1	1			1		1				
MNF 562	Industrial Training(2)	1												1			1	1			
	Project-2b	1	1			1			1		1	1			1		1				



Table (4) Program Mapping Matrix Courses/General Transferrable skills (D's)

				0	al a - 2 :		alalo et	:II. (B)		
Code	Subject	01	02	Gener 03	al and to	transfer 05	able sk	ills <b>(D)</b> 07	08	09
GEN 141	Contemporary Social Issues	1	UZ	1	04	UO	UU	1	UO	1
GEN 141	English Language	1	1	1	1		1	1	1	1
GEN 143	History of Engineering and Technology	1		'			'	1	1	
GEN 241	presentation skills	1	1	1		1		1		
GEN 242	Technical Report Writing	<u> </u>		·			1	·	1	
GEN 351	Elective 2	1	1	1			-	1		1
GEN 453	Elective 3	1	1				1			1
GEN 352	Elective 5	1		1				1		1
GEN 353	Management & International Business	1		1				1		1
GEN 354	Sound System and Noise Pollution	1		1					1	
GEN 454	Basics of Engineering Syndicate Works	1	1	1			1	1		
CHE 100	Chemistry	1	1	1	1	1		1		
CMP 110	Program Design and Computer Language	1		1	1	1		1		1
MEC 101	Mechanics-1	1	1							
MEC 102	Mechanics-2	1	1							
MTH 101	Math-1 (Algebra and Calculus)			1				1		
MTH 102	Math-2 (Integration and Analytic Geometry)	1		1				1		
MTH 203	Math-3 (Differential Equations and Transforms)			1				1		
MTH 207	Math-7 (Numerical Analysis)			1	1			1		
MTH 305M	Math-5 (Introduction to Probability and Statistics)	1	4	1			4	1		
PHY 101	Physics-1	1	1	1	1	4	1	4		1
PHY 102	Physics-2	1		1	1	1		1		4
ELC 316 ELC 317	Electro Engineering Electric Machines	1	1	1			1	1		1
MNF 100	Introduction to Engineering Materials	1	- 1	1			I	1		1
MNF 100	Eng. Graphics	1		1				I		1
MNF 101	Principles of Production Engineering	1		1				1		1
MNF 211	Mechanics of materials	1		1				ı		1
MNF 212	Fundamentals of materials Science	1		1				1		1
MNF 213	Mechanics of Machines-1	1		1				1		1
MNF 214	Machine Drawing-1	1		1						1
MNF 215	Mechanics of Machines-2	1		1				1		-
MNF 216	Machine Drawing-2	1				1				1
MNF 221	Metal Cutting Processes	1		1				1		1
MNF 222	Materials Technology and Testing	1		1				1		1
MNF 311	Fluid Mechanics	1	1	1		1				
MNF 312	Computer Applications-1	1		1						1
MNF 313	Computer Applications-2	1			1					
MNF 314	Thermodynamics	1		1				1	1	
MNF 321	Metals Cutting Theory	1		1				1		1
MNF 322	Machine Design-1		1	1				1		1
MNF 323	Foundry Technology	1		1				1		1
MNF 324	Machine Design-2		1	1				1		1
MNF 325	Engineering Metrology		1							
MNF 361	Seminar-1.			1			1	1		
MNF 362	Seminar-2.			1			1	1		
MNF 411	Mechanical Measurements	4	1	_						
MNF 412	Industrial Operations Research	1		1			1	1		1
MNF 413	Automatic Control	4		1	1			1		1
MNF 421	Joining Processes	1		1			1	1		1
MNF 422 MNF 423	Computer Numerical Control, CNC MACHINES Computer Aided Design (CAD)	1		1	1	1	I			
MNF 424	Advanced Materials and Composite			1	1	1		1	1	1
MNF 424	Modern Manufacturing Methods	1		1	1			1	1	1
MNF 431	Elective 1	1		1	- 1			1		1
MNF 432	Elective 1	1		1				1		1
MNF 433	Elective 1	1		1				1		1
MNF 461	Project-1	'		1			1	1		•
MNF 462	Industrial Training(1)			1			1	1		
MNF 511	Quality Control and Quality Management	1		1				1		
MNF 521	Computer Aided Manufacturing (CAM)	1			1					
MNF 522	Hydraulic Power Systems	1		1	1			1		1
MNF 523	Production Aids Design	1		1				1		1
	<u> </u>									



MNF 524	Industrial Thermal Systems	1		1			1	1
MNF 530	Elective 7	1		1			1	
MNF 531	Elective 4	1		1	1	1		
MNF 532	Elective 4	1					1	1
MNF 533	Elective 6	1		1	1			
MNF 534	Elective 6	1		1	1		1	1
MNF 535	Elective 7		1	1	1			1
MNF 536	Elective 6	1		1			1	1
MNF 537	Elective 7	1		1	1		1	1
MNF 538	Elective 4	1		1			1	1
MNF 551	Elective 3	1	1	1		1		
MNF 552	Elective 3	1		1		1	1	1
MNF 553	Elective 5	1		1	1		1	1
MNF 561	Project-2a			1		1	1	
MNF 562	Industrial Training(2)			1		1	1	
MNF 563	Project-2b			1		1	1	

The preceding four tables include the mapping matrix relating the program courses with the program ILO's. The program ILO's contributed by each course were determined in the course specification. These tables showed that the program courses gave balanced coverage of the program ILO's.



### Comments of external evaluator and other stakeholders

# 1- Basic Information

# a) Comments of stakeholders:

- 1) Addition of new design software packages and modernization of laboratories are a continuous trend for improving the educational process.
- 2) Full knowledge of relevant scientific methods and software packages of the design process of mechanical systems is emphasized.
- A very strong interest in new trends and advanced methods of production, which help in manufacturing of precise products of mechanical systems as well as other classical manufacturing means.
- 4) Ergonomics and human needs as a user of space and his comfort is a priority.
- 5) Other important aspects of the educational system are totally regarded, that includes; implementation methods and techniques, computer related use.
- 6) Full knowledge of design process is taught, to provide methods of applying functional, environmental, social and economic aspects of design.
- 7) Development of research skills and teamwork through the execution of projects during fourth and fifth years.

# b) Comments of external evaluator

# 1) First Evaluator

### **Reviewer Comment**

#### Program Aims

- The aims are consistent with the degree awarded by completion of the program.
- The program aims are clearly stated.
- The aims specify the most important knowledge skills and attitudes students should gain after completing the program.

# 2) Second Evaluator

#### Reviewer Comment

# > Program Aims

- The aims are consistent with the degree awarded by completion of the program.
- The program aims are clearly stated.
- The aims specify the most important knowledge skills and attitudes students should gain after completing the program.

# 2- Professional Information

# a) Comments of stakeholders:

The academy is applying a real advanced teaching system, based upon maintaining balance between theoretical fundamentals and practical application, emphasizing coherence and integration among the study, development requirements of products and generally industry, and technological means (classical and/or advanced).

The teaching system is based upon advanced teaching techniques using illustrations and experimental models to clarify the relation between different parameters associated in a certain phenomenon. Manual drawing skills are first developed to help student acquire presentation

Coordinator Response

The department council agreed upon the aims of the program.

Coordinator Response

The department council agreed upon the aims of the program.



skills. The academy also develops design skills using modern computer programs packages starting with Auto Cad up to the very sophisticated levels of 3- D programs.

# b) Comments of external evaluator

# 1) First Evaluator

#### **Reviewer Comment**

# ➤ Intended Learning Outcomes (ILOs)

- The program ILO's are clearly stated.
- The program ILO's are appropriately coded.
- Consistent with the program aims.
- Program ILO's are adequately fulfilled by the program courses.
- Cover the minimum requirements in accordance with the awarded degree in terms of : Knowledge, Professional & Practical skills, Intellectual capabilities, and General and transferable skills.
- Program ILO's cope with recent advances in the field of specialty.

#### > Academic Reference Standard

- The academic Reference standards of the program are clearly stated.
- The reference standards used as a benchmark are specified.
- The degree to which the academic standards of the program measure up to the specified benchmark (they fall below it).

#### Curriculum Structure and Contents

- ✓ Program duration
  - The minimum duration specified is adequate to fulfill the program activities & objectives.
- ✓ Program Structure
  - The number of hours required to complete the program are specified and adequate.
  - Distribution of the hours as compulsory, elective, and optional is acceptable.
  - The following areas are adequately covered in the program (Social sciences and humanities, Basic science course. Specialized courses. Practical/Field training).
  - No other courses should be included in the program.

# 2) Second Evaluator

#### **Reviewer Comment**

# ➤ Intended Learning Outcomes (ILOs)

- The program ILO's are clearly stated.
- The program ILO's are appropriately coded.
- Consistent with the program aims.
- -The program ILO's are adequately fulfilled by the program courses.
- Cover the minimum requirements in accordance with the awarded degree in terms of: Knowledge, Professional & Practical skills, Intellectual capabilities, and General and transferable skills.
- The program ILO's cope with recent advances in the field of specialty.

# Coordinator Response

- The department adopted the ARS as the academic reference standard and considered the ARS intended learning outcomes as the program ILO's. Moreover, the courses ILO's are stated in detail in the courses specifications. They agree, in general, with the program ILO's
- The department adopted the ARS standard as a reference academic standard.
- The duration of the program has been determined according to ARS standard. Also the number of hours and their distribution to different areas are according to ARS.

# Coordinator Response

The department adopted the NARS as the academic reference standard and considered the NARS intended learning outcomes as the program ILO's. Moreover, the courses ILO's are stated in detail in the courses specifications. They agree, in general, with the program ILO's

-



#### > Academic Reference Standard

- The academic Reference standards of the program are clearly stated.
- The reference standards used as a benchmark are specified.
- The degree to which the academic standards of the program measure up to the specified benchmark \* they fall below it).

# > Curriculum Structure and Contents

- ✓ Program duration
  - The minimum duration specified is adequate to fulfill the program activities & objectives.
- ✓ Program Structure
  - The number of hours required to complete the program are specified and adequate.
  - Distribution of the hours as compulsory, elective, and optional is acceptable.
  - The following areas are adequately covered in the program (Social sciences and humanities, Basic science course. Specialized courses. Practical/Field training).
  - No other courses should be included in the program.

➤ The department adopted the ARS standard as a reference academic standard.

➤ The duration of the program has been determined according to ARS standard. Also the number of hours and their distribution to different areas are according to ARS.

# 3- Regulation & Evaluation

# a) Comments of stakeholders:

1) There should be an orientation courses for first year student after finishing their academic year to properly guide students to their specialization. Also, student choice of different department should be constrained according to some gualifying courses.

# b) Comments of external evaluator

# 1) First Evaluator

**Reviewer Comment** 

- The program admission requirements are clearly specified and matching the school bylaws.
  - The regulation for progression and program completion are clearly specified and matching the school bylaws.
- The methods used for program evaluation are adequate.

#### 2) Second Evaluator

**Reviewer Comment** 

The program admission requirements are clearly specified and matching the school bylaws.

# Coordinator Response

- ➤ The program admission requirements have been applied according to the law No. 52 of 1970, on the organization of private colleges and institutes regulations issued Ministerial Resolution No. 1088 for the year 1987 and amended decisions.
- Methods used to evaluate the program are student questionnaire, external reviewers, and stakeholders' comments.

### Coordinator Response

The program admission requirements have been applied according to the law No. 52 of 1970, on the organization of private colleges and institutes regulations issued Ministerial



The regulation for progression and program completion are clearly specified and matching the school bylaws.

> The methods used for program evaluation are adequate.

Resolution No. 1088 for the year 1987 and amended decisions.

Methods used to evaluate the program are student questionnaire, external reviewers, and stakeholders' comments.

# 4- Program Courses

# a) Comments of stakeholders:

Program courses were very well prepared. Courses specifications include listing of lecture notes, in addition to reference books and recommended references.

The data of some references should be updated and be in the standard form according to the formal form used in course specification.

Minor topics should be changed and repetitions of the same topic in different courses should be resolved.

# b) Comments of external evaluator

# 1) First Evaluator

**Reviewer Comment** 

- ➤ There are some courses, course notes, required books, and recommended books not specified or no published date.
- There is a new edition for some basic sciences courses.
- > For many books published dates are required.
- Required books & recommended books must be updated.
- General Note: A lot of books and references should be updated.

# 2) Second Evaluator

Reviewer Comment

- > ILO s of some courses needs to be revised.
- Student's assessment/ILOs matrix in some courses should be corrected.
- Verbs used to describe ILO's need to be revised ( marked in documents)
- Facilities required for teaching and learning in many courses need to be completed.
- Recommended books and required one need to be completed.
- ILO's of some courses cannot be measured and need to be revised ( marked in documents)

# Coordinator Response

- Course notes have been added to the course specifications.
- > The mentioned courses are basic science courses; new editions will be added.
- Publishing dates have been added to some books.
- Updating of references will be carried out.

#### Coordinator Response

- > ILO's have been revised for all courses.
- The errors which have been found in student assessment methods and ILO's matrix will be corrected.
- The ILO's have been revised and corrected
- There are different facilities for teaching and learning and every teaching staff has laid down the facilities that he actually apply.
- The ILO's have been revised and corrected



# 5- Overall Evaluator Opinion & Free Comments

a) Comments of stakeholders:

None

# b) Comments of external evaluator

### 1) First Evaluator

Reviewer Comment

Generally this program is considered up to standard if compared with other similar programs, and I am sure that a lot of effort has been carried out to present this report in this honorable form.

Coordinator Response

The program has been prepared according to ARS.

# 2) Second Evaluator

Reviewer Comment

Coordinator Response

None

# 2.3 Achievement of program aims

Reviewing the achieved program aims covered by the achievement of the different educational aims in the courses, which vary from one course to another according to the course nature, It has been noticed fully achievement of program aims which are:

- 1- Providing practical professionally supervised summer training programs.
- 2- Applying and developing advanced teaching methods.
- 3- Considering and implementation of continual development of taught curricula.
- 4- Maintaining balance between theoretical fundamentals and practical application.
- 5- Emphasizing coherence and integration between theoretical and applied courses and the needs of manufacturing engineering and production technology in general and specifically the advanced and new trends.
- 6- Broadening the scope of taught courses, enriching their content by studying some case studies and experiences and preparing seminars.
- 7- Engaging students of third and fifth years in realistic research work through their projects that give a good reflection of student ability to grasp knowledge and different skills from different courses.

# 2.4 Assessment methods

- The department evaluates the students using various methods such as final exam, midterm exam, oral exams, weekly or biweekly assignments, quizzes, practical exam, seminars, and researches, according to the course structure and assessment methods mentioned in courses specifications.
- The assessment methods must cover the intended learning outcomes mentioned in the course specification. The teaching staff and the head of the department are keen on revising the examinations sheets to be sure that they cover at least 80 % of the course content.
- The final grade awarded to student in a course is usually based on the grades for both final exam and semester work and for some courses, the evaluation of practical and/or oral exam is also included.



# 2.5 Student achievement

Comments of external evaluator and other stakeholders on statistics from Section B:

# a- Comments of stakeholders:

- Students are coping well with the learning system and, methods implemented at the academy. They
  became familiar to hard work, libraries, books, periodicals, as well as, to computer use and internet. They
  present very well seminars, able to work in groups; each member of the group is executing his task
  efficiently.
- The applied system implies discipline and help student form hard work habit. Libraries, field and research work help developing analytical skills. Seminars help developing presentation skills.

# b- Comments of external evaluators :

1- First Evaluator

None

2- Second Evaluator

None

# 2.6 Quality of teaching and learning

# Comments of external evaluator and other stakeholders including students

#### a- Comments of stakeholders

- The Academy adopt methods of teaching and learning based on traditional patterns of education courses that meet the goals and targets that are taught in accordance with the approved list.
- The formation of a committee of faculty members to study the distribution of subjects on the staff members in accordance with the teaching specialty to ensure the quality of teaching and learning.
- The diversity in summer training programs according to the variables and labor market needs and requirements of the parties outside the academy.
- The development of strategies and announcements of the Department through regular monthly meetings with faculty members and once per term meeting with teaching assistants to develop and discuss the plan of action and put forward solutions to problems that are reviewed.
- Some of the decisions are being taken corrective actions to keep high performance of the teaching process in the department as the results of self-evaluation.
- Ongoing work of the internal audit and continuous assessment tasks.

# b- Comments of external evaluators

1- First Evaluator: None2- Second Evaluator: None

# 2.7 Effectiveness of student support systems

# Commentary on both academic and pastoral/personal support for all students

The department is interested in the students' support through the following:

• Students of the same level are divided into classes; each includes at most 30 students that have exercise for each course in a special class and period. However, inside the laboratories the



- class is divided into groups; each includes no more than 6 students; to carry out the assigned experiment under the supervision of specialized engineers.
- Motivate outstanding students to participate in seminars, cultural activities, academic research projects and attending scientific conferences. Also, they got additional marks according to the extent of their activities.
- Each level of students has a faculty member as a counselor that helps in solving students' problems (educational, social, economic, etc...). The counsellors, also, follow-up the complaints and respond in a specific period.
- The counselor held a periodic meeting with students to build a good relation and help in solving their problems.
- There is a schedule of final revision for the studied courses at the end of each semester to assist low and middle caliber students.
- Students are helped in the case of special circumstances such as cases of disease, the death
  of a parent, injuries during an incident, by taking into account the circumstances of each case in
  providing the requirements of this year, especially in materials that rely on semester marks and
  attendance.
- Encourage students to manage, and organize cultural activities.
- Establishing a database for students and save all the data and grades of the year in electronic archive for each student

# 2.8 Learning resources

# A. Number and ratio of faculty members and their assistants to students

- Staff members and the assistants (Appendix 1 Program Specification)
- Percentage of staff members to students: 1:25
- Percentage of staff assistants to students: 1:15

#### B. Matching of faculty members' specialization to program needs.

• All the Staff members are Qualified and they are adapted with the program requirements. (C.V. for all staff members are included in H.R. document))

# C. Availability and adequacy of program handbook

The program specification is explained to the students attending the program through interviews with the students, in addition there are lecture notes for most of the courses available to the students.

# D. Adequacy of library facilities.

• The academy scientific library is annually refurnished with the books needed for enriching the specialty according to the budget.

# E. Adequacy of laboratories

- The department has 18 laboratories serving different courses taught in the department.
- A computer laboratory consists of 34 computers is specified to the department to help in teaching
   6 courses
- The department is going to buy a virtual lab. That can help for teaching the lab for a lot of courses



# F. Adequacy of computer facilities

- Labs are in need of increase of the instruments to cope with the increasing number of students attending the program and to build virtual labs that help in teaching different courses in the dept.
- Renovation of the design software packages periodically.

# G. Adequacy of field/practical training resources

• The department is keen on the compatibility of the summer training programs with the program specification and the requirements of the labor market. Care to provide opportunities for all students of the department with the diversity of training sites.

# H. Adequacy of any other program needs: None

# 2.9 Quality management

# A. Availability of regular evaluation and revision system for the program

There is a unit for Quality Assurance in the department began its course of action by doing self-assessment to the department at the end of the academic year 2009/2010, in order to identify and develop the strong points and to identify and treat the weak points (SWOT). The views of all interested parties (faculty members, their assistants, students, the administrative bodies, representatives of civil society, and stakeholders) in the courses and the educational process have been explored, and sample of students has been taken (10%) of the total number of students of the college. As for the faculty members, they were asked all and for the administrative apparatus, the sample (30%) of the total number has been analyzed. The results of the poll were statistically analyzed then a view of these results was discussed with the College Board to take decisions on further development.

# The results of self-evaluation and quality management

a- Reflection of the results of self-evaluation of the department performance on quality management

Work is already underway to make some decisions for correcting the overall performance of the department in light of the results of self-evaluation Examples of such decisions:

- The work of the internal audit and continuous assessment with identified tasks.
- Work is permanently and continuously to develop the capacity of faculty members.
- The department is interested in students and alumni, and follows up their proceeding in the labor market, to improve the outcomes and competitive position within the community.

# b- Strengthening activities for Quality Management

It was possible to identify some areas for future promotion and development in the light of the results of self-evaluation of the performance of the department and of these areas.

Strengthening the quality management in the department through:

- The continued development of the courses objectives with global trends.
- Developing the skills of the administrative apparatus in the use of technology.
- Prepare an annual plan for periodic maintenance of institutional facilities.
- Preparation of a 5-year plane to hire staff members and assistants to modify their ratios to the number of students.

# B. Effectiveness of the system

The quality management system is effective since there are:

Quality management regulations.



- Enforcing and application of the quality measures for all aspects of the teaching process.
- Feedback for the program evaluation.
- Corrective actions for program flaws.
- Recording and listing all these activities in annual course reports and in the program report

# C. Effectiveness of Faculty and University laws and regulations for progression and completion

There is a quality section in the department which is a subordinate from the quality center of the Academy. Its role is not only monitoring and assuring the implementation of the quality measures in the department but also to plane, manage, and help in execution of quality measures of the academy.

# D. Effectiveness of program external evaluation system:

I- External evaluators

The department program is evaluated by two qualified external evaluators.

#### II- Students

The program courses, the teaching methods and the assessment methods are evaluated by students each semester by questionnaires handed to a sample of students for each course. As for the fifth year students, they fill in addition to the courses questionnaires another one concerned with the program questionnaire to evaluate the whole program.

#### III- Other stakeholders

At the end of the academic year, there is an annual meeting for the stakeholders and representatives of the civil community for the reconnaissance of their evaluation to the academic year.

# E. Faculty response to student and external evaluations

All the external evaluator's comments were taken in consideration and are stated with the department response in the "Program Specification".

There is an action plan set to be implemented in the following academic year.

# 3. Proposals for program development

# A Courses, deletions, additions, and modifications

The course coordinator can modify some of the contents of the curriculum without changing the major goals of the course which is approved by the academy and the ministry of high education. This change is done by reference to the department council.

# B. Staff development requirements

According to the plan four staff members have been appointed in the department during the academic years 2014/2015, and 2015/2016. The department has a plan to increase the number of staff within the next 2 years to reach the ratio 1:25 for the staff to students. Also 3 staff assistants have been appointed during 2014/2015, and other two have been hired during 2015/2016. The department plans to reach the ratio of 1:15 for the staff assistants to students.



4. Progress of previous year's action plan

4. Flogless of previous y	car 3 action plan	
Action identified	Person Responsible	Progress of action
Choice of external reviewers to review the program specifications for credit hour system.	The department and the Administration of the Academy	Done
Specialized training courses for all staff and teaching assistants	Training Sector of the Academy	Five training courses have been held  1- Use of Technology in teaching (10- 11/11/2013) (1 Staff & 1 Assistant)  2-Different methods of examinations & student evaluation (12-14/11/2013) (1 Staff & 1 Assistant)  3- Training for trainer Track (26-27/8/2014) (2 assistants)  4- Ethics of scientific research (15- 16/11/2015) (2 Staff & 4 Assistants)  5-Use of Technology in teaching (26- 27/01/2015) (2 Staff & 2 Assistant)
Complete the shortage in educational staff.	Administration of the Academy	Four staff member has been added to the department and Fife teaching assistants
Holding the Fourth scientific conference of the academy	Administration of the academy	Not carried out.
The Third & Fourth scientific conferences of the department	The department	Done at November 2014 and at March 2015
Training of Teaching Assistants on CAMWORKS package	The department	September 2015

# 5. Action plan (2017/2018)

Action required	Person Responsible	Completion Date
Specialized training courses for all staff and teaching assistants	Training Sector of the Academy	During Midterms of 2017/ 2018 semesters
Complete the shortage in educational staff. (According to the plane one Staff member and 2 teaching assistants).	Administration of the Academy	Academic year 2017-2018
Holding the Fifth scientific conference of the academy	Administration of the academy	After finishing the graduation projects.
The Fifth and Sixth scientific conferences of the department	The department	Two conferences, one in each semester

Program Coordinator: Dr. Abdelmagid A. Abdalla

Signature:





# Semester's Course Report



# 2012/2013

# Freshman, First Semester

Code	Course
MTH101	Math-1 (Algebra and Calculus)
PHY101	Physics-1
MNF101	Eng. Graphics
CHE100	Chemistry
MEC101	Mechanics-1
GEN141	Contemporary Social Issues
GEN143	History of Engineering and Technology

# Freshman, Second Semester

Code	Course
MTH102	Math-2 (Integration and Analytic Geometry)
PHY102	Physics-2
MEC102	Mechanics-2
MNF102	Principles of Production Engineering
CMP110	Program Design and Computer Language
GEN142	English Language
MNF100	Introduction to Engineering Materials



# Semester's Course Report Academic year 2012-2013

# A- Basic Information

1- Course Code & Title: (MTH 101) Algebra and Calculus

2- Program(s) on which this course is given:

Manufacturing Engineering and Production Technology BSc Program Electronic Engineering and Communication Technology BSc Program Computer Engineering and Information Technology BSc Program Architecture Engineering and Building Technology BSc Program

3- Year/Level of program: First Year/First Semester

4- Credit hours

Credit 3 hrs Lectures: 2 hrs Tutorial 2 hrs Practical 5- Names of lecturers contributing to the delivery of the course: Prf. Dr. Osama El Gayar

Dr. Sabry Abd El-Aziz

No.

No.

**Pass** 

**6- Course coordinator:** Dr. Sabry Abd El-Aziz

**7- External evaluator:** None

# **B- Statistical Information**

1- No. of students attending the course:2- No. of students completing the course:

3- Results:

	No.	%
Passed	776	77.83
Failed	221	22.17

Grading of successful students:			
Grade No. %			
Excellent	100	10.03	
Very Good	211	21.16	
Good	274	27.48	

191

1016

997

100

98.13

%

%

19.16

# **C- Professional Information**

1 - Course teaching

	opic		Acual hours	Tutorial hours
1	Functions.	4	3	2
2	Differentiation.	3	4	4
3	Trigonometric and inverse trigonometric functions.	3	4	4
4	Exponential and logarithmic functions.	2	2	2
5	Hyperbolic and inverse hyperbolic functions.	2	2	2
6	Taylor and binomial expansions.	2	2	2
7	Matrices with applications.	6	4	6
8	Vectors in the Euclidean space.	2	1	2
9	Real vector spaces.	2	1	2
10	Polar coordinates.	2	1	2
11	Final Revision	2	2	2
	Total hours	30	26	30

Topics taught as a percentage of the content specified: Reasons in detail for not teaching any topic: Non

More than 85 %



If any topics were taught which are not specified, give reasons in detail: Non Achieved program intended learning outcomes, ILO's:

Knowledge & Understanding	Intellectual skills	Applied Skills	General transferable skills
a1 to a7	b1 to b5	c1 to c2	d1 to d3

2- Teaching and learning methods:

Lectures: Lecture, discussions, tutorials, problem solving

Practical training/ laboratory:

Seminar/Workshop:

Class activity Solution of problems Other assignments/homework: Weekly assignments

If teaching and learning methods were used other than those specified, give reasons: Non

#### 3- Student assessment:

Method of assessment	Points	%
Written examination	70	70
Oral examination	Non	0
Practical/laboratory work	Non	0
Other assignments/class work	15	15
Mid-Term Exam	15	15
Total	100	100

Members of examination committee: Dr. Sameh and Dr. Sabry

Role of external evaluator: Non

4- Facilities and teaching materials:

Totally adequate	
Adequate to some extent	Yes
Inadequate	

List any inadequacies: Non

# **5- Administrative constraints** (List any difficulties encountered)

➤ Non

# 6- Student evaluation of the course:

	List any criticisms	Response of course team
(a)	it is recommended to solve more	Only a balanced proportion of exercises are solved
	examples in the exercises	in the class, the rest are presented as assignments
(b)	The assignment are corrected without giving detailed comments concerning the correct answers	The correct results of problems solutions of problems will be presented during the exercises periods
(c)	It is recommended to announce the points of mid- term, rather than the grades.	The form and timing of declaration of year work evaluation results follow the Academy policy.

# 7- Comments from external evaluator(s): None

#### 8- Written Exam Evaluation: None

#### 9-Course enhancement:

Progress on actions identified in the previous year's action plan. State whether or not completed and give reasons for any non-completion:



Actions required	Planned Completion date	Accomplishment
Non	Non	Non

10- Action plan for academic year 2013 - 2014

Actions required	Completion date	Person responsible
Adding more exercises, assignments reports	September , 2015	Dr. Sabry
and quizzes		

Course coordinator: Dr. Sabry Abd El-Aziz

Signature: Date: February, 2013



# Semester's Course Report Academic year 2012-2013

# A- Basic Information

1- Course Code & Title: (PHY 101) Physics

2- Program(s) on which this course is given:

Manufacturing Engineering and Production Technology BSc Program Electronic Engineering and Communication Technology BSc Program Computer Engineering and Information Technology BSc Program Architecture Engineering and Building Technology BSc Program

3- Year/Level of program: First Year/Second Semester

4- Credit hours

Credit 3 hrs Lectures 2 hrs Tutorial 1 hrs Practical 2 hr

5- Names of lecturers contributing to the delivery of the course: Prof. Dr.El-Tawab Kamal

Prof. Dr. Abo el Yazeed B. Abo el Yazeed

Dr. Marwa Y. Shoeib Dr. Nagat A. Elmahdy

**6- Course coordinator:** Dr. Nagat A. Elmahdy

7- External evaluator: Non

# **B- Statistical Information**

No. of students attending the course: No. of students completing the course: Results: No. No.

952	100	%
952	100	%

	No.	%
Passed	850	89.28
Failed	102	10.71

Grading of successful students:			
Grade No. %			
Excellent	17.64		
Very Good 215 25.29			
Good	260	30.58	
Pass 225 26.47			

# **C- Professional Information**

# 1 – Course teaching

Tonio		l hours	Lecturer
Торіс	Plan.	Actual	
Rotational motion and the Gravitational Law.	10	10	
Elasticity and Energy Stored in a wire.	6	8	Prof. Dr. El-tawab
Fluid Flow and Fundamental Laws of Fluid Mechanics.	6	8	Kamal
Viscosity and Poiseuille's Law	3	4	
Temperature and Heat Transfer.	7	8	
Thermodynamics and the Kinetic Theory of Gases.	6	8	
Simple Harmonic Motion.	4	0	
Wave Motion and Energy Transmitted by Sinusoidal Waves.	6	0	
Sound waves and Doppler's Effect.	6	0	
Total hours	54	46	

Topics taught as a percentage of the content specified:

>90 %

**70-90 %** <70%

Reasons in detail for not teaching any topic: There was no time

If any topics were taught which are not specified, give reasons in detail: Non



Achieved program intended learning outcomes, ILO's:

Knowledge & Understanding	Intellectual skills	Applied Skills	General transferable skills
a1 to a7	b1 to b3	c1 to c4	d1 to d3

# 2- Teaching and learning methods:

Lectures: Lecture, discussions, tutorials and problem solving
Practical training/ laboratory: Practical Training and experimental measurements in Lab

Seminar/Workshop: Non

Class activity Exercises; solution of problems and data show.

Other assignments/homework: Bi-weekly assignments and reports

If teaching and learning methods were used other than those specified, give reasons: Non

#### 3- Student assessment:

Method of assessment	Points	%
Written examination	60	60
Oral examination	Non	0
Practical/laboratory work	20	20
Other assignments/class work	10	10
Mid-Term Exam	10	10
Total	100	100

Members of examination committee: Prof. Dr. El-Tawab Kamal, Prof. Dr. Abo el Yazeed B. Abo el

Yazeed, Dr. Marwa Y. Shoeib and Dr. Nagat A. Elmahdy

Role of external evaluator: Non

4- Facilities and teaching materials:

Totally adequate	Yes
Adequate to some extent	
Inadequate	

List any inadequacies: Non

### 5- Administrative constraints (List any difficulties encountered)

➤ Non

# 6- Student evaluation of the course:

	List any criticisms	Response of course team	
(a)	it is recommended to solve more	Only a balanced proportion of exercises are solved in	
	examples in the exercises	the class, the rest are presented as assignments	
(b)	The assignment are corrected without	The correct results of problems solutions of problems	
	giving detailed comments concerning the	will be presented during the exercises periods	
	correct answers		
(c)	It is recommended to announce the points	The form and timing of declaration of year work	
, ,	of mid- term, rather than the grades.	evaluation results follow the Academy policy.	

7- Comments from external evaluator(s):

	Comment	Response of course team
(a)	Non	

### 8- Written Exam Evaluation

- ➤ High success percentage in the good level of the final written exam.
- The whole exam result shows considerable weakness in report writing and English language level.



# 9- Course enhancement:

Progress on actions identified in the previous year's action plan. State whether or not completed and give reasons for any non-completion:

Actions required	Planned Completion date	Accomplishment
Add more experiments to	September 2012	Two experiments are already added on September
Physics Laboratory	ratory 2012. One more is planned for May 2013	

10- Action plan for academic year 2013 - 2014

Actions required	Completion date	Person responsible
<ol> <li>Adding more assignments reports and quizzes for Chapters 1 and 3</li> <li>The need for more advanced laboratory experiences in the major.</li> </ol>	September 2013	Prof. Dr. El-Tawab Kamal

Course coordinator: Dr. Nagat A. Elmahdy

Signature: Dr. Nagat A. Elmahdy

**Date:** February 15, 2013



# Semester's Course Report Academic year: 2012 - 2013 Semester: Fall

# A- Basic Information

1- Course Code & Title: (MNF101) Engineering Graphics

2- Program(s) on which this course is given: Manufacturing Eng. & Prod. Tech. BSc Prog

3- Year/Level of program: Fresh

4- Credit hours

Credit 3 hrs Lectures 2 hrs Tutorial 6 hrs Practical

5- Names of lecturers contributing to the delivery of the course:

Prof. Dr. Nabil Gadallah

6- Course coordinator: Prof. Dr. Nabil Gadallah

**7- External evaluator:** Non

# **B- Statistical Information**

No. of students attending the course: No. of students completing the course: Results:

	No.	%
Passed	306	76.5
Failed	94	23.5

No.	400	100	%
No.	400	100	%

Grading of successful students:			
Grade	No.	%	
Α	21	5.25	
В	40	10	
С	68	17	
D	177	44.25	

# **C- Professional Information**

# 1 – Course teaching

Topic	Lecture hours	Tutorial hours	Lecturer
Drawing instruments , Draw sheets ; Scales; Folding Lettering	1	6	
Geometric Construction	1	6	
Alphabet of lines	1	6	
Theory of orthographic projection: Projection of point; line and plane Projection of geometric solids	1	6	er
Multi view drawing (of Vertical and Horizontal Surfaces)	1	6	Saber
Multi view drawing (of inclined Surfaces)	1	6	
Multi view drawing (of cylindrical Surfaces)	1	6	Mamdouh
Pictorial drawing (isometric ) , Pictorial drawing (oblique )	1	6	am
Isometric drawing (of Vertical, Horizontal & inclined Surfaces)	1	6	ğ
Isometric drawing (of cylindrical Surfaces)	1	6	Prof.
Conventional practice in ED	1	6	₫
Importance of drawing sections ; Basic types of sections: Full sections : longitudinal ,cross – section	1	6	
Offset; Aligned sections; Half-section; Partial S.; Revolved & Auxiliary sections.	1	6	



••		المردري سادي ويوني والمراجعة
Dimensioning – Arrangements of dimensions – Rules for dimensions circles; radii; angles; plain holes	s of 1	6
Revision	1	6
Total hours	15	90
Topics taught as a percentage of the content specified:  >90 % 100 70-90 %  Reasons in detail for not teaching any topic None  If any topics were taught which are not specified, give rea	<70%	]
None, all of the missed teaching hours were substituted		
<ul> <li>Teaching and learning methods:         <ul> <li>Lectures: Using OHP Black board /White board</li> <li>Practical training /laboratory:</li> <li>Seminar /Workshop: Drawing of several problems weekly uhand sketches.</li> </ul> </li> <li>Class activity:         <ul> <li>Case Study: Selected cases</li> </ul> </li> <li>Other assignments / homework: Weekly</li> <li>If teaching and learing methods were used other than tho</li> </ul>	Š	
None	ose specifica, fi	st and give Teason
- Student assessment:	Deinte	%
Method of assessment	Points	
Written examination	60	60
Oral examination	0	0
Practical/laboratory work	0	0
Other assignments/class work	20	20
Mid-Term Exam	20	20
Total	100	100
	r. Nabil Gadallah	1
Role of external evaluator	Non	
- Facilities and teaching materials:		
Totally adequate Yes		
Adaquate to some extent		
Inadoquato		
List any inadequacies Non		
- Administrative constraints List any difficulties encountered: None		
- Student evaluation of the course: List any criticisms		

7- Comments from external evaluator(s): Non

None



# 8- Course enhancement:

Progress on actions identified in the previous year's action plan: No previous comments Action State whether or not completed and give reasons for any non-completion Non

9- Action plan for academic year 2013 - 2014

Actions required Completion date Person responsible

Non

**Course coordinator:** Prof. Dr. Nabil Gadallah

Signature:

Date: October 2013



# Semester's Course Report Academic year: 2012 - 2013 Semester: Spring

# **A- Basic Information**

1- Course Code & Title: (MNF101) Engineering Graphics

2- Program(s) on which this course is given: Manufacturing Eng. & Prod. Tech. BSc Prog.

3- Year/Level of program: Fresh

**4- Credit hours: 3** Lectures: 2 hrs Tutorial: 6 hrs Practical: ---

5- Names of lecturers contributing to the delivery of the course:

Prof. Dr. Nabil Gadallah

**6- Course coordinator:** Prof. Dr. Nabil Gadallah

**7- External evaluator:** Non

### **B- Statistical Information**

1- No. of students attending the course:

No. 394 100 % No. 394 100 %

2- No. of students completing the course:

3- Results:

	No.	%
Passed	365	92.64
Failed	29	7.36

Grading of successful students:			
Grade	No. %		
Α	35	8.88	
В	106	26.9	
С	111	28.17	
D	113	28.86	

### **C- Professional Information**

# 1 - Course teaching

Topic	Lecture hours	Tutorial hours	Lecturer
Drawing instruments , Draw sheets ; Scales; Folding Lettering	1	6	
Geometric Construction	1	6	
Alphabet of lines	1	6	
Theory of orthographic projection: Projection of point; line and plane Projection of geometric solids	1	6	
Multi view drawing (of Vertical and Horizontal Surfaces)	1	6	
Multi view drawing (of inclined Surfaces)	1	6	je
Multi view drawing (of cylindrical Surfaces)	1	6	abe
Pictorial drawing (isometric), Pictorial drawing (oblique)	1	6	h S
Isometric drawing (of Vertical, Horizontal & inclined Surfaces)	1	6	nop
Isometric drawing (of cylindrical Surfaces)	1	6	аÜ
Conventional practice in ED	1	6	Σ
Importance of drawing sections; Basic types of sections: Full sections: longitudinal ,cross – section	1	6	Prof. Mamdouh Saber
Off set; Aligned sections; Half-section; Partial S.; Revolved & Auxiliary sections.	1	6	
Dimensioning – Arrangements of dimensions – Rules for dimensions of circles; radii; angles; plain holes	1	6	
Revision	1	6	
Total hours	15	90	



Topics taught as a percentage of the content specified:  >90 % 100 70-90 % None  Reasons in detail for not teaching any topic None  If any topics were taught which are not specified, give real None, all of the missed teaching hours were substituted	<70%			
2- Teaching and learning methods:     Lectures: Using OHP Black board /White board     Practical training /laboratory:     Seminar /Workshop: Drawing of several problems weekly usin hand sketches.     Class activity:     Case Study: Selected cases     Other assignments / homework: Weekly     If teaching and learning methods were used other than those specifications.				
3- Student assessment:	D : 1	0/		
Method of assessment	Points	<u>%</u>		
Written examination	60	60		
Oral examination	0	0		
Practical/laboratory work	0	0		
Other assignments/class work	20	20		
Mid-Term Exam	20	20		
Total	100	100		
	Nabil Gadallah Non			
4- Facilities and teaching materials:				
Totally adequate Yes				
Adequate to some extent				
Inadequate				
·				
List any inadequacies Non				
5- Administrative constraints List any difficulties encountered: None				
6- Student evaluation of the course: List any criticisms None				
7- Comments from external evaluator(s): Non				
8- Course enhancement: Progress on actions identified in the previous year's action Action State whether or not completed and give reasons for				

٣٨

**Completion date** 

Person responsible

9- Action plan for academic year 2013 – 2014 Actions required

Non



Course coordinator: Prof. Dr. Nabil Gadallah

Signature: Date: October 2013



# Semester's Course Report Academic year 2012-2013

# A- Basic Information

1- Course Code & Title: (CHE100) Chemistry

2- Program(s) on which this course is given:

Manufacturing Engineering and Prod. Technology BSc Program Electronic Engineering and Comm. Technology BSc Program Computer Engineering and Inf. Technology BSc Program Architecture Engineering and Build. Technology BSc Program

No.

No.

3- Year/Level of program: First Year/Second Semester

4- Credit hours

Credit 3 hrs. Lectures 2 hrs. Tutorial 1 hrs. Practical 2 hrs.

5- Names of lecturers contributing to the delivery of the course: Prof. Dr. Shaban R, Gouda

**6- Course coordinator:** Prof. Dr. Shaban Rageb Gouda

**7- External evaluator:** Non

# **B- Statistical Information**

4- No. of students attending the course:

5- No. of students completing the course:

6- Results:

	No.	%
Passed	1150	91.26
Failed	110	8.73

Grading of successful students:			
Grade No. %			
Excellent	466	36.98	
Very Good	240	19.04	
Good	280	22.2	
Pass	144	13 01	

1280

1260

100

98.43

%

%

# C- Professional Information

1 - Course teaching

Tamia	Tota	Total hours	
Торіс		Actual	
Gas low and gas liquefaction	6	6	
Liquid state, refrigeration and heat pump.	6	6	
Electrochemistry and metallic corrosion.	5	5	
Solution and antifreezes	3	3	କୃ
Thermo chemistry and solar heat.	3	3	Dr. Rageb
• Pollution	0	0	of. I
water treatment and distillation	14	14	Prof. Dr. Shaban Rag
polymer and industry	3	3	ည်
fuels and combustion	3	3	
Chemistry and tech. of petroleum and new trends in energy resource.	3	3	
Total hours	46	46	1

Topics taught as a percentage of the content specified:

>90 %

Reasons in detail for not teaching any topic: non

If any topics were taught which are not specified, give reasons in detail: Non



Achieved program intended learning outcomes, ILO's:

Knowledge & Understanding	Intellectual skills	Applied Skills	General transferable skills
a1 to a12	b1 to b7	c1 to c6	d1 to d5

### 2- Teaching and learning methods:

Lectures: Lecture, discussions, tutorials and problem solving
Practical training/ laboratory: Practical Training and experimental measurements in Lab

Seminar/Workshop: Non

Class activity Exercises; solution of problems and data show.

Other assignments/homework: Bi-weekly assignments and reports

If teaching and learning methods were used other than those specified, give reasons: Non

#### 3- Student assessment:

Method of assessment	Points	%
Written examination	60	60
Oral examination	Non	0
Practical/laboratory work	20	20
Other assignments/class work	10	10
Mid-Term Exam	10	10
Total	100	100

Members of examination committee: Prof. Dr. Shaban Ragab Gouda

Role of external evaluator: Non

### 4- Facilities and teaching materials:

Totally adequate	Yes
Adequate to some extent	
Inadequate	

List any inadequacies: Non

# 5- Administrative constraints (List any difficulties encountered)

Nor

#### 6- Student evaluation of the course:

	List any criticisms	Response of course team
(a)	it is recommended to solve more examples in	Only a balanced proportion of exercises are solved in
	the exercises	the class, the rest are presented as assignments
(b)	The assignment are corrected without giving	The correct results of problems solutions of problems
	detailed comments concerning the correct	will be presented during the exercises periods
	answers	
(c)	It is recommended to announce the points of	The form and timing of declaration of year work
	mid- term, rather than the grades.	evaluation results follow the Academy policy.

# 7- Comments from external evaluator(s):

	Comment	Response of course team
(a)	Non	

#### 8- Written Exam Evaluation

- ➤ High success percentage in the good level of the final written exam.
- The whole exam result shows considerable weakness in report writing and English language level.



# 9- Course enhancement:

Progress on actions identified in the previous year's action plan. State whether or not completed and give reasons for any non-completion:

, , , , , , , , , , , , , , , , , , , ,		
Actions required	Planned Completion date	Accomplishment
Add more experiments to	December 2013	One experiment is already added on September
chemistry Laboratory		2013. One more is planned for May 2014

10- Action plan for academic year 2013 – 2014

Actions required	Completion date	Person responsible
1. adding more assignments reports and	December 2013	Prof. Dr. Shaban
quizzes for Chapters 10 and 11		Rageb

Course coordinator: Prof. Dr. Shaban Rageb

Signature:

Date: September 2013



# Semester's Course Report Academic year 2012-2013

# A- Basic Information

1- Course Code & Title: (MEC 101) Mechanics 2- Program(s) on which this course is given:

Manufacturing Engineering and Production Technology BSc Program Electronic Engineering and Communication Technology BSc Program Computer Engineering and Information Technology BSc Program Architecture Engineering and Building Technology BSc Program

3- Year/Level of program: First Year/First Semester

4- Credit hours

Credit 2 hrs Lectures: 1 hrs Tutorial 3 hrs Practical

5- Names of lecturers contributing to the delivery of the course:

Prof. Dr. Eng. Hassan Awad

Dr. Moamen Wafaie Dr. Shymaa Lotfy

**6- Course coordinator:** Prof. Dr. Eng. Hassan Awad

**7- External evaluator:** Non

# **B- Statistical Information**

No. of students attending the course: No. of students completing the course: Results: No.

980	100	%
950	96.9	%

	No.	%
Passed	759	79.9
Failed	191	20.1

Grading of successful students:			
Grade	No.	%	
Excellent	60	6.4	
Very Good	159	16.7	
Good	326	34.3	
Pass	214	22.5	

# **C- Professional Information**

1 - Course teaching

	Торіс		Tutorial hours
1	Forces in plane	1	2
2	Component of a Force- Rectangular Component – Resultant	1	3
3	Force in space	2	6
4	Force defined by its magnitude and two points on its line of action	1	4
5	Moment of a force about a point	1	2
6	Rectangular Components of the moment of a Force	1	4
7	Moment of a fore about a specified axis- moment of a couple	1	4
8	Equivalent system – Resultants of a force and couple sys	2	4
9	Support reaction in plane	2	6
10	Support reaction in space	1	4
11	Trusses	2	6
	Total hours	15	45

Topics taught as a percentage of the content specified:

Reasons in detail for not teaching any topic:

More than 95 %

Non



If any topics were taught which are not specified, give reasons in detail: Non Achieved program intended learning outcomes, ILO's:

Knowledge & Understanding	Intellectual skills	Applied Skills	General transferable skills
a1 to a5	b1 to b6	None	d1 to d3

2- Teaching and learning methods:

Lectures: Lecture, discussions, tutorials, problem solving

Practical training/ laboratory:

Seminar/Workshop:

Class activity Numerical exercises; solution of problems

Case Study: Selected case studies

Other assignments/homework: Bi-weekly assignments and reports

If teaching and learning methods were used other than those specified, give reasons: Non

#### 3- Student assessment:

Method of assessment	Points	%
Written examination	70	70
Oral examination	Non	0
Practical/laboratory work	Non	0
Other assignments/class work	15	15
Mid-Term Exam	15	15
Total	100	100

Members of examination committee: Prof. Dr. Eng. Hassan Awad,

Dr. Moamen Wafaie and

Dr. Shymaa Lotfy

Role of external evaluator: Non

4- Facilities and teaching materials:

Totally adequate	
Adequate to some extent	Yes
Inadequate	

List any inadequacies: Non

# 5- Administrative constraints (List any difficulties encountered)

➤ Non

### 6- Student evaluation of the course:

	List any criticisms	Response of course team
(a)	It is recommended to solve more examples in the exercises	Only a balanced proportion of numerical exercises are solved in the class, the rest are presented as assignments
(b)	The assignment are corrected without giving detailed comments concerning the correct answers	The correct results of problems solutions of problems will be presented during the exercises periods
(c)	It is recommended to announce the points of mid- term, rather than the grades.	The form and timing of declaration of year work evaluation results follow the Academy policy.

7- Comments from external evaluator(s):

	Comment	Response of course team
(a)	Non	



### 8- Written Exam Evaluation

- Low success percentage in question 4 of the final written exam implies the need to revise the teaching and learning activity of the control system stability analysis and design of convenient controller, by adding more exercises, assignments reports and quizzes.
- > The whole exam result shows considerable weakness in report writing and English language level.

# 9- Course enhancement:

Progress on actions identified in the previous year's action plan. State whether or not completed and give reasons for any non-completion:

Actions required	Planned Completion date	Accomplishment
None	None	None

9- Action plan for academic year 2013 - 2014

Actions required	Completion date	Person responsible
None	None	None

Course coordinator: Prof. Dr. Eng. Hassan Awad

Signature:

Date: September 24, 2013



# Semester's Course Report Academic year 2012-2013

# A- Basic Information

1- Course Code & Title: (GEN 141) قضايا اجتماعية معاصره

2- Program(s) on which this course is given:

Manufacturing Engineering & Prod. Technology BSc Program Electronic Engineering and Comm. Technology BSc Program Computer Engineering and Info. Technology BSc Program Architecture Engineering and Build. Technology BSc Program

3- Year/Level of program: First Semester

4- Credit hours

Credit 2 hrs Lectures 2 hrs Tutorial - Practical

رشاد احمد عبداللطيف. 5- Names of lecturers contributing to the delivery of the course: Prof. Dr.

6- Course coordinator: Prof. Dr. وشاد احمد عبداللطيف

**7- External evaluator:** Non

# **B- Statistical Information**

No. of students attending the course: No. of students completing the course: Results:

No.	1005	100	%
No.	880	87.56	%

	No.	%
Passed	725	82.38
Failed	155	17.61

Grading of s	Grading of successful students:			
Grade	%			
Excellent	230	26.14		
Very Good	250	28.40		
Good	190	21.59		
Pass	55	6.25		

# **C- Professional Information**

### 1 - Course teaching

Topic		Total hours	
		Actual	
الانتماء اهميته واصول المجتمع العادات والتقاليد المرعية المواطنه العوامل			
المحفزه لحب الوطن ( الحرية - احترام الرأي الاخر – عدم التمييز العنصري –			رشاد
الديمقراطية)	8		a)
النمو والتكامل الاقتصادي المكونات الاجتماعية والاقتصادية للمجتمع - اساليب			عبداللطية
القياده ــاساليب ترشيد الموارد ــ الابتكار وتجديد الموارد ــ الحوافز الخاصة بافراد			أطأ
المجتمع – اساليب تقييم المشروعات)	8		.9
(بناء الاسرة – تكوين الاسرة – التنشئة الاجتماعية – النسق الاسري والانساق			Ē.
الاخري – المؤسسات التقليدية والحديثة الخاصة بالاسرة)	8		Prof. [
(مهارات العمل الجماعي – اهمية العمل الفريقي – الفارق بين العمل الجماعي			Prc
وُ الفريقي – كيفية اعداد القادة )	6		
Total hours	30		

Topics taught as a percentage of the content specified:

>90 % 70-90 % <70%

Reasons in detail for not teaching any topic: Non

If any topics were taught which are not specified, give reasons in detail: Non



Achieved program intended learning outcomes, ILO's:

Knowledge & Understanding	Intellectual skills	Applied Skills	General transferable skills
a1 to a3	b1 to b3	-	d1 to d3

2- Teaching and learning methods:

Lectures: Lecture, discussions, tutorials, problem solving and modeling

Practical training/ laboratory: Non
Seminar/Workshop: Lecture
Class activity Non

Case Study: Selected case studies

Other assignments/homework: Bi-weekly assignments and reports

If teaching and learning methods were used other than those specified, give reasons:

3- Student assessment:

Method of assessment	Points	%
Written examination	70	70
Other assignments/class work	30	30
Mid-Term Exam	Non	0
Total	100	100

Members of examination committee: Prof. Dr. رشاد عبداللطيف

Role of external evaluator: Non

4- Facilities and teaching materials:

Totally adequate	Yes
Adequate to some extent	
Inadequate	

List any inadequacies: Non

**5- Administrative constraints** (List any difficulties encountered) : Non

#### 6- Student evaluation of the course:

	List any criticisms	Response of course team
(a)	يري البعض عدم اهمية تدريس العلوم الانسانية	تخصيص اكثر من محاضرة لتوضيح اهمية دراسة العلوم
	لطلاب كلية الهندسة	الانسانية في الحياة العملية بجانب در استة للتخصص
(b)	يري بعض الطلاب اضافة بعض الموضوعات	تخصيص محاضرتين يعرض فيها الطلبة بعض المهارات التي
	التي تناسب تخصصهم ودراستهم للهندسة	تساعد في الحياة العملية مثل العمل الفريقي او الاقناع

7- Comments from external evaluator(s):

	Comment	Response of course team
(a)	Non	Non

#### 8- Written Exam Evaluation

High success percentage in the good level of the final written exam.

The whole exam result shows considerable weakness in report writing and English language level

#### 9- Course enhancement:

Progress on actions identified in the previous year's action plan. State whether or not completed and give reasons for any non-completion:

9- Action plan for academic year 2013-2014

Actions required	Completion date	Person responsible
Non	January 2015	Prof. Dr shimaa nabih

Course coordinator: Prof. Rashad A. Abdelatif

Signature:

Date: September 2013



# Semester's Course Report Academic year 2012-2013

# A- Basic Information

1- Course Code & Title: (GEN 143) تاريخ الهندسة والتكنولوجيا

2- Program(s) on which this course is given:

Manufacturing Engineering & Prod. Technology BSc Program Electronic Engineering and Comm. Technology BSc Program Computer Engineering and Info. Technology BSc Program Architecture Engineering and Build. Technology BSc Program

3- Year/Level of program: First Semester

4- Credit hours

Credit 2 hrs Lectures 2 hrs Tutorial - Practical

**5- Names of lecturers contributing to the delivery of the course**: Dr. Amal Asran

**6- Course coordinator:** Dr. Amal Asran

7- External evaluator: Non

# **B- Statistical Information**

No. of students attending the course: No. of students completing the course: Results:

	No.	%		
Passed	510	97.14		
Failed	15	2.68		

	•		
No.	525	92.11	%
0 "	,	6111	

100

570

No.

Grading of successful students:			
Grade No. %			
Excellent	143	27.23	
Very Good	156 29.71		
Good	138	26.28	
Pass	73	13.90	

# **C- Professional Information**

# 1 - Course teaching

Topic		Total hours	
		Actual	
العلم و الهندسة والتكنولوجيا	2		
الهندسة و البحث العلمي – منظومة البحث العلمي	2		a E
عناصر و متطلبات البحث العلمي	2		asran
الهندسة وخريطة البحث العلمي – مراحل البحث العلمي	2		Amal
تاريخ الهندسة و التكنولوجيا في مختلف العصور	4		
نقل التكنولوجيا	2		<u> </u>
نشاطات العمل الهندسي و مسئوليات المهندس	3		
Total hours	15		

Topics taught as a percentage of the content specified:

>90 % 70-90 % <70%

Reasons in detail for not teaching any topic: Non

If any topics were taught which are not specified, give reasons in detail: Non

Achieved program intended learning outcomes, ILO's:

Knowledge & Understanding	Intellectual skills	Applied Skills	General transferable skills
a1 to a4	b1 to b4	-	d1 to d4

#### 2- Teaching and learning methods:

Lectures: Lecture, discussions, tutorials, problem solving and modeling



Practical training/ laboratory: Non
Seminar/Workshop: Lecture
Class activity Non

Case Study: Selected case studies

Other assignments/homework: Bi-weekly assignments and reports

If teaching and learning methods were used other than those specified, give reasons:

Non

#### 3- Student assessment:

Method of assessment	Points	%
Written examination	70	70
Oral examination	Non	0
Practical/laboratory work	Non	0
Other assignments/class work	30	30
Mid-Term Exam	Non	0
Total	100	100

Members of examination committee: Dr. Amal Asran

Role of external evaluator: Non

### 4- Facilities and teaching materials:

Totally adequate	Yes
Adequate to some extent	
Inadequate	

List any inadequacies: Non

# 5- Administrative constraints (List any difficulties encountered)

➤ Non

# 6- Student evaluation of the course:

	List any criticisms	Response of course team
(a)	يري بعض عدم اهمية لدراسة العلوم الانسانية في	تخصيص اكثر من محاضرة لتوضيح اهمية دراسة العلوم
	لطلاب كلية الهندسة	الانسانية في الحياة العملية بجانب دراستة للتخصص
(b)	يري بعض الطلاب اضافة بعض الموضوعات	تخصيص محاضرتين يعرض فيها الطلبة بعض المهارات التي
	التي تناسب تخصصهم ودراستهم للهندسة	تساعد في الحياة العملية مثل العمل الفريقي او الاقناع

7- Comments from external evaluator(s):

	Comment	Response of course team
(a)	Non	Non

### 8- Written Exam Evaluation

#### 9- Course enhancement:

Progress on actions identified in the previous year's action plan. State whether or not completed and give reasons for any non-completion:

9- Action plan for academic year 2013-2014

Actions required	Completion date	Person responsible
Non	January 2015	مروه محمد فؤادProf. Dr

Course coordinator: Dr. Amal Asran

Signature:

Date: September 2013



# Semester's Course Report Academic year 2012-2013

# A- Basic Information

1- Course Code & Title: (MTH 102) Integration and Analytic Geometry

2- Program(s) on which this course is given:

Manufacturing Engineering & Prod. Technology BSc Program
Electronic Engineering and Comm. Technology BSc Program
Computer Engineering and Info. Technology BSc Program
Architecture Engineering and Build. Technology BSc Program

3- Year/Level of program: First Year/Second Semester

4- Credit hours

Credit 3 hrs Lectures: 2 hrs Tutorial 3 hrs Practical

5- Names of lecturers contributing to the delivery of the course: Dr. Sameh Al Shenawy

Dr. Sabry Abd El-Aziz

**6- Course coordinator:** Dr. Sabry Abd El Aziz

**7- External evaluator:** Non

# **B- Statistical Information**

No. of students attending the course: No. of students completing the course: Results:

	No.	%
Passed	647	69.05
Failed	290	30.95

NO.	989	100	%
No.	937	94.7	%

Grading of successful students:			
Grade	No. %		
Excellent	112	11.95	
Very Good	116 12.38		
Good	147	15.69	
Pass	272	29,03	

# **C- Professional Information**

### 1 - Course teaching

	Торіс		Actual hours	Tutorial hours
1	Anti-derivative, indefinite integral	2	2	2
2	Definite integrals and the fundamental thearem of calculus	2	2	3
3	Methods of integration (integration by parts, substitution)	4	3	6
4	Integration of trigonometric functions	2	2	4
5	Trignometric Substitutions	2	2	2
6	Integration of rational functions	2	2	4
7	Miscellaneous Substitutions, improper integrals	2	2	4
8	Application of definite integral(area, volume, arc length, surface		3	4
	area )	3		4
9	Sequences, series	4	3	6
10	Equations of lines, planes and circles	3	3	4
11	Conic sections (parabola, ellipse, hyperbola)	4	3	6
	Total hours	30	27	45

Topics taught as a percentage of the content specified:

More than 90 %



Reasons in detail for not teaching any topic: Non

If any topics were taught which are not specified, give reasons in detail: Non

Achieved program intended learning outcomes, ILO's:

Knowledge & Understanding	Intellectual skills	Applied Skills	General transferable skills
a1 to a5	b1 to b6	c1	d1 to d3

# 2- Teaching and learning methods:

Lectures: Lecture, discussions, tutorials, problem solving

Practical training/ laboratory:

Seminar/Workshop:

Class activity Numerical exercises; solution of problems

Case Study: Selected case studies

Other assignments/homework: Weekly assignments and reports

If teaching and learning methods were used other than those specified, give reasons: Non

# 3- Student assessment:

Method of assessment	Points	%
Written examination	70	70
Oral examination	Non	0
Practical/laboratory work	Non	0
Other assignments/class work	15	15
Mid-Term Exam	15	15
Total	100	100

Members of examination committee: Dr. Sameh and Dr. Sabry

Role of external evaluator: Non

# 4- Facilities and teaching materials:

Totally adequate	
Adequate to some extent	Yes
Inadequate	

List any inadequacies:

Non

### **5- Administrative constraints** (List any difficulties encountered) Non

# 6- Student evaluation of the course:

	List any criticisms	Response of course team
(a)	it is recommended to solve more examples in the exercises	Only a balanced proportion of numerical exercises are solved in the class, the rest are presented as assignments
(b)	The assignment are corrected without giving detailed comments concerning the correct answers	The correct results of problems solutions of problems will be presented during the exercises periods
(c)	It is recommended to announce the points of mid- term, rather than the grades.	The form and timing of declaration of year work evaluation results follow the Academy policy.

# 7- Comments from external evaluator(s):

	Comment	Response of course team
(a)	Non	

#### 8- Written Exam Evaluation



# 9- Course enhancement:

Progress on actions identified in the previous year's action plan. State whether or not completed and give reasons for any non-completion:

Actions required	Planned Completion date	Accomplishment
Non		

# 10- Action plan for academic year 2013 - 2014

Actions required	Completion date	Person responsible
Adding more exercises, assignments reports and quizzes	December 2015	Prof. Dr. Sabry

Course coordinator: Dr Sabry Abd El Aziz

Signature:

Date: October 2013



# Semester's Course Report Academic year 2012-2013

# A- Basic Information

1- Course Code & Title: (PHY 102) Physics

2- Program(s) on which this course is given:

Manufacturing Engineering and Production Technology BSc Program Electronic Engineering and Communication Technology BSc Program Computer Engineering and Information Technology BSc Program Architecture Engineering and Building Technology BSc Program

3- Year/Level of program: First Year/Second Semester

4- Credit hours

Credit 3 hrs Lectures 2 hrs Tutorial 1 hrs Practical 2 hr

5- Names of lecturers contributing to the delivery of the course: Dr. El-Tawab Kamal

Dr. Abo el Yazeed B. Abo el Yazeed

Dr. Marwa Y. Shoeib Dr. Nagat A. Elmahdy

6- Course coordinator: Dr. El-Tawab Kamal

**7- External evaluator:** Non

# **B- Statistical Information**

No. of students attending the course: No. of students completing the course: Results:

No. No.

1026	100	%
1026	100	%

	No.	%
Passed	908	88.5
Failed	118	11.5

Grading of successful students:				
Grade No. %				
Excellent	48	5.17		
Very Good	165	18.28		
Good	229	25.22		
Pass	466	51.33		

# **C- Professional Information**

1 - Course teaching

Tania	Tota	Total hours	
Торіс		Actual	
Charge and Matter, The Electric Field, Gauss' law	10	12	
Gauss's law applications	4	8	_
Electric Potential	6	6	Kamal
Capacitors and Dielectric	4	6	(ar
Current and Resistance, Electromotive force and Circuits	8	8	
Ampere's law, Inductance	6	6	El-Tawab
Magnetic Properties of matter	4	0	Та
Electromagnetic Waves, Physical Optics, Polarization of light	4	0	<u> </u>
Interference of light, Diffraction of light	6	0	
Diffraction of light, Some applications	2	0	
Total hours	54	46	

Topics taught as a percentage of the content specified:

>90 % 70-90 % <70%

Reasons in detail for not teaching any topic: There was no time

If any topics were taught which are not specified, give reasons in detail: Non



Achieved program intended learning outcomes, ILO's:

Knowledge & Understanding	Intellectual skills	Applied Skills	General transferable skills
a1 to a7	b1 to b3	c1 to c4	d1 to d3

### 2- Teaching and learning methods:

Lectures: Lecture, discussions, tutorials and problem solving
Practical training/ laboratory: Practical Training and experimental measurements in Lab

Seminar/Workshop: Non

Class activity Exercises; solution of problems and data show.

Other assignments/homework: Bi-weekly assignments and reports

If teaching and learning methods were used other than those specified, give reasons: Nor

#### 3- Student assessment:

Method of assessment	Points	%
Written examination	60	60
Oral examination	Non	0
Practical/laboratory work	20	20
Other assignments/class work	10	10
Mid-Term Exam	10	10
Total	100	100

Members of examination committee: Dr.El-Tawab Kamal, Prof. Dr. Abo el Yazeed B. Abo el

Yazeed, Dr. Marwa Y. Shoeib and Dr. Nagat A. Elmahdy

Role of external evaluator: Non

4- Facilities and teaching materials:

Totally adequate	Yes
Adequate to some extent	
Inadequate	

List any inadequacies: Non

# 5- Administrative constraints (List any difficulties encountered)

➤ Non

# 6- Student evaluation of the course:

_			
		List any criticisms	Response of course team
	(a)	it is recommended to solve more examples in	Only a balanced proportion of exercises are solved
	. ,	the exercises	in the class, the rest are presented as assignments
	(b)	The assignment are corrected without giving detailed comments concerning the correct answers	The correct results of problems solutions of problems will be presented during the exercises periods
	(c)	It is recommended to announce the points of	The form and timing of declaration of year work
		mid- term, rather than the grades.	evaluation results follow the Academy policy.

7- Comments from external evaluator(s):

	Comment	Response of course team
(a)	Non	

#### 8- Written Exam Evaluation

- > High success percentage in the good level of the final written exam.
- The whole exam result shows considerable weakness in report writing and English language level.

#### 9- Course enhancement:



Progress on actions identified in the previous year's action plan. State whether or not completed and give reasons for any non-completion:

Actions required	Planned Completion date		Accomplis	hment		
(a) Add more experiments to	December 2012	Two	experiments	will	add	on
Physics Laboratory		Septen for May	nber 2013. One v 2014	e more	is plar	ned

# 10- Action plan for academic year 2013 - 2014

Actions required	Completion date	Person responsible
1. adding more quizzes for Chapters 10 and 11	December 2013	Prof. Dr. El-Tawab Kamal

Course coordinator: Dr El-Tawab Kamal

Signature:

Date: September 2013



# Semester's Course Report Academic year 2012-2013

# A- Basic Information

1- Course Code & Title: (MEC 102) Mechanics (2)-Dynamics

2- Program(s) on which this course is given:

Manufacturing Engineering and Production Technology BSc Program Electronic Engineering and Communication Technology BSc Program Computer Engineering and Information Technology BSc Program Architecture Engineering and Building Technology BSc Program

3- Year/Level of program: second Semester

4- Credit hours

Credit 2 hrs Lectures 1 hrs Tutorial 3 - Practical

5- Names of lecturers contributing to the delivery of the course: Prof.Dr.Eng. Hassan Awad

Dr. Moamen Wafaie Dr. Shymaa Lotfy

**6- Course coordinator:** Prof.Dr. Hassan Awad

**7- External evaluator:** Non

# **B- Statistical Information**

No. of students attending the course: No. of students completing the course:

Results:

	No.	%
Passed	658	86.7
Failed	101	13.3

N	0.	759	100	%
	·			
G	rading of	f successful s	tudonte:	

759

No.

100

Grading of successful students:				
Grade	No. %			
Excellent	52	6.9		
Very Good	185	24.3		
Good	216	28.5		
Pass	205	27		

# **C- Professional Information**

### 1 - Course teaching

Торіс		Tutorial hours
Rectilinear Motion of particles.	1	4
Determination of the motion of a particle.	1	4
Graphical Solution of Rectilinear Motion.	1	4
Curvilinear Motion of particle, Free Flight Motion.	2	4
Curvilinear Motion of particle:		
Normal and Tangential.	1	4
Plane Curvilinear Motion.	1	4
Polar Coordinates.	1	4
Kinetics of Particles, Force and acceleration.	2	4
Kinetics of Particles Energy and Momentum Methods	2	4
Motion under a conservative centeral force.	1	4
Principle of Impulse and Momentum for particle.	2	5
Total hours	15	45

Topics taught as a percentage of the content specified: more than 95%

**>90** % 100 **70-90** %

<70%



Reasons in detail for not teaching any topic Non

If any topics were taught which are not specified, give reasons in detail: Non

Achieved program intended learning outcomes, ILO's:

Knowledge & Understanding	Intellectual skills	Applied Skills	General transferable skills
a1 to a5	b1 to b2	c1 to c3	d1 to d2

## 2- Teaching and learning methods:

Lectures: Lecture, discussions, problem solving and modeling

Practical training/ laboratory: Non Seminar/Workshop: Lecture Class activity Non.

Case Study: Selected case studies

Other assignments/homework: Bi-weekly assignments and reports

If teaching and learning methods were used other than those specified, give reasons:

#### 3- Student assessment:

Method of assessment	Points	%
Written examination	70	70
Oral examination	Non	0
Practical/laboratory work	Non	0
Other assignments/class work	20	20
Mid-Term Exam	10	10
Total	100	100

Members of examination committee: Prof.Dr. Hassan Awad

Role of external evaluator: Non

### 4- Facilities and teaching materials:

Totally adequate	Yes
Adequate to some extent	
Inadequate	

List any inadequacies: Non

# **5- Administrative constraints** (List any difficulties encountered)

Non

6- Comments from external evaluator(s): None

#### 7- Student evaluation of the course:

	List any criticisms	Response of course team
(a)	It is recommended to solve more examples in the exercises	Only a balanced proportion of numerical exercises are solved in the class, the rest are presented as assignments
(b)	The assignments are corrected without giving detailed comments concerning the correct answers	The correct results of problems solutions of problems will be presented during the exercises periods
(c)	It is recommended to announce the points of mid- term, rather than the grades.	The form and timing of declaration of year work evaluation results follow the Academy policy.



# 8- Course enhancement:

Progress on actions identified in the previous year's action plan. State whether or not completed and give reasons for any non-completion: Non

# 9- Action plan for academic year 2013 - 2014

Actions required	Completion date	Person responsible
None	December 2013	Prof. Dr. Hassan Awad

Course coordinator: Prof. Dr . Hassan Awad

Signature:

Date: September 2013



# **Semester's Course Report**

Academic year: 2012 - 2013 Semester: Fall

### A- Basic Information

1- Course Code & Title: (MNF102) Principles of Production Engineering

2- Program(s) on which this course is given:

Manufacturing Engineering and Production Technology BSc Program Electronic Engineering and Communication Technology BSc Program Computer Engineering and Information Technology BSc Program Architecture Engineering and Building Technology BSc Program

3- Year/Level of program: Fresh

4- Credit hours

Credit 3 hrs Lectures 2 hrs Tutorial hrs Practical 4hr 5- Names of lecturers contributing to the delivery of the course: Prof. Dr. Ahmed Kohail

Dr. Maher Khalifa

**6- Course coordinator:** Dr. Maher Khalifa

7- External evaluator: Non

### **B- Statistical Information**

No. of students attending the course: No. of students completing the course: Results: No. 453 100 No. 453 100

	No.	%
Passed	333	73.51
Failed	120	26.49

Grading of successful students:				
Grade No. %				
Α	78	17.22		
В	113	24.94		
С	86	18.98		
D	59	13.02		

## **C- Professional Information**

1 - Course teaching

Topic	Lecture hours	Tutorial hours	Practical hours
Role of production engineering, production system objective, types	110410	1100110	1100110
of industries, classification of manufacturing processes	2		
Properties of materials and testing principles	2		4
Sand casting, melting of metal & furnaces. Solidification, pattern			
allowances, sand molding & gating system. Die casting, centrifugal			
& investment casting.	2		8
Types of welding, oxy- acetylene welding, electric- arc welding,			
submerged arc welding, MIG, TIG, resistance welding, soldering &			
brazing	2		8
Hot & cold forming, rolling, extrusion, wire drawing & sheet metal			
forming	3		10
Metal cutting processes (Turning, milling, shaping grinding and			
drilling)	4		30
Total hours	15		60

Topics taught as a percentage of the content specified:



<b>&gt;90</b> % 10	70-90 %		<70%	
		None		
	aught which are not speci	ified, give reasons	in detail	
None, all of the miss	ed teaching hours were sub	ostituted		
2- Teaching and learnin Lecture: bi-weekly L				
•	aboratory: weekly Practica	l Training		
Seminar/Workshop	·	ii rraiiiiig		
Class activity:	·•			
Case Study:				
Other assignments	/homework: assign	ments		
	ing methods were used oth		ied. list and give rea	sons: Non
•		a	J	
3- Student assessment				
Method of assessn			Points	%
Written examinatio	n		60	60
Oral examination			0	0
Practical/laboratory			20	20
Other assignments	s/class work		10	10
Mid-Term Exam			10	10
Total			100	100
	nation committee Prof. Dr.		. Maher Khalita	
Role of external ev	aluator	Non		
4- Facilities and teaching	ng materials:			
Totally adequate	.9	Yes		
Adequate to some	extent	1.55		
Inadequate	CATORIT	·····		
List any inadequac	ios	Non		
List ally illauequac	162	NOTI		
5- Administrative const List any difficulties				
6- Student evaluation o	f the course	58%		
Response of course		Non		
List any criticisms	t Calli	Non		
List dily Grucisilis		HOII		
7- Comments from external Response of course				
•	t: identified in the previous r or not completed and gi	•	•	
9- Action plan for acade	-		_	
<b>Actions</b> Non	required	Completion da	ate Pers	son responsible
Course coordinator: Signature:	Prof. Dr. Ahmad Kohail			
Date:	13/10/2013			



# Semester's Course Report

Academic year: 2012 - 2013 Semester: Spring

# A- Basic Information

1- Course Code & Title: (MNF102) Principles of Production Engineering

2- Program(s) on which this course is given:

Manufacturing Engineering and Production Technology BSc Program Electronic Engineering and Communication Technology BSc Program Computer Engineering and Information Technology BSc Program Architecture Engineering and Building Technology BSc Program

3- Year/Level of program: Fresh

4- Credit hours

Credit 3 hrs Lectures 2 hrs Tutorial hrs Practical 4hr 5- Names of lecturers contributing to the delivery of the course: Prof. Dr. Ahmed Kohail

Dr. Maher Khalifa

**6- Course coordinator:** Dr. Maher Khalifa

7- External evaluator: Non

### **B- Statistical Information**

1- No. of students attending the course:

2- No. of students completing the course:

3- Results:

	No.	%
Passed	336	94.915
Failed	18	5.085

No.	354	100	%
No.	354	100	%

Grading of successful students:				
Grade No. %				
Α	A 78 22.03			
В	B 113 31.92			
С	86	24.3		
D	59	16.67		

# **C- Professional Information**

1 - Course teaching

Topic	Lecture hours	Tutorial hours	Practical hours
Role of production engineering, production system objective, types of industries, classification of manufacturing processes	2		
Properties of materials and testing principles	2		4
Sand casting, melting of metal & furnaces. Solidification, pattern allowances, sand molding & gating system. Die casting, centrifugal & investment casting.	2		8
Types of welding, oxy- acetylene welding, electric- arc welding, submerged arc welding, MIG, TIG, resistance welding, soldering & brazing	2		8
Hot & cold forming, rolling, extrusion, wire drawing & sheet metal forming	3		10
Metal cutting processes (Turning, milling, shaping grinding and drilling)	4		30
Total hours	15		60

Topics taught as a percentage of the content specified:



>90 % 10	70-90 % or not teaching any topic	<u> </u>	<70%	
	aught which are not speci		in detail	
	sed teaching hours were sub			
2- Teaching and learning Lecture: bi-weekly l				
,	aboratory: weekly Practical	Training		
Seminar/Workshop Class activity:	<u> </u>	Trailing		
Case Study:				
Other assignments	s/homework: assigni	ments		
	ning methods were used other		ied, list and give rea	asons: Non
3- Student assessment		·	,	
Method of assessr			Points	%
Written examination			60	60
Oral examination	41		0	0
Practical/laborator	y work		20	20
Other assignments			10	10
Mid-Term Exam			10	10
Total	nation committee Prof. Dr.		100	100
Role of external ev  4- Facilities and teaching Totally adequate Adequate to some Inadequate List any inadequate 5- Administrative constitutes List any difficulties	ng materials: extent :ies traints	Yes  Non		
6- Student evaluation of	of the course:	58%		
Response of course	e team	Non		
List any criticisms		Non		
7- Comments from exte Response of course	` ,			
	t: s identified in the previous er or not completed and giv	•	•	
9- Action plan for acade Actions Non	emic year 2013 – 2014 required	Completion da	ate Per	son responsible
Course coordinator: Signature:	Prof. Dr. Ahmad Kohail			
Date:	13/10/2013			

Semester's Course Report



# (Academic Year 2012-2013) Spring Semester

# A- Basic Information

- 1- Title and code: Program Design and Computer Languages (CMP 110)
- 2- Program(s) on which this course is given:

Manufacturing Engineering and Production Technology BSc Program Electronic Engineering and Communication Technology BSc Program Computer Engineering and Information Technology BSc Program Architecture Engineering and Building Technology BSc Program

- **3- Year/Level of program:** Freshmen
- 4- Unit hours: 4 Lectures 2hrs Tutorial 3hrs Practical -2 hrs Total 7hrs
- 5- Names of lecturers contributing to the delivery of the course Dr. Ehab ElShimee

  Course coordinator: Dr. Ehab ElShimee

# **B- Statistical Information**

No. of students attending the course	<b>No.</b> 786	100%
No. of students completing the course	<b>No.</b> 786	100%

	No.	%
Passed	702	89.313
Failed	84	10.687

	No.	%
A+	20	2.545
Α	56	7.125
A-	100	12.723
B+	99	12.595
В	108	13.74
C+	87	11.069
С	74	9.415
D+	48	6.107
D	41	5.216
D-	69	8.779

# **C- Professional Information**

1- Course Teaching:

Topic	Lecture hours	Lecture
Steps for solving programs by computer programs	2	
Program documentation and flow charts	2	
Program structure in C++	1	<u>e</u>
Data types and declaration in C++	2	her
Input/output in C++ and I/O stream class	1	Ehab Elsheme
> I/O manipulation	1	Jab
Operators and precedence in C++	2	
Decision (Selection) Constructs in C++	2	٦.
> Loops (Iterations) in C++	2	
> Arrays, Pointers, References, and dynamic allocation	2	



> Functions in C++, calling functions (by value, by reference)	2		
> Structures, Unions, Enumeration, and user-defined data types	2		
> Abstract data types (ADT)	1		
> Concepts and Terminologies of Object-Oriented Programming (OOP)	2		
> Classes and objects	2		
> Constructors, destructors, friend functions	1		
> Polymorphism, encapsulation, inheritance	1		
File I/O, I/O stream, strings, recursion	2		
Total hours	30		
Percentage of the content specified:  >90 %	il None		
2- Teaching and learning methods:     Lectures: Classical lecturing using the white board     Practical training/ laboratory: yes     Seminar/Workshop: None     Class activity: A monthly discussion of what is given in the previous week     Case Study: None     Other assignments/homework: Bi-weekly assignments     If teaching and learning methods were used other than those specified, list		ons: None	
3- Student assessment: Through Quizzes, oral participation in class, midterm exams Written examination Practical examination Other assignments/class work Mid-Term Exam Total Total Members of examination committee Role of external evaluator None			
4- Facilities and teaching materials:  Totally adequate  Adequate to some extent Inadequate List any inadequacies  Dictionaries, Tape recorder  Yes None	setc		
5- Administrative constraints List any difficulties encountered None			

**7- Comments from external evaluator(s):** None

6- Student evaluation of the course: List any criticisms

Questioner

None

Good



# 8- Course enhancement:

Progress on actions identified in the previous year's action plan: updating the program software Action State whether or not completed and give reasons for any none-completion upgrading the computers of the labs

# 9- Action plan for academic year 2013- 2014

Adding data show in the computer lab increasing exercises and number of application programs

Course coordinator: Dr. Ehab Elshimee

Signature:

Date: August 2013

Semester's Course Report Academic year 2012-2013



### A- Basic Information

1- Course Code & Title: GEN 142 English Language

2- Program(s) on which this course is given:

Manufacturing Engineering and Production Technology BSc Program Electronic Engineering and Communication Technology BSc Program Computer Engineering and Information Technology BSc Program Architecture Engineering and Building Technology BSc Program

3- Year/Level of program: 1st Year/Second Semester

4- Credit hours

Credit 2 hrs Lectures 2 hrs Tutorial Practical

**5- Course coordinator:** Dr. Neveen Samir

**6- External evaluator:** Non

## **B- Statistical Information**

No. of students attending the course: No. of students completing the course: Results:

	No.	%
Passed	445	90.81
Failed	45	9.18

No.
No.

Grading of successful students:				
Grade No. %				
Excellent	30	6.1		
Very Good	66	13.46		
Good	140	28.57		
Pass	254	51.83		

# **C- Professional Information**

### 1 - Course teaching

Торіс		Tutorial hours	Practical hours	
Computer Hackers	2			
At the Doctor's				
Reviewing tenses	2			
Reading				
At the Doctor's(to be continued)	2			
Grammar: perfect tenses& prefixes	2			
Global Warming				
Reading	2			
Speaking: English communication skills	2	<b>1</b>		
Suffixes & adj.&adv.				
Computer Addiction				
Reading: 53-55	2			
Seaking: discussing the topic				
Grammar: adjectives				
Earthquake				
Reading: 59-61	2			
Grammar: Suffixes				
Words and their Stories				
Reading	2			
Grammar: with-questions and negatives				
Revision	2			
7 <sup>th</sup> week Exam	2			



Describing People &Things			
Reading:	2		
Grammar:adj.& adv			
Describing People &Things (to be contiued)			
Reading :	2		
Grammar : relative clauses			
Qualities and Flaws			
Speak: dicussing qualities and flaws of each one (pair wok	2		
Grammar: Possession Pronouns+ Adjectives			
Qualities and Flaws (to be continued)			
List. & Speak:dicussing the topic			
People Idioms	2		
Grammar:gerund "& to infinitive & adjectives with prepositions	2		
English proverbs	2		
Grammar: problem verbs			
Revision	2		
Total hours	30		

Topics taught as a percentage of the content specified:

>90 %

Reasons in detail for not teaching any topic: Non

If any topics were taught which are not specified, give reasons in detail: Non

Achieved program intended learning outcomes, ILO's:

Knowledge & Understanding	Intellectual skills	Applied Skills	General transferable skills
A9 , A10	C11, C12	B4	D1 to D8

### 2- Teaching and learning methods:

Lectures: Lecture, discussions, doing exercises,

Practical training/ laboratory: Non Seminar/Workshop: Non

Class activity Doing exercises (pair work & group work)
Other assignments/homework: Bi-weekly assignments and reports

If teaching and learning methods were used other than those specified, give reasons: Non

#### 3- Student assessment:

Method of assessment	Points	%
Written examination	70	70
Oral examination	Non	0
Practical/laboratory work	-	-
Other assignments/class work	15	15
Mid-Term Exam	15	15
Total	100	100

Members of examination committee: Dr. Neveen Samir

Role of external evaluator: Non

### 4- Facilities and teaching materials:

Totally adequate	
Adequate to some extent	Yes
Inadequate	

List any inadequacies: Non

**5- Administrative constraints** (List any difficulties encountered): None

# 6- Student evaluation of the course:



	List any criticisms	Response of course team
(a)	It is recommended to announce the points of	The form and timing of declaration of year work
	mid- term, rather than the grades.	evaluation results follow the Academy policy.

7- Comments from external evaluator(s):

	Comment	Response of course team		
(a)	Non			

### 8- Written Exam Evaluation

> The exam level is convenient, considering the percentage of success.

### 9- Course enhancement:

Progress on actions identified in the previous year's action plan. State whether or not completed and give reasons for any non-completion:

Actions required	Planned Completion date	Accomplishment
Non	Non	Non

10- Action plan for academic year 2014 – 2015

Actions required	Completion date	Person responsible
Non	Non	Non

Course coordinator: Dr. Neveen

Signature:

Date: September 2013

**Semester's Course Report** 



Academic year: 2012 - 2013 Semester: Fall

# A- Basic Information

- 1- Course Code & Title: (MNF100) Introduction to Engineering Materials
- 2- Program(s) on which this course is given:

Manufacturing Engineering and Production Technology BSc Program Electronic Engineering and Communication Technology BSc Program Computer Engineering and Information Technology BSc Program Architecture Engineering and Building Technology BSc Program

3- Year/Level of program: : Freshman

4- Credit hours

Credit 1 hrs Lectures 1 hrs Tutorial 0 hrs Practical 0 hr

5- Names of lecturers contributing to the delivery of the course:

Assist. Prof. Dr. Adel El-Gamal

Dr. Tarek Madboly

**6- Course coordinator:** Assist. Prof. Adel Elgammal

7- External evaluator: Non

## **B- Statistical Information**

7- No. of students attending the course:

8- No. of students completing the course:

9- Results:

	No.	%
Passed	372	86.96
Failed	56	13.08

No.	428	100	%
No.	428	100	%

Grading of successful students:				
Grade	No. %			
Α	112	26.1		
В	72	16.8		
С	84	19.6		
D	104	24.3		

# **C- Professional Information**

#### 1 - Course teaching

Topic	Lecture hours	Tutorial hours	Practical hours
1- Introduction	1		
Types of engineering materials	ı		
Properties of materials, material testing principles			
2- Ferrous alloys and their properties	3		
2-1 Steel; types and uses			
2-2 Cast iron; types and uses			
3- Non-ferrous alloys and their properties	8		
3-1 Copper and its alloys			
3-2 Aluminum and its alloys			
4- Other engineering alloys	3		
5- Selection of Materials	3		
Total hours	15		

<b>-</b> .	4 14		C 41		
IANIC	e tallant se	a percentage	At the	CONTANT	' CNACITIAN'
I ODIC	, iauuiii as	a percentage	OI UIC	COLLECT	. SDCCIIICU

>90 % 100 70-90 % <70%

Reasons in detail for not teaching any topic None

If any topics were taught which are not specified, give reasons in detail



None, all of the missed teaching hours were substituted, in addition to the seminars arranged during the student's free day.

2- Teaching and learning methods:

Lecture: Bi-Weekly Lecture Practical training/ laboratory:

Seminar/Workshop: Bi-weekly Seminars

Class activity: Case Study:

Other assignments/homework: weekly assignments

If teaching and learning methods were used other than those specified, list and give reasons: Non

#### 3- Student assessment:

Assessment Method	Timing	Grade (Degrees)
Semester Work: seminars, quizzes assignments and reports	Bi-Weekly	20
Mid-Term Exam	8-th Week	10
Written Exam	Sixteenth week	70
Total	100	

Members of examination committee Role of external evaluator

Assist. Prof. Adel El-Gamal & Dr. Tarek Madboly

Non

4- Facilities and teaching materials:

Totally adequate

Adequate to some extent

Inadequate

List any inadequacies

Yes

.....

Nor

5- Administrative constraints

List any difficulties encountered: None

6- Student evaluation of the course: 90 %
Response of course team Non
List any criticisms Non

7- Comments from external evaluator(s):

Response of course team Non

8- Course enhancement:

Progress on actions identified in the previous year's action plan: No previous comments Action State whether or not completed and give reasons for any non-completion Non

9- Action plan for academic year 2013 - 2014

Actions required Completion date Person responsible

Non

Course coordinator: Assist. Prof. Adel Elgammal

Signature:

Date: September 2013

# Semester's Course Report



Academic year: 2012 - 2013 Semester: Spring

## A- Basic Information

- 1- Course Code & Title: (MNF100) Introduction to Engineering Materials
- 2- Program(s) on which this course is given:

Manufacturing Engineering and Production Technology BSc Program Electronic Engineering and Communication Technology BSc Program Computer Engineering and Information Technology BSc Program Architecture Engineering and Building Technology BSc Program

3- Year/Level of program: : Freshman

4- Credit hours

Credit 1 hrs Lectures 1 hrs Tutorial 0 hrs Practical 0 hr

5- Names of lecturers contributing to the delivery of the course:

Assist. Prof. Adel El-Gamal

Dr. Tarek Madboly

**6- Course coordinator:** Assist. Prof. Adel El-Gamal

7- External evaluator: Non

#### **B- Statistical Information**

10- No. of students attending the course:

11- No. of students completing the course:

12- Results:

	No.	%
Passed	350	93.583
Failed	24	6.417

No.	3/4	100	%
No.	374	100	%

Grading of successful students:			
Grade	No.	%	
Α	59	15.775	
В	88	23.529	
С	106	28.34	
D	97	25.936	

# **C- Professional Information**

#### 1 - Course teaching

Topic	Lecture hours	Tutorial hours	Practical hours
1- Introduction	1		
<ul> <li>Types of engineering materials</li> </ul>	I		
Properties of materials, material testing principles			
2- Ferrous alloys and their properties	3		
2-1 Steel; types and uses			
2-2 Cast iron; types and uses			
3- Non-ferrous alloys and their properties	8		
3-1 Copper and its alloys			
3-2 Aluminum and its alloys			
4- Other engineering alloys	3		
5- Selection of Materials			
Total hours	15		

Topics	taught as	s a percentage of	the content	specified:		
	>90 %	100	70-90 %		<70%	
Reasor	ns in deta	ail for not teaching	any topic	None		
If any to	opics we	re taught which a	re not specif	ied, give reasor	ns in detail	



None, all of the missed teaching hours were substituted, in addition to the seminars arranged during the student's free day.

# 2- Teaching and learning methods:

Lecture: Bi-Weekly Lecture

Practical training/ laboratory:

Seminar/Workshop: Bi-weekly Seminars

Class activity: Case Study:

Other assignments/homework: weekly assignments

If teaching and learning methods were used other than those specified, list and give

reasons: Non

#### 3- Student assessment:

Assessment Method	Timing	Grade (Degrees)
Semester Work: seminars, quizzes assignments and reports	Bi-Weekly	20
Mid-Term Exam	8-th Week	10
Written Exam	Sixteenth week	70
Total	100	

**Members of examination committee** Assist. Prof. Adel El-Gamal & Dr. Tarek Madboly **Role of external evaluator** Non

4- Facilities and teaching materials:

**Totally adequate** 

Adequate to some extent

Inadequate

List any inadequacies

Yes ..... Non

#### 5- Administrative constraints

List any difficulties encountered: None

6- Student evaluation of the course: 90 %
Response of course team Non
List any criticisms Non

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

Response of course team Non

#### 8- Course enhancement:

Progress on actions identified in the previous year's action plan: No previous comments Action State whether or not completed and give reasons for any non-completion Non

### 9- Action plan for academic year 2013 - 2014

Actions required Completion date Person responsible

Non

Course coordinator: Assist. Prof. Adel El-Gamal

Signature:

Date: September 2013



### 2013/2014

### Sophomore, Third Semester

Code	Course
MTH 203	Math-3 (Differential Equations and Transforms)
MNF 211	Mechanics of materials
MNF 212	Fundamentals of materials Science
MNF 213	Mechanics of Machines-1
GEN 241	Presentation Skills
MNF 214	Machine Drawing-1

Sophomore, Fourth Semester



Code	Course
MTH 207	Math-7 (Numerical Analysis)
MNF 215	Mechanics of Machines-2
MNF 222	Materials Technology and Testing
MNF 221	Metal Cutting Processes
GEN 242	Technical Report Writing
MNF 216	Machine Drawing-2

### Semester's Course Report Academic year 2013-2014

#### **A- Basic Information**

1- Course Code & Title: (MTH 203) Mathematics -3(Differential Equations and Transforms)

2- Program(s) on which this course is given:

Manufacturing Engineering and Production Technology BSc Program Electronic Engineering and Communication Technology BSc Program Computer Engineering and Information Technology BSc Program

3- Year/Level of program: Sophomore

**4- Credit hours : 3** Lectures 2 hrs Tutor 3 hrs Practical --

5- Names of lecturers contributing to the delivery of the course: Dr. Ashraf Taha

Dr. Sameh Elshenawy Dr. Moamen Wafaie

**6- Course coordinator:** Dr. Ashraf Taha

**7- External evaluator:** Non

#### **B- Statistical Information**

No. of students attending the course:

No. of students completing the course:

Results:

	No.	%
Passed	372	90.51
Failed	39	9.49

No.	411	100	%
No.	411	100	%
			<u> </u>

Grading of successful students:			
Grade	No.	%	
Excellent	121	29.44	
Very Good	70	17.03	
Good	100	24.33	
Pass	81	19.71	

#### **C- Professional Information**



Topic	Lecture hours	Tutorial hours	Practical hours
Definitions, order, degree.	1	1	_
> 1st order differential equations, 2nd order and n the order			
differential equations with constant coefficients.	6	10	
Non homogeneous D.E., undetermined coefficient method.	6	10	
Variation of parameters, Euler equations, piratical D.E.	3	4	
➤ Laplace transform, 1st and 2nd shifting theorem.	4	6	
<ul> <li>Laplace transforms of derivative and integrals, inverse</li> </ul>			
Laplace transforms, convolution, applications.	4	6	
> Fourier series, half rang expansion, Legendre and Bessel			
functions.	6	8	
Total hours	30	45	

More than 95 %

Topics taught as a percentage of the content specified:

Reasons in detail for not teaching any topic: Non

If any topics were taught which are not specified, give reasons in detail: Non

Achieved program intended learning outcomes, ILO's:

Knowledge & Understanding	Intellectual skills	Applied Skills	General transferable skills
a1 to a7	b1 to b4	c1 to c3	d1 to d2

#### 2- Teaching and learning methods:

Lectures: Lecture, discussions, tutorials, problem solving

Practical training/ laboratory:

Seminar/Workshop:

Class activity Solution of problems
Case Study: Selected case studies

Other assignments/homework: Weekly assignments and reports

If teaching and learning methods were used other than those specified, give reasons:

Non

#### 3- Student assessment:

Method of assessment	Points	%
Written examination	70	70
Other assignments/class work	15	15
Mid-Term Exam	15	15
Total	100	100

Members of examination committee: Dr. Ashraf Taha and Dr. Sameh Elshenawy Role of external evaluator: Non

#### 4- Facilities and teaching materials:

Totally adequate	
Adequate to some extent	Yes
Inadequate	

List any inadequacies: Non

#### **5- Administrative constraints** (List any difficulties encountered) None

#### 6- Student evaluation of the course:

	List any criticisms	Response of course team
(a)	It is recommended to solve more examples in	Only a balanced proportion of exercises are
	the exercises	solved in the class, the rest are presented as
		assignments



(b)	The assignment are corrected without giving detailed comments concerning the correct	The correct results of problems solutions of problems will be presented during the exercises
	answers	periods
(c)	It is recommended to announce the points of	The form and timing of declaration of year work
	mid- term, rather than the grades.	evaluation results follow the Academy policy.

7- Comments from external evaluator(s):

	Comment	Response of course team
(a)	Non	

#### 8- Written Exam Evaluation

➤ Low success percentage in question 2 of the final written exam implies the need to revise the teaching and learning activity of the methods of solution for the second and higher differential equations, by adding more exercises.

#### 9- Course enhancement:

Progress on actions identified in the previous year's action plan. State whether or not completed and give reasons for any non-completion:

Actions required	Planned Completion date	Accomplishment
None	None	None

10- Action plan for academic year 2014 – 2015

Actions required	Completion date	Person responsible
None	None	None

Course coordinator: Dr. Ashraf Taha

Signature:

Date: October 1, 2014



### Semester Course Report Academic year 2013-2014 "FALL"

#### **A- Basic Information**

1- Title and code: (MNF 211) Mechanics of Material

2- Program(s) on which this course is given: Manufacturing Eng. & Production Tech. BSc. Prog.

**1-Year/Level of program:** Sophomore/Semester 3

2- Credit hours: 3 Lectures 2 hrs Tutorial 3 hr Total 5 hrs

5- Names of lecturers contributing to the delivery of the course

Prof. Dr. Ahmed El-Sanabary

Course coordinator Prof. Dr. Ahmed El-Sanabary

External evaluator

#### **B- Statistical Information**

No. of students attending the course:	<b>No</b> . 163	<b>%</b> 100
No. of students completing the course:	<b>No</b> . 163	<b>%</b> 100
<b>5</b>		

Results:

	No.	%	Grading of successful students:		:
Passed	163	63.2	•	No.	%
Failed	60	36.8	Excellent(A+,A,A-)	12	7.36
			V. Good (B+,B,B-)	24	14.72
			Good (C+,C,C-)	34	20.86
			Pass (D+ D D-)	33	20.25



### **C- Professional Information**

1 – Course teaching

	Topic	Lecture hours	<b>Practical Hours</b>	Lecturer
1	Simple Trusses	2	2	
2	Stress and strain	2	2	
3	Tensile test	2	2	
4	Thin wall Pressure Vessel	2	2	>
5	Torsion of circular shafts	2	2	ELSanabary
6	Springs Stresses	2	2	ana
7	Temperature stresses	2	2	Ë
8	Strain energy due to stresses	2	2	
9	Shear & Bending Moment Diagrams	2	2	e E
10	Shear & Bending Moment Diagrams	2	2	Ą
11	Centroid &Second moment of area	2	2	ä
12	Shear & Bending stresses	2	2	Prof. Dr. Ahmed
13	Compound stress	2	2	<u>Ф</u>
14	Deflection of beams	2	2	
15	Testing of Materials	2	2	
Total	hours	30	30	

	•	TOTIONO LOCK	_	_	
	4	Thin wall Pressure Vessel	2	2	>
	5	Torsion of circular shafts	2	2	2
	6	Springs Stresses	2	2	2
	7	Temperature stresses	2	2	Ù
	8	Strain energy due to stresses	2	2	Ц Т
	9	Shear & Bending Moment Diagrams	2	2	8
	10	Shear & Bending Moment Diagrams	2	2	4
	11	Centroid &Second moment of area	2	2	ے
	12	Shear & Bending stresses	2	2	Drof Dr. Ahmed El Canahan
	13	Compound stress	2	2	Δ
	14	Deflection of beams	2	2	
	15	Testing of Materials	2	2	
	Total	hours	30	30	
ı	Topic	cs taught as a percentage of the content spe	cified:		
	•	> <b>90</b> % 100 <b>70-90</b> %	<70%	,	
	Reas	ons in detail for not teaching any topic No	<u>—</u> า		
		topics were taught which are not specified,		tail Non	
2-		ng and learning methods:	•		
			<u>ــا</u>		
	Lecti	<u> </u>	<u>u</u>		
	_	Computer supported learning			
		tical training/ lab <u>orat</u> ory:Practical training and	experimental meas	urements in Lab	
	Semi	inar/Workshop: Non			
	Class	s activity: Numerical exercises; solution of prob	lems .		
	Case	Study: Selected case studies			
	Othe	r assignments/homework: Bi-weekly as	ssignments		
		ching and learning methods were used other that		st and give reasons	: Non
			, , , , , , , , , , , , , , , , , , , ,		
3- (		nt assessment:			
		od of assessment	Perc	enta <u>ge o</u> f total	
	Writt	en examination		70 %	
	Oral	examination			
	Pract	tical/laboratory work			
	Othe	r assignments/class work		20 %	
	Mid-	Геrm Exam		10 %	
	Total			100 %	
	Mem	bers of examination committee	Prof. Dr. Ahme	ed El-Sanabary	
	Role	of external evaluator	Non	•	
4- I		es and teaching materials:			
		lly adequate	Yes		
	Aded	juate to some extent			
	Inade	equate			

List any inadequacies: Non



5- Administrative constraints: None

6- Student evaluation of the course: None

7- Comments from external evaluator(s):

Non Non

8- Course enhancement:

Progress on actions identified in the previous year's action plan:

Actions required Planned Completion date Accomplishment

Non Non Non

Action State whether or not completed and give reasons for any non-completion Non

9- Action plan for academic year 2014 - 2015

Actions required Completion date Person responsible

Non Non Non

**Course coordinator:** Prof. Dr. Ahmed El-Sanabary

Signature:

**Date:** 3/02/2014

### Semester Course Report Academic year 2013-2014 "Spring"

#### A- Basic Information

1- Title and code: (MNF 211) Mechanics of Material

2- Program(s) on which this course is given: Manufacturing Eng. & Production Tech. BSc. Prog.

**3-Year/Level of program:** Sophomore/Semester 3

**4- Credit hours: 3** Lectures 2 hrs Tutorial 3 hr Total 5 hrs

5- Names of lecturers contributing to the delivery of the course

Prof. Dr. Ahmed El-Sanabary

Course coordinator Prof. Dr. Ahmed El-Sanabary

External evaluator

**B- Statistical Information** 

No. of students attending the course: No. 54 % 100 % 100 No. of students completing the course: No. 54 % 100

Results:

	No.	%	Grading of successful students:		
Passed	36	66.67	-	No.	%
Failed	18	33.33	Excellent(A+,A,A-)	1	1.852
			V. Good (B+,B,B-)	0	0
			Good (C+,C,C-)	8	14.815
			Pass (D+,D,D-)	27	50.001

#### **C- Professional Information**



	Topic	Lecture hours	<b>Practical Hours</b>	Lecturer
1	Simple Trusses	2	2	
2	Stress and strain	2	2	
3	Tensile test	2	2	
4	Thin wall Pressure Vessel	2	2	>
5	Torsion of circular shafts	2	2	bar
6	Springs Stresses	2	2	ana
7	Temperature stresses	2	2	Ë
8	Strain energy due to stresses	2	2	Б Ш
9	Shear & Bending Moment Diagrams	2	2	шe
10	Shear & Bending Moment Diagrams	2	2	\forall \begin{array}{c} \delta \end{array}
11	Centroid &Second moment of area	2	2	Prof. Dr. Ahmed ELSanabary
12	Shear & Bending stresses	2	2	rof.
13	Compound stress	2	2	<b>△</b>
14	Deflection of beams	2	2	
15	Testing of Materials	2	2	
Tota	I hours	30	30	
Topi	cs taught as a percentage of the content spe-	cified:		
-	> <b>90</b> % 100 <b>70-90</b> %	<70%	<b>6</b>	
Semin Clas Case Othe	Practical training and ar/Workshop:  S activity: Numerical exercises; solution of probe Study:  Selected case studies  Practical training and content of probe selected case studies  Practical training and content of probe selected case studies  Practical training and content of probe selected case studies  Practical training and content of probe selected case studies  Practical training and content of probe selected case studies  Practical training and content of probe selected case studies  Practical training and content of probe selected case studies  Practical training and content of probe selected case studies  Practical training and content of probe selected case studies	lems .		Non
3- Stude	nt assessment:			
Writt Oral Prac Othe Mid- Tota	nod of assessment ten examination examination tical/laboratory work er assignments/class work Term Exam I		70 %  20 % 10 % ed El-Sanabary	
Role	of external evaluator ies and teaching materials:		Non	
Aded Inade	lly adequate quate to some extent equate any inadequacies:	Yes  Non		



5- Administrative constraints: Non

6- Student evaluation of the course: Non

7- Comments from external evaluator(s): Response of course team

Non Non

8- Course enhancement:

Progress on actions identified in the previous year's action plan:

Actions required Planned Completion date Accomplishment

Non Non Non

Action State whether or not completed and give reasons for any non-completion Non

9- Action plan for academic year 2014 – 2015

Actions required Completion date Person responsible

Non Non Non

**Course coordinator:** Prof. Dr Ahmed El-Sanabary

Signature:

**Date:** 1/10/2014

### Annual Course Report Academic year 2013-2014 "fall"

#### A- Basic Information

1- Title and code: (MNF 212) Fundamentals of Material Sciences

2- Program(s) on which this course is given: Manufacturing Eng. & Prod. Tech. BSc. Prog.

3- Year/Level of program: Sophomore/Semester3

**4- Credit hours: 3** Lectures 2 hrs Tutorial 3 hr Practical 2 Pre-Requisite MNF 100

5- Names of lecturers contributing to the delivery of the course

Assist. Prof. Adel Elgamal

Course coordinator Assist. Prof. Adel Elgamal

External evaluator: None

#### **B- Statistical Information**

No. of students attending the course: No. 147 % 100 No. of students completing the course: No. 147 % 78.91

Results:

	No.	%	Grading of successful students		
Passed	116	78.91		No.	%
Failed	31	21.1	Excellent(A+,A,A-)	5	3.40
			V. Good (B+,B,B-)	17	11.56
			Good $(C^+,C,C^-)$	28	19.05
			Pass (D+ D D-)	66	<i>11</i> 9

#### C- Professional Information



Topic	Lecture hours	Lecturer
> Introduction	5	
> Atomic structure	5	As
> Structure of crystalline materials.	5	Assist.
> Imperfections in solids	5	
> Strengthening mechanisms	10	Prof.
Mechanical properties of materials	5	Adel
Electrical properties of materials	10	<u> </u>
Thermal properties of materials	5	Elgamal
Optical properties of materials	5	nal
Magnetic properties of materials	5	
Total hours	60	

		Hours	
> Introduction		5	
Atomic structure		5	As
Structure of crystalline materials.		5	sist
> Imperfections in solids	5	P	
Strengthening mechanisms	10	of.	
Mechanical properties of materials		5	Assist. Prof. Adel Elgamal
<ul> <li>Electrical properties of materials</li> </ul>		10	el E
<ul> <li>Thermal properties of materials</li> </ul>		5	Elge
<ul> <li>Optical properties of materials</li> </ul>		5	ame
<ul> <li>Magnetic properties of materials</li> </ul>		5	<u> 22</u>
Total hours		60	
Topics taught as a percentage of the content sp	nocified:	00	
>90 % [100] 70-90 %	<70%		
Reasons in detail for not teaching any topic	Non		
If any topics were taught which are not specified	l, give reasons in de	etail Non	
N <b>-</b> 11 1 1 1 1 1			
2- Teaching and learning methods:			7
Lectures: Classical lecturing using the white boar	d, Computer support	ed learning	)
Practical training/ laboratory : Practical training an	nd experimental meas	surements	in Lab
Seminar/Workshop: Non			
•	hlomo		
Class activity: Numerical exercises; solution of pro	DIEITIS .		
Case Study: Selected case studies			
Other assignments/homework: Bi-weekly assi	gnments		
If teaching and learning methods were used other than the	hose specified, list and	give reason	ns: Non
	•		
3- Student assessment:			
Method of assessment	Percentag	je of total	
Written examination	7	0 %	
Oral examination			
Practical/laboratory work		_	
•	<u></u>	0 0/	
Other assignments/class work	<u> </u>	0 %	
Mid-Term Exam	[1	0 %	
Total	1	00 %	
Members of examination committee	Assist. Prof. Adel	Elgamal	
Role of external evaluator	No	-	
	• • • • • • • • • • • • • • • • • • • •		
4- Facilities and teaching materials:			
Totally adequate	Yes		
•	100		
Adequate to some extent			
Inadequate			
List any inadequacies:	Non		
•			
5- Administrative constraints			



6- Student evaluation of the course:

List any criticisms None

7- Comments from external evaluator(s): Response of course team

Non

8- Course enhancement:

Progress on actions identified in the previous year's action plan:

Actions required Planned Completion date Accomplishment

Non Non Non

Action State whether or not completed and give reasons for any non-completion Non

9- Action plan for academic year 2014 - 2015

Actions required Completion date Person responsible

Non Non Non

Course coordinator: Assist. Prof. Adel Elgamal

Signature:

**Date:** 1/10/2014

### Annual Course Report Academic year 2013-2014 "SPRING"

#### A- Basic Information

**1- Title and code:** (MNF 212) Fundamentals of Material Sciences

2- Program(s) on which this course is given: Manufacturing Eng. & Prod. Tech. BSc. Prog.

**3- Year/Level of program:** Sophomore/Semester3

**4- Credit hours: 3** Lectures 2 hrs Tutorial 3 hr Practical 2 Pre-Requisite MNF 100

5- Names of lecturers contributing to the delivery of the course

Assist. Prof. Adel Elgamal

Course coordinator Assist. Prof. Adel Elgamal

External evaluator: None

#### **B- Statistical Information**

No. of students attending the course:

No. of students completing the course:

No. 37

No. 37

No. 37

No. 37

Results:

	No.	%	Grading of success	tul stude	nts:
<b>Passed</b>	29	78.38		No.	%
Failed	8	21.62	Excellent(A+,A,A-)	2	5.41
			V. Good (B+,B,B-)	7	18.92
			Good (C+,C,C-)	12	32.43
			Pass (D+,D,D-)	8	21.62

#### **C- Professional Information**



Topic		Lecture hours	Lecturer
> Introduction		5	
Atomic structure		5	As
Structure of crystalline materials.		5	Assist. Prof. Adel Elgamal
> Imperfections in solids		5	P
Strengthening mechanisms		10	<u>약</u>
Mechanical properties of materials		5	Ad
Electrical properties of materials		10	E E
Thermal properties of materials		5	lgaı
Optical properties of materials		5	nal
Magnetic properties of materials		5	
Total hours		60	
Teaching and learning methods:  Lectures: Classical lecturing using the white	hoard Computer supported	l learning	7
Practical training/ laboratory: Practical training	g and experimental measur	ements	ın Lab
Seminar/Workshop: Non			
Class activity: Numerical exercises; solution o	f problems .		
• —	f problems .		
Class activity: Numerical exercises; solution o Case Study:  Selected case studies	f problems .  assignments		
Class activity: Numerical exercises; solution o Case Study: Selected case studies	assignments	and give	e reasons:
Class activity: Numerical exercises; solution of Case Study:  Selected case studies  Other assignments/homework:  Bi-weekly	assignments	: and give	e reasons:
Class activity: Numerical exercises; solution of Case Study: Selected case studies  Other assignments/homework: Bi-weekly  If teaching and learning methods were used other	assignments ner than those specified, list	_	e reasons:
Class activity: Numerical exercises; solution of Case Study: Selected case studies  Other assignments/homework: Bi-weekly  If teaching and learning methods were used other  Student assessment:	assignments	of total	e reasons:
Class activity: Numerical exercises; solution of Case Study:  Selected case studies  Other assignments/homework:  Bi-weekly  If teaching and learning methods were used othe  Student assessment:  Method of assessment  Written examination	assignments ner than those specified, list  Percentage	of total	e reasons:
Class activity: Numerical exercises; solution of Case Study:  Other assignments/homework:  Bi-weekly  If teaching and learning methods were used oth Student assessment:  Method of assessment  Written examination  Oral examination	assignments ner than those specified, list  Percentage	of total	e reasons:
Class activity: Numerical exercises; solution of Case Study:  Other assignments/homework:  Bi-weekly  If teaching and learning methods were used other assessment:  Method of assessment  Written examination  Oral examination  Practical/laboratory work	assignments ner than those specified, list  Percentage 70	of total	e reasons:
Class activity: Numerical exercises; solution of Case Study:  Selected case studies  Other assignments/homework:  Bi-weekly  If teaching and learning methods were used other assessment:  Method of assessment  Written examination  Oral examination  Practical/laboratory work  Other assignments/class work	assignments ner than those specified, list  Percentage  70 20	of total	e reasons:
Class activity: Numerical exercises; solution of Case Study:  Other assignments/homework:  If teaching and learning methods were used other assessment:  Method of assessment  Written examination  Oral examination  Practical/laboratory work  Other assignments/class work  Mid-Term Exam	assignments ner than those specified, list  Percentage 70 20 10	of total %	e reasons:
Class activity: Numerical exercises; solution of Case Study:  Selected case studies  Other assignments/homework:  Bi-weekly  If teaching and learning methods were used oth Student assessment:  Method of assessment  Written examination  Oral examination  Practical/laboratory work  Other assignments/class work  Mid-Term Exam  Total	assignments ner than those specified, list  Percentage 70 20 10	of total % % % % % % %	e reasons:
Class activity: Numerical exercises; solution of Case Study:  Selected case studies  Other assignments/homework:  Bi-weekly  If teaching and learning methods were used other assessment:  Method of assessment  Written examination  Oral examination  Practical/laboratory work  Other assignments/class work  Mid-Term Exam  Total  Members of examination committee	assignments ner than those specified, list  Percentage 70 20 10 Assist. Prof. Adel El	of total % % % % 0 %  gamal	e reasons:
Class activity: Numerical exercises; solution of Case Study:  Selected case studies  Other assignments/homework:  Bi-weekly  If teaching and learning methods were used other assessment:  Method of assessment  Written examination  Oral examination  Practical/laboratory work  Other assignments/class work  Mid-Term Exam  Total	assignments ner than those specified, list  Percentage 70 20 10	of total % % % % 0 %  gamal	e reasons:
Class activity: Numerical exercises; solution of Case Study:  Other assignments/homework:  If teaching and learning methods were used other assessment:  Method of assessment  Written examination  Oral examination  Practical/laboratory work  Other assignments/class work  Mid-Term Exam  Total  Members of examination committee  Role of external evaluator	assignments ner than those specified, list  Percentage 70 20 10 Assist. Prof. Adel El	of total % % % % 0 %  gamal	e reasons:
Class activity: Numerical exercises; solution of Case Study:  Other assignments/homework:  Bi-weekly:  If teaching and learning methods were used other assessment:  Method of assessment:  Written examination  Oral examination  Practical/laboratory work  Other assignments/class work  Mid-Term Exam  Total  Members of examination committee  Role of external evaluator  Facilities and teaching materials:	assignments ner than those specified, list  Percentage 70 20 10 Assist. Prof. Adel El Non	of total % % % % 0 %  gamal	e reasons:
Class activity: Numerical exercises; solution of Case Study:  Other assignments/homework:  Bi-weekly: Bi-weekl	assignments ner than those specified, list  Percentage 70 20 10 Assist. Prof. Adel El	of total % % % % 0 %  gamal	e reasons:
Class activity: Numerical exercises; solution of Case Study:  Other assignments/homework:  Bi-weekly:  If teaching and learning methods were used other assessment:  Method of assessment:  Written examination  Oral examination  Practical/laboratory work  Other assignments/class work  Mid-Term Exam  Total  Members of examination committee  Role of external evaluator  facilities and teaching materials:  Totally adequate  Adequate to some extent	assignments ner than those specified, list  Percentage 70 20 10 Assist. Prof. Adel El Non	of total % % % % 0 %  gamal	e reasons:
Class activity: Numerical exercises; solution of Case Study:  Other assignments/homework:  Bi-weekly: Bi-weekl	assignments ner than those specified, list  Percentage 70 20 10 10 Assist. Prof. Adel El Non  Yes	of total % % % % 0 %  gamal	e reasons:
Class activity: Numerical exercises; solution of Case Study:  Other assignments/homework:  If teaching and learning methods were used off tudent assessment:  Method of assessment  Written examination  Oral examination  Practical/laboratory work  Other assignments/class work  Mid-Term Exam  Total  Members of examination committee  Role of external evaluator  acilities and teaching materials:  Totally adequate  Adequate to some extent	assignments ner than those specified, list  Percentage 70 20 10 10 Assist. Prof. Adel El Non  Yes	of total % % % % 0 %  gamal	e reasons:
Class activity: Numerical exercises; solution of Case Study:  Other assignments/homework:  If teaching and learning methods were used other tudent assessment:  Method of assessment  Written examination  Oral examination  Practical/laboratory work  Other assignments/class work  Mid-Term Exam  Total  Members of examination committee  Role of external evaluator  acilities and teaching materials:  Totally adequate  Adequate to some extent  Inadequate	assignments ner than those specified, list  Percentage 70 20 10 10 Assist. Prof. Adel El Non  Yes	of total % % % % 0 %  gamal	e reasons:

List any difficulties encountered

6- Student evaluation of the course:

Non



List any criticisms None

7- Comments from external evaluator(s): Response of course team

Non

8- Course enhancement:

Progress on actions identified in the previous year's action plan:

Actions required Planned Completion date Accomplishment

Non Non Non

Action State whether or not completed and give reasons for any non-completion Non

9- Action plan for academic year 2013 - 2014

Actions required Completion date Person responsible

Non Non Non

Course coordinator: Assist. Prof. Adel Elgamal

Signature:

**Date:** 1/10/2014

# Semester's Course Report 2013/2014

### **Summer Semester**

#### A- Basic Information

- 1- Title and code: (M213) Mechanics of Machines (I)
- 2- Program(s) on which this course is given: Manufacturing Eng. & Prod. Tech. BSc. Prog.
- 3- Year/Level of program: second Level.
- 4- Credit hours: 3 Lectures 2 hrs Tutorial 3 hrs Practical
- 5- Names of lecturers contributing to the delivery of the course

Prof. Dr. Ahmed Mohie El-Din Sarhan

Course coordinator Prof. Dr. Ahmed Mohie El-Din Sarhan

External evaluator

#### **B- Statistical Information**

No. of students attending the course:

No. 13

No. 13

No. 13

No. 13

No. 13

	No.	%	Grading of succe	ssful stude	nts:
Passed	12	92.31		No.	%
Failed	1	7.69	Excellent	4	30.77
			Very Good	3	23.1
			Good	2	15.38
			Pass	3	23.1

#### **C- Professional Information**



Topic Actually taught	No. of hours	Lecturer
Moment of inertia	4	
System of particles	12	Dr. rhan
Kinematics of rigid bodies,	8	<u></u> ≅
Plane Motion of rigid bodies: Force and acceleration	12	or'c ed (
Plane Motion of rigid bodies: Energy and Momentum	12	J. P.
• Cams	8	drDr.ProDi Ahmdded S
Total hours	56	

Н	ranomatico or rigita botaloo,		•	$\dot{\sim}$ (2)
	Plane Motion of rigid bodies: Force and acceleration		12	Jo.
	Plane Motion of rigid bodies: Energy and Momentum		12	J.F.
	• Cams		8	drDr.ProD
	Total hours		56	
	Topics taught as a percentage of the content spec	ified:		
	<b>&gt;90</b> % 100 <b>70-90</b> %	<70%		
		Non		
	If any topics were taught which are not specified,	give reasons in	detail Non	
2	2- Teaching and learning methods:			
	Lectures: Classical lecturing using the white board			
	Practical training/ laboratory:			
	Seminar/Workshop:			
	Class activity: Practical Applications; Problem solving	g.		
	Case Study: Selected case studies; General M	echanics Autom	otive, , Aerospac	е
	Engineering			_
	Other assignments/homework: Bi-weekly assign	nments		
	If teaching and learning methods were used other	than those spec	cified, list and gi	ve reasons
	Non			
3	B- Student assessment:			
	Method of assessment	Percen	tage of total	
	Written examination		70 %	
	Oral examination			
	Practical/laboratory work		<u> </u>	
	Other assignments/class work		20 %	
	Mid-Term Exam		10 %	
	Total		100 %	
		<b>Prof.</b> Dr. Ahmed		
		Assist. Prof. Gat	far Husain	
	Role of external evaluator	Non		
4	1- Facilities and teaching materials:			
	Totally adequate	Yes		
	Adequate to some extent			
	Inadequate			
	•	Non		
,				

5- Administrative constraints

List any difficulties encountered None



6- Student evaluation of the course:

List any criticisms

1. Lack of materials

Response of course team

More material is added to cover more areas

7- Comments from external evaluator(s): None

8- Course enhancement:

Progress on actions identified in the previous year's action plan: Some problem is added Action State whether or not completed and give reasons for any non-completion Non

9- Action plan for academic year 2014 - 2015

Actions required Completion date Person responsible

1. Provide more Problems Dr. Sarhan

Course coordinator: Prof. Dr. Ahmed Mohie Eldin Sarhan

Signature:

**Date:** 10/10/2014

### Semester's Course Report 2013/2014 Fall Semester

#### A- Basic Information

1- Title and code: (M213) Mechanics of Machines (I)

2- Program(s) on which this course is given: Manufacturing Eng. & Prod. Tech. BSc. Prog

3- Year/Level of program: second Level.

4- Unit hours: 3 Lectures 2 hrs Tutorial 3 hrs Practical

5- Names of lecturers contributing to the delivery of the course

Prof. Dr. Ahmed Mohie El-Din Sarhan

Course coordinator Prof. Dr. Ahmed Mohie El-Din Sarhan

External evaluator

#### **B- Statistical Information**

No. of students attending the course: No.  $\boxed{152}$  %  $\boxed{100}$  No. of students completing the course: No.  $\boxed{152}$  %  $\boxed{100}$ 

Results:

	No.	%	Grading of succe	ssful stude	nts:
Passed	148	97.37		No.	%
Failed	4	2.63	Excellent	78	57.32
			Very Good	40	26.32
			Good	17	11.18
			Pass	13	8 55

#### **C- Professional Information**

Topic Actually taught	No. of hours	Lecturer



Moment of inertia		4	ъ
System of particles		12	Prof. Dr. Ahmdded Sarhan
Kinematics of rigid bodies,		8	h an
Plane Motion of rigid bodies: Force and acceleration		12	Dr. Ahn Sarhan
Plane Motion of rigid bodies: Energy and Momentum		12	т. S
• Cams		8	Pro
Total hours		56	•
Topics taught as a percentage of the content spe			
>90 % 100 70-90 %	<70%		
Reasons in detail for not teaching any topic	Non	. data!! Nam	
If any topics were taught which are not specified,	give reasons ir	i detail Non	
2- Teaching and learning methods:			
Lectures: Classical lecturing using the white board	Ī		
Practical training/ laboratory:	1		
Seminar/Workshop:			
Class activity: Practical Applications; Problem solvi	na		
Case Study: Selected case studies; General Mecha	•	Aerospace Engi	neering
Other assignments/homework: Bi-weekly assignments/homework		, rioroopado Erigi	nooning
If teaching and learning methods were used other that		d list and give rea	sons: Non
· ·	an those opcome	a, not and give rec	100110. 11011
3- Student assessment:	_		
Method of assessment	Percen	tage of total	
Written examination		70 %	
Oral examination		П	
Practical/laboratory work			
Other assignments/class work		20 %	
Mid-Term Exam		10 % 100 %	
Total  Members of examination committee	Dr. Ahmed Sarl		
members of examination committee	Dr. Gafar Husa		
Role of external evaluator	Non		
4 Escilition and topoling materials:			
4- Facilities and teaching materials:			
Totally adequate	Yes		
Adequate to some extent			
Inadequate			
List any inadequacies	Non		
5- Administrative constraints			
List any difficulties encountered	None		
List any annountes encountered	THOTIC		

6- Student evaluation of the course:

List any criticisms Response of course team

1. Lack of materials More material is added to cover more areas



**7- Comments from external evaluator(s):** None

#### 8- Course enhancement:

Progress on actions identified in the previous year's action plan: Some problem is added Action State whether or not completed and give reasons for any non-completion Non

#### 9- Action plan for academic year 2014 - 2015

**Actions required** 

Completion date

Person responsible

1. Provide more Problems Dr. Sarhan

**Course coordinator:** Prof. Dr Ahmed Mohie Eldin Sarhan

Signature:

**Date:** 10/10/2014

# Annual Course Report (Academic Year 2013-2014)

#### A- Basic Information

**1- Title and code:** Presentation Skills - (GEN 241)

**2- Program(s) on which this course is given:** Electronic Eng. & Comm. Tech BSc. Prog. Manufacturing Eng. & Prod. Tech. BSc. Prog.

3- Year/Level of program: Second Level

4- Unit hours 2 Lectures 2 hrs Tutorial -- Practical -- Total 2 hrs

5- Names of lecturers contributing to the delivery of the course

Dr. Lubna Fekry

Course coordinator: Dr. Lubna Fekry

External evaluator: None

#### **B- Statistical Information**

	FAL	LL	SF	PRING
No. of students attending the course	<b>No.</b> 163	100%	<b>No</b> . 1	2 100%
No. of students completing the course	<b>No.</b> 154	94.5%	<b>No</b> . 1	2 100%

		Results		
	FA	LL	Sp	ring
	No.	%	No.	%
Passed	143	92.85	11	91.7
Failed	11	7.14	1	8.3

		Grading of studen	its	
	FA	\LL	Sp	ring
	No.	%	No.	%
Α	12	7.79	1	8.3
В	24	15.58	2	1.67
С	54	35.1	4	0.33
D	53	34.4	4	0.33



F	11	7.14	1	8.3

### **C- Professional Information**

Topics	Lecture
1- Preparation of short talks.	hours 2
2- How to write a technical report.	2
3- C.V Writing: Preparation of an attractive C.V. containing personal data qualifications, posts, and	
publications Interview Preparations	2
4- Fundamentals of preparing an attractive style for a short talk, techniques for using slides and	
projector for better interpretation. Using the power point technique for achieving and ideal short	6
talk through a lab top and a data show / Seminar training.	_
5- To improve the student communications skills / Seminar training / JoeHariies Windows	6
6- To develop the student acquiring power of leadership	2
7 Training on active listening and negotiation.	4
8- To understand and practice what's body language.	3
9Free Suggested topic by the students.  Total hours	3 <b>30</b>
Topics taught as a percentage of the content specified:	30
<b>Lectures:</b> Presenting for both Lecturer and students using data show + white board	•
Practical training/ laboratory: Seminar/Workshop: yes Class activity: Bi-weekly presentation by students Case Study: In the portfolio	
Lectures: Presenting for both Lecturer and students using data show + white board  Practical training/ laboratory: Seminar/Workshop: yes  Class activity: Bi-weekly presentation by students	
Lectures: Presenting for both Lecturer and students using data show + white board  Practical training/ laboratory:  Seminar/Workshop:	
Lectures: Presenting for both Lecturer and students using data show + white board  Practical training/ laboratory: Seminar/Workshop: yes  Class activity: Bi-weekly presentation by students  Case Study: In the portfolio  Other assignments/homework: Technical report / CV writing / Work Biography  If teaching and learning methods were used other than those specified, list and give reason tudent assessment: Presentation / Technical report / CV writing / Work Biography	
Lectures: Presenting for both Lecturer and students using data show + white board  Practical training/ laboratory: Seminar/Workshop:	
Lectures: Presenting for both Lecturer and students using data show + white board  Practical training/ laboratory: Seminar/Workshop:	
Lectures: Presenting for both Lecturer and students using data show + white board  Practical training/ laboratory:	
Lectures: Presenting for both Lecturer and students using data show + white board  Practical training/ laboratory:	
Lectures: Presenting for both Lecturer and students using data show + white board  Practical training/ laboratory:	
Lectures: Presenting for both Lecturer and students using data show + white board  Practical training/ laboratory:	

Totally adequate

Adequate to some extent

#### 5- Administrative constraints

#### List any difficulties encountered

- Limited time for all students to present well
- Not adequate class work degrees compared with final exam degree.



No assistant.

6- Student evaluation of the course: 72%

7- Comments from external evaluator(s): None

#### 8- Course enhancement:

Progress on actions identified in the previous year's action plan 2013-2014: Extra interesting discussion for students, better arranging through groups Action State whether or not completed and give reasons for any none-completion Done

#### 9- Action plan for academic year 2014 – 2015

We will try to do extra concerning discussion for students, better arranging through groups

Course coordinator: Dr. Lubna Fekry

Signature: Date: 2014

Semester's Course Report Academic year: 2013-2014 Semester: Spring

#### A- Basic Information

- 1- Title and code: (MNF 214) Machine Drawing I
- 2- Program(s) on which this course is given: Manufacturing Eng. and Prod. Tech. BSc Program
- 3- Year/Level of program: Second Year/Sophomore
- 4- Credit hours Credit 3hrs Lectures 2hrs Tutorial 4hrs Practical -
- 5- Names of lecturers contributing to the delivery of the course

Prof. Dr. Nabil Gadallah

Course coordinator Prof. Dr. Nabil Gadallah

External evaluator

#### **B- Statistical Information**

No. of students attending the course:

No. of students completing the course:

No. 25

No. 25

No. 25

No. 25

	No.	%
Passed	19	76
Failed	6	24

Grading of successful students:			
Grade	No.	%	
Α	1	4	
В	0	0	
С	9	36	
D	6	24	

#### **C- Professional Information**

Topic Actually taught	No. of hours	Lecturer
DATA NECESSARY FOR PRODUCTION:	•	
1. Shape Description	4	
2. Size Description	4	Prof Nal
3. Tolerances & Fits and Geometrical Accuracy	4	] <sup> </sup>



4. Surface Finish	4	
5. Material Description	4	
GRAPHICAL REPRESENTATION OF RINCIPAL MACHINE ELEMENTS AND JOINTS		
1. Introduction	4	
2. Standardization of Machine Parts	4	
3. Joints of Machine Parts	4	
4. Dismountable Joints		
4.1 Threaded Joints	4	
4.2 Keyed Joints	4	
4.3 Splines & Serrations	4	
4.4 Pin Joints	4	
5. Non Dismountable Joints		
5.1 Welded Joints	4	
5.2 Riveted Joints	4	
Revision	4	
Total	60	
Tonics taught as a percentage of the content specified:		

ropics taught as	a percentage of tr	ie content sp	есттеа:	
>90 %	100	70-90 %		<70%

Reasons in detail for not teaching any topic None

If any topics were taught which are not specified, give reasons in detail

None, all of the missed teaching hours were substituted, in addition to the seminars arranged during the students free day.

#### 2- Teaching and learning methods:

#### Lectures:

Course notes

- Machine Drawing (2) by: Prof. Nabil Gadallah, Modern Academy for Engineering & Technology, 2013.
- Standardized parts by: Prof. Mamdouh saber, Modern Academy for Engineering & Technology, 2005.

Required books Engineering Drawing and Graphic Technology, Thomas French McGrawHill, 1992.

Machine Drawing, P.S.Gill, S.K.Kataria & Sons, 2013

Practical training/ laboratory:

Seminar/Workshop: Bi-weekly Seminars

Class activity: Case Study:

Other assignments/homework: weekly assignments

If teaching and learning methods were used other than those specified, list and give reasons: Non

#### 3- Student assessment:

Method of assessment	Points	%
Written examination	70	70
Oral examination	Non	0
Practical/laboratory work	Non	0
Other assignments/class work	20	20
Mid-Term Exam	10	10
Total	100	100

Members of examination committee	Dr. Nabil Gadallah
Role of external evaluator	Non

Λ	_	Eacil	litiae	and	toac	hina	materia	ale:
7	- 1	acı	แนธอ	and	teac	mng	materi	aio.

Totally adequate Yes



Adequate to some extent .....

Inadequate
List any inadequacies
Non

5- Administrative constraints

List any difficulties encountered

**6- Student evaluation of the course:**List any criticisms

Non

7- Comments from external evaluator(s):

Response of course team Non

8- Course enhancement:

Progress on actions identified in the previous year's action plan: No previous comments Action State whether or not completed and give reasons for any non-completion Non

9- Action plan for academic year 2014 - 2015

Actions required Completion date Person responsible

Non

Course coordinator: Prof. Dr. Nabil Gadallah

Signature:

**Date:** 2/8/2014



### Semester's Course Report Academic year: 2014-2015 Semester: Fall

#### **A- Basic Information**

1- Title and code: (MNF 214) Machine Drawing I

2- Program(s) on which this course is given: Manufacturing Eng. & Prod. Tech. BSc Program

**3- Year/Level of program:** Second Year/Sophomore

4- Credit hours: 3 Lectures 2hrs Tutorial 4hrs Practical -

5- Names of lecturers contributing to the delivery of the course

Prof. Dr. Nabil Gadallah

Course coordinator Prof. Dr. Nabil Gadallah

External evaluator

#### **B- Statistical Information**

No. of students attending the course:

No. 161

No. 161

% 100

Results:

	No.	%
Passed	139	86.3
Failed	22	13.7

Grading of successful students:			
Grade	No.	%	
Α	17	10.2	
В	32	19.9	
С	41	24.7	
D	32	19.9	

#### **C- Professional Information**

Topic Actually taught	No. of hours	Lecturer
Welded Joints	4	=
Riveted Joints	4	Prof. Dr. Vabi
Journal Bearings	4	ت کے ت



Journal Bearings	4	
Rolling Bearings	4	
Gears- Gear Geometry .	4	
Spur – Helical Gears	4	
Bevel Gears	4	
Worm Gears	4	
Mechanical transmission	4	
Oil seals	4	
Springs	6	
Valves	6	
Revision	4	
Total	60	

Topics taught as a pe	rcentage of the content s <sub>l</sub>	pecified:		
<b>&gt;90</b> % 100	70-90 %		<70%	
Reasons in detail for	not teaching any topic	None		

If any topics were taught which are not specified, give reasons in detail

None, all of the missed teaching hours were substituted, in addition to the seminars arranged during the students free day.

#### 2- Teaching and learning methods:

#### Lectures:

Course notes

- Machine Drawing (2) by: Prof. Nabil Gadallah, Modern Academy for Engineering & Technology, 2013.
- Standardized parts by: Prof. Mamdouh saber, Modern Academy for Engineering & Technology, 2005.

Required books Engineering Drawing and Graphic Technology, Thomas French McGraw Hill, 1992.

Machine Drawing, P.S.Gill, S.K.Kataria & Sons, 2013

Practical training/ laboratory:

Seminar/Workshop: Bi-weekly Seminars

Class activity: Case Study:

Other assignments/homework: weekly assignments

If teaching and learning methods were used other than those specified, list and give reasons: Non

#### 3- Student assessment:

Method of assessment	Points	%
Written examination	70	70
Oral examination	Non	0
Practical/laboratory work	Non	0
Other assignments/class work	20	20
Mid-Term Exam	10	10
Total	100	100

Members of examination committee

Dr. Nabil Gadallah

Role of external evaluator

Non



4- Facilities and teaching materials:

Totally adequate

Adequate to some extent

Inadequate

List any inadequacies

Yes

.....

Non

5- Administrative constraints

List any difficulties encountered None

**6- Student evaluation of the course:** 78% List any criticisms Non

7- Comments from external evaluator(s): None

8- Course enhancement:

Progress on actions identified in the previous year's action plan: No previous comments Action State whether or not completed and give reasons for any non-completion Non

9- Action plan for academic year 2014 – 2015

Actions required Completion date Person responsible

Non

Course coordinator: Prof. Dr Nabil Gadallah

Signature:

**Date:** 28/9/2014



### Semester's Course Report Academic year 2013-2014

#### **A- Basic Information**

1- Course Code & Title: (MTH 207) Numerical Analysis

2- Program(s) on which this course is given: Manufacturing Eng. & Prod. Tech. BSc Program

3- Year/Level of program: Sophomore, Fourth Semester

4- Credit hours

Credit 3 hrs. Lectures: 2 hrs. Tutorial 2 hrs. Practical 5- Names of lecturers contributing to the delivery of the course: Dr. S. Shenawy

**6- Course coordinator:** Dr. Sameh Shenawy

7- External evaluator: Non

#### **B- Statistical Information**

1- No. of students attending the course:
No. of students completing the course:
No. 111 100 %
No. 111 100 %

3- Results:

	No.	%
Passed	93	84
Failed	18	16

Grading of	Grading of successful students:		
Grade	%		
Excellent	18	16.21	
Very Good	24	21.62	
Good	30	27.03	
Pass	21	18.92	

#### **C- Professional Information**

	Торіс		Actual	Tutorial hours
1	Curve fitting and linear Approximation of a function.	3	3	3
2	Polynomial interpolation and error estimation in the interpolation formula	2	2	2
3	Lagrange interpolation	2	2	2
4	Newton –interpolation	2	2	2



5	Hermit interpolation.	2	2	2
6	Newton-Cotes formula, composite Newton-cotes formula	2	2	2
7	Romberg – Steifel integration method.	2	2	2
8	Numerical solution of initial value problems	3	2	2
9	Numerical solution of first order methods Runge- Kutta methods	4	2	2
10	Multistep methods.	2	2	2
11	Numerical solution of linear and non-linear equation, Gauss-Seidel method.	4	4	4
12	Numerical solution of nonlinear equations the fixed point iteration		2	•
	method,	2		2
13	Newton-Raphson method.	2	2	2
	Total hours	30	27	27

Topics taught as a percentage of the content specified:

More than 95 %

Reasons in detail for not teaching any topic: Non

If any topics were taught which are not specified, give reasons in detail: Non

Achieved program intended learning outcomes, ILO's: A1,A5,B1,B2,B3,B11,D3,D4,D7

2- Teaching and learning methods:

Lectures:Lecture, discussions, tutorials, problem solvingClass activityNumerical exercises; solution of problems

Case Study: Selected case studies

Other assignments/homework: Bi-weekly assignments and reports

If teaching and learning methods were used other than those specified, give reasons: Non

#### 3- Student assessment:

Method of assessment	Points	%
Written examination	70	70
Oral examination	Non	0
Practical/laboratory work	Non	0
Other assignments/class work	15	15
Mid-Term Exam	15	15
Total	100	100

Members of examination committee: Dr. S. Shenawy

Role of external evaluator: Non

#### 4- Facilities and teaching materials:

Totally adequate	
Adequate to some extent	Yes
Inadequate	

List any inadequacies:

This needs a computer Lab

#### **5- Administrative constraints** (List any difficulties encountered)

criticism	Response of course team
They want to study some applications in	They are completely right. Next semester we will
manufacturing technology.	add such examples.

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

Comment	Response of course team
None	None

#### 8- Written Exam Evaluation



The results of the course are normally distributed with mean at 70% and with standard deviation 20. This means that the main objectives of the course are achieved for most of the students.

#### 9- Course enhancement:

Progress on actions identified in the previous year's action plan. State whether or not completed and give reasons for any non-completion:

	1	
Actions required	Planned Completion date	Accomplishment
This is the first semester	Non	Non

9- Action plan for academic year 2014 - 2015

Actions required	Completion date	Person responsible
Adding more examples related to manufacturing technology	December 2014	Dr. S. Shenawy

Course coordinator: Dr. S. Shenawy

Signature:

**Date:** July 15, 2014

Semester Course Report Academic year: 2013 - 2014 Semester: spring

#### A- Basic Information

1- Course Code & Title: (MNF 215) Mechanics of Machines-2

2- Program(s) on which this course is given: Manufacturing Eng. & Prod. Tech. BSc Prog.

3- Year/Level of program: Sophomore

**4- Credit hours** 3 hrs Lectures 2 hrs Tutorial 3 hrs

5- Names of lecturers contributing to the delivery of the course: Prof. Gaafar Hussein

**6- Course coordinator:** Prof. Gaafar Hussein

7- External evaluator: Non

#### **B- Statistical Information**

No. of students attending the course: No. of students completing the course:

Results:

	No.	%
Passed	135	97.83
Failed	3	2.17

No.	138	100	%
No.	138	100	%

Grading of successful students:				
Grade	No.	%		
Α	24	17.39		
В	52	37.68		
С	34	24.64		
D	25	18.12		

#### **C- Professional Information**

Торіс		l hours	Lasturar
		Tut.	Lecturer
Kinematics of motion: Different types of motion of particles, the basic equations			- e - X
governing motion.	2	4	Dr. N Rabi twall
Dynamic force analysis in machines: Velocity and acceleration in mechanisms,			
inertia forces and moments. Static and dynamic balancing of rotating and			Prof. Galal Dr Me
reciprocating machines	4	8	



<ul> <li>Gear trains:</li> <li>Types of gears (spur, helical, worm, and bevel gears) and their basics</li> <li>Types of gear trains: ordinary (simple, compound) and epicyclic gear trains</li> <li>Transmission ratios of different gear trains</li> </ul>	6	10	
• Gyroscopes: Processional angular motion, gyroscopic couple, effect of gyroscopic couple in different applications (motor vehicles, marines, aircrafts, production machines,)	6	8	
<ul> <li>Inertia forces in reciprocating parts:</li> <li>Velocity and acceleration of reciprocating parts in engines, approximate analytical method for velocity and acceleration of the piston and connecting rod</li> <li>Inertia forces and moments on the engine moving parts</li> </ul>	4	8	
<ul> <li>Turning moment diagrams and flywheel:</li> <li>Turning moment diagrams for single-cylinder and multi-cylinder engines</li> <li>Fluctuations of energy and speed, flywheel design calculations.</li> </ul>	4	4	
Speed governors: The basic types of governors and their principle of actions, the basic equations for controlling the rotating speeds.      Total hours	4 30	3 45	

Topics taught as a percentage of the content specified:

>90 % 70

70-90 %

<70%

Reasons in detail for not teaching any topic: Non

If any topics were taught which are not specified, give reasons in detail: Non

Achieved program intended learning outcomes, ILO's:

Knowledge & Understanding	Intellectual skills	Applied Skills	General transferable skills
a1 to a7	b1 to b4	c1 to c4	d1 to d3

#### 2- Teaching and learning methods:

Lecture, presentations, discussions, tutorials, problem solving, self-learning

If teaching and learning methods were used other than those specified, give reasons:

Non

#### 3- Student assessment:

Method of assessment	Points	%
Written examination	70	70
Oral examination	Non	0
Practical/laboratory work	Non	0
Other assignments/class work	20	20
Mid-Term Exam	10	10
Total	100	100

Members of examination committee: Dr. Gaafar A. Hussein

Role of external evaluator:

Non

4- Facilities and teaching materials:

Totally adequate	Yes
Adequate to some extent	
Inadequate	

List any inadequacies:

Non

#### 5- Administrative constraints (List any difficulties encountered) Non

#### 6- Student evaluation of the course:

	List any criticisms	Response of course team
(a)	None	



7- Comments from external evaluator(s):

	Comment	Response of course team
(a)	Non	

#### 8- Written Exam Evaluation

- The exam level is convenient, considering the percentage of high grades.
- The whole exam result shows considerable weakness in engineering units.

#### 9- Course enhancement:

Progress on actions identified in the previous year's action plan. State whether or not completed and give reasons for any non-completion:

Actions required	Planned Completion date	Accomplishment
None		

10- Action plan for academic year 2014 - 2015

Actions required	Completion date	Person responsible

Course coordinator: Prof. Dr. Gaafar A. Hussein

Signature:

Date: December 24, 2014

# Annual Course Report 2013/2014

#### A- Basic Information

1- Title and code: MNF221: Metals Cutting Processes

**2- Program(s) on which this course is given:** Manufacturing Eng. & Prod. Tech. BSc Prog.

**3- Year/Level of program:** 2<sup>nd</sup> Level / 3<sup>rd</sup> Semester

4- Credit hours: 3 Lectures 2hrs Tutorial 1 Hrs Practical 2 Hrs

5- Names of lecturers contributing to the delivery of the course: Dr. M. Merdan

Course coordinator: Dr. M. Merdan

External evaluator: None

#### **B- Statistical Information**

No. of students attending the course: 129
No. of students completing the course: 127

Results:

	No.	%	Grading of successful students:		
<b>Passed</b>	117	92.18		No.	%
Failed	10	7.82	Excellent	15	11.81
			Very Good	26	20.47
			Good	35	27.58
			Pass	<i>1</i> 1	32 23

#### **C- Professional Information**

Topic	Lecture hours	Tutorial hours	Practical hours
Introduction; Definition of technology, production system, manufacturing processes and elements of machining system	2		4



Machining Deviations; reasons, types, dimensional deviation and ISO system of tolerances, definitions and denotations of geometric deviations, standardization and measurement of surface roughness.	4	2	4
Classification of metal cutting processes.	1	1	
Measurement and inspections	4	2	4
Turning process.	4	2	4
Drilling and boring processes.	2	1	4
Planning, shaping, and slotting processes.	2	2	2
Milling process.	4	2	4
Surface and cylindrical grinding processes.	7	3	4
<b>Note:</b> At each metal cutting operations the following topics are going to be discussed; basic concepts, cutting tools and work pieces clamping methods, machine tool types and main parts, attainable accuracies and surface roughness, and sequences of operations required for specific applications for each metal cutting process.			
Total	30	15	30

•	Topics 1	taug	ht as a percentage of the c	content specified:	
	>90 %	100	70-90 %	<70%	

- Reasons in detail for not teaching any topic
- If any topics were taught which are not specified, give reasons in data

2-	<b>Teaching</b>	and	learning	methods:
----	-----------------	-----	----------	----------

•	Lectures:	Classical lecturing	g usin	g the	white	board
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Practical training/ laboratory: YesSeminar/Workshop: Yes

■ Class activity: Solution of problems

■ Case Study: None

Other assignments/homework: Assignment report each 4 weeks

If teaching and learning methods were used other than those specified, list and give reasons: None

#### 3- Student assessment:

Method of assessment	Percentage of total
<ul><li>Written examination</li></ul>	60 %
<ul><li>Oral examination</li></ul>	
<ul><li>Practical/laboratory work</li></ul>	20 %
<ul><li>Other assignments/class work</li></ul>	10 %
<ul><li>Mid-Term Exam</li></ul>	10 %
Total	<del>100 %</del>
Members of examination committee	Dr. M. Merdan
Role of external evaluator	none

#### 4- Facilities and teaching materials:

- Totally adequate
- Adequate to some extent
- Inadequate
- List any inadequacies

Yes



5- Administrative constraints: None

6- Student evaluation of the course: None

7- Comments from external evaluator(s): Response of course team

None None

8- Course enhancement:

Progress on actions identified in the previous year's action plan: None Action State whether or not completed and give reasons for any non-completion: None

9- Action plan for academic year 2014 - 2015

Actions required Completion date Person responsible

None

Course coordinator: Dr. M. Merdan

Signature: M. Merdan Date: 17/12/2014

### Semester's Course Report Academic year: 2013 - 2014 Semester: Spring

#### A- Basic Information

1- Course Code & Title: (MNF222) Materials Technology and Testing

2- Program(s) on which this course is given: Manufacturing Eng. & Prod. Tech. BSc Prog.

3- Year/Level of program: : Sophomore

**4- Credit hours: 3** Lectures 2 hrs Tutorial 1 hr Practical 2 hrs

5- Names of lecturers contributing to the delivery of the course:

Prof. Dr. Adel Algamal

**6- Course coordinator:** Dr. Adel El-Gamal

7- External evaluator: Non

#### **B- Statistical Information**

No. of students attending the course:

No. of students completing the course:

Results:

	No.	%
Passed	113	96.58
Failed	4	3.42

No.	117	100	%
No.	117	100	%

Grading of successful students:					
Grade	No.	%			
Α	6	5.128			
Α-	10	8.547			
B+	16	13.675			
В	19	16.239			
C+	19	16.239			
С	14	11.9658			
D+	14	11.965			
D	10	8.547			



D-	5	4.27

#### **C- Professional Information**

#### 1 - Course teaching

Topic	Lecture hours	Practical hours	Tutorial hours
Alloys and Alloying systems	3	3	1
Phase Equilibrium and Phase Diagrams	4	3	2
➤ Fe/Fe3c iron carbon diagram	5	4	3
phase Transformation	3	3	1
Time Temperature Transformation (TTT) diagrams	5	5	3
Continuous Cooling Transformation (CCT) diagrams	3	3	2
The heat Treatment of Metals	3	3	1
Mechanical properties of materials	2	4	1
Fracture, Fatigue and Creep	2	2	1
Total hours	30	30	15

Topics taught as a percentage of the content specified:					
> <b>90</b> % 100	70-90 %	80	<70%		

**Reasons in detail for not teaching any topic:** The term actually was 12 weeks as during the last three weeks' practical exams and revisions were carried out.

If any topics were taught which are not specified, give reasons in detail: None

2-	<b>Teaching</b>	and	learning	methods:
_	I CUCITING	MIIM	ioui i i i i g	IIIOUIIOGO:

Lecture: Weekly Lecture

Practical training/ laboratory: Weekly Laboratory

Seminar/Workshop: Bi-weekly Seminars

Class activity: Case Study:

Other assignments/homework: weekly assignments

If teaching and learning methods were used other than those specified, list and give reasons: Non

#### 3- Student assessment:

Assessment Method	Timing	Grade (Degrees)
Semester Work: seminars, quizzes assignments and reports	Bi-Weekly	10
Mid-Term Exam	6th Week	10
Practical Exam	15 <sup>th</sup> week	20
Written Exam	16th week	60
Total	100	

Members of examination committeeDr. Adel El-GamalRole of external evaluatorNon

4- Facilities and teaching materials:

Totally adequate

Adequate to some extent

Inadequate

List any inadequacies

Yes

.....

Nor

5- Administrative constraints



#### List any difficulties encountered:

Limitations of the number of operating experiments in the lab.

6- Student evaluation of the course:

90 %

List any criticisms	Response of course team
The exercise hours are not sufficient	The number of solved problems during lecture will be increased.

7- Comments from external evaluator(s): None

#### 8- Course enhancement:

Progress on actions identified in the previous year's action plan: None Action State whether or not completed and give reasons for any non-completion None

#### 9- Action plan for academic year 2014 - 2015

Actions required Completion date Person responsible
Increasing the number of practical tests September 2014 Assist. Prof. Adel Elgammal

Course coordinator: Assist. Prof. Adel ElGammal

Signature:

**Date:** 8/12/2014

### Semester's Course Report 2014/2015 Fall Semester

#### A- Basic Information

1- Title and code: GEN 242 Report writing

2- Program(s) on which this course is given: Manufacturing Eng. & Prod. Tech. BSc. Prog.

3- Year/Level of program: Second Year Man. Eng. & Prod. Technology.

4- Credit hours: 3 Lectures 2 hrs Tutorial 2 hrs

5- Names of lecturers contributing to the delivery of the course

Dr. Elsaved kamar

Course coordinator Dr. Elsayed kamar

External evaluator: None

#### **B- Statistical Information**

No. of students attending the course: No.  $\boxed{100}$  %  $\boxed{100}$  No. of students completing the course: No.  $\boxed{100}$  %  $\boxed{100}$ 

Results:

	No.	%	Grading of successful students:		
Passed	94	94	-	No.	%
Failed	6	6	Excellent	22	22
			Very Good	22	22
			Good	24	24
			Pass	26	26

#### C- Professional Information

Tonic Actually tought	No. of I	hours	
Topic Actually taught	Planned	Actual	Lecturer



Chapter 1: A guide to report w	ritina		2	2	
	Chapter 2: Technical report writing			4	
Chapter 3: Business letters			4 4	4	mar
Chapter 4:Technical writing et	hics		4	4	ka
Chapter 5:Mechanics			4	4	Dr. Elsayed kamaı
•	Chapter 6:Using words correctly		4	4	Sa
Chapter 7: Characteristics of effective written communication		6	6	<u>с</u> Ш	
Chapter 8: Connectives			2	2	
Tota	l hours		30	30	
Topics taught as a percent	age of the content s	specified:	•		
>90 % 🗴 70-90 %	<709	%			
Reasons in detail for not teac	hing any topic.	The term act	ually was 12	weeks as	during
the last three weeks practical ex	kams and revisions v	vere carried ou	it.		
If any topics were taught which	ch are not specified	l, give reason	s in detail	None	
Knowledge & Understanding	Intellectual Skills	Applied Skills	General 8	& Transfer	able skills
a1 to a5	b1 to b4	c1 to c3		d1 to d3	
Practical training/ laboratory: Seminar/Workshop: Class activity: Case Study: Other assignments/homework If teaching and learning method	one one k: Writing a repor	rt and a resum		give reas	ons: None
3- Student assessment:					
Method of assessment Written examination Oral examination Practical/laboratory work Other assignments/class wor Total Members of examination cor Role of external evaluator		<b>Per</b> o	70 %  30 % 100 %	otal	
4- Facilities and teaching materia	ls:				
Totally a		Y	es		
Adequate to s	•				
List any inadequacies		None			
5. Administrative constraints		. 10.10			

5- Administrative constraints

List any difficulties encountered None

6- Student evaluation of the course:



List any criticisms: None

7- Comments from external evaluator(s): None

#### 8-Written Exam Evaluation

The exam level is convenient, considering the percentage of success.

Elevated success in all questions indicate good understanding of the fundamentals of the subject.

#### 9- Course enhancement:

Progress on actions identified in the previous year's action plan:

None

Action State whether or not completed and give reasons for any non-completion None

10- Action plan for academic year 2014 - 2015

Actions required Completion date Person responsible

None

Course coordinator: Dr. Elsayed kamar

Signature:

**Date:** 1/10/2014

Semester Course Report Academic year: 2013-2014 Semester: Spring

#### **A- Basic Information**

1- Title and code: (MNF 216) Machine Drawing II

2- Program(s) on which this course is given: Manufacturing Eng. & Prod. Tech. BSc Prog.

3- Year/Level of program: Second Year/Sophomore

4- Credit hours: 3 Lectures 2hrs Tutorial 4hrs Practical -

5- Names of lecturers contributing to the delivery of the course

Prof. Dr. Nabil Gadallah

Course coordinator Prof. Dr. Nabil Gadallah

External evaluator

#### **B- Statistical Information**

No. of students attending the course:

No. 123

No. of students completing the course:

No. 123

No. 123

No. 123

Results:

	No.	%
Passed	114	92.7
Failed	9	7.3

Grading of successful students:				
Grade	No.	%		
Α	20	16.3		
В	19	15.4		
С	31	25.2		
D	44	35.8		

#### **C- Professional Information**

Topic Actually taught	No. of hours	Lecturer
Welded Joints	4	. ==
Riveted Joints	4	Prof Dr. Vabi
Journal Bearings	4	ت کے ت



Journal Bearings	4	
Rolling Bearings	4	
Gears- Gear Geometry .	4	
Spur – Helical Gears	4	
Bevel Gears	4	
Worm Gears	4	
Mechanical transmission	4	
Oil seals	4	
Springs	6	
Valves	6	
Revision	4	
Total	60	

	. • •••				
Topics taught as a percentaç	ge of the content specif	ied:			
<b>&gt;90</b> % 100	70-90 %	<70%			
Reasons in detail for not tea	ching any topic N	one	<del></del>		
f any topics were taught which are not specified, give reasons in detail					
None, all of the missed teachin	ng hours were substituted	, in addition to	the seminars arra	anged	
during the student's free day.					

#### 2- Teaching and learning methods:

#### Lectures:

Course notes

- Machine Drawing (2) by: Prof. Nabil Gadallah, Modern Academy for Engineering & Technology, 2013.
- Standardized parts by: Prof. Mamdouh saber, Modern Academy for Engineering & Technology, 2005.

Practical training/ laboratory:

Seminar/Workshop: Bi-weekly Seminars

Class activity: Case Study:

Other assignments/homework: weekly assignments

If teaching and learning methods were used other than those specified, list and give reasons: Non

#### 3- Student assessment:

Method of assessment	Points	%
Written examination	70	70
Oral examination	Non	0
Practical/laboratory work	Non	0
Other assignments/class work	20	20
Mid-Term Exam	10	10
Total	100	100

Members of examination committee	Prof. Di	. Nabil Gadallah
Role of external evaluator	Non	

4- Facilities and teaching materials:

Totally adequate Yes



Adequate to some extent ......

Inadequate
List any inadequacies

Non

5- Administrative constraints

List any difficulties encountered None

6- Student evaluation of the course: 78%
Response of course team Non
List any criticisms Non
7- Comments from external evaluator(s): Non

8- Course enhancement:

Progress on actions identified in the previous year's action plan: No previous comments Action State whether or not completed and give reasons for any non-completion Non

9- Action plan for academic year 2014 - 2015

Actions required Completion date Person responsible

Non

Course coordinator: Prof. Dr. Nabil Gadallah

Signature:

**Date:** 2/8/2014



## Semester Course Report Academic year: 2013-2014 Semester: Summer

#### **A- Basic Information**

1- Title and code: (MNF 216) Machine Drawing II

2- Program(s) on which this course is given: Manufacturing Eng. & Prod. Tech. BSc Prog.

3- Year/Level of program: Second Year/Sophomore

**4- Credit hours: 3** Lectures 2hrs Tutorial 4hrs Practical - **5- Names of lecturers contributing to the delivery of the course** 

Prof. Dr. Nabil Gadallah

Course coordinator Prof. Dr. Nabil Gadallah

External evaluator

#### **B- Statistical Information**

No. of students attending the course:

No. 27

No. of students completing the course:

No. 27

No. 27

No. 27

No. 27

	No.	%
Passed	22	81.5
Failed	5	18.5

Grading of successful students:					
Grade No. %					
Α	1	3.7			
В	4	14.8			
С	12	44.5			
D	5	18.5			

#### **C- Professional Information**

Topic Actually taught	No. of hours	Lecturer
Welded Joints	4	6 e
Riveted Joints	4	₽ ~ O X



Journal Bearings	4	
Journal Bearings	4	
Rolling Bearings	4	
Gears- Gear Geometry .	4	
Spur – Helical Gears	4	
Bevel Gears	4	
Worm Gears	4	
Mechanical transmission	4	
Oil seals	4	
Springs	6	
Valves	6	
Revision	4	
Total	60	

Topics taught as a percentage of the content specified:					
>90 %	100	70-90 %		<70%	

Reasons in detail for not teaching any topic None

If any topics were taught which are not specified, give reasons in detail

None, all of the missed teaching hours were substituted, in addition to the seminars arranged during the student's free day.

#### 2- Teaching and learning methods:

#### Lectures:

Course notes

- Machine Drawing (2) by: Prof. Nabil Gadallah, Modern Academy for Engineering & Technology, 2013.
- Standardized parts by: Prof. Mamdouh saber, Modern Academy for Engineering & Technology, 2005.

Practical training/ laboratory:

Seminar/Workshop: Bi-weekly Seminars

Class activity: Case Study:

Other assignments/homework: weekly assignments

If teaching and learning methods were used other than those specified, list and give reasons: Non

#### 3- Student assessment:

Method of assessment	Points	%
Written examination	70	70
Oral examination	Non	0
Practical/laboratory work	Non	0
Other assignments/class work	20	20
Mid-Term Exam	10	10
Total	100	100

Members of examination committee Prof. Nabil Gadallah Role of external evaluator Non

4- Facilities and teaching materials:

Totally adequate Yes



Adequate to some extent

Inadequate

List any inadequacies

.....

Non

5- Administrative constraints

List any difficulties encountered

6- Student evaluation of the course:
Response of course team
List any criticisms

Non

7- Comments from external evaluator(s): None

8- Course enhancement:

Progress on actions identified in the previous year's action plan: No previous comments Action State whether or not completed and give reasons for any non-completion Non

9- Action plan for academic year 2014 - 2015

Actions required Completion date Person responsible

Non

Course coordinator: Prof. Dr Nabil Gadallah

Signature:

**Date:** 2/9/2014



## 2014/2015

### Junior, Fifth Semester

Code	Course
MTH 305	Math-5 (Introduction to Probability and Statistics)
MNF 311	Fluid Mechanics
MNF 321	Metal Cutting Theory
MNF 312	Computer Applications-1
MNF 322	Machine Design-1
ELC 316	Electro Engineering
MNF 361	Seminar-1.

### Junior, Sixth Semester

Code	Course
MNF323	Foundry Technology



MNF313	Computer Applications-2
MNF324	Machine Design-2
MNF325	Engineering Metrology
MNF314	Thermodynamics
ELC 317	Electric Machines

## Semester's Course Report Academic year 2014-2015

#### **A- Basic Information**

1- Course Code & Title: (MTH 305) Introduction to Prob. and Statistics

**2- Program(s) on which this course is given:** Manufacturing Engineering & Prod. Tech. BSc Prog.

**3- Year/Level of program:** Fifth Semester (Junior)

4- Credit hours

Credit: 3 hrs Lectures: 2 hrs Tutorial: 3 hrs 5- Names of lecturers contributing to the delivery of the course: Dr. S. Shenawy

**6- Course coordinator:** Dr. S. Shenawy

7- External evaluator: Non

#### **B- Statistical Information**

1- No. of students attending the course:
No. 109 100 %
2- No. of students completing the course:
No. 109 100 %

3- Results:

	No.	%
Passed	95	87.16
Failed	14	12.84

Grading of successful students:			
Grade	No.	%	
Excellent	13	15.23	
Very Good	29	24.87	
Good	28	25.38	
Pass	25	22.94	

#### **C- Professional Information**

	Торіс		Actual	Tutorial hours
1	Introduction, Sample space, Axioms of probability	2	2	6
2	Conditional probability Bay's theorem	2	2	6
3	Random variables.	1	1	3
4	Binomial distribution.	2	2	6



5	Normal distribution.	1	1	3
6	Cumulative distribution.	1	1	3
7	Standard normal distribution.	1	1	3
8	Introduction to Statistics, measure of location (sample mean)	2	1	6
9	Median and mode.	1	1	3
10	Measures of variations	2	2	6
	Total hours	15	15	45

Topics taught as a percentage of the content specified:

More than 90 %

Reasons in detail for not teaching any topic: Non

If any topics were taught which are not specified, give reasons in detail: Non

Achieved program intended learning outcomes, ILO's: A1, A2, A5, B1, B2, B3, B7, B11, C1, C2, C12, D3, D7

2- Teaching and learning methods:

**Lectures:** Lecture, discussions, tutorials, problem solving

Class activity Exercises; solution of problems

Case Study: Selected case studies

Other assignments/homework: Bi-weekly assignments and reports

If teaching and learning methods were used other than those specified, give reasons: Non

#### 3- Student assessment:

Method of assessment	Points	%
Written examination	70	70
Oral examination	Non	0
Practical/laboratory work	Non	0
Other assignments/class work	15	15
Mid-Term Exam	15	15
Total	100	100

Members of examination committee: Dr. S. Shenawy

Role of external evaluator: Nor

#### 4- Facilities and teaching materials:

Totally adequate	Yes
Adequate to some extent	
Inadequate	

List any inadequacies:

#### **5- Administrative constraints** (List any difficulties encountered) None

#### 6- Student evaluation of the course:

	List any criticisms	Response of course team
(a)		They are completely right. Next semester we will
(5.)	manufacturing and production technology.	add such examples.

#### 7- Comments from external evaluator(s): None

#### 8- Written Exam Evaluation

The results of the course are normally distributed with mean at 68% and with standard deviation 18. This means that the main objectives of the course are achieved for most of the students.

#### 9- Course enhancement:

Progress on actions identified in the previous year's action plan. State whether or not completed and give reasons for any non-completion:



Actions required	Planned Completion date	Accomplishment
This is the first semester	Non	Non

9- Action plan for academic year 2015 - 2016

Actions required	Completion date	Person responsible
Adding more examples related to manufacturing technology	June 2015	Dr S. Shenawy

Course coordinator: Prof. Dr S. Shenawy

Signature:

**Date:** January 11, 2015

## Semester's Course Report Academic year: 2014-2015 Semester: Fall

#### **A- Basic Information**

1- Title and code: (MNF 311) Fluid Mechanics

2- Program(s) on which this course is given: Manufacturing Eng. and Prod. Tech. BSc. Program

3- Year/Level of program: Third Level

4- Credit hours: 3 Lec.: 2 Tutorial: 1 Practical: 2 Pre-requisite: MTH 102

5- Names of lecturers contributing to the delivery of the course

Dr. Abdelmagid A. Abdalla

Course coordinator Dr. Abdelmagid A. Abdalla

External evaluator: None

#### **B- Statistical Information**

No. of students attending the course: No. 114 %  $\boxed{100}$  No. of students completing the course: No. 114 %  $\boxed{100}$ 

Results:

	No.	%	Grading of successful students:		
Passed	103	90.35	•	No.	%
Failed	11	9.65	Excellent	5	4.38
			Very Good	14	12.3
			Good	38	33.3
			Pass	46	40.35

#### **C- Professional Information**

•	oodise teaching			
	Торіс	Lecture hours	Tutorial hours	Practical hours
	• Introduction: definition of fluids, dimensions and units, fluid properties.	3	2	3



Fluid statics: pressure at a point, pressure field, pressure measurement, hydrostatic forces acting on plane and curved surfaces, buoyancy, floatation, and stability.	6	2	6
Fluid kinematics: velocity field, acceleration field, Reynolds's transport theorem.	6	2	6
<ul> <li>Conservation laws: conservation of mass- continuity equation, conservation of linear and angular momentum, conservation of energy</li> </ul>	5	2	5
<ul> <li>Similitude, dimensional analysis, and modeling: dimensional analysis, Buckingham Pi theorem, determination of Pi terms by inspection, Common dimensionless groups in fluid mechanics, correlation of experimental data, modeling and similitude, some typical model studies.</li> </ul>	4	4	6
Viscous Flow in Pipes: general characteristics of pipe flow, fully developed laminar flow, fully developed turbulent flow, dimensional analysis of pipe flow, pipe flow examples, pipe flow rate measurement.	2	0	4
Total hours	30	12	30

Topics laught as a percentage of the content specified.					
>90 %	70 <b>-</b> 90 %	90	<70%		
Reasons in detail for not teaching any topic Shortage of time					
If any topics were taught which are not specified, give reasons in detail No					

#### 2- Teaching and learning methods:

Lectures: Weekly Lecture Practical: Weekly lab.

Other assignments/homework: Bi-weekly assignments

If teaching and learning methods were used other than those specified, list and give reasons: Non

#### 3- Student assessment:

Method of assessment	Percentage of total
Written examination	60 %
Oral examination	
Practical/laboratory work	20 %
Other assignments/class work	10 %
Mid-Term Exam	10 %
Total	100 %

Members of examination committee Dr. Abdelmagid A. Abdalla

Role of external evaluator None

#### 4- Facilities and teaching materials:

Totally adequate .Yes.

Adequate to some extent

Inadequate

List any inadequacies

#### 5- Administrative constraints

List any difficulties encountered

#### 6- Student evaluation of the course:

	List any criticisms		Response of course team
>	Students do not understand well from lab	$\triangleright$	Dr. Abdalla talked to him to raise his voice during
	engineer due to its low voice		explaining the experiments.

#### 7- Comments from external evaluator(s): Non

#### 8- Course enhancement:



Progress on actions identified in the previous year's action plan: No previous comments Action State whether or not completed and give reasons for any non-completion Non

9- Action plan for academic year 2015 – 2016

Actions required Completion date Person responsible

Non

Course coordinator: Dr Abdelmagid A. Abdalla

Signature:

**Date:** 28/9/2015

# Fall Course Report 2014/2015

A- Basic Information

1- Title and code: MNF 321: Metals Cutting Theories

2- Program(s) on which this course is given: Manufacturing Eng. & Prod. Tech. BSc. Prog.

3- Year/Level of program: 3rd Level / Fall

4- Unit hours: 3 Lectures 2hrs Tutorial 1 Hrs Practical 2 Hrs

5- Names of lecturers contributing to the delivery of the course: Dr. M. Merdan

Course coordinator: Dr. M. Merdan

External evaluator: None

#### **B- Statistical Information**

No. of students attending the Exam: 131

Grades	No. of Students	%
+A	1	0.763
Α	11	8.397
-A	11	8.397
+B	15	12.450
В	15	12.450
+C	23	17.557
С	12	9.160
+D	19	14.504
D	11	8.397
-D	11	8.397
F	2	1.527

## **C- Professional Information**



#### 1 - Course teaching

Topic	Lecture hours	Tutorial hours	Practical hours
Introduction; Definition of machining system, manufacturing processes and elements of machining system.	2	2	2
Machining Deviations; reasons, types, dimensional deviation and ISO system of tolerances, definitions and denotations of positional & geometric deviations, standardization and measurement of surface roughness.	6	1	4
Cutting tools failures, Cutting tools materials; classification and properties; tools geometries.	2	2	3
Chip formation; evaluation of amount of deformation using coefficient of chip upsetting, k, and shear angle. Study of the effects of cutting conditions upon k and \$1.	2	1	4
Integrity of machined surfaces; Work hardening, residual stresses, and surface roughness	2		2
Cutting forces calculation in oblique and orthogonal cuttings, cutting forces measurement, and study of the effects of cutting conditions.	2	2	3
Heat generation when metal cutting, sources and heat distribution, and study of the effects of cutting parameters.	2	1	2
Cutting tools wear; types and curves of wear, Taylor's equation T-v relationship, and effects of cutting parameters.	2	2	4
Determination of optimum Cutting conditions; v, s, and t.	2	2	
Productivity when rough and fine metal cutting operations	2		
Production costs determination	2		
Gears manufacturing; form and generating methods	2		4
Jigs and fixtures design	2	2	2
Total	30	15	30

Topics taugh	t as a percentage of the c	ontent specified:	
<b>&gt;90</b> % 100	70-90 %	<70%	

- Reasons in detail for not teaching any topic
- If any topics were taught which are not specified, give reasons in data

#### 2- Teaching and learning methods:

•	Lectures:	Classical lecturing using the white board
•	Practical training/ laboratory:	Yes
•	Seminar/Workshop:	Yes
•	Class activity:	Solution of problems
•	Case Study:	None

Other assignments/homework: Assignment report each 4 weeks

If teaching and learning methods were used other than those specified, list and give reasons: None

#### 3- Student assessment:

**Method of assessment** 

Percentage of total

Written examination

60 %

Oral examination



Practical/laboratory work

Other assignments/class work

Mid-Term Exam

Total

Members of examination committee Role of external evaluator

Dr. M. Merdan none

Yes

20 %

10 %

10 %

100 %

4- Facilities and teaching materials:

Totally adequate

Adequate to some extent

Inadequate

List any inadequacies

5- Administrative constraints None

6- Student evaluation of the course: None

7- Comments from external evaluator(s): None

iise. Noi

8- Course enhancement:

Progress on actions identified in the previous year's action plan: None

Action State whether or not completed and give reasons for any non-completion: None

9- Action plan for academic year 2015- 2016

Actions required Completion date Person responsible

None

Course coordinator: Dr. M. Merdan

Signature: M. Merdan Date: 17/10/2015



## Semester's Course Report Academic year: 2014-2015 Semester: Fall

#### A- Basic Information

1- Title and code: (MNF 312) Computer Applications I

2- Program(s) on which this course is given: Manufacturing Eng. &Prod. Tech. BSc. Prog.

3- Year/Level of program: Third Year

4- Credit hours: 3 Lec. --- Tutorial 0 Practical 6 Pre-requisite: MP110

5- Names of lecturers contributing to the delivery of the course

Prof. Dr. Nabil Gadallah

Course coordinator Prof. Dr. Nabil Gadallah

External evaluator

#### **B- Statistical Information**

No. of students attending the course: No. 136 %  $\boxed{100}$  No. of students completing the course: No. 136 %  $\boxed{100}$ 

Results:

	No.	%	Grading of succe	ccessful students:		
<b>Passed</b>	135	99.3	_	No.	%	
Failed	1	0.7	Excellent	20	14,7	
			Very Good	35	25.7	
			Good	51	37.6	
			Pass	29	21.3	

#### **C- Professional Information**



Topic Actually taught	No. of hours	Lecturer
Introduction to computer applications:		
Computer graphics (Solidworks)	6	
Engineering analysis (Matlab)		
Solid modelling techniques in art design	6	1
Extrusion & Revolve	6	llah
Applications	12	Prof. Dr. Nabil Gadallah
Sweep and Lofting	6	<u> </u>
Assemblies	12	abil
Detail Drawing (drafting)	12	
Introduction to MATLAB	6	Ω
<ul> <li>Introduction &amp; basic vector and matrix operations.</li> </ul>	6	rof
<ul> <li>Polynomials and solution of linear equations</li> </ul>	6	] —
Programming and applications	6	
Solid modelling techniques in art design	6	1
Total	90	

Topics taught as a percentage of the content specified:	Topics tau	ght as a	percentage	of the	content	specified:
---	------------	----------	------------	--------	---------	------------

>90 %	100	70-90 %	<70%	

Reasons in detail for not teaching any topic None

#### If any topics were taught which are not specified, give reasons in detail

None, all of the missed teaching hours were substituted, in addition to the seminars arranged during the students free day.

#### 2- Teaching and learning methods:

Lectures:

Practical training/ laboratory: Matlab & Solid works Packages in Lab

Seminar/Workshop:

Two Seminars were arranged by the students:

- (a) MATLAB Applications
- (b) Computer graphics (Solid works)

Class activity: Solid Modeling Graphics & MatLab Applications

Case Study: Selected case studies

Other assignments/homework: Bi-weekly assignments

If teaching and learning methods were used other than those specified, list and give reasons: Non

#### 3- Student assessment:

Method of assessment	Percentage of total
Written examination	60 %
Oral examination	
Practical/laboratory work	20 %
Other assignments/class work	10 %
Mid-Term Exam	10 %
Total	100 %
Members of examination committee	Dr. Nabil Gadallah
Role of external evaluator	Non

#### 4- Facilities and teaching materials:



Totally adequate

Adequate to some extent

Inadequate

List any inadequacies

5- Administrative constraints

List any difficulties encountered None

6- Student evaluation of the course: None

7- Comments from external evaluator(s): Non

8- Course enhancement:

Progress on actions identified in the previous year's action plan: No previous comments Action State whether or not completed and give reasons for any non-completion Non

.Yes.

9- Action plan for academic year 2015 - 2016

Actions required Completion date Person responsible

Non

Course coordinator: Prof. Dr Nabil Gadallah

Signature:

**Date:** 28/9/2015

Semester's Course Report Academic year: 2014-2015 Semester: Spring

#### A- Basic Information

1- Title and code: (MNF 312) Computer Applications I

2- Program(s) on which this course is given:

3- Year/Level of program: Third Level

4- Credit hours: 3 Lec.: 0 Tutorial: 0 Practical: 6 Pre-requisit: CMP110

5- Names of lecturers contributing to the delivery of the course

Prof. Dr. Nabil Gadallah

Course coordinator Prof. Dr. Nabil Gadallah

External evaluator: None

#### **B- Statistical Information**

No. of students attending the course:

No. 6

No. 6

Mo. 6

Mo. 6

Mo. 6

Mo. 6

Results:

	No.	%	Grading of successful students:			
Passed	5	83.3	•	No.	%	
Failed	1	16.7	Excellent	0	0	
			Very Good	1	16.7	
			Good	2	33.3	
			Pass	2	33.3	

#### **C- Professional Information**



Topic Actually taught	No. of hours	Lecturer
Introduction to computer applications:		
Computer graphics (Solidworks)	6	
Engineering analysis (Matlab)		
Solid modelling techniques in art design	6	
Extrusion & Revolve	6	llah
Applications	12	Prof. Dr. Nabil Gadallah
Sweep and Lofting	6	වී
Assemblies	12	abil
Detail Drawing (drafting)	12	Z
Introduction to MATLAB	6	Δ.
<ul> <li>Introduction &amp; basic vector and matrix operations.</li> </ul>	6	rof
<ul> <li>Polynomials and solution of linear equations</li> </ul>	6	ш
Programming and applications	6	
Solid modelling techniques in art design	6	
Total	90	

To	pics	taught	as a	a pe	rcenta	ae of	the	content	sp	ecified	1:
	PIOO	tuugiit	uo i	4 20	Conta	go o.		001110111	VΡ		•

<b>&gt;90</b> % 100	70-90 %	<70%	

Reasons in detail for not teaching any topic None

### If any topics were taught which are not specified, give reasons in detail

None, all of the missed teaching hours were substituted, in addition to the seminars arranged during the student's free day.

#### 2- Teaching and learning methods:

Lectures:

Practical training/ laboratory: Matlab & Solid works Packages in Lab

Seminar/Workshop:

Two Seminars were arranged by the students:

- (a) MATLAB Applications
- (b) Computer graphics (Solid works)

Class activity: Solid Modeling Graphics & MatLab Applications

Case Study: Selected case studies

Other assignments/homework: Bi-weekly assignments

If teaching and learning methods were used other than those specified, list and give reasons: Non

#### 3- Student assessment:

Method of assessment	Percentage of total
Written examination	60 %
Oral examination	
Practical/laboratory work	20 %
Other assignments/class work	10 %
Mid-Term Exam	10 %
Total	00 %
Members of examination committee	Dr. Nabil Gadallah
Role of external evaluator	Non

#### 4- Facilities and teaching materials:



Totally adequate
Adequate to some extent
Inadequate

Yes

#### 5- Administrative constraints

List any inadequacies

List any difficulties encountered

6- Student evaluation of the course: None

7- Comments from external evaluator(s): Non

#### 8- Course enhancement:

Progress on actions identified in the previous year's action plan: No previous comments Action State whether or not completed and give reasons for any non-completion Non

#### 9- Action plan for academic year 2015 - 2016

Actions required Completion date Person responsible

Non

Course coordinator: Prof. Dr. Nabil Gadallah

Signature:

**Date:** 28/9/2015

## Semester Course Report (2014/2015) Fall Semester

#### A- Basic Information

1- Title and code: (MNF322) Machine Design (I)

- 2- Program(s) on which this course is given: Manufacturing Engineering & Prod. Tech. BSc. Prog.
- 3- Year/Level of program: Third Level Manufacturing Engineering, Fall Semester
- 4- Credit hours: 3 Lectures 2hrs Tutorial 3hrs Practical Total 5 hrs
- 5- Names of lecturers contributing to the delivery of the course

Assist. Prof. Serage Eldin Khalifa

Course coordinator: Assist. Prof. Serage Eldin Khalifa

#### **B- Statistical Information**

No. of students attending the course: No. 131 % 100 No. of students completing the course: No. 131 % 100

Results:

. too artor					
	No.	%	Grading of successful students:		s:
Passed	111	84.733		No.	%
Failed	20	15.3	Excellent	4	3.05
			Very Good	20	15.26
			Good	40	30.53
			Pass	47	35.87

#### C- Professional Information

Торіс	Lecture hours	Tutorial hours



<ul> <li>Introduction; definitions, design phases and design considerations,</li> </ul>		4
mechanical properties of metals	2	1
Analysis of stresses at a point	1	4
Determination of principal stresses for a stress element	2	4
Design for static strength	4	8
Design for Dynamic strength	6	8
<ul> <li>Design of Shafts</li> </ul>	2	4
<ul> <li>Design of Keys, Feathers &amp; splines</li> </ul>	2	3
Design of Threaded Joints, Fasteners and Connections	6	6
Design of Welded Joints	1	3
Design of Helical Springs	4	4
Total hours	30	45
Topics taught as a percentage of the content specified:	00	
>90 % 100 70-90 % - <70%		
Reasons in detail for not teaching any topic None	1	
If any topics were taught which are not specified, give reasons in detail N	ione	
- Teaching and learning methods:		
Lectures: Classical lecturing using the white board and computer supported		
Tutorials: Classical Exercises using the white board and computer supported	learning	
Practical training/ laboratory: None		
Seminar/Workshop: None		
Class activity: Numerical exercises; solution of problems by calculator or con	nouter and data	show, usin
computer programs.	ipator and data	, o o , ao
Case Study: Selected case studies		
Other assignments/homework: Bi-weekly assignments		
If teaching and learning methods were used other than those specified, I	ist and aive re	acone: Non
ii teaching and learning methods were used other than those specified, i	ist and give re	asons. Non
B- Student assessment:		
Method of assessment Percentage	ne of total	
Written examination 70 %	je or total	
' <del></del> '		
Oral examination		
Practical/laboratory work		
Other assignments/class work		
Mid-Term Exam 20 %		
Total 100 %		
Members of examination committee Assist. Prof. Serage Eldin Khalif	a	
Role of external evaluator None		
l- Facilities and teaching materials:		
Totally adequate .Yes.		
<del></del> _		
Adequate to some extent		
Inadequate		
List any inadequacies None		
5- Administrative constraints		
List any difficulties encountered None		
List any announces encountered NONE		



6- Student evaluation of the course:

List any criticisms None

7- Comments from external evaluator(s): None

8- Course Enhancement:

Progress on actions identified in the previous year's action plan: None

Action State whether or not completed and give reasons for any non-completion None

9- Action plan for academic year 2015 - 2016

Actions required Completion date Person responsible

None

Course coordinator: Prof. Dr Serage Eldin Khalifa

Signature:

**Date:** 21/9/2015

## Semester Course Report (2014/2015) Spring Semester

#### A- Basic Information

1- Title and code: (MNF322) Machine Design (I)

2- Program(s) on which this course is given: Manufacturing Eng. & Prod. Tech. BSc. Prog.

3- Year/Level of program: Third Level Manufacturing Engineering, Spring Semester

4- Credit hours: 3 Lectures 2hrs Tutorial 3hrs Practical - Total 5 hrs

**5- Names of lecturers contributing to the delivery of the course:** Assist. Prof. Serage Eldin Khalifa Course coordinator: Assist. Prof. Serage Eldin Khalifa

#### **B- Statistical Information**

No. of students attending the course:

No. 22

No. of students completing the course:

No. 22

No. 22

No. 22

No. 22

Results:

	No.	%	Grading of successful students:		nts:
Passed	20	90.909		No.	%
Failed	2	9.09	Excellent	0	0
			Very Good	0	0
			Good	4	18.18
			Pass	16	72.72

#### **C- Professional Information**



Торіс	Lecture hours	Tutorial hours
<ul> <li>Introduction; definitions, design phases and design</li> </ul>		
considerations, mechanical properties of metals	2	1
<ul> <li>Analysis of stresses at a point</li> </ul>	1	4
<ul> <li>Determination of principal stresses for a stress element</li> </ul>	2	4
Design for static strength	4	8
Design for Dynamic strength	6	8
Design of Shafts	2	4
Design of Keys, Feathers & splines	2	3
Design of Threaded Joints, Fasteners and Connections	6	6
Design of Welded Joints	1	3
Design of Helical Springs	4	4
Total hours	30	45

	Design of Helical Springs	4	4
	Total hours	30	45
	Topics taught as a percentage of the content specified:  >90 % 100 70-90 % - <70%	П	
	Reasons in detail for not teaching any topic None		
	If any topics were taught which are not specified, give reasons in de	etail None	
2-	Teaching and learning methods:		7
	Lectures: Classical lecturing using the white board and computer supp		
	Tutorials: Classical Exercises using the white board and computer supp	orted learnin	g
	Practical training/ laboratory: None		
	Seminar/Workshop: None		
	Class activity: Numerical exercises; solution of problems by calculator of	r computer a	nd data
	show, using computer programs.		
	Case Study: Selected case studies		
	Other assignments/homework: Bi-weekly assignments		
	If teaching and learning methods were used other than those specified, li	st and give re	easons: None
3_ 9	Student assessment:		
•	Method of assessment Percentage	e of total	
		) %	
	Practical/laboratory work	-	
		) %	
	<u>~</u>	) %	
		0 %	
	Members of examination committee Assist. Prof. Serage Eldin R		
	Role of external evaluator None		
4 -	Tabilities and tabaling materials.		
4- t	Facilities and teaching materials:		
	Totally adequate Yes		
	Adequate to some extent		
	Inadequate		



List any inadequacies None

5- Administrative constraints

List any difficulties encountered None

6- Student evaluation of the course:

List any criticisms None

7- Comments from external evaluator(s): None

8- Course Enhancement:

**Progress on actions identified in the previous year's action plan:** None Action State whether or not completed and give reasons for any non-completion None

9- Action plan for academic year 2015 - 2016

Actions required Completion date Person responsible

None

Course coordinator: Prof. Dr Serage Eldin Khalifa

Signature:

**Date:** 21/9/2015

# Annual Course Report Academic year 2014-2015

#### **A- Basic Information**

1- Title and code: (ELC316) Electro Engineering

2- Program(s) on which this course is given: Manufacturing Eng. and Prod. Tech. BSc Prog.

3- Year/Level of program: Third Level

4- Credit hours: 3 Lectures 2 hrs Tutorial 1 hrs Practical 2 hr Total 5 hrs

5- Names of lecturers contributing to the delivery of the course

Prof. Dr. Ir. Mostafa Sayed AFIFI

Course coordinator Prof. Dr. Ir. Mostafa Sayed AFIFI

External evaluator

**B- Statistical Information** 

No. of students attending the course:

No. 127

No. 127

No. 127

No. 127

No. 127

No. 127

Results:

No. % Grading of successful students: Passed 98.43 125 No. % Failed 2 **Excellent** 50 38.4 1.57 28 **Very Good** 23.1 Good 25 19.7 22 **Pass** 17.3

#### **C- Professional Information**

1 Course teaching		
Topic Actually taught	No. of hours	Lecturer
Introduction: Needs for electric engineering and fluid flow analogy	4	г 0 f



Electromagnetic standards	6				
Charges, Currents, Voltages and Fields	4				
Electric and Electronic Circuits	4				
Transmission lines and propagation	6				
Electric Forces and Radiated fields					
Classification and basic designs	4				
AC and DC arrangements	4				
Direction of propagation in air and on wires	6				
Ohms Law and circuit analysis		1			
Node Voltages and Mish Currents	6				
Practical applications of strain gauges and Wheatstone Br	8				
Operational Amplifiers, Inversion, non-inversion, Adders and subtractions.	6				
Capacitance and Inductance, its construction, calculations and first order	· ·				
transients. Applications and second order transients.	8				
LabVIEW application	6				
Digital applications and stepper motors	6				
Analysis and Design of practical Circuits and Motors	6				
Total hours	84				
Topics taught as a percentage of the content specified:	U-T	l			
>90 % X 70-90 %					
	whomand				
Reasons in detail for not teaching any topic Semiconductors were sho					
If any topics were taught which are not specified, give reasons in detail 2- Teaching and learning methods:	INOH				
2- reaching and learning methods.					
Lectures: Classical lecturing using the white board and computer support	rted learning				
Practical training/ laboratory: Practical training and experimental measurements in Lab					
Seminar/Workshop: Non					
Class activity: Numerical exercises; solution of problems by computer and	data show, using c	omputer			
programs; MATLAB.		·			
Case Study: Selected case studies					
Other assignments/homework: Bi-weekly and weekly assignments					
If teaching and learning methods were used other than those specified, list a		Non			
3- Student assessment:	J				
	tage of total				
Written examination	65.0 %				
Oral examination	03.0 %				
	20.0/				
Practical/laboratory work	20 %				
Other assignments/class work	10 %				
Mid-Term Exam	5 %				
Total	100 %				
Members of examination committee Prof. Dr. Ir. Mostafa S. Afi	ti				
Role of external evaluator Non					
4- Facilities and teaching materials:					
Totally adequate Yes					
Adequate to some extent					
Inadequate					
List any inadequacies: Non					



#### 5- Administrative constraints

List any difficulties encountered

- Limitation of lecture hours is limiting the full verification of course objectives.
- The number of operating Lab experiments are being expanded.

#### 6- Student evaluation of the course:

List any criticisms

Response of course team

Indications are that high response from the Students to electronic courses.

The introduction of the course is directed to explanation of the importance of electronic engineering to mechanical applications. Also more applications are directed to mechanical facilities, such as the strain gauges, electronic ignition and power steering with modeling of mechanical system with electric circuits.

7- Comments from external evaluator(s): Response of course team

None

8- Course enhancement:

Progress on actions identified in the previous year's action plan:

**Actions required Planned Completion date Accomplishment** 

Put more functional experiments in the lab. 2015

Action State whether or not completed and give reasons for any non-completion Non

9- Action plan for academic year 2015 - 2016

**Completion date Actions required** Person responsible Prof. Dr. Ir. Mostafa Afifi

Formation of new details of ELC316 Electro July 2015

Engineering

Course coordinator: Prof. Dr. Ir. Mostafa Afifi

Signature:

Date: 14/9/2015



### Semester's Course Report Academic year: 2014-2015 Semester: Fall

#### **A- Basic Information**

1- Title and code: (MNF 361) Seminar-1

2- Program(s) on which this course is given: Manufacturing Eng. & Prod. Tech. BSc. Prog.

3- Year/Level of program: Junior, 5th semester

**4- Credit hours** Credit Hours: 1 Lectures: - Tutorial: 2 Practical: -

Pre-requisite: Nor

5- Names of lecturers contributing to the delivery of the course

Dr. Abdelmagid A. Abdalla

Course coordinator Prof. Dr. Nabil Gadallah

External evaluator: None

**B- Statistical Information** 

No. of students attending the course: No. 137 %  $\boxed{100}$  No. of students completing the course: No. 137 %  $\boxed{100}$ 

Results:

i tooditoi					
	No.	%	Grading of succe	ssful stude	nts:
Passed	135	100	_	No.	%
Failed	0	0	Excellent	89	64,96
			Very Good	34	24.82
			Good	13	9.49
			Pass	1	0.73



#### **C- Professional Information**

1 - Course teaching

	Topic Actually taught	Lecture hours	Tutorial hours	Practical hours
•	The course consists of a number of seminars concerned with		30	
	the development of technology and its impact to society, It			
	covers the following areas:			
	✓ The definition and evolution of technology.			
	✓ Technology and society			
	✓ Technology and Innovation.			
	✓ Technology selection decision and social			
	considerations			
	✓ Engineering design.			
	✓ Engineering problem solving.			
	✓ Human and social considerations in engineering			
	design, and social problems.			
	✓ Concepts of the exploitation of technology for the			
	advancement of human kind.			
	Total hours		30	

Topics ta	aught a	as a percentag	e of the conten	it specified	:		
>	90 %	100	70-90 %		<70%		
Reasons	in det	ail for not tead	ching any topic	None	Э		
If any top	oics we	ere taught whi	ch are not spec	ified, give	reasons in o	detail N	lone

### 2- Teaching and learning methods:

Lectures:

Practical training/ laboratory:

Seminar/Workshop: weekly individual student's seminar

Class activity: Case Study:

Other assignments/homework:

If teaching and learning methods were used other than those specified, list and give reasons: Non

#### 3- Student assessment:

4-

Method of assessment	Percentage of total
Written examination	
Oral examination	100%
Practical/laboratory work	
Other assignments/class work	
Mid-Term Exam	
Total	100 %
Members of examination committee	
Role of external evaluator	Non
Facilities and teaching materials:	
Totally adequate	Yes
Adequate to some extent	



Inadequate

List any inadequacies

5- Administrative constraints

List any difficulties encountered None

6- Student evaluation of the course: None

7- Comments from external evaluator(s): Non

8- Course enhancement:

Progress on actions identified in the previous year's action plan: No previous comments Action State whether or not completed and give reasons for any non-completion Non

9- Action plan for academic year 2015 - 2016

Actions required Completion date Person responsible

Non

Course coordinator: Dr. Abdelmagid A. Abdalla

Signature:

**Date:** 28/9/2015

## Semester Course Report 2014-2015 Spring Semester

#### A- Basic Information

1- Title and code: Computer Applications II, MNF313

2- Program(s) on which this course is given: Manufacturing Eng. & Prod. Tech. BSc. Prog.

3- Year/Level of program: third year

**4- Unit hours** Lectures - hrs Tutorial - hrs Practical 4 Total 4 hrs

5- Names of lecturers contributing to the delivery of the course

Dr. Atef Afifi

Course coordinator Dr. Atef Afifi External evaluator None

**B- Statistical Information** 

No. of students attending the course:

No. 133 | 100% |
No. of students completing the course:

No. 133 | 100% |
No. 134 | 100% |
No. 135 | 10

Results:

	No.	%	Grading of successful students:		
Passed	116	87.22	-	No.	%
Failed	17	12.78	Excellent	33	28.4
			Very Good	34	29.3
			Good	17	14.6
			Pass	32	27 7

#### **C- Professional Information**

Role of external evaluator

Totally adequate

4- Facilities and teaching materials:



Topic Actually taught	Practical hours	Lecturer
Introduction to NC and CNC Machines	2	
Basic Definitions of G-Codes	2	
Different Types of G-Codes	4	
Basic Terminology of G-Code (FUNOC)	4	
Milling:		
<ul> <li>Work piece Installation</li> </ul>	4	
<ul> <li>Determination of Zero Position</li> </ul>	4	: <del></del>
<ul> <li>Definition and Applications of G58 , G52</li> </ul>	4	Or Atef Afifi
<ul> <li>Definition and Applications of G00</li> </ul>	4	ıtef
<ul> <li>Definition and Applications of G01</li> </ul>	4	)r A
<ul> <li>Definition and Applications of G02, G03</li> </ul>	8	
Turning:		
<ul> <li>Definition and Applications of G58 , G52</li> </ul>	4	
<ul> <li>Definition and Applications of G00</li> </ul>	4	
<ul> <li>Definition and Applications of G01</li> </ul>	4	
<ul> <li>Definition and Applications of G02, G03</li> </ul>	4	
Revisions	4	
Total Hours	60	

<ul> <li>Definition and Applications of G02 ;</li> </ul>	, G03 4
Revisions	4
Total Hours	60
Topics taught as a percentage of the conte	nt specified:
>90 % 100 70-90 %	<70%
Reasons in detail for not teaching any topic	c Non
If any topics were taught which are not spe	cified, give reasons in detail Non
2- Teaching and learning methods:	
Lectures: Classical lecturing using the white	hoard
	; board
Practical training/ laboratory: Yes	
Seminar/Workshop: Yes	
Class activity: Solutions of problems	
Case Study: None	
Other assignments/homework: assignments	ents report each month
If teaching and learning methods were used ot	ther than those specified, list and give reasons: No
3- Student assessment:	-
Method of assessment	Percentage of total
Written examination	60%
Oral examination	====
Practical/laboratory work	20%
Other assignments/class work/	10%
Mid-Term Exam	10%
Total	100 %
Members of examination committee	Dr. Atef Afifi

None

Yes



Adequate to some extent -----Inadequate ......
List any inadequacies Non

5- Administrative constraints

List any difficulties encountered none

6- Student evaluation of the course:

List any criticisms None

7- Comments from external evaluator(s): None

8- Course enhancement:

Progress on actions identified in the previous year's action plan: none Action State whether or not completed and give reasons for any non-completion Non

9- Action plan for academic year 2015 - 2016

Actions required Completion date Person responsible None

Course coordinator: Dr Atef Afifi

Signature:

Date: September 2015

## Semester Course Report 2014-2015 Spring Semester

#### A- Basic Information

- 1- Title and code: foundry technology, MNF 323
- 2- Program(s) on which this course is given: Manufacturing Eng. & Prod.Tech. Prog.
- 3- Year/Level of program: 3rd Level Manufacturing / 1st term
- 4- Credit hours: 3 Lectures 2 hrs Tutorial 1 hrs Practical 2 hrs
- 5- Names of lecturers contributing to the delivery of the course:

Assist Prof. Ibrahim Mousa

Course coordinator: Assist Prof. Ibrahim Mousa

External evaluator: None

#### **B- Statistical Information**

No. of students attending the course: 124
No. of students completing the course: 124

Results:

	No.	<b>%</b> 75	Grading of su	Grading of successful students:		
Passed	93		•	No.	%	
Failed	31	25	Excellent	1	1.1	
			Very Good	8	8.6	
			Good	19	20.4	
			Pass	65	69.9	

#### **C- Professional Information**



Topic	Lecture hours	Tutorial hours	Practical hours
Introduction to foundry	2	-	-
<ul> <li>Steps involved in casting advantages, limitations and implications of casting process</li> </ul>	2	1	
<ul> <li>Pattern types, allowances for pattern, pattern materials, color coding and storing of patterns.</li> </ul>	3	2	4
<ul> <li>Molding methods and processes, materials, equipment, molding sand ingredients, essential requirements</li> </ul>	2	2	2
sand preparation and control, testing, cores and core making	2	1	2
<ul> <li>Design considerations in casting, gating and risers, and directional solidification in casting</li> </ul>	3	2	4
<ul> <li>Sand castings, pressure die casting, permanent mould casting, centrifugal casting, precision investment, casting shell molding, CO2 molding, continuous casting, squeeze casting, electro slag casting</li> </ul>	4	2	6
feting, finishing, and casting defects	2	1	2
<ul> <li>Foundry remolding furnaces, selection of furnace, crucibles oil fired furnaces, electric furnaces cupola, calculation of cupola charges, hot blast cupola, degasification, inoculation, pouring equipment, and inspection of casting</li> </ul>	4	2	6
<ul> <li>Need- Areas for mechanization, typical layout, sand reclamation techniques, and material handling</li> </ul>	2	1	2
Pollution control in foundry	2		
Computers in casting process	2	1	2
Total hours	30	15	30

Topics taught as a percentage of the >90 % 100 70-90 % Reasons in detail for not teachin If any topics were taught which a	√ <70%
2- Teaching and learning methods:	
Lectures:	Classical lecturing using the white board
Practical training/ laboratory:	Casing Workshop
Seminar/Workshop:	None
Class activity:	Assignments on design of molds and dies
■ Case Study:	None
Other assignments/homework:	Assignment reports
If teaching and learning methods were used	d other than those specified, list and give reasons: None

3- Student assessment:

otaaont accoccinciti	
Method of assessment	Points of total
<ul><li>Written examination</li></ul>	60
<ul><li>Practical/laboratory work</li></ul>	20
<ul> <li>Other assignments/class work</li> </ul>	10
<ul><li>Mid-Term Exam</li></ul>	10
Total	100
Members of examination committee	Assist Prof. Ibrahim Mousa
Role of external evaluator	None



4- Facilities and teaching materials:

Totally adequate

- Adequate to some extent
- Inadequate
- List any inadequacies

5- Administrative constraints

List any difficulties encountered None

6- Student evaluation of the course:

List any criticisms Response of course team

Yes

None None

7- Comments from external evaluator(s): Response of course team

None None

8- Course enhancement:

Progress on actions identified in the previous year's action plan: None

Action State whether or not completed and give reasons for any non-completion None

9- Action plan for academic year 2015- 2016

Actions required Completion date Person responsible

None None

Course coordinator: Assist. Prof. Ibrahim Mousa

**Signature:** Ibrahim Mousa **Date:** September 2015



## Semester Course Report (2014/2015) Spring Semester

#### A- Basic Information

1- Title and code: (MNF324) Machine Design (II)

2- Program(s) on which this course is given: Manufacturing Eng. & Prod. Tech. BSc Prog.

**3- Year/Level of program:** Third Level Manufacturing Engineering, Spring Semester

4- Credit hours: 3 Lectures 2hrs Tutorial 3hrs Practical - Total 5 hrs

5- Names of lecturers contributing to the delivery of the course

Assist. Prof. Serage Eldin Khalifa

#### **B- Statistical Information**

No. of students attending the course:

No. 109

No. of students completing the course:

No. 109

% 100

Results:

	No.	%	Grading of successful students:		
Passed	101	92.661		No.	%
Failed	8	7.339	Excellent	6	5.5
			Very Good	18	16.5
			Good	31	28.44
			Pass	46	42.2

#### **C- Professional Information**

Adequate to some extent

List any inadequacies

Inadequate



Topic	Lecture hours	Tutorial hours
Hydrodynamic bearings theory	4	2
Hydrodynamic bearings design	2	6
Rolling contact bearings	6	8
Involute gear tooth	2	3
Spur gears	4	8
Helical gears	4	6
Bevel gears	4	6
Worm gears	4	6
Total hours	30	45
Reasons in detail for not teaching any topic None If any topics were taught which are not specified, give reasons in o	<b>detail</b> None	9
Teaching and learning methods:		
Lectures: Classical lecturing using the white board and computer s	supported learr	ning
Tutorials: Classical Exercises using the white board and computer s	upported learn	ing
Practical training/ laboratory: None		
Seminar/Workshop: None		
Class activity: Numerical exercises; solution of problems by calcula AutoCAD 2004	tor or compute	er, drawing b
Case Study: Selected case studies		
Other assignments/homework: Bi-weekly assignments		
If teaching and learning methods were used other than those specifie	d, list and give	reasons: No
Student assessment:		
Written examination Oral examination Practical/laboratory work Other assignments/class work Mid-Term Exam	10 % 20 % 100 %	
Facilities and teaching materials:		
Totally adequate Yes		
A de susta to come outsut		

None



5- Administrative constraints

List any difficulties encountered None

6- Student evaluation of the course:

List any criticisms None

7- Comments from external evaluator(s): None

8- Course Enhancement:

Progress on actions identified in the previous year's action plan: None

Action State whether or not completed and give reasons for any non-completion None

9- Action plan for academic year 2015 - 2016

Actions required Completion date Person responsible

None

Course coordinator: Assist. Prof. Serage Eldin Khalifa

Signature:

**Date:** 21/9/2015

## Semester Course Report (2014/2015) Summer Semester

#### A- Basic Information

1- Title and code: (MNF324) Machine Design (II)

2- Program(s) on which this course is given: Manufacturing Eng. & Prod. Tech. BSc. Prog.

3- Year/Level of program: Third Level Manufacturing Engineering, Summer Semester

4- Credit hours: 3 Lectures | 2hrs | Tutorial | 3hrs | Practical | - | Total | 5 hrs

5- Names of lecturers contributing to the delivery of the course

Assist Prof. Serage Eldin Khalifa

#### **B- Statistical Information**

No. of students attending the course:

No. 19

% 100

No. of students completing the course:

No. 19

% 100

Results:

. toodito.					
	No.	%	Grading of successful students:		
Passed	12	63.158		No.	%
Failed	7	36.842	Excellent	0	0
			Very Good	0	0
			Good	5	26.316
			Pass	7	36.842

#### C- Professional Information



1 - Course teaching

Торіс		Tutorial hours
Hydrodynamic bearings theory	4	2
Hydrodynamic bearings design	2	6
Rolling contact bearings	6	8
Involute gear tooth	2	3
Spur gears	4	8
Helical gears	4	6
Bevel gears	4	6
Worm gears	4	6
Total hours	30	45

Hydrodynamic bearings theory	4	2
Hydrodynamic bearings design	2	6
Rolling contact bearings	6	8
Involute gear tooth	2	3
Spur gears	4	8
Helical gears	4	6
Bevel gears	4	6
Worm gears	4	6
Total hours	30	45
Topics taught as a percentage of the content specified:  >90 % 100 70-90 % - <700  Reasons in detail for not teaching any topic None  If any topics were taught which are not specified, give reason		e
2- Teaching and learning methods:		
Tutorials: Classical Exercises using the white board and compute Practical training/ laboratory: None Seminar/Workshop: None  Class activity: Numerical exercises; solution of problems by calc AutoCAD 2004  Case Study: Selected case studies Other assignments/homework: Bi-weekly assignments If teaching and learning methods were used other than those spec	ulator or compute	er, drawing by
3- Student assessment:		
Written examination Oral examination Practical/laboratory work Other assignments/class work	70 %  10 %	
Mid-Term Exam Total Members of examination committee Prof. Dr. Serage Eldin Kha Role of external evaluator None	20 % <b>100 %</b> alifa	
4- Facilities and teaching materials:		
Totally adequate Yes Adequate to some extent		

Inadequate



List any inadequacies None

5- Administrative constraints

List any difficulties encountered None

6- Student evaluation of the course:

List any criticisms None

4- Comments from external evaluator(s): None

8- Course Enhancement:

Progress on actions identified in the previous year's action plan: None

Action State whether or not completed and give reasons for any non-completion None

9- Action plan for academic year 2015 - 2016

Actions required Completion date Person responsible

None

Course coordinator: Prof. Dr. Serage Eldin Khalifa

Signature:

**Date:** 21/9/2015

## Semester's Course Report Academic year: 2014 - 2015 Semester: Spring

#### A- Basic Information

1- Course Code & Title: (MNF325) Engineering Metrology

2- Program(s) on which this course is given: Manufacturing Eng. & Prod. Tech. BSc Prog.

3- Year/Level of program: Junior

**4- Credit hours: 3** Lectures 2 hrs Tutorial 1 hr Practical 2 hrs

5- Names of lecturers contributing to the delivery of the course: Prof. Dr. N Gadallah

Dr. Nasr Aref

**6- Course coordinator:** Dr. Nasr Aref

7- External evaluator: Non

**B- Statistical Information** 

No. of students attending the course:

No. of students completing the course:

Results:

	No.	%
Passed	120	96
Failed	5	4

No.	147	100	%
No.	125	85	%

Grading of successful students:			
Grade	No.	%	
Α	30	24	
В	39	31,2	
С	30	24	
D	21	16,8	

#### **C- Professional Information**



Topic	Lecture hours	Tutorial hours	Practical hours
Errors in measurements.	4	2	4
Light waves as standard of length.	4	2	4
Standard for dimensional tolerances.	2	1	2
Linear measurementsAngular measurements and circular divisions.	2	1	2
Limits and limit gauge designMachine tool metrology.	2	1	2
Gear measurementsThread measurements	2	1	2
Surface roughness measurements	2	1	2
Standard for shape and positional deviations	2	1	2
3-D measuring machines	4	2	4
Computer software for engineering metrology	4	2	4
Revision	2	1	2
Total hours	30	15	30

Topics taught as a percentage of the content specified:			
> <b>90</b> % 100 70- <b>90</b> % <70%			
Reasons in detail for not teaching any topic None			
If any topics were taught which are not specified, give reasons in detail			
None, all of the missed teaching hours were substituted, in addition to the during the student's free day.	e seminars	arranged	
aamig nie etaaente nee aag.			

## 2- Teaching and learning methods:

**Lecture:** Weekly Lecture

Practical training/ laboratory: Weekly Lab.
Seminar/Workshop: Bi-weekly Seminars

Class activity: Case Study:

Other assignments/homework: weekly assignments

If teaching and learning methods were used other than those specified, list and give reasons: Non

#### 3- Student assessment:

Method of assessment	Points	%
Written examination	60	60
Oral examination	0	0
Practical/laboratory work	20	20
Other assignments/class work	10	10
Mid-Term Exam	10	10
Total	100	100

Members of examination committee Dr. Nabil Gadallah & Dr Nasr Aref Role of external evaluator Non

4	E ::::::		4	4
		222	toobloa	materials:
4=	FACILITIES	<b>AIII</b> (1	16acmino	IIIAIPHAIS
_		alia	LUGUIIIII	IIIatoi iaioi

Totally adequate

Adequate to some extent

Inadequate

List any inadequacies

Yes

.....

Non



5- Administrative constraints

List any difficulties encountered: None

6- Student evaluation of the course: 78%
Response of course team Non
List any criticisms Non

7- Comments from external evaluator(s): Non

8- Course enhancement:

Progress on actions identified in the previous year's action plan: No previous comments Action State whether or not completed and give reasons for any non-completion Non

9- Action plan for academic year 2015 - 2016

Actions required Completion date Person responsible

Non

Course coordinator: Dr. Nasr Aref

Signature:

**Date:** 28/9/2015

# Semester's Course Report Academic year: 2014 - 2015 Semester: Summer

### A- Basic Information

1- Course Code & Title: (MNF325) Engineering Metrology

2- Program(s) on which this course is given: Manufacturing Eng. & Prod. Tech. BSc Prog.

3- Year/Level of program: Junior

**4- Credit hours: 3** Lectures 2 hrs Tutorial 1 hr Practical 2 hrs

5- Names of lecturers contributing to the delivery of the course: Prof. Dr. N Gadallah

Dr Nasr Aref

**6- Course coordinator:** Dr Nasr Aref

7- External evaluator: Non

## **B- Statistical Information**

No. of students attending the course: No. of students completing the course:

Results:

	No.	%
Passed	9	100
Failed	0	0

No.	9	100	%
No.	9	100	%

Grading of successful students:			
Grade	No.	%	
Α	1	11,111	
В	5	55,555	
С	2	22,222	
D	1	11,111	

## **C- Professional Information**



Topic	Lecture hours	Tutorial hours	Practical hours
Errors in measurements.	4	2	4
Light waves as standard of length.	4	2	4
Standard for dimensional tolerances.	2	1	2
Linear measurementsAngular measurements and circular	2	1	2
divisions.			
Limits and limit gauge designMachine tool metrology.	2	1	2
Gear measurementsThread measurements	2	1	2
Surface roughness measurements	2	1	2
Standard for shape and positional deviations	2	1	2
3-D measuring machines	4	2	4
Computer software for engineering metrology	4	2	4
Revision	2	1	2
Total hours	30	15	30

Topics taught as a percentage of	f the content sp	ecified:		
<b>&gt;90</b> % 100	70-90 %		<70%	
Reasons in detail for not teaching	g any topic	None		
If any topics were taught which a missed teaching hours were substit	•	l, give rea	asons in d	etail: None, all of the
2- Teaching and learning methods:				
Lecture: Weekly Lecture				
Practical training/ laboratory: We	ekly lab.			
Seminar/Workshop: Bi-weekly Se	minars			
Class activity:				
Case Study:				
Other assignments/homework:	weekly assign	ments		
If teaching and learning methods were	used other than the	hose speci	fied, list and	d give reasons: Non

## 3- Student assessment:

Method of assessment	Points	%
Written examination	60	60
Oral examination	0	0
Practical/laboratory work	20	20
Other assignments/class work	10	10
Mid-Term Exam	10	10
Total	100	100

Members of examination committeeDr. Nabil Gadallah & Dr Nasr ArefRole of external evaluatorNon

1-	Facil	litiae	and	taac	hina	mate	riale:

Totally adequate

Adequate to some extent
Inadequate

Yes

.....



List any inadequacies Non

5- Administrative constraints

List any difficulties encountered: None

6- Student evaluation of the course: 78%
Response of course team Non
List any criticisms Non

7- Comments from external evaluator(s): Non

8- Course enhancement:

Progress on actions identified in the previous year's action plan: No previous comments Action State whether or not completed and give reasons for any non-completion Non

9- Action plan for academic year 2015 - 2016

Actions required Completion date Person responsible

Non

Course coordinator: Dr. Nasr Aref

Signature:

**Date:** 28/9/2015

Semester's Course Report Academic year: 2014-2015 Semester: Spring

## A- Basic Information

1- Title and code: (MNF 314) Thermodynamics

2- Program(s) on which this course is given: Manufacturing Eng. and Prod. Tech. BSc. Program

3- Year/Level of program: Third Level

4- Credit hours: 3 Lec.: 2 Tutorial: 1 Practical: 2 Pre-requisite: MTH 102

5- Names of lecturers contributing to the delivery of the course

Dr. Abdelmagid A. Abdalla

Course coordinator Dr. Abdelmagid A. Abdalla

External evaluator: None

## **B- Statistical Information**

No. of students attending the course: No. 122 100% No. of students completing the course: No. 122 100%

Results:

	No.	%	Grading of succes	sful students	<b>S</b> :
Passed	105	86	•	No.	%
Failed	17	14	Excellent	5	4.1
			Very Good	14	11.5
			Good	38	31.15
			Pass	48	39 35

## **C- Professional Information**

 Oburde teaching		
Topic	Taught hours	Lecturer



Introduction: Importance of thermodynamics, some applications. Mechanisms of heat transfer.	8	
<ul> <li>Concepts and definitions: System, boundary, surroundings. Closed, open, and isolated systems. Kinetic, potential, and internal energy. State of a system, process, cycle, reversible, and irreversible processes, and work.</li> </ul>	10	alla
• Properties of a pure substance: Definition, phase diagram of water (p-v), (T-v), Tables of steam. Equation of state, and compressibility factor, specific heats (C <sub>P</sub> & C <sub>V</sub> ).	10	. Abdalla
First law of thermodynamics: Statement of the first law for cycle & process. Different forms for a control mass & control volume. Special cases (SSSF, USUF). Enthalpy	11	agid A
Second law of thermodynamics: Heat engine and heat pump, Kelvin–Plank and Clausius statements. Reversibility and factors affecting it, Carnot cycle and its efficiency, Thermodynamic temperature scales.	11	Abdelmagid A
<ul> <li>Entropy: Definition, Clausius inequality, entropy of a pure substance, entropy change in a process, entropy relation, entropy generation and principle of increase of it, entropy change of a solid, liquid, and ideal gas. Second law for a control volume, for SSSF, and USUF processes,</li> </ul>	10	Dr.
Total hours	60	

Topics taught as a percentage of the content specified:					
>90 % <b>70-90</b> %	80	<70%			
Reasons in detail for not teaching a	ny topic	Shortage of time	. The actual	term was	13 Weeks
If any topics were taught which are not specified, give reasons in detail None					

## 2- Teaching and learning methods:

Lectures: Weekly Lecture Practical: Weekly lab.

Other assignments/homework: weekly assignments

If teaching and learning methods were used other than those specified, list and give reasons: Non

### 3- Student assessment:

Method of assessment	Percentage of total
Written examination	60 %
Oral examination	
Practical/laboratory work	20 %
Other assignments/class work	10 %
Mid-Term Exam	10 %
Total	100 %

Members of examination committee Dr. Abdelmagid A. Abdalla Role of external evaluator None

## 4- Facilities and teaching materials:

Totally adequate . Yes.

Adequate to some extent

Inadequate

List any inadequacies

## 5- Administrative constraints

List any difficulties encountered None

## 6- Student evaluation of the course:

List any criticisms	Response of course team
Students do not understand well from an	> Dr. Abdalla talked to him to raise his voice during
engineer In the lab due to its low voice	explaining the experiments.

## 7- Comments from external evaluator(s): Non



#### 8- Course enhancement:

Progress on actions identified in the previous year's action plan: No previous comments

Action State whether or not completed and give reasons for any non-completion

Non

9- Action plan for academic year 2015 - 2016

Actions required Completion date Person responsible

Non

Course coordinator: Dr. Abdelmagid A. Abdalla

Signature:

**Date:** 28/7/2015

# Semester's Course Report Academic year: 2014-2015 Semester: Summer

## **A- Basic Information**

1- Title and code: (MNF 314) Thermodynamics

2- Program(s) on which this course is given: Manufacturing Eng. and Prod. Tech. BSc. Program

3- Year/Level of program: Third Level

4- Credit hours: 3 Lec.: 2 Tutorial: 1 Practical: 2 Pre-requisite: MTH 102

5- Names of lecturers contributing to the delivery of the course

Dr. Abdelmagid A. Abdalla

Course coordinator Dr. Abdelmagid A. Abdalla

External evaluator: None

## **B- Statistical Information**

No. of students attending the course: No. 18  $\frac{100\%}{100\%}$  No. of students completing the course: No. 18  $\frac{100\%}{100\%}$ 

Results:

	No.	%	Grading of succes	sful students	s:
Passed	18	100	_	No.	%
Failed	0	0	Excellent	0	0
			Very Good	0	0
			Good	10	55.5
			Pass	8	44.4

## **C- Professional Information**

godino todoming		
Topic	Taught hours	Lecturer



change of a solid, liquid, and ideal gas. Second law for a control volume, for SSSF, and USUF processes,		
• Entropy: Definition, Clausius inequality, entropy of a pure substance, entropy change in a process, entropy relation, entropy generation and principle of increase of it, entropy	10	Dr.
<ul> <li>Second law of thermodynamics: Heat engine and heat pump, Kelvin-Plank and Clausius statements. Reversibility and factors affecting it, Carnot cycle and its efficiency, Thermodynamic temperature scales.</li> </ul>	11	. Abdelmagid
First law of thermodynamics: Statement of the first law for cycle & process. Different forms for a control mass & control volume. Special cases (SSSF, USUF). Enthalpy	11	agid A.
<ul> <li>Properties of a pure substance: Definition, phase diagram of water (p-v), (T-v), Tables of steam. Equation of state, and compressibility factor, specific heats (C<sub>P</sub> &amp; C<sub>V</sub>).</li> </ul>	10	. Abdalla
<ul> <li>Concepts and definitions: System, boundary, surroundings. Closed, open, and isolated systems. Kinetic, potential, and internal energy. State of a system, process, cycle, reversible, and irreversible processes, and work.</li> </ul>	10	alla
• Introduction: Importance of thermodynamics, some applications. Mechanisms of heat transfer.	8	

Total hours				60	1
Topics taught as a p	percentage of the conte	ent specified:			
>90 %	70-90 % 80	<70%			
Reasons in detail for	r not teaching any topic	c Shortage of tir	me (Summer term	is equivalent t	o 12
Weeks)					
If any topics were ta	lught which are not spe	ecified, give rease	ons in detail: No	one	

## 2- Teaching and learning methods:

Lectures: Weekly Lecture Practical: Weekly lab.

Other assignments/homework: weekly assignments

If teaching and learning methods were used other than those specified, list and give reasons: Non

## 3- Student assessment:

Method of assessment	Percentage of total
Written examination	60 %
Oral examination	
Practical/laboratory work	20 %
Other assignments/class work	10 %
Mid-Term Exam	10 %
Total	100 %

**Members of examination committee**Role of external evaluator

Dr. Abdelmagid A. Abdalla

None

## 4- Facilities and teaching materials:

Totally adequate Yes

Adequate to some extent

Inadequate

List any inadequacies

## 5- Administrative constraints

List any difficulties encountered

## 6- Student evaluation of the course:

-			
List any criticisms			Response of course team
> Students do not understand well from the			Dr. Abdalla assign the explanation task to another
	laboratory engineer due to its low voice		one.



7- Comments from external evaluator(s): Non

#### 8- Course enhancement:

Progress on actions identified in the previous year's action plan: No previous comments

Action State whether or not completed and give reasons for any non-completion

Non

9- Action plan for academic year 2015 - 2016

Actions required Completion date Person responsible

Non

Course coordinator: Dr. Abdelmagid A. Abdalla

Signature:

**Date:** 28/9/2015

# Annual Course Report Academic year 2014-2015 Spring Semester

### A- Basic Information

1- Course Code & Title: (ELC 317) Electrical Machines

2- Program(s) on which this course is given: Manufacturing Eng. & Prod. Tech. BSc Prog.

3- Year/Level of program: 3rd Year/Second Semester

**4- Credit hours: 3** Lectures 2 hrs Tutorial 1 hr Practical 2 hrs

5- Names of lecturers contributing to the delivery of the course: Prof. Dr. Said A. Gawish

Dr. Haytham Gamal.

**6- Course coordinator:** Prof. Dr. Said A. Gawish

**7- External evaluator:** Non

## **B- Statistical Information**

No. of students attending the course: No. of students completing the course: Results:

	No.	%
Passed	97	86.6
Failed	15	13.4

Grading of successful students:				
Grade No. %				
Excellent (A)	11	9.82		
Very Good (B)	8	7.14		
Good (C)	31	27.68		

47

114

112

No.

No.

Pass (D)

100 %

98.25%

41.96

## **B- Professional Information**



Topic	Lecture	Tutorial	Practical	Lecturer
·	hours	hours	hours	
Basic magnetic field laws.	2	1	-	
Magnetic material characteristics.	1	ı	-	
Magnetic circuit and transformer analysis.	3	2	4	
DC machine construction and operation.	2	2	3	4.
DC machine classification and applications	4	2	4	Gamal.
AC machine operation and equivalent circuit.	3	2	2	Ga
Speed control of AC motors.	2	-	3	ш
Three phase motors operation and equivalent	3	2	2	Dr. Haytham
Toque-speed characteristics of AC motors.	1	•	3	Ча)
Synchronous machine operation and equivalent	2	2	4	)r. 1
Automobile alternators.	2	ı	2	7
Single phase motors.	3	2	2	
Stepper motor operation	2	-	1	
Total hours	30	15	30	

Topics taught as a percentage of the content specified:

>90 %

Reasons in detail for not teaching any topic: non

If any topics were taught which are not specified, give reasons in detail: Non

Achieved program intended learning outcomes, ILO's:

Knowledge & Understanding	Intellectual skills	Applied Skills	General transferable skills
a1,a14	b1,b6	c1,c6	d1 to d5

## 2- Teaching and learning methods:

Lectures: Lecture, discussions, tutorials and problem solving

Practical training/ laboratory: Practical Training and experimental measurements in Lab

Seminar/Workshop: Non

Class activity Exercises; solution of problems and data show.

Other assignments/homework: Bi-weekly assignments and reports

If teaching and learning methods were used other than those specified, give Non

reasons:

## 3- Student assessment:

Method of assessment	Points	%
Written examination	60	60
Practical/laboratory work	20	20
Other assignments/class work	10	10
Mid-Term Exam	10	10
Total	100	100

Members of examination

committee:

Dr. Haytham Gamal.

Role of external evaluator: Non

## 4- Facilities and teaching materials:

Totally adequate	Yes
Adequate to some extent	
Inadequate	

List any inadequacies: Non

107



# 5- Administrative constraints (List any difficulties encountered) None

## 6- Student evaluation of the course:

	List any criticisms	Response of course team
(a)	There are few solved problem in the lecture.	The solved will be increased in the lectures.
(b)	Rate of the lecturer is fast than the rate of the	A better coordination with the assistant will be done to
	assistance.	improve the integration between lecture and tutorial.

## 7- Comments from external evaluator(s): None

## 8- Written Exam Evaluation

➤ The exam paper measures 79% of course ILO's measurable in written form and the variety of questions is practically balanced

## 9- Course enhancement:

Progress on actions identified in the previous year's action plan.

State whether or not completed and give reasons for any non-completion: It the first year for Credit Hour

9- Action plan for academic year 2015 - 2016

Actions required	Completion date	Person responsible
Increase the solved problems in the lecture	2015/2016	Lecturer

Course coordinator: Prof. Dr. Said A. Gawish

Signature:

Date: September 2015

# 2015/2016

## Senior 1, Seventh Semester

Code	Course
MNF 411	Mechanical Measurements
MNF 421	Joining Processes
MNF 412	Industrial Operations Research
MNF 462	Industrial Training (1)
MNF 422	Computer Numerical Control, CNC, MACHINES
	Elective-2:
GEN354	a) Sound systems and Noise Pollution
GEN 353	b) Management and International Business, and total quality management.
GEN351	c) Engineering Economy
MNF362	Seminar-2.

## Senior 1, Eighth Semester

Code	Course	
------	--------	--



MNF 423	Computer Aided Design (CAD)	
MNF424	Advanced Materials and Composite	
MNF413	Automatic Control	
MNF425	Modern Manufacturing Methods	
	Elective-1:	
MNF 433	a) Production and Operations Management.	
MNF 431	b) Heat Transfer	
MNF 432	C) Mechanical Vibrations	
MNF461	Project-1	

The course was not offered

# Semester Course Report 2015/2016 Fall

## A- Basic Information

- 1- Title and code: (GEN351) Engineering Economics
- 2- Program(s) on which this course is given:
  - Manufacturing Engineering and Production Technology BSc Program
  - Communication Engineering Technology BSc Program
  - Computer Engineering Technology BSc Program
- 3- Year/Level of program: Third Level
- 4- Unit hours: 2 Credits Lectures 2 hrs Tutorial --- Practical Total 2 hrs
- 5- Names of lecturers contributing to the delivery of the course

Dr. Metwally H. Metwally

Course coordinator Dr. Abdelmagid A. Abdalla

External evaluator: None

# **B- Statistical Information**

No. of students attending the course:	<b>No.</b> 51	100%
No. of students completing the course:	<b>No</b> . 51	100%
Results:		

	No.	%	Grading of succ	essfu	I students	<b>S</b> :
Passed	49	96	_		No.	%
Failed	2	4	Excellent	A+	7	13.725
				Δ	1	7 843



	A-	6	11.765
Very	B <sup>+</sup>	9	17.647
Good	В	7	13.725
Good	C+	2	3.922
	С	7	13.725
Pass	D+	3	5.882
	D	1	1.961
	D-	3	5.882

# **C- Professional Information**

# 1 – Course teaching

Topic Actually taught	No. of hours	Lecturer
Cash Flow	2	
Compound Interest:	6	ø,
Time Value of Money	2	Abdalla,
Nominal and Effective Interest	2	] <b>Q</b>
Engineering Problem Analysis:	6	√ P
Depreciation	4	lagi
Tax effects	2	Abdelmagid
Breakeven point & payback period	-	Abc
Total hours	24	

<ul> <li>Engineering Problem Analys</li> </ul>	is:	6	Dr. Abdelmagid A.
<ul> <li>Depreciation</li> </ul>		4	nagi
Tax effects		2	lel le
<ul> <li>Breakeven point &amp; payback</li> </ul>	period	-	Abc
Total	hours	24	
	<b>80 &lt;70%</b>		
Reasons in detail for not teaching an If any topics were taught which are n	• •		
2- Teaching and learning methods: Lectures: Classical lecturing using to Practical training/ laboratory: None Seminar/Workshop: None Class activity: Numericate Case Study: None Other assignments/homework: If teaching and learning methods we	l exercises.  Weekly assignment	l. list and give reas	s <b>ons:</b> None
B- Student assessment:     Method of assessment     Written examination     Other assignments/class work     Mid-Term Exam     Total     Members of examination committee:	·	tage of total  70 %  10 %  20 %  100 %	
Role of external evaluator	Dr. Metwally H. Metwally  None		
4- Facilities and teaching materials: Totally adequate Adequate to some extent Inadequate List any inadequacies	Yes  None		



Dr. Abdelmagid A. Abdalla

5- Administrative constraints

List any difficulties encountered

None

### 6- Student evaluation of the course:

List any critisms	Response of course team
- Students need an exercise period	<ul> <li>The number of credit hours is 2 credits and this does not allow an exercise period in addition to the lecture.</li> <li>Next year, the lecturer will solve more problems during the lecture to partially compensate the exercise.</li> </ul>

7- Comments from external evaluator(s):

Response of course team

None

### 8- Course enhancement:

Progress on actions identified in the previous year's action plan: The first time to be taught for the credit hours Action State whether or not completed and give reasons for any non-completion: None

9- Action plan for academic year 2016-2017

**Actions required** More problems will solved during the lecture **Completion date** Person responsible Fall of 2016/2017

Course coordinator: Dr. Abdelmagid A. Abdalla

Signature:

Date: 15/3/2016

> **Annual Course Report** Academic year: 2015-2016

### A- Basic Information

1- Title and code: (MNF 462) Industrial Training 1

2- Program(s) on which this course is given: Manufacturing Eng. and Prod. Tech. BSc. Program

3- Year/Level of program: Fourth Level

**4- Credit hours: 3** Lec.: 1 Tutorial: - Practical: 4 Pre-requisite: 65 Credit Hours 5- Names of lecturers contributing to the delivery of the course: Training Sites

Course coordinator Dr. Abdelmagid A. Abdalla

External evaluator: None

## **B- Statistical Information**

No. of students attending the course: No. 179 No. of students completing the course: No. 168

Results:

	No.	%	Grading of successful students:		
<b>Passed</b>	168	100	•	No.	%
Failed	0	0	Excellent	126	75
			Very Good	42	25
			Good	0	0
			Pass	0	Λ

C - Professional Information

3 - Contents



Topic	Lecture hours	Tutorial hours	Practical hours
<ul> <li>Practical industrial training for two weeks- during the vacation</li> </ul>	10		40
at the end of the 6th semester- in a recognized industrial			
establishment.			
<ul> <li>At the end of the training, student should submit a report with</li> </ul>			
the following information:			
✓ Profile of the industry			
✓ Organization structure.			
✓ Product range			
✓ Processes			
✓ Machines, equipment, devices.			
✓ Personnel welfare scheme			
✓ Details of the training undergo			
Projects undertaken during the training.(if any)			
Total hours	10		40

Topi	CS 1	tauqh	t as	a percen	tage (	of the	conte	nt spec	ified	
. op.	00	.uug::	t uo	a porcor	tugo .	00		iii opco	IIICG	•

>90 % ---- 70-90 % 80 <70% ....

Reasons in detail for not teaching any topic

If any topics were taught which are not specified, give reasons in detail None

# 2- Teaching and learning methods:

Lectures: Daily Lecture

Practical: Daily.

Other assignments/homework: By the end of training

If teaching and learning methods were used other than those specified, list and give reasons: Non

## 3- Student assessment:

Method of assessment	Percentage of total
Written examination	0
Oral examination	40
Practical/laboratory work	60 %
Other assignments/class work	0
Mid-Term Exam	0
Total	100 %
Members of examination committee	Dept. Teaching Staff
Role of external evaluator	None

## 4- Facilities and teaching materials:

Totally adequate Yes

Adequate to some extent

Inadequate

List any inadequacies

### 5- Administrative constraints

List any difficulties encountered

## 6- Student evaluation of the course:

List any criticisms	Response of course team	
None	None.	



7- Comments from external evaluator(s): Non

### 8- Course enhancement:

Progress on actions identified in the previous year's action plan: No previous comments Action State whether or not completed and give reasons for any non-completion Non

## 9- Action plan for academic year 2016 - 2017

Actions required Completion date

Person responsible

Non

Course coordinator: Dr. Abdelmagid A. Abdalla

Signature:

**Date:** 28/8/2016

# Semester's Course Report Academic year: 2015 - 2016 Semester: Fall

## **A-** Basic Information

1- Course Code & Title: (MNF421) Joining Processes.

2- Program(s) on which this course is given: Manufacturing Eng. and Prod. Tech. BSc Program

3- Year/Level of program: : 4th year

**4- Credit hours: 3** Lectures: 2 hrs Tutorial: 1 hr Practical: 2 hrs **5- Names of lecturers contributing to the delivery of the course**: Dr. Elsayed Kamar

**6- Course coordinator:** Dr. Elsayed Kamar

7- External evaluator: Non

## **B- Statistical Information**

No. of students attending the course No. of students completing the course: Results:

	No.	%
Passed	112	100

No.	112	100	%
No.	112	100	%

Grading of successful students:							
Grade	No.	%					
Α	43	38.393					
В	39	34.822					
С	27	24.108					
D	3	2.679					

# **C- Professional Information**

1 - Course teaching

Failed



Торіс	Lecture hours	Tutorial hours	Practical hours
<ul> <li>Introduction. Classification of joining. Basic concepts. Economic importance of joining. Typical industrial applications, and welding symbols</li> </ul>	4	1	2
• Soldering and brazing. Practice of soldering. Joint types and preparation. Fluxes. Heat sources and heat transfer. Different types of brazing. Braze welding.	2	2	4
<ul> <li>Welding. Oxy-acetylene welding, arc welding, resistance welding, spot welding, electron beam welding, thermite welding, MIG&lt; TIG, and MAG etc. Practice, joint design and preparation. Filler materials</li> </ul>	4	2	4
Basic science of joining processes. Sources of heat energy, the flame, the electric arc, chemical reactions during welding, oxidation reaction, and protection of weld pool with fluxes or gases. Theory of distortion.	3	1	3
<ul> <li>Metallurgy of welding. Microstructure changes during welding, the effect of heat on metals. Pre-treatment and post-treatment of welds. Behavior of ferrous and nonferrous metals. Fracture of welds.</li> </ul>	3	1	3
<ul> <li>Inspections and tests of welds and joints. Mechanical testing. Non-destructive testing. Weld defects.</li> </ul>	3	2	3
<ul> <li>Adhesives. Contact adhesives. Polyester, polyamide, and polyurethane melt adhesives. Toughened acrylic and epoxy adhesives. Silicone adhesives. Mechanical properties and fracture mechanics. Joint design.</li> </ul>	4	2	4
• Joining of ceramics. Metal/ceramic joining and ceramic/ceramic joining. Thermochemical considerations.	4	2	4
Diffusion bonding. Brazing methods. Joint design     Total hours	3 <b>30</b>	2 <b>15</b>	3 <b>30</b>

Topics taught as a percentage of the content specified:				
>90 %	100	70-90 %	<70%	

Reasons in detail for not teaching any topic None

If any topics were taught which are not specified, give reasons in detail None, all of the missed teaching hours were substituted.

## 2- Teaching and learning methods:

- Course notes: Lecture notes and Handouts
- Required books: Non.
- Recommended books: The Welding Handbook,2005,14th edition
- Periodicals, Web sites, etc.:

Available relevant Web sites

Practical training/ laboratory:

Seminar/Workshop: Bi-weekly workshops

Class activity: Weekly

Case Study:

Other assignments/homework: weekly assignments

If teaching and learning methods were used other than those specified, None

### 3- Student assessment:

• • • • • • • • • • • • • • • • • • • •		
Assessment Method	Timing	Grade (Degrees)
Semester Work: seminars, quizzes assignments and reports	Bi-Weekly	10
Mid-Term Exam	8-th Week	10
Practical Exam	Fifteenth week	20
Written Exam	Sixteenth week	60



100 Total

Dr. Elsayed Kamar

Members of examination committee

Role of external evaluator Non

4- Facilities and teaching materials:

**Totally adequate** 

Adequate to some extent

Inadequate

List any inadequacies

5- Administrative constraints List any difficulties encountered None

6- Student evaluation of the course:

Response of course team

List any criticisms

Non

7- Comments from external evaluator(s): Response of course team

8- Course enhancement:

Progress on actions identified in the previous year's action plan: No previous comments Action State whether or not completed and give reasons for any non-completion Non

Non

9- Action plan for academic year 2016 - 2017

**Actions required** 

**Completion date** Person responsible

Non

Course coordinator: Dr. Elsayed Kamar

Signature:

Date: 1/7/2016



# Semester's Course Report Academic year: 2015 - 2016 Semester: Fall

## **A- Basic Information**

1- Course Code & Title: (MNF422) Computer Numerical Control

2- Program(s) on which this course is given: Manufacturing Eng. and Prod. Tech. BSc Program

3- Year/Level of program: : 3th Level

**4- Credit hours: 3** Lectures 2 hrs Tutorial 1 hr Practical 2 hrs **5- Names of lecturers contributing to the delivery of the course**: Dr. Atef Afifi

**6- Course coordinator:** Dr. Atef Afifi

7- External evaluator: Non

## **B- Statistical Information**

13- No. of students attending the course:

14- No. of students completing the course:

15- Results:

	No.	%
Passed	108	98.182
Failed	2	1.818

No.	110	100	%
No.	110	100	%

Grading of successful students:					
Grade	No.	%			
Α	51	46.36			
В	22	20			
С	19	17.273			
D	16	14.545			

# **C- Professional Information**



Topic	Lecture hours	Tutorial hours	Practical hours
Definition and applications of Computer Numerical Control			
(CNC)	2	1	3
Review on Basic codes of G&M code	2	1	3
Rectangular and circular pocket programming	2	1	1
Centering and Deep hole drilling cycles and manufacturing of			
row of holes	2	1	3
Definition of different strategies of external and internal turning	4	2	4
Definition of local coordinate system	2	1	1
Grooving cycle in turning	2	1	1
Reaming and Tapping cycles	2	1	2
<ul> <li>Scale, Mirror and polar techniques</li> </ul>	4	2	4
Threading cycle in turning	2	1	2
Axis rotation techniques	2	1	2
<ul> <li>Introduction to parametric programming</li> </ul>	2	1	3
Revision	2	1	1
Total hours	30	15	30

Topics taught as a perc	entage of the conten	it specified:	
<b>&gt;90</b> % 100	70-90 %	<70%	
December in detail for no	4 4000bina 001/40bio	Nlana	

Reasons in detail for not teaching any topic None

If any topics were taught which are not specified, give reasons in detail

None, all of the missed teaching hours were substituted.

# 2- Teaching and learning methods:

Course notes: Lecture notes

Required books: Software manuals.

Recommended books: James V. Valentino, Ed V. Goldenberg and AAA Predator, 2012, Introduction to Computer Numerical Control, 5th Edition.

Practical training/ laboratory: WIN NC32

Seminar/Workshop: Class activity: Weekly

Case Study:

Other assignments/homework: weekly assignments

If teaching and learning methods were used other than those specified, list and give reasons: Non

#### 3- Student assessment:

Assessment Method		Timing	Grade (Degrees)
Mid-Term Exam		7-th Week	10
Semester Work	Quizzes	4 Quizzes(every 3 weeks)2 degree for each one	4
Reports Assignment		One report per semester	2
		Bi-Weekly	4
Practical Exam		Fifteenth week	10
Written Exam		Sixteenth week	60
		Total	100

Members of examination committee Dr. Atef Afifi Role of external evaluator Non



4- Facilities and teaching materials:

**Totally adequate** 

Adequate to some extent

Inadequate

List any inadequacies:

5- Administrative constraints

List any difficulties encountered: None

6- Student evaluation of the course: 96 % Non Response of course team

List any criticisms Non

7- Comments from external evaluator(s): Non

8- Course enhancement:

Progress on actions identified in the previous year's action plan: No previous comments Action State whether or not completed and give reasons for any non-completion Non

9- Action plan for academic year 2016 - 2017

Actions required Completion date Person responsible

Non

Course coordinator: Dr. Atef Afifi

Signature:

20/9/2016 Date:

> **Semester's Course Report** Academic year: 2015-2016 Semester: Fall

## A- Basic Information

1- Title and code: (MNF 362) Seminar-2

2- Program(s) on which this course is given: Manufacturing Eng. & Prod. Tech. BSc. Prog.

3- Year/Level of program: Junior, 5th semester

4- Credit hours

Credit Hours: 1 Tutorial: 2 Practical: -Lectures: -

> Pre-requisite: Non

5- Names of lecturers contributing to the delivery of the course

Dr. Abdelmagid A. Abdalla

Course coordinator Prof. Dr. Nabil Gadallah

External evaluator: None

**B- Statistical Information** 

No. of students attending the course: No. 113 No. 113

No. of students completing the course:

Results:

No. % **Grading of successful students:** 

**Passed** 113 100 No. % Failed Excellent A+ 16 14 16



	Α	32	28.3
	<b>A</b> -	29	25.66
Very	B+	23	20.35
Good	В	9	7.96
Good	C+	4	3.54

### **C- Professional Information**

## 1 – Course teaching

	Topic Actually taught	Lecture hours	Tutorial hours	Practical hours
t	The course consists of a number of seminars concerned with the development of technology and its impact to society, It covers the following areas:  ✓ The definition and evolution of technology.  ✓ Technology and society  ✓ Technology and Innovation.  ✓ Technology selection decision and social considerations  ✓ Engineering design.  ✓ Engineering problem solving.  ✓ Human and social considerations in engineering design, and social problems.  ✓ Concepts of the exploitation of technology for the advancement of human kind.		30	
	Total hours		30	

Topics to	aught a	as a percenta	ge of the conten	t spe	ecified:		
>	90 %	100	70-90 %		<70%		
Reasons	in det	ail for not tea	ching any topic:	The	e available time was	12 weeks	3
If any top	pics we	ere taught wh	ich are not spec	ified	l, give reasons in d	<b>etail</b> No	ne

# 2- Teaching and learning methods:

Lectures:

Practical training/ laboratory:

Seminar/Workshop: weekly individual student's seminar

Class activity: Case Study:

Other assignments/homework:

If teaching and learning methods were used other than those specified, list and give reasons: Non

### 3- Student assessment:

Method of assessment
Written examination
Oral examination
Practical/laboratory work
Other assignments/class work
Mid-Term Exam
Total
Percentage of total
100%
100%

Members of examination committee



Role of external evaluator Non

4- Facilities and teaching materials:

Totally adequate Yes

Adequate to some extent

Inadequate

List any inadequacies

5- Administrative constraints

List any difficulties encountered None

6- Student evaluation of the course: None

7- Comments from external evaluator(s): Non

8- Course enhancement:

Progress on actions identified in the previous year's action plan: No previous comments Action State whether or not completed and give reasons for any non-completion Non

9- Action plan for academic year 2016 - 2017

Actions required Completion date Person responsible

None

Course coordinator: Dr. Abdelmagid A. Abdalla

Signature:

**Date:** 15/3/2016

# Semester Course Report Academic year 2015-2016 Spring Semester

## **A- Basic Information**

1- Title and code: (MNF 423) Computer Aided Design

2- Program(s) on which this course is given: Manufacturing Eng. and Prod. Tech. B.Sc. Program.

3- Year/Level of program: 3<sup>rd</sup>. Level

**4- Credit hours 3** Lectures 2hrs Tutorial 1hrs Practical 2 Total 5 hrs

**5- Names of lecturers contributing to the delivery of the course:** Prof. Dr. Nabil Gadallah Course coordinator Prof. Dr. Nabil Gadallah

External evaluator

**B- Statistical Information** 

No. of students attending the course: No. 108 % 100 No. of students completing the course: No. 108 % 100

**Results:** 

itesaits	,.					
	No.	%	Grading of successfu	Grading of successful students:		
Passed	107	99.07		No.	%	
Failed	1	0.93	Excellent	17	15.89	
			Very Good	35	32.71	
			Good	37	34.58	
			Pass	18	16.82	



	Failed	1	0.93

## **C- Professional Information**

## 1 - Course teaching

Topic Actually taught	No. of hours	Lecturer
CHAPTER 1: An Overview of Computer-Aided Design & Analysis	7	h.
C H A PTE R 2: Review of Numerical Techniques for CAD	14	Gadallah
C H A PTE R 3: Principles of Computer Graphics	14	Gас
CHAPTER 4: Computer Graphics and Design	14	Nabil
CHAPTER 5: Introduction to Design Databases	7	Na
CHAPTER6: Overview of the Finite Element Method	14	Dr.
CHAPTER7 Elastic Stress Analysis by the Finite Element Method	21	Prof.
CHAPTER8: Design Optimization	14	P
Total	90	

Topics taught as	s a percentage	of the content	specified:			
>90 %	100	70-90 %		<70%		
Reasons in detail for not teaching any topic None						

If any topics were taught which are not specified, give reasons in detail None, all of the missed teaching hours were substituted, in addition to the seminars arranged during the students free day.

2-	Teaching	and learnin	g methods:
_			0

Lectures: Classical lecturing using the white board and computer supported learning
---

**Practical training/ laboratory:** computer supported learning **Seminar/Workshop:** Two Seminars were arranged by the students:

a) Principles of Computer Graphics

b) Overview of the Finite Element Method

Class activity: -

Case Study: Selected case studies

Other assignments/homework: Bi-weekly assignments

If teaching and learning methods were used other than those specified, list and give reasons: None

#### 3- Student assessment:

Tools	Time schedule	Grading in points
Assignments and quizzes	weekly	10
Mid-Term Exam	6 <sup>th</sup> . week	10
Practical Exam	15 <sup>th</sup> . week	20
Final Written exam	16 <sup>th</sup> . week	60
Total	100	

Members of examination committeeDr. Nabil GadallahRole of external evaluatorNone

4- Facilities and teaching materials:

Totally adequate

Adequate to some extent

Inadequate

List any inadequacies

Yes

......

None



5- Administrative constraints

List any difficulties encountered

6- Student evaluation of the course: Response of course team

List any criticisms

7- Comments from external evaluator(s): Response of course team

None None

8- Course enhancement:

**Progress on actions identified in the previous year's action plan:** No previous comments **Action State whether or not completed and give reasons for any non-completion** None

9- Action plan for academic year 2013 - 2014

Actions required Completion date Person responsible

None None None

Course coordinator: Prof. Dr. Nabil Gadallah

Signature:

**Date:** 3/01/2016

# Annual Course Report For Academic year 2015/2016

**A- Basic Information** 

1- Title and code: Industrial Operations Researches: MNF 412

2- Program(s) on which this course is given: Manufacturing Eng. & prod. Tech. BSc Program

3- Year/Level of program: 5th year Manufacturing Technology / 1st term

**4- Unit hours: 3** Lectures: 2 hrs Tutorial: 2hrs Practical: Total: 4 hrs

5- Names of lecturers contributing to the delivery of the course:

Course coordinator: Dr Mohamed Saad Abdelkarim

External evaluator: None

**B- Statistical Information** 

No. of students attending the course: 120 100% No. of students completing the course: 110 91.6%

Results:

	No.	%	Grading of successful students:		
<b>Passed</b>	103	93.6	_	No.	%
Failed	7	6.4	Excellent	29	28.1
			Very Good	26	25.2
			Good	27	26.2
			Pass	21	20.4

### **C- Professional Information**

Topic	Lecture hours	Tutorial hours	Practical hours	Lecturer



Linear Programming Review	2	2	2	
<ul> <li>Integer Linear Programming Review</li> </ul>	2	2	2	
<ul> <li>Nonlinear Programming</li> </ul>	2	2	2	
<ul> <li>Goal &amp; Dynamic Programming</li> </ul>	2	2	2	Saad
Replacement Theory	2	2	2	d S
<ul> <li>Modeling &amp; Simulation</li> </ul>	2	2	2	ıme
Decision Theory Review	2	2	2	Jr. Mohamed
Queuing Theory	2	2	2	∑.
Games Theory	2	2	2	□
Revision	2	2	2	
Total hours	30	30	30	

•	<b>Topics</b>	taught as	a percentaç	ge of the	content	specified:
---	---------------	-----------	-------------	-----------	---------	------------

>90 % 95 70-90 % <70%

Reasons in detail for not teaching any topic: -

Reduced hours due to extra vacations

2-	Teaching	and	learning	methods:
----	----------	-----	----------	----------

Lectures: power point presentation

Practical training/ laboratory: None
 Seminar/Workshop: None

Class activity:
 Solution of Problems

Case Study: None

Other assignments/homework:

Assignment report each 4 weeks

If teaching and learning methods were used other than those specified, list and give reasons: None

#### 3- Student assessment:

Method of assessment

Written examination

Oral examination

Practical/laboratory work

Other assignments/class work

Mid-Term Exam

Total

Percentage of total

70

10

20

100 %

Members of examination committee Dr. Mohamed saad Abdelkarim

4- Facilities and teaching materials:

Role of external evaluator

Totally adequate
 Yes

None

Adequate to some extent

Inadequate

List any inadequacies

#### 5- Administrative constraints

List any difficulties encountered	None				

### 6- Student evaluation of the course:

List any criticisms Response of course team

None

None

7- Comments from external evaluator(s): Response of course team
None



### 8- Course enhancement:

Progress on actions identified in the previous year's action plan: None

Action State whether or not completed and give reasons for any non-completion
 None

9- Action plan for academic year 2016 – 2017

Actions required Completion date Person responsible

Non

Course coordinator: Dr. Mohamed Saad Abdelkarim

Signature:

**Date:** 1/11/2016

# Semester's Course Report Academic year: 2015 - 2016 Semester: Spring

## A- Basic Information

1- Course Code & Title: (MNF433) Production & Operations Management

2- Program(s) on which this course is given: Manufacturing Eng. and Prod. Tech. BSc Program

3- Year/Level of program: : 3rd Level

4- Credit hours: 3 Lectures 2 hrs Tutorial 1 hr Practical 2 hrs

5- Names of lecturers contributing to the delivery of the course: Dr. Mohamed Saad

**6- Course coordinator:** Dr. Mohamed Saad

7- External evaluator: Non

## **B- Statistical Information**

No. of students attending the course: No. of students completing the course:

Results:

	No.	%
Passed	85	91.4
Failed	8	8.6
Falled	ð	8.6

No.	103	100	%
No.	93	90	%

Grading of successful students:					
Grade No. %					
Α	15	16.1			
В	13	14			
С	31	33.3			
D	26	28			

## **C- Professional Information**

Tonio	Lecture	Tutorial	Practical
Topic	hours	hours	hours



1- Introduction	2	1	2
2- Production system	2	1	2
3- Break-Even Analysis	2	1	2
4- Capacity Planning	2	1	2
5 - Forecasting	4	2	4
6- Product / Service Design	2	1	2
7- Inventory Management	4	2	4
8- Material Requirement Management (MRP)	4	2	4
9- Aggregate Planning	4	2	4
10- Scheduling and Dispatching	4	2	4
Total hours	30	15	30

8- Material Requirement Management (MRP)	4	2	4
9- Aggregate Planning	4	2	4
10- Scheduling and Dispatching	4	2	4
Total hours	30	15	30
Topics taught as a percentage of the content specified:		1	
>90 % 100 70-90 % <70°	%	.]	
Reasons in detail for not teaching any topic None If any topics were taught which are not specified, give re None, all of the missed teaching hours were substituted.  2- Teaching and learning methods:	ture notes) manageme		Hall, Eighth
Practical training/ laboratory: Seminar/Workshop: Bi-weekly Seminars Class activity: Case Study:			

reasons: Non

## 3- Student assessment:

Assessment Method	Timing	Grade (Degrees)
Semester Work: seminars, quizzes assignments and	Bi-Weekly	10
reports		
Mid-Term Exam	8-th Week	10
Practical Exam	Fifteenth week	20
Written Exam Sixteenth week		60
Total	100	

If teaching and learning methods were used other than those specified, list and give

Members of examination committee Role of external evaluator	Dr. Mohamed Saad Non
4- Facilities and teaching materials: Totally adequate Adequate to some extent Inadequate List any inadequacies	Yes  Non

Other assignments/homework: weekly assignments

## 5- Administrative constraints



List any difficulties encountered

6- Student evaluation of the course:

Response of course team
List any criticisms

91 %
Non
Non

7- Comments from external evaluator(s):

Response of course team Non

8- Course enhancement:

Progress on actions identified in the previous year's action plan:

No previous comments

Action State whether or not completed and give reasons for any non-completion Non

9- Action plan for academic year 2016 - 2017

**Actions required** 

**Completion date** 

Person responsible

Non

Course coordinator: Dr. Mohamed Saad

Signature:

**Date:** 25/9/2016

# Annual Course Report Academic year 2015-2016

## A- Basic Information

1- Course Code & Title: (MNF413) Automatic Control

2- Program(s) on which this course is given: Manufacturing Engineering and Prod. Tech. BSc Program

**3- Year/Level of program:** Fourth Year/Second Semester

**4- Credit hours 3** Lectures 2 hrs Tutorial 1 hr. Practical 2 hrs

**5- Names of lecturers contributing to the delivery of the course**: Prof. Dr. M Galal Rabie

Dr Metwally Hussein

**6- Course coordinator:** Prof. Dr. M Galal Rabie

7- External evaluator: Non

### **B- Statistical Information**

No. of students attending the course: No. of students completing the course: No. No. 106 106 % 106 106 %

Results:

	No.	%
Passed	100	94.34
Failed	6	5.66

Grading of successful students:		
Grade No. %		
Excellent	22	22
Very Good	30	30
Good	17	17
Pass	31	31

## **C- Professional Information**

Торіс	Lecture hours	Tutorial hours	Practical hours
<ul> <li>Introduction, basic definitions and terminology</li> </ul>	2		



Mathematical topics	3	4	
Transfer functions, definition and case studies	4	4	
<ul> <li>Block diagrams; conventions, block diagram algebra and reduction of block</li> </ul>			
diagrams.	3	2	
<ul> <li>Signal flow graphs; definition, conventions and Mason's formula</li> </ul>	3	-	
Time domain analysis			
<ul> <li>Transient response of proportional, integrating and first order elements.</li> </ul>	3	2	
<ul> <li>Transient response of second order elements. Effect of location of roots of</li> </ul>			
characteristic equation on the transient response	4	4	
<ul> <li>System identification based of the transient response.</li> </ul>	3	2	
<ul> <li>Instruments, sensors and controllers</li> </ul>			10
<ul> <li>Level control</li> </ul>			4
Flow control			4
<ul> <li>Speed control</li> </ul>			4
Temperature control			4
Robotic arm control			4
Frequency response			
Frequency response; Polar plot and Bode plots.	3	2	
<ul> <li>System identification based of the transient and frequency responses.</li> </ul>	3	2	
Accuracy of feedback systems; steady state error.	3	2	
Stability of feedback systems; Routh-Herwitz and Nyquest stability criteria.	3	2	
Root locus analysis	2	-	
Compensation of control systems	3	2	
Design and tuning of P, PI and PID controllers	3	2	
Total hours	30	15	30

Topics taught as a percentage of the content specified:

Reasons in detail for not teaching any topic: Non

If any topics were taught which are not specified, give reasons in detail: Non

Achieved program intended learning outcomes, ILO's:

Knowledge & Understanding	Intellectual skills	Applied Skills	General transferable skills
a1 to a10	b1 to b5	c1 to c5	d1 to d3

## 2- Teaching and learning methods:

Lecture, presentations, discussions, tutorials, problem solving, self-learning, modeling and laboratory experiments If teaching and learning methods were used other than those specified, give reasons:

Non

## 3- Student assessment:

Method of assessment	Points	%
Written examination	100	66.7
Oral examination	Non	0
Practical/laboratory work	20	13.3
Other assignments/class work	15	10
Mid-Term Exam	15	10
Total	150	100

Members of examination committee: Role of external evaluator:

Dr. M. Galal RABIE and Dr. Metwally Hussein

Non

## 4- Facilities and teaching materials:

Totally adequate	
Adequate to some extent	Yes

**>90 %** 70-90 %

<70%



Inadequate	

List any inadequacies: Incomplete laboratory equipment

**5- Administrative constraints** (List any difficulties encountered) None

## 6- Student evaluation of the course:

### **Questionnaire Results**

Course	90%
Lecturer	98%
Assistant	98%
Book	88%
Assessment	98%
Laboratory	100%

#### Comments

	List any criticisms	Response of course team
(a)	Discussion of exercises should be	A full revision of previously taught mathematical topics
	extended to the fundamentals of mathematics.	is included in the course content and occupies 8 exercise hours.
(b)	The laboratory book is not useful	A new book will be prepared considering the newly added experiments as results from the merge process
(c)	The laboratory equipment is poor and the number of operating experiments is too few	The laboratories of mechanical and electrical engineering departments will be merged on February 2016. More experiments will be available
(d)	Bad communication between the students and laboratory assistants	The laboratory work will be put under close supervision pr Professor M Galal Rabie

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

	Comment	Response of course team
(a)	Non	

#### 7- Written Exam Evaluation

- > The written exam covers 60% of the course ILO's in a balanced form.
- > The level and degree of interest of student this year are very Law
- > The exam considers the course aims listed in the course specification.
- ➤ The exam level is convenient, considering the percentage of success.
- Elevated success in the first three questions indicate good understanding of the fundamentals and applications of mathematics.
- ➤ Decreased success in the last questions indicates the need to more attention to the professional applied skills. Therefore, a mini project will be added to the exercises starting from the next academic year
- Low level of English language is quite clear in the written exam papers.

#### 9- Course enhancement:

Progress on actions identified in the previous year's action plan. State whether or not completed and give reasons for any non-completion:

Actions required	Planned Completion date	Accomplishment
(b) Non		

## 10- Action plan for academic year 2016 – 2017

Actions required	Completion date	Person responsible
1. Merging the laboratories	of The laboratories of mechanical and	Departments heads
mechanical and electric	al electrical engineering departments	
engineering departments	will be merged on February 2016.	



2. Preparing a new laboratory	To be determined in agreement	Prof. M Galal
book	with the Electronic engineering and	Rabie
	communication Technology Dpt.	
3. Adding mini project on the design of PID controller	September 2015	Prof. M Galal Rabie
4. Supervising the laboratory exercises by Prof. M Galal Rabie		Mechanical Engineering department head

Course coordinator: Prof. Dr. M Galal Rabie

Signature:

Date: July 2016

# Semester's Course Report Academic year:2015-2016 Semester : Spring

## A- Basic Information

- 1- Course Code & Title: (MNF425) Modern Manufacturing Methods
- 2- Program(s) on which this course is given: Manufacturing Eng. and Prod. Tech. BSc Program
- 3- Year/Level of program: :3rd Level
- 4- Credit hours

Credit 3hrs Lectures 2hrs Tutorial 1hrs Practical 2hr

- 5- Names of lecturers contributing to the delivery of the course: Prof. Ahmed Kohail
- **6- Course coordinator:** Prof. Ahmed Kohail
- 7- External evaluator: Non

## **B- Statistical Information**

16- No. of students attending the course:

17- No. of students completing the course:

18- Results:

	No.	%
Passed	104	92,8
Failed	8	7.2

No. 112 100 %	No.	112	100	%
110. 112 100 /0	No.	112	100	%

Grading	of successful students:		
Grade	No.	%	
Α	11	10.6	
В	22	21.2	
С	31	30.4	
D	40	37.8	

## **C- Professional Information**

1- Course teaching

Lecturer: Prof. Dr.A.M.Kohail



Торіс	Lecture hours	Tutorial hours	Practical hours
Introduction to Non-Traditional Machining	2	1	-
<ul> <li>Electro-Discharge Machining (EDM)</li> </ul>	6	3	26
<ul> <li>Electro Chemical Machining (ECM)</li> </ul>	4	3	4
Laser beam Machining (LBM)	4	1	-
Electron beam Machining (EBM)	2	-	-
Ultrasonic Machining (USM)	2	1	-
Abrasive jet Machining (AJM)	2	1	-
Water jet Machining (WJM)	2	2	-
Abrasive water jet Machining (AWJM)	2	1	-
Chemical Machining (CHM)	2	1	-
Plasma Arc Machining (PAM)	2	1	-
Total hours	30	15	30

Topics taught as a percentage of the content specified: >90 % 100 70-90 % <70% ....

Reasons in detail for not teaching any topic None
If any topics were taught which are not specified, give reasons in detail
None, all of the missed teaching hours were substituted.

## 2- Teaching and learning methods:

Lectures: Classical lecturing using the white board
 Practical training/ laboratory: EDM machine

Seminar/Workshop: None

Class activity: Solution of problems
 Case Study: Non-traditional machining methods

Other assignments/homework: Assignment report each 4 weeks

If teaching and learning methods were used other than those specified, list and give reasons:

None

#### 3- Student assessment:

Assessment Method	Grade (Degrees)	
Semester Work: seminars, quizzes assignments and	Bi-Weekly	10
reports		
Mid-Term Exam	8-th Week	10
Practical Exam	Fifteenth week	20
Written Exam	Sixteenth week	60
Total	100	

**Members of examination committee** Prof. Ahmed Kohail **Role of external evaluator** Non

4- Facilities and teaching materials:

Totally adequate
Adequate to some extent

Inadequate

List any inadequacies





5- Administrative constraints

List any difficulties encountered

6- Student evaluation of the course: 64%
Response of course team Non
List any criticisms Non

7- Comments from external evaluator(s):

Response of course team Non

8- Course enhancement:

Progress on actions identified in the previous year's action plan:

No previous comments

Action State whether or not completed and give reasons for any non-completion Non

9- Action plan for academic year 2016 - 2017

Actions required Completion date Person responsible

Non

Course coordinator: Prof. A. Kohail

Signature:

**Date:** 25/9/2016

# Semester Course Report

# Academic year 2015-2016

## A- Basic Information

ادارة و أعمال دولية (GEN 353) ادارة و أعمال دولية

**2- Program(s) on which this course is given:** Manufacturing Eng. & Prod. Tech. BSc. Program

Electronic Eng and Comm. Technology BSc Program Computer Eng and Inf. Technology BSc Program

No.

No.

**Pass** 

3- Year/Level of program: 3rd year

4- Credit hours: 2 Lectures 2 hrs Tutorial ---- Practical -----

5- Names of lecturers contributing to the delivery of the course: Dr. مروه فؤاد

6- Course coordinator: Dr مروه فؤاد

7- External evaluator: Non

# **B- Statistical Information**

19- No. of students attending the course:

20- No. of students completing the course:

21- Results:

	No.	%
Passed	379	97.68
Failed	9	2.32

Grading of successful students:			
Grade	No.	%	
Excellent	154	39.70	
Very Good	100	25.77	
Good	79	20.36	

46

390

388

100

99.48

%

%

11.86

# **C- Professional Information**

i – Course teaching		
Topic	Total hours	Lecturer



	Plan.	Actual	
مفهوم الادارة	4		
مفهوم التخطيط	4		مروه .Dr . فؤاد
صناعة و اتخاذ القررات	2		فؤاد
الهياكل التنظيمية	6		
القيادة و التوجيه	4		
ادارة الأعمال الدولية	6		
مفهوم ادارة الجودة الشاملة	4		
Total hours	30		

Topics taught as a percentage of the content specified:

>90 % 70-90 % <70%

Reasons in detail for not teaching any topic:Non

If any topics were taught which are not specified, give reasons in detail:Non

Achieved program intended learning outcomes, ILO's:

Knowledge &Understanding	Intellectual skills	Applied Skills	General transferable skills	
a1 to a3	b1 to b3	-	d1 to d3	

## 2- Teaching and learning methods:

Lectures: Lecture, discussions, tutorials, problem solving and modeling

Practical training/ laboratory: Non
Seminar/Workshop: Lecture
Class activity Non

Case Study: Selected case studies

Other assignments/homework: Bi-weekly assignments and reports

If teaching and learning methods were used other than those specified, give reasons: Non

## 3- Student assessment:

Method of assessment	Points	%
Written examination	70	70
Oral examination	Non	0
Practical/laboratory work	Non	0
Other assignments/class work	30	30
Mid-Term Exam	Non	0
Total	100	100

Members of examination committee: Dr. مروه فؤاد Role of external evaluator: Non

## 4- Facilities and teaching materials:

Totally adequate	Yes
Adequate to some extent	
Inadequate	

List any inadequacies: Non

## **5- Administrative constraints** (List any difficulties encountered)

➤ Non

### 6- Student evaluation of the course: None

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

•	onimonto nom oxternar ovalation (o)		
		Comment	Response of course team
	(a)	Non	Non

144



#### 8- Written Exam Evaluation

### 9- Course enhancement:

Progress on actions identified in the previous year's action plan. State whether or not completed and give reasons for any non-completion:

## 10- Action plan for academic year 2016- 2017

Actions required	Completion date	Person responsible
Non	January 2016	Prof. Dr Marwa Fouad

**Course coordinator:** 

مروه فؤاد.Dr

Signature:

**Date:** September 1, 2016

# Annual Course Report Academic year: 2015 - 2016 Semester: spring

## A- Basic Information

1- Course Code & Title: (MNF 432) Mechanical Vibrations

2- Program(s) on which this course is given: Manufacturing Engineering &Prod. Tech. BSc Program

3- Year/Level of program: 4th/3

4- Credit hours

Credit 3 hrs Lectures 2 hrs Tutorial 1 hrs Practical 2

5- Names of lecturers contributing to the delivery of the course: Assoc. Prof. Gaafar Husse

**6- Course coordinator:** Assoc. Prof. Gaafar Hussein

7- External evaluator: Non

## **B- Statistical Information**

No. of students attending the course: No. of students completing the course:

Results:

	No.	%
Passed	17	89.5
Failed	2	10.5

100	%
	100

Grading of successful students:			
Grade	No.	%	
Α	3	17.65	
В	4	23.5	
С	7	41.15	
D	3	17.65	

# **C- Professional Information**

Tonio Astually tought	Lecture	Tutorial	Practical	Lecturer
Topic Actually taught	hours	hours	hours	



	1			
Introduction to system dynamics				
System Classifications and basic functions	3	3		
<ul> <li>Basic concepts of vibrating systems and the</li> </ul>				
equations of motion of the vibrating elements.	4	3		
<ul> <li>Response of free vibrating systems with single</li> </ul>				
and multiple degree of freedom.	8	6		_
Response of single and multiple degree of				gei.
freedom systems undergoing different forcing				ssn
functions.	10	8		Ŧ
<ul> <li>MATLAB simulation of single degree of</li> </ul>				ar /
freedom systems.			6	aaf
Mechanical-electrical and mechanical-				.· .·
hydraulic analogies.	6	6		صً
Vibration absorbing techniques.	4	4		Prof. Dr. Gaafar A. Hussein
Vibration Measurements	4		3	<u> </u>
Machine monitoring conditions using system				
dynamic analysis.	6		3	
MATLAB Simulation of multiple degree of				
freedom systems			3	
Total hours	45	30	15	
Topics taught as a percentage of the content specified:		>90 %	70-90 %	<70%

Reasons in detail for not teaching any topic: Non

If any topics were taught which are not specified, give reasons in detail: Non

Achieved program intended learning outcomes, ILO's:

Knowledge & Understanding	Intellectual skills	Applied Skills	General transferable skills
a1 to a7	b1 to b4	c1 to c4	d1 to d3

## 2- Teaching and learning methods:

Lecture, presentations, discussions, tutorials, problem solving, self-learning

If teaching and learning methods were used other than those specified, give reasons:

Non

### 3- Student assessment:

Method of assessment	Points	%
Written examination	70	70
Oral examination	Non	0
Practical/laboratory work	Non	0
Other assignments/class work	20	20
Mid-Term Exam	10	10
Total	100	100

Members of examination committee: Assoc. Prof. Gaafar A. Hussein

Role of external evaluator: Non

4- Facilities and teaching materials:

Totally adequate	Yes
Adequate to some extent	
Inadequate	

List any inadequacies:

**5- Administrative constraints** (List any difficulties encountered)

Non



➤ Non

## 6- Student evaluation of the course:

1.1.6	D ( )
List any criticisms	Response of course team
LIST ALLY CHUCISHIS	Nesponse of course team

# 7- Comments from external evaluator(s):

	Comment	Response of course team
(a)	Non	

### 8- Written Exam Evaluation

- > The exam level is convenient, considering the percentage of high grades.
- The whole exam result shows considerable weakness in engineering units.

## 9- Course enhancement:

Progress on actions identified in the previous year's action plan. State whether or not completed and give reasons for any non-completion:

Ī	Actions required	Planned Completion date	Accomplishment

9- Action plan for academic year 2016 - 2017

Actions required	Completion date	Person responsible
(a)		

Course coordinator: Assoc. Prof. Gaafar A. Hussein

Signature:

Date: September 15, 2016



# Semester Course Report Academic year 2015-2016

#### **A- Basic Information**

- 1- Course Code & Title: (MNF 411) Mechanical Measurements
- 2- Program(s) on which this course is given: Manufacturing Engineering and Prod. Tech. BSc Program
- 3- Year/Level of program: Fourth Year/Third level
- 4- Teaching/Credit hours

Credit 3 hrs Lectures 2 hrs Tutorial 1 hrs Practical 2 hr

**5- Names of lecturers contributing in teaching the course**: Prof. Dr. Nabil Gadallah

**6- Course coordinator:** Prof. Dr. Nabil Gadallah

7- External evaluator: Non

## **B- Statistical Information**

No. of students attending the course: No. of students completing the course:

Results:

	No.	%
Passed	109	97.3
Failed	3	2.7

No.	112	100	%

112

No.

100

%

Grading of successful students:				
Grade No. %				
Excellent	24	2.7		
Very Good	34	21.4		
Good	38	33.9		
Pass	13	11.6		

# **C- Professional Information**

Topic	Lecture hours	Tutorial hours	Practical hours
System Characteristics & Standards of Measurements	4	2	4
System Response		1	2
Traceability, Repeatability & Accuracy	2	1	2



Sensors (Sensing Elements)	2	1	2
Dimensional & Displacement Measurements	2	1	2
Strain Measurement	2	1	2
Measurement of Time, Speed, Acceleration & Frequency	2	1	2
Measurements of Force, Torque & Power	2	1	2
Measurement of Pressure	2	1	2
Temperature Measurement	2	1	2
Measurement of Liquid Level	2	1	2
Measurement of Fluid Flow	2	1	2
Data Acquisition System	2	1	2
Indicating & Recording Instruments	2	1	2
Revision	2		
Total hours	30	15	30

# 2- Teaching and learning methods:

Lecture, presentations, discussions, tutorials, problem solving, self-learning, modeling and Laboratory Experiments

If teaching and learning methods were used other than those specified, give reasons:

Non

Non

#### 3- Student assessment:

Method of assessment	Points	%
Written examination	60	60
Oral examination	Non	0
Practical/laboratory work	20	20
Other assignments/class work	10	10
Mid-Term Exam	10	10
Total	100	100

Members of examination committee:

Prof. Dr. Nabil Gadallah and Prof. Dr. Ahmed Sarhan

Role of external evaluator:

4- Facilities and teaching materials:

Totally adequate	Yes
Adequate to some extent	
Inadequate	

List any inadequacies:

Non

5- Administrative constraints (List any difficulties encountered)

None

# 6- Student evaluation of the course:

7- Comments from external evaluator(s):

	Comment	Response of course team
(a)	Non	

# 8- Written Exam Evaluation

➤ The exam level is convenient, considering the percentage of success.

#### 9- Course enhancement:

Progress on actions identified in the previous year's action plan. State whether or not completed and give reasons for any non-completion:

Actions required	Planned Completion date	Accomplishment
Non		

# 9- Action plan for academic year 2016 - 2017



Non

Course coordinator: Prof. Dr. Nabil Gadallah

Signature:

Date: February 24, 2016

# Semester's Course Report Academic year: 2015-2016 Semester: Spring

# **A- Basic Information**

1- Title and code: (MNF 461) Project 1

- 2- Program(s) on which this course is given: Manufacturing Eng. and Prod. Tech. BSc. Program
- 3- Year/Level of program: Third Level
- 4- Credit hours: 2 Lec.: 1 Tutorial: Practical: 3 Pre-requisite: MNF362
- 5- Names of lecturers contributing to the delivery of the course All teaching Staff members

Course coordinator Dr. Metwally H. Metwally

External evaluator: None

# **B- Statistical Information**

No. of students attending the course: No. 122 100%
No. of students completing the course: No. 122 100%

Results:

	No.	%	Grading of succes	sful students	3:
Passed	121	99.12		No.	%
Failed	1	0.82	Excellent	76	62.3
			Very Good	33	27.05
			Good	10	8.2
			Pass	0	0

# **C** - Professional Information

3 - Contents

Tonio	Lecture	Tutorial	Practical
Торіс	hours	hours	hours



The project requires the following steps to be carried out:	15	90
✓ The literature survey.		
Choice of the project construction based on some existing variants.		
✓ Preparation of the constructional drawings of parts.		
✓ Design of the most dangerous parts.		
<ul> <li>Preparation of the process sheets to manufacture the parts.</li> </ul>		
✓ Assembly and testing of the project.		
✓ Calibration of some parameters (if any).		
✓ Preparation of the report		
✓ Preparation of the presentation.		
Total hours	15	90

Tο	pics	taught	as a	percentage	of the	content s	specified
. •	P			P 0 . 0 0	••		

>90 % --- 70-90 % 80 <70% ...

Reasons in detail for not teaching any topic Shortage of time. The actual term was 13 Weeks If any topics were taught which are not specified, give reasons in detail None

### 2- Teaching and learning methods:

Lectures: Weekly Lecture Practical: Weekly lab.

Other assignments/homework: weekly assignments

If teaching and learning methods were used other than those specified, list and give reasons: Non

#### 3- Student assessment:

Method of assessment	Percentage of total
Written examination	-
Oral examination	30
Practical/laboratory work	30 %
Other assignments/class work	40 %
Mid-Term Exam	0 %
Total	100 %

**Members of examination committee**All members of teaching staff
Role of external evaluator
None

### 4- Facilities and teaching materials:

Totally adequate Yes

Adequate to some extent

Inadequate

List any inadequacies

#### 5- Administrative constraints

List any difficulties encountered

#### 6- Student evaluation of the course:

List any criticisms	Response of course team
None	

### 7- Comments from external evaluator(s): Non

#### 8- Course enhancement:

Progress on actions identified in the previous year's action plan: No previous comments

Action State whether or not completed and give reasons for any non-completion

Non

### 9- Action plan for academic year 2016 - 2017

Actions required Completion date Person responsible



Non

Course coordinator:

Dr. Metwally H. Metwally

Signature:

**Date:** 28/8/2016

# Semester's Course Report Academic year: 2015 - 2016 Semester: Spring

## A- Basic Information

1- Course Code & Title: (MNF424) Advanced Composite materials

2- Program(s) on which this course is given: Manufacturing Eng. & Prod. Tech. BSc Prog.

3- Year/Level of program: Third

4- Credit hours

Credit 3 hrs Lectures 2 hrs Tutorial 1hrs Practical 2hr

5- Names of lecturers contributing to the delivery of the course: Dr. Maher Khalifa

**6- Course coordinator:** Dr. Maher Khalifa

7- External evaluator: Non

### **B- Statistical Information**

5- No. of students attending the course:6- No. of students completing the course:

No. 97 100 % No. 97 100 %

7- Results:

	No.	%
Passed	93	95.876
Failed	4	4.124

Grading of successful students:						
Grade No. %						
Α	11	11.34				
В	22	22.68				
С	32	32.99				
D	28	28.865				

# **C- Professional Information**

i oodioc tedoimig			
Topic	Lecture hours	Tutorial hours	Practical hours
<ul> <li>Engineering materials (Types and applications)</li> </ul>	1	2	2



Materials selections		3	
Qualitative material selection	2		
Quantitative material selection	2		2
Concept of cost per unit property	2		
<ul> <li>Case study of metal substitutions</li> </ul>	2		
Materials for low temperature applications-Polymer (structure, properties, behavior, classifications)	2	3	2
<ul> <li>Materials for high temperature applications-Ceramic (structure, properties, behavior, classifications)</li> </ul>	2		2
Composite materials-high performance materials			
<ul> <li>Structure, properties, behavior, classifications</li> </ul>	2	4	4
Composite design guide and architectural	2		4
Raw materials for part fabrications	2		4
Product development & Product life cycle	2		
Design for Assembly Manufacturing	2	3	2
Failure Mode and Effect Analysis (FMEA)	2		
Manufacturing techniques			2
Reinforcement manufacturing-(CF, GF, others)	1		2
Composite manufacturing	2		2
Recycling of composites	1		2
New trends in material technology	1		
Total hours	45	15	30

Topics taught	t as a percent	age of the content	specified:				
>90 %	<b>6</b> 100	70-90 %		<70%			
Reasons in detail for not teaching any topic None							
If any topics were taught which are not specified, give reasons in detail							
None, all of the missed teaching hours were substituted							

<b>7</b> _ `	Teaching	and	laarnina	methods:

Lecture: bi-weekly Lecture	
Practical training/ laboratory: 🛭	veekly Practical Training
Seminar/Workshop:	
Class activity:	
Case Study:	
Other assignments/homework:	assignments
If teaching and learning methods	were used other than th

If teaching and learning methods were used other than those specified, list and give reasons: Non

# 3- Student assessment:

Method of assessment	Points	%
Written examination	60	60
Oral examination	0	0
Practical/laboratory work	20	20
Other assignments/class work	10	10
Mid-Term Exam	10	10
Total	100	100

Members of examination committee Dr. Maher Khalifa Role of external evaluator Non

4-	<b>Facilities</b>	and	teac	hing	ma	teria	IS:
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Totally adequate

Adequate to some extent



Inadequate

List any inadequacies

..... Non

5- Administrative constraints

List any difficulties encountered

6- Student evaluation of the course: 78%
Response of course team Non
List any criticisms Non

7- Comments from external evaluator(s):

Response of course team Non

8- Course enhancement:

Progress on actions identified in the previous year's action plan: No previous comments Action State whether or not completed and give reasons for any non-completion Non

9- Action plan for academic year 2016 - 2017

Actions required Completion date Person responsible

Non

Course coordinator: Dr. Maher Khalifa

Signature:

**Date:** 13/6/2016

# 2016/2017

# Senior 2, Ninth Semester

Code	Course			
MNF521	Computer Aided Manufacturing (CAM)			
MNF511	Quality Control and Quality Management			
MNF561	Project-2a			
MNF522	Hydraulic Power Systems			
MNF523	Production Aids Design			
	Elective-3:			
MNF 551	a) Environmental Studies			
MNF 552	b) Industrial Project Management			
<b>GEN 453</b>	c) Industrial Psychology			
	Elective-4:			
MNF 531	a) Modeling and Simulation.			
MNF 538	b) Advanced Casting Techniques.			
MNF 532	c) Failure Analysis and Fracture			

Senior 2, Tenth Semester



Code	Course			
MNF 524	Industrial Thermal Systems			
	Elective-5:			
MNF 553	a) Industrial social impact.			
GEN 454	b) Basics of Engineering Syndicate Works			
GEN 352	c) Engineering Laws and Regulations			
MNF 562	Industrial Training (2)			
MNF 563	Project-2b			
	Elective-6:			
MNF 536	a) Industrial Robotics			
MNF 533	b) Rapid Prototyping			
MNF 534	c) Automation in Production and CIM			
	Elective-7:			
MNF 530	a) Advanced Forming Techniques.			
MNF 535	b) Advanced Facility Planning			
MNF 537	c) Electro- Hyd.& pneumatic Systems			

# Semester's Course Report Academic year: 2016 - 2017 Semester: Fall

### A- Basic Information

1- Course Code & Title: (MNF521) Computer Aided Manufacturing

2- Program(s) on which this course is given: Manufacturing Eng. and Prod. Tech. BSc Program

3- Year/Level of program: : 4th Level

**4- Credit hours: 3** Lectures: 2 hrs Tutorial: -- Practical: 2 hrs **5- Names of lecturers contributing to the delivery of the course**: Dr. Atef Affifi

**6- Course coordinator:** Dr. Atef Afifi

7- External evaluator: Non

### **B- Statistical Information**

No. of students attending the course: No. of students completing the course:

Results:

	No.	%
Passed	96	93.2
Failed	7	6.79

No.	103	100	%
No.	103	100	%

Grading of successful students:					
Grade No. %					
Α	15	14.563			
В	31	30.097			
С	29	28.156			
D	21	20.388			

# **C- Professional Information**

Topic	Lecture hours	Tutorial hours	Practical hours
Fundamentals of CAM	3		
Part programming using tool compensation (length and radius)	4		2
Canned cycles of CNC milling	3		4



Canned cycles of CNC turning	3	4
Subprogram techniques for CNC part programming	3	4
Introduction to computer Aided Part Programming	3	2
Computer Aided Part Programming of Milled parts	3	4
Computer Aided Part Programming of Turned parts	4	4
Computer Aided Process Planning	4	6
Total hours	30	30

i opics taught as a perc	entage of the content	t specifiea:	
<b>&gt;90</b> % 100	70-90 %	<70%	
Reasons in detail for no	ot teaching any topic	None	
If any topics were taugh	nt which are not spec	ified, give reaso	ns in detail
None, all of the missed to	eaching hours were sub	ostituted.	

# 2- Teaching and learning methods:

- Course notes: Lecture notes and Handouts
- Required books:
  - Nanfara, F, Uccello, T and Murphy, D., The CNC workshop (A multimedia introduction to computer numerical control), Addison-Wesley Longman Inc., 1999
  - Radhakrishnan, p and Subramanian, S, CAD/CAM/CIM, New age international Ltd. Publishers, 1994
  - RAO, P.N,CAD/CAM principles and applications, Tata McGraw-Hill publishing Company limited, 2004

practical training/ laboratory: CAMWORKS

Seminar/Workshop: Class activity: Weekly

Case Study:

Other assignments/homework: weekly assignments

If teaching and learning methods were used other than those specified, list and give

reasons: Non

#### 3- Student assessment:

Assessment Method		Timing	Grade (Degrees)	
Mid-Term Exam		7-th Week	10	
Semester Work	Quizzes	4 Quizzes(every 3 weeks)2 degree for each one	4	
	Reports	One report per semester	2	
Assignment		Bi-Weekly	4	
Practical Exam		Fifteenth week	20	
Written Exam		Sixteenth week	60	
	Total			

Members of examination committee Dr. Atef Afifi Role of external evaluator Non

4-	<b>Facilities</b>	and	teachi	ing	materi	al	s:
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Totally adequate
Adequate to some extent
Inadequate
List any inadequacies:

5- Administrative constraints
List any difficulties encountered

6- Student evaluation of the course: 31 %



Response of course team Non List any criticisms Non

# 7- Comments from external evaluator(s):

Response of course team Non

#### 8- Course enhancement:

Progress on actions identified in the previous year's action plan: No previous comments Action State whether or not completed and give reasons for any non-completion Non

### 9- Action plan for academic year 2017 - 2018

Actions required Completion date Person responsible

Non

Course coordinator: Dr. Atef Afifi

Signature:

**Date:** 20/9/2017

# Semester Course Report

For Spring Semester 2016/2017

#### A- Basic Information

1- Title and code: Modeling & Simulation (Elective 4): MNF 531

2- Program(s) on which this course is given: Manufacturing Eng. and production Tech. Prog.

**3- Year/Level of program:** 4th Level, Manufacturing Eng. & Prod. Tech. / 2nd term

**4- Unit hours**: Creit Hours 3 Lecture: 2 Tutorial 1 Practical:2

5- Names of lecturers contributing to the delivery of the course:

Dr. Abdelmagid A. Abdalla

Course coordinator: Dr. Abdelmagid A. Abdalla

External evaluator: None

**B- Statistical Information** 

No. of students attending the course: 112
No. of students completing the course: 112

Results:

	No.	%	Grading of successful	student	s:
<b>Passed</b>	112	100		No.	%
Failed	0	0	Excellent	34	30.36
			Very Good	35	31.25
			Good	32	28.57
			Pass	11	9.82

## **C- Professional Information**

Topic	Lecture hours	Tutorial hours	Practical hours
Continuous and Discrete system simulation	2	-	-
Development of simulation models	6	3	6
Random number generation	4	2	4
Model Validation, and analysis of model output	4	2	4
Impact of nonlinearity and transient behavior	4	2	4



Dynamic system analysis	4	2	4
Application of simulation packages.	4	3	6
Revision	2	1	2
Total hours	30	15	30

Topics taught as a percentage of the content specified:

>90 % 70-90 % .... <70% ....

 Reasons in detail for not teaching any topic: - reduced hours due to the actual duration of the semester was 12 weeks.

# 2- Teaching and learning methods:

Lectures: Classical lecturing using the white board

Practical training/ laboratory: Solving some problems using Matlab &Simulink

Seminar/Workshop: None

Class activity:
 Solution of Problems

Case Study: None

Other assignments/homework: Assignment report weekly

If teaching and learning methods were used other than those specified, list and give reasons: None

#### 3- Student assessment:

Method of assessment

Written examination

Oral examination

Practical/laboratory work

Other assignments/class work

Mid-Term Exam

Total

Percentage of total

60

20

100 %

**Members of examination committee**Role of external evaluator
Dr. Abdelmagid A. Abdalla
None

### 4- Facilities and teaching materials:

Totally adequate
 Adequate to some extent
 Inadequate
 List any inadequacies

#### 5- Administrative constraints

List any difficulties encountered	None

#### 6- Student evaluation of the course:

List any criticisms	Response of course team		
No books for tutorial and the lectures.	>	Books for lectures and exercises will be prepared.	
Change of a teaching assistant.	>	This will be considered next semester.	

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

Response of course team

None

#### None

## 8- Course enhancement:

- Progress on actions identified in the previous year's action plan: None
- Action State whether or not completed and give reasons for any non-completion. None



9- Action plan for academic year 2017-2018

	Actions required	Completion date	Person responsible
➤ Pr	reparation of a lecture and tutorial book	September 2017	Lec. Ass.: Yehia Elattar

Course coordinator:

Dr. Abdelmagid A. Abdalla

Signature:

**Date: 28/7/**2017

# Semester's Course Report Academic year: 2016 - 2017 Semester: Fall

#### A- Basic Information

1- Course Code & Title: (MNF511) Quality Control & Quality Management

2- Program(s) on which this course is given: Manufacturing Eng. and Prod. Tech. BSc Program

3- Year/Level of program: : 4th Level

**4- Credit hours : 3** Lectures 2 hrs Tutorial 1 hr Practical 2 hrs **5- Names of lecturers contributing to the delivery of the course**: Dr. Mohamed Saad

6- Course coordinator: Dr. Mohamed Saad

7- External evaluator: Non

### **B- Statistical Information**

22- No. of students attending the course:

23- No. of students completing the course:

24- Results:

	No.	%
Passed	94	98.9
Failed	1	1.1

No.	95	100	%	
No.	95	100	%	
		·		

Grading of successful students:				
Grade	le No. %			
Α	19	20.2		
В	38	40.4		
С	25	26.6		
D	12	12.8		

# **C- Professional Information**

Topic	Lectur hours		Practical hours
1- Introduction to quality	2	1	2
2- Quality improvement techniques	2	1	2
3- Total quality management	2	1	2



4- Quality cost	2	1	2
5 – Fundamentals of statistics and quality	2	1	2
6- Control charts for variables	4	2	4
7- Fundamentals of probability and quality	4	2	4
8- ISO quality systems	4	2	4
9- Acceptance sampling plans	2	1	2
10- Acceptance sampling systems	2	1	2
11- Reliability and quality	2	1	2
12- Computers and quality control	2	1	2
Total hours	30	15	30

O CONTROL CHARLO FOR VARIABLES		_	
7- Fundamentals of probability and quality	4	2	4
8- ISO quality systems	4	2	4
9- Acceptance sampling plans	2	1	2
10- Acceptance sampling systems	2	1	2
11- Reliability and quality	2	1	2
12- Computers and quality control	2	1	2
Total hours	30	15	30
Topics taught as a percentage of the content spec >90 % 100 70-90 % Reasons in detail for not teaching any topic None If any topics were taught which are not specified, None, all of the missed teaching hours were substituted.	<70%	] n detail	
<ul> <li>2- Teaching and learning methods:</li> <li>Course notes: Lecture notes and Handouts</li> <li>Required books: Non.</li> <li>Recommended books: Dale Bester field, "Quality Cor</li> <li>Periodicals, Web sites, etc.:         Available relevant Web sites     </li> </ul>	ntrol", Prentice Hall	, 1998, Fifth	n edition.
Practical training/ laboratory: Minitab Application Seminar/Workshop: Bi-weekly workshops Class activity: Weekly Case Study: Other assignments/homework: weekly assignments If teaching and learning methods were used other treasons: Non		cified, list	t and give
3- Student assessment:			
Assessment Method	Timing		(Degrees)
Semester Work: seminars, quizzes assignments and reports	Bi-Weekly		10
Mid-Term Evam	8-th Week		10

# 3-

Assessment Method	Timing	Grade (Degrees)
Semester Work: seminars, quizzes assignments and reports	Bi-Weekly	10
Mid-Term Exam	8-th Week	10
Practical Exam	Fifteenth week	20
Written Exam	Sixteenth week	60
Total		100

Members of examination committee Dr. Mohamed Saad Role of external evaluator Non

4- Facilities and teaching materials:	
Totally adequate	
Adequate to some extent	

Inadequate List any inadequacies

Yes

5- Administrative constraints List any difficulties encountered

6- Student evaluation of the course: 76 %



Response of course team Non List any criticisms Non

7- Comments from external evaluator(s): Response of course team Non

#### 8- Course enhancement:

Progress on actions identified in the previous year's action plan: No previous comments Action State whether or not completed and give reasons for any non-completion: Non

9- Action plan for academic year 2017 - 2018

**Actions required** 

**Completion date** 

Person responsible

Non

Course coordinator: Dr. Mohamed Saad

Signature:

**Date:** 20/9/2017

Annual Course Report Academic year: 2016 - 2017 Semester: spring

# **A- Basic Information**

1- Course Code & Title: (MNF 524) Industrial Thermal Systems

2- Program(s) on which this course is given: Manufacturing Engineering & Prod. Tech. BSc Program

3- Year/Level of program: 5th/4

4- Credit hours

Credit 3 hrs Lectures 2 hrs

Tutorial 1 hrs Practical 2

5- Names of lecturers contributing to the delivery of the course: Assoc. Prof. Gaafar Hussein

**6- Course coordinator:** Assoc. Prof. Gaafar Hussein

7- External evaluator: Non

# **B- Statistical Information**

25- No. of students attending the course:

26- No. of students completing the course:

27- Results:

	No.	%
Passed	103	100
Failed	0	0

No.	103	100	%
No.	103	100	%

Grading of successful			
students:			
Grade	No.	%	
Α	11.65		
В	48	46.60	
С	32	31.07	
D	11	10.68	

### **C- Professional Information**

Tania	Lecture	Tutoria	Practica
Торіс	hours	I hours	I hours



Classifications of metal melting furnaces and operating principles of			
each	4		4
	4		4
The meaning of furnace efficiency and the parameters considered to			
achieve efficient operation of furnaces, performance evaluation of	4	4	
different furnaces	4	4	
Heat recovery techniques and estimation of fuel saving in furnaces.	2	2	2
Operating principle of heat treatment salt bath furnaces, their			
description, performance evaluation, and development	2	2	4
Types of forging heating furnaces, their technical features and			
performance	2		4
Principle of operation of induction furnace, features, construction,			
types, advantages and disadvantages	2		4
Meaning of slag and mechanism of its formation, slag classification and			
its foaming characteristics, slag metal refining	2		
Heating boilers: operating principles, types, working pressures and			
temperatures, main components, safety issues, best practices for	^	_	_
efficient operation, boiler control, boiler performance evaluation.	6	3	6
Temperature measurement and control in industries: temperature			
measurement inside furnaces, flue gas channels, in large tanks, in			
metal melting and salt baths, in plastic extruders, in heat exchanger			
pipes, in housings and walls, in bearing shells. Temperature control			
techniques.	2		2
Refrigeration and air conditioning: processes, basic components,			
control, applications.	4	4	4
Total hours	30	15	30

Topics taught as a percentage of the content specified:

Reasons in detail for not teaching any topic: Non

If any topics were taught which are not specified, give reasons in detail: Non

Achieved program intended learning outcomes, ILO's:

Knowledge & Understanding	Intellectual skills	Applied Skills	General transferable skills
a1 to a3	b1 to b3	c1 to c3	d1 to d3

# 2- Teaching and learning methods:

Lecture, presentations, discussions, tutorials, problem solving, self-learning

If teaching and learning methods were used other than those specified, give reasons:

Non

<70%

**>90 %** 70-90 %

### 3- Student assessment:

Method of assessment	Points	%
Written examination	60	60
Oral examination	Non	0
Practical/laboratory work	20	20
Other assignments/class work	10	10
Mid-Term Exam	10	10
Total	100	100

Assoc. Prof. Gaafar A. Hussein Members of examination committee:

Role of external evaluator:

Non

Facilities and teaching materials:



Totally adequate	Yes
Adequate to some extent	
Inadequate	

List any inadequacies:

Non

**5- Administrative constraints** (List any difficulties encountered)

Non

#### 6- Student evaluation of the course:

List any criticisms		Response of course team
	none	

7- Comments from external evaluator(s):

Comment		Response of course team
(a)	Non	

#### 8- Written Exam Evaluation

- > The exam level is convenient, considering the percentage of high grades.
- > The whole exam result shows considerable weakness in engineering units.

### 9- Course enhancement:

Progress on actions identified in the previous year's action plan. State whether or not completed and give reasons for any non-completion:

Actions required	Planned Completion date	Accomplishment

9- Action plan for academic year 2017 - 2018

Actions required	Completion date	Person responsible
Actions required	Completion date	r et son responsible

Course coordinator: Assoc. Prof. Gaafar A. Hussein

Signature:

Date: September 15, 2017



# Annual Course Report 2016/2017

### **A- Basic Information**

1- Title and code: MNF523: Production Aids Design

2- Program(s) on which this course is given: Manufacture

3. Year/Level of program: 5<sup>th</sup> Year Manufacturing Technology / 4<sup>th</sup> Level
4- Credit hours: 3 Lectures 2hrs Tutorial 1 Hrs Practical 2 Hrs

5- Names of lecturers contributing to the delivery of the course: Dr. M. Merdan

Course coordinator: Dr. M. Merdan

External evaluator: None

#### **B**- Statistical Information

No. of students attending the course: 129
No. of students completing the course: 127

**Results:** 

	No.	%	Grading of successful students:		
Passed	117	92.18		No.	%
Failed	10	7.82	Excellent	15	11.81
			Very Good	26	20.47
			Good	35	27.58
			Pass	41	32 23

# **C- Professional Information**

# 1 – Course teaching

Lecturer: Dr. M. Merdan

Торіс	Lecture hours	Tutorial hours	Practical hours
Cutting tools design and the proper selection for particular applications	4	2	4
Jigs and fixtures design	4	2	4



		ى بالمعــادى	مــودرن اکـــادیمــ
Plastics materials and molding processes.	2	2	
Plastic molds design.	8	2	8
Sheet metals dies design,	4	2	5
Forging and deep drawing dies.	4	2	5
Economic evaluation of molds and dies design	4	2	
Using the available software packages, in design and	2	1	4
manufacture of molds and dies			7
Total	30	15	30
<ul> <li>Topics taught as a percentage of the content specific</li> </ul>	ed:		
>90 % 100 70-90 %	< <b>70</b> %		
<ul> <li>Reasons in detail for not teaching any topic</li> </ul>			
<ul> <li>If any topics were taught which are not specified, given</li> </ul>	ve reasons ir	n data	
- Teaching and learning methods:	1.11		
• Lectures: Classical lecturing using the v	vhite boar		
<ul> <li>Practical training/ laboratory: Yes</li> </ul>			
Seminar/Workshop: Yes			
<ul> <li>Class activity: Solution of problems</li> </ul>			
<ul><li>Case Study: None</li></ul>			
<ul><li>Other assignments/homework: Assignment report</li></ul>	each 4 week	(S	
If teaching and learning methods were used other than those s	specified, list	and give r	easons: No
- Student assessment:			
	Percentage o	of total	
<ul><li>Written examination</li></ul>	60 9		
<ul> <li>Oral examination</li> </ul>	<u> </u>		
<ul> <li>Practical/laboratory work</li> </ul>	20 %	7	
Other assignments/class work	10 %	₹	
Mid-Term Exam	10 %	4	
Total	100 9		
	100	<b>7</b> 0	
Mombars of avamination committee			
	Dr. M. Merd	an	
Members of examination committee Role of external evaluator		an	
Role of external evaluator	Dr. M. Merd	an	
Role of external evaluator - Facilities and teaching materials:	Dr. M. Merd none	an	
Role of external evaluator  - Facilities and teaching materials:  - Totally adequate	Dr. M. Merd	an	
Role of external evaluator  - Facilities and teaching materials:  - Totally adequate - Adequate to some extent	Dr. M. Merd none	an	
Role of external evaluator  - Facilities and teaching materials:  - Totally adequate - Adequate to some extent	Dr. M. Merd none	an	
Role of external evaluator  - Facilities and teaching materials:  - Totally adequate - Adequate to some extent - Inadequate - List any inadequacies	Dr. M. Merd none	an	
Role of external evaluator  - Facilities and teaching materials:  - Totally adequate - Adequate to some extent - Inadequate - List any inadequacies  - Administrative constraints	Dr. M. Merd none	an	
Role of external evaluator  - Facilities and teaching materials:  - Totally adequate - Adequate to some extent - Inadequate - List any inadequacies  - Administrative constraints	Dr. M. Merd none	an	
Role of external evaluator  - Facilities and teaching materials:  - Totally adequate - Adequate to some extent - Inadequate - List any inadequacies  - Administrative constraints List any difficulties encountered	Dr. M. Merd none	an	
Role of external evaluator  - Facilities and teaching materials:  - Totally adequate - Adequate to some extent - Inadequate - List any inadequacies  - Administrative constraints List any difficulties encountered	Dr. M. Merd none Yes	an	team
Role of external evaluator  - Facilities and teaching materials:  - Totally adequate - Adequate to some extent - Inadequate - List any inadequacies  - Administrative constraints	Dr. M. Merd none Yes	an	team

Response of course team

None

8- Comments from external evaluator(s):

None



#### 9- Course enhancement:

Progress on actions identified in the previous year's action plan: None

Action State whether or not completed and give reasons for any non-completion: None

10- Action plan for academic year 2017 - 2018

**Actions required Completion date** Person responsible

None

**Course coordinator:** Dr. M. Merdan

Signature: M. Merdan **Date:** 25/2/2018

# **Annual Course Report** Academic year 2016-2017

# **A- Basic Information**

- 1- Title and code: (GEN 352) Engineering Laws & Regulations
- 2- Program(s) on which this course is given: قوانين وتشريعات هندسيه
- 3- Year/Level of program: Fourth Year/Second Semester
- 4- Credit hours: 2 Lectures 2hrs Practical 0 Tutorial 0 5- Names of lecturers contributing to the delivery of the course: Dr.Abeer Serag eldeen

**Course coordinator:** Dr. Abeer Serag eldeen

External evaluator: Non

#### **B- Statistical Information**

No. of students attending the course: 100 % No. of students completing the course: 94.6 %

Results:

No. %		Grading of success	sful students:		
Passed	77	88.5	•	No.	%
Failed	10	11.5	Excellent	7	8
			Very Good	12	13.8
			Good	11	12.6
			Pass	59	55.7

#### **C- Professional Information**

Topic	Tota	Total hours	
Торіс	Plan.	Actual	
مقدمه ومفاهيم وبعض العاريف.	2	2	
التوحيد القياسي والشخصيه العتباريه والتسجيل في السجل التجاري •	۲	۲	en
العلامه التجاريه والمنشاة المضره بالبيئه •	۲	۲	Abeer
التخطيط اتلعام والتفصيلي للقرى والمدن •	۲	۲	
تقسيم الاراضي لاغراض البناء •	2	2	Dr.
التلوث البيئي والقوانين المصريه للحد من التلوث •	۲	۲	



المناقصات العامه •			7 7
المناقصات المحدوده •			7 7
المزادات •			7 7
اخلاقيات العمل الوظيفى • اخلاقيات المهنه •			2 2
احلاقیات مهنة الهندسه • اخلاقیات مهنة الهندسه •			7 7
	I hours		7
Topics taught as a percentage			12
>90 % 100	70-90 %	<70%	
Reasons in detail for not teachi If any topics were taught which Achieved program intended lea	ng any topic Non are not specified, give i		Non
Knowledge and Understanding	Intellectual skills	Applied Skills	General transferable skills
a1 to a10	b1 to b5	7 Applied Citile	Contrat transferable sixtile
	2.1000	1	<u>I</u>
2- Teaching and learning methods: Lectures: Lecture and discuss Practical training/ laboratory: Seminar/Workshop: Non Class activity: Word reporting Case Study: Selected case studi Other assignments/homework: If teaching and learning methods	es Bi-weekly discussi		nd give reasons: Non
3- Student assessment:    Method of assessment    Written examination    Oral examination    Attendance    Other assignments/class work    Mid-Term Exam    Total    Members of examination comm    Role of external evaluator	<b>ittee</b> Dr. Abeer Hassan	[ [ [ Serag ElDeen	ge of total 70 % 10 % 5 % 10 % 10 % 10 %
4- Facilities and teaching materials: Totally adequate Adequate to some extent Inadequate List any inadequacies:		Yes  Non	
5- Administrative constraints List any difficulties encountered ➤ Non	d		
6- Student evaluation of the course List any criticisms Non	Respons	e of course team	
7- Comments from external evaluate  Non  The analysis of written exam res		e of course teaming weak points:	
•	_	•	



Accomplishment

High success percentage in all questions

8- Course enhancement:

Progress on actions identified in the previous year's action plan:

**Actions required Planned Completion date** 

Action State whether or not completed and give reasons for any non-completion Non

9- Action plan for academic year 2017-2018

**Actions required Completion date** Person responsible

Some chapters needed to exchange and adding 
End of second term 2016-2017 Dr. Abeer serag ElDeen

new subjects

**Course coordinator:** Dr Abeer serag ElDeen

Signature:

August 2, 2017 Date:

# **Annual Course Report** Academic year 2016-2017

## A- Basic Information

1- Course Code & Title: (MNF 522) Hydraulic Power Systems

2- Program(s) on which this course is given: Manufacturing Engineering & Prod. Tech. BSc Program

3- Year/Level of program: Fourth Year/Second Semester

4- Teaching hours:

2 hr Total 7hrs Lectures Tutorial 2 hrs Practical 3 hrs

5- Names of lecturers contributing to the delivery of the course: Prof. Dr. M Galal Rabie

Prof. Dr. M Galal Rabie Course coordinator:

External evaluator: Non

### **B- Statistical Information**

28- No. of students attending the course:

29- No. of students completing the course:

	No.	%
Passed	94	95.9
Failed	4	4.08

No.	98	100	1
No.	98	100%	

Grading of successful students:				
Grade	No.	%		
Α	29	30.8		
В	15	16		
С	25	26.6		
D	25	26.6		

# **C- Professional Information**

Topic	Total hours	ه د



	Plan.	Actual	
> Power systems, classification, operation, and comparison.	4		
➤ Introduction to hydraulic power systems and standard symbols	10	ster	
➤ Hydraulic fluids; properties and their effect on the system performance.	4	mes he by	
➤ Hydraulic transmission lines and connectors	10	s se y. T ated	
➤ Hydraulic pumps:	4	y this ator ens	
Classification and basic mathematical relations	4	furing this seme obligatory. The compensated by	
Gear pumps, vane pumps and piston pumps	4	s du	Ф
Fixed and variable displacement pumps and pump control	4	reek hour	Rabie
➤ Control valves	4	ng w 91 ours	Galal F
Classification and basic design		ichir al of g ho ng h	Ga
Pressure control valves (direct/pilot operated); relief valves, pressure reducers,      converge valves and accumulator charging valves.	6	The effective teaching weeks during this semester were 13 with total of 91 hours. obligatory. The reduced teaching hours were compensated by additional lecturing hours.	Dr. M
sequence valves and accumulator charging valves  • Directional control valves	4	ectiv with	Prof. I
Flow control valves	4	e effe re 13 uced	ᇫ
Check valves	5	The well	
Hydraulic actuators; cylinders, motors and rotary actuators	2		
> Accessories; accumulators, filters, reservoirs, pressure switches,,etc.	4	-	
> Small project; design and analysis of the hydraulic system for an industrial application. Analysis of the possible operational problems	6		
Total hours	105	84	

• Topics taught as a percentage of the content specified:

**>80 %** 70-90 % <70%

- Reasons in detail for not teaching any topic: Non
- If any topics were taught which are not specified, give reasons in detail: Non
- Achieved program intended learning outcomes, ILO's: Actually, all of the intended learning outcomes were
  achieved. The 13% obligatory cut of the net teaching hours was compensated by additional lecturing hours
  and seminars.

Knowledge & Understanding	Intellectual skills	Applied Skills	General transferable skills
a1 to a6	b1 to b3	c1 to c5	d1 to d4

# 2- Teaching and learning methods:

lecture, presentations & movies, discussions & seminars, tutorials, problem solving and self-learning, modeling If teaching and learning methods were used other than those specified, give reasons:

Non

# Seminar/Workshop:

- Two seminars were prepared by 8 students
- 13 technical reports were prepared by 13 students

The seminars and reports are not obligatory and evaluated by 10 bonus points maximum for each student.

#### 3- Student assessment:

Tools	To measure the content of	Time schedule	Grading	%
Mid-Term Exam	a1 to a6, b1 to b3 and c1 to c4	sixth week	15	10
Term papers, quizzes	a1 to a5, b1 to b3, c1, c2 and c4 and d1	Bi-weekly	15	10
and seminars	to d4			
Practical exams	a3, c1 and c5	Fifteenth week	20	13.3
Written exam	a1 to a6, b1 to b3 and c1 to c4 and d2	16 <sup>th</sup> week	100	66.7



Total	150	100

Members of examination committee: Dr. M. Galal RABIE and Dr. Abdelmegid Abdellatif

Role of external evaluator: Non

4- Facilities and teaching materials:

Adequate to some extent	
Inadequate	

List any inadequacies: Non

#### **5- Administrative constraints** (List any difficulties encountered)

➤ Non

#### 6. Comment on the Examination results and feedback

- > The exam paper header agrees with the MAM standard form
- The exam paper measures 73% of course ILO's measurable in written form and the variety of questions is practically balanced.
- ➤ The exam considers the course aims listed in the course specification.
- ➤ The exam level is practically convenient, considering the percentage of success.
- Low success percentage in questions 3 and 4 may be attributed to low attendance during the second half of semester. Moreover, it implies the need to develop new plans to encourage the students, or oblige them, to attend the late term activities.
- The exam result shows considerable weakness in hand sketching and report writing and English language level.
- The exam showed acceptable level in manipulation with numbers. However, a non-negligible percentage of students suffer from poor comprehension of SI units and numbers evaluation.

#### > 7- Student evaluation of the course:

	List any criticisms	Response of course team
(a)	Non	

#### 8- Comments from external evaluator(s):

	(-)	
	Comment	Response of course team
(a)	Non	

#### 9- Course enhancement:

Progress on actions identified in the previous year's action plan. State whether or not completed and give reasons for any non-completion:

Actions required	Planned Completion date	Accomplishment
Non		

## 10- Action plan for academic year 2017 – 2018

Actions required	Completion date	Person responsible
------------------	-----------------	--------------------

**Course coordinator:** Prof. Dr. M Galal Rabie

Signature:

**Date:** August 12, 2017



# Annual Course Report Academic year: 2016-2017

# **A- Basic Information**

1- Title and code: (MNF 562) Industrial Training 2

2- Program(s) on which this course is given: Manuf. Eng. & Prod. Tech. BSc. Program

**3- Year/Level of program:** Fourth Level

**4- Credit hours: 3** Lec.: 1 Tutorial: - Practical: 4 Pre-requisite: MNF462 **5- Names of lecturers contributing to the delivery of the course:** Training Sites

Course coordinator Dr. Abdelmagid A. Abdalla

External evaluator: None

# **B- Statistical Information**

No. of students attending the course: No. 152 100 % No. of students completing the course: No. 129 84.9 %

Results:

	No	%	Grading of succe	essful stud	ents:
Passed	12 9	100		No.	%
Failed	0	0	Excellent	85	66
			Very Good	44	34
			Good	0	0
			Pass	0	0

# C - Professional Information Contents

Topic Lecture Tutorial Practica hours hours
---



<ul> <li>Practical industrial training for two weeks- during the vacation at the end of the 8<sup>th</sup> semester- in a recognized industrial establishment.</li> <li>At the end of the training, student should submit a report with the following information:         <ul> <li>✓ Profile of the industry</li> <li>✓ Organization structure.</li> <li>✓ Product range</li> <li>✓ Processes</li> <li>✓ Machines, equipment, devices.</li> <li>✓ Personnel welfare scheme</li> <li>✓ Details of the training undergo</li> </ul> </li> </ul>	10	40
Projects undertaken during the training.(if any)		
Total hours	10	40

Topics taught as a percentage of the content specified:

>90 %		70-90 %	80	<70%	
s in deta	ail f	or not teaching	a anv	topic None	

Reasons in detail for not teaching any topic

If any topics were taught which are not specified, give reasons in detail None

# 2- Teaching and learning methods:

Lectures: Daily Lecture

Practical: Daily

Other assignments/homework: By the end of the training

If teaching and learning methods were used other than those specified, list and give reasons: Non

#### 3- Student assessment:

Method of assessment	Percentage of total
Written examination	0
Oral examination	40 %
Practical/laboratory work	60 %
Other assignments/class work	0
Mid-Term Exam	0
Total	100 %
Members of examination committee	Dept. Teaching Staff
Role of external evaluator	None

# 4- Facilities and teaching materials:

Totally adequate Yes

Adequate to some extent

Inadequate

List any inadequacies

### 5- Administrative constraints

List any difficulties encountered

# 6- Student evaluation of the course:

List any criticisms	Response of course team
None	None



# 7- Comments from external evaluator(s): Non

#### 8- Course enhancement:

Progress on actions identified in the previous year's action plan: None Action State whether or not completed and give reasons for any non-completion Non

9- Action plan for academic year 2017 - 2018

Actions required (

Completion date

Person responsible

Non

Course coordinator: Dr. Abdelmagid A. Abdalla

Signature:

**Date:** 28/10/2017

# Semester's Course Report Academic year: 2016 - 2017 Semester: Fall

### A- Basic Information

1- Course Code & Title: (MNF552) Industrial Project Management

2- Program(s) on which this course is given: Manufacturing Engineering and Prod. Tech. BSc Program

3- Year/Level of program: : 4th Level

4- Credit hours

Credit 2 hrs Lectures 2hrs Tutorial 0 Practical

5- Names of lecturers contributing to the delivery of the course: Dr. Ahmed Sarhan

**6- Course coordinator:** Dr. Ahmed Sarhan

7- External evaluator: Non

#### **B- Statistical Information**

31- No. of students attending the course:

32- No. of students completing the course:

No. No.

99	100	%
99	100	%

0

33- Results:

	No.	%
Passed	99	100
Failed	-	-

Grading of successful students:				
Grade	No. %			
Α	83	83.8		
В	15	15.2		
С	1	1		
D	-	0		

# **C- Professional Information**

Topic	Lecture hours	Tutorial hours	Practical hours
1- Introduction	1	-	-
2- Feasibility study	-	-	-



-Market study	1	-	-
-Technical study	1	-	-
<ul> <li>Financial &amp; Economic study</li> </ul>	1	-	-
<ul><li>Environmental study</li></ul>	1	-	-
3- Project Management	-	-	-
<ul> <li>Phases of a project &amp; steps of managing a project</li> </ul>	1	-	-
<ul> <li>The project management body of knowledge</li> </ul>	1	-	-
<ul> <li>The role of the project manager</li> </ul>	1	-	-
<ul> <li>Planning of a project</li> </ul>	1	-	-
<ul> <li>Developing a mission, vision, goals and objectives for the project</li> </ul>	1		-
34- Linear Programming	1	-	-
35- Assignment problems	4	-	-
Total hours	15	•	-

Topics taught as	s a percentage of the co	ntent spe	cified:	
<b>&gt;90</b> % 100	<b>70-90</b> %		<70%	
Reasons in detai	il for not teaching any to	pic Non		
If any topics were	e taught which are not s	specified,	give reaso	ons in detai
Non, all of the mis	ssed teaching hours were	substitute	ed.	

## 2- Teaching and learning methods:

- Course notes: Lecture notes and Handouts
- Required books: Non.
- Recommended books: A guide to the project management body of knowledge (PMBOK® guide).
  - -- Fifth edition 2013 The Project Management Institute, Inc
- Periodicals, Web sites, etc.: Available relevant Web sites

Practical training/ laboratory: Non

Seminar/Workshop: Bi-weekly workshops

Class activity: Weekly

Reports of different feasibility studies Case Study: Other assignments/homework: Bi-weekly assignments

If teaching and learning methods were used other than those specified, list and give

reason Non

### 3- Student assessment:

Role of external evaluator

Assessment Method	Timing	Grade (Degrees)
Semester Work: seminars, quizzes assignments and reports	Bi-Weekly	20
Mid-Term Exam	7-th Week	10
Practical Exam	-	-
Written Exam	Sixteenth week	70
Total	-	100

Semester Work: seminars, quizzes assignments and reports	Bi-Weekly	20
Mid-Term Exam	7-th Week	10
Practical Exam	-	-
Written Exam	Sixteenth week	70
Total		100
Members of examination committee Dr. Ahmed S	Sarhan	

Non

4- Facilities and teaching materials:	
Totally adequate	Yes
Adequate to some extent	
Inadequate	
List any inadequacies	Non



5- Administrative constraints

List any difficulties encountered

6- Student evaluation of the course: 86 %
Response of course team Non
List any criticisms Non

7- Comments from external evaluator(s):

Response of course team Non

8- Course enhancement:

Progress on actions identified in the previous year's action plan: No previous comments Action State whether or not completed and give reasons for any non-completion Non

9- Action plan for academic year 2017 - 2018

Actions required Completion date Person responsible

Non

Course coordinator: Dr. Ahmed Sarhan

Signature: Date: 20/2/2017

Semester's Course Report Academic year: 2016-2017 Semester: Spring

### A- Basic Information

1- Title and code: (MNF 561) Project 2a

2- Program(s) on which this course is given: Manufacturing Eng. and Prod. Tech. BSc. Program

3- Year/Level of program: Third Level

4- Credit hours: 2 Lec.: 1 Tutorial: - Practical: 3 Pre-requisite: non

5- Names of lecturers contributing to the delivery of the course

All staff members of the dept

Course coordinator Dr. Maher Khalifa

**External evaluator: None** 

### **B- Statistical Information**

No. of students attending the course: No. 105 100%

No. of students completing the course: No. 105 100%

No. % Grading of successful students: Passed 105 100 No.

 Passed
 105
 100
 No.
 %

 Failed
 0
 0
 Excellent
 88
 83.8

 Very Good
 17
 16.2

Good Pass

C - Professional Information

3 - Contents

Tonio	Lecture	Tutorial	Practical
Торіс	hours	hours	hours



The project requires the following steps to be carried out:	15	90
✓ The literature survey.		
✓ Choice of the project construction based on some existing variants.		
✓ Preparation of the constructional drawings of parts.		
✓ Design of the most dangerous parts.		
✓ Preparation of the process sheets to manufacture the parts.		
✓ Assembly and testing of the project.		
✓ Calibration of some parameters (if any).		
✓ Preparation of the report		
✓ Preparation of the presentation.		
Total hours	15	90

Results:

Topics taught as a percentage >90 % 100 70 Reasons in detail for not teachi If any topics were taught which are	90 %
2- Teaching and learning methods: Lectures: Weekly Lecture Practical: Weekly lab. Other assignments/homework: Versical of the same of the	eekly assignments vere used other than those specified, list and give reasons: Non
3- Student assessment: Method of assessment Written examination Oral examination Practical/laboratory work	Percentage of total 30% 30 %



Other assignments/class work 40 % Mid-Term Exam ---

Total 100 %

Members of examination committee All staff members of the dept.

Role of external evaluator None

4- Facilities and teaching materials:

Totally adequate Yes

Adequate to some extent

Inadequate

List any inadequacies

5- Administrative constraints List any difficulties encountered

#### 6- Student evaluation of the course:

List any criticisms	Response of course team		
non			

7- Comments from external evaluator(s): Non

8- Course enhancement:

Progress on actions identified in the previous year's action plan: No previous comments Action State whether or not completed and give reasons for any non-completion Non

9- Action plan for academic year 2017-2018

Actions required Completion date Person responsible

Non

Course coordinator: Dr Maher Khalifa

Signature:

Date: 28/8/2017

# Semester's Course Report

Academic year:2016-2017 Semester: Spring

# A- Basic Information

- 1- Course Code & Title:(MNF534) Automation in production and CIM
- 2- Program(s) on which this course is given: Manufacturing Engineering & Prod. Tech. BSc Program
- 3- Year/Level of program: :4th Level



4- Credit hours

Credit 3hrs Lectures 2hrs Tutorial 1hrs Practical 2hr

5- Names of lecturers contributing to the delivery of the course: Prof. Ahmed Kohail

Course coordinator: Prof. Ahmed Kohail

External evaluator: Non

# **B- Statistical Information**

No. of students attending the course: No. 110 100 %

No. of students completing the course: No. 110 100 %

Results:

	No.	%
Passed	104	94.5
Failed	6	5.5

Grading of successful students:				
Grade	No.	%		
Α	14	10.6		
В	30	21.2		
С	33	30.4		
D	27	37.8		

# **C- Professional Information**

1- Course teaching

Topic	Lecture hours	Tutorial hours	Practical hours
Automation economics	2		
Analysis of automated lines	2	2	-
Line balancing	2	2	-
Assembly lines	2	2	-
<ul> <li>CNC and robot applications</li> </ul>	4	2	4
Group technology	2	2	-
FMS and prod. cells	4	-	-
Linear feed-back control systems	2	2	2
Sequential control applications	2	-	10
<ul> <li>Applications for automatic filling systems</li> </ul>	2	-	4
Total hours	30	15	30

т	onics	taught	as a	percentage of	f the	content	specified:
•	ODICS	taugiit	นว น	Del Cellade O	uic	COLLECT	SDCCIIICU.

>90 % 100 70-90 % <70% ....

Reasons in detail for not teaching any topic None

If any topics were taught which are not specified, give reasons in detail

None, all of the missed teaching hours were substituted.

2- Teaching and learning methods:

Lectures: Classical lecturing using the white board

Practical training/ laboratory: Automation lab.

Seminar/Workshop: None

Class activity:
 Solution of problems

Case Study: PLC applications

Other assignments/homework: Assignment report each 4 weeks

If teaching and learning methods were used other than those specified, list and give reasons: None

### 3- Student assessment:

Assessment Method	Timing	Grade (Degrees)



Semester Work: seminars,	Bi-Weekly	10
quizzes assignments and reports		
Mid-Term Exam	8-th Week	10
Practical Exam	Fifteenth week	20
Written Exam	Sixteenth week	60
Total	100	

**Members of examination committee** Prof. Ahmed Kohail **Role of external evaluator** Non

4- Facilities and teaching materials:

Totally adequate

Adequate to some extent
Inadequate
List any inadequacies

Yes

.....

Non

5- Administrative constraints

List any difficulties encountered

6- Student evaluation of the course: 84%
Response of course team Non
List any criticisms Non

7- Comments from external evaluator(s): Response of course team Non

8- Course enhancement:

Progress on actions identified in the previous year's action plan: No previous comments Action State whether or not completed and give reasons for any non-completion Non

9- Action plan for academic year 2017 - 2018

Actions required Completion date Person responsible

Course coordinator: Prof. A.Kohail

Signature:

**Date:** 25/9/2017

# Annual Course Report Academic year: 2016-2017

# **A- Basic Information**

- 1- Title and code: (MNF 563) Project 2b
- 2- Program(s) on which this course is given: Manufacturing Eng. and Prod. Tech. BSc. Program
- 3- Year/Level of program: Third Level



4- Credit hours: 4 Lec.: 2 Tutorial: - Practical: 6 Pre-requisite: non

5- Names of lecturers contributing to the delivery of the course

Dr. Abdelmagid A. Abdalla

Course coordinator Dr. Abdelmagid A. Abdalla

External evaluator: None

# **B- Statistical Information**

No. of students attending the course: No. 120 100%

No. of students completing the course: No. 120 100%

Results:

	No.	%	Grading of successful studen		
Passed	120	100	•	No.	%
Failed	0	0	Excellent	98	81.66
			Very Good	14	11.66
			Good	6	5
			Pass	2	1.66

### **C - Professional Information**

#### 3 - Contents

Торіс	Lecture hours	Tutorial hours	Practical hours
<ul> <li>The project requires the following steps to be carried out:         <ul> <li>✓ The literature survey.</li> <li>✓ Choice of the project construction based on some existing variants.</li> <li>✓ Preparation of the constructional drawings of parts.</li> <li>✓ Design of the most dangerous parts.</li> <li>✓ Preparation of the process sheets to manufacture the parts.</li> <li>✓ Assembly and testing of the project.</li> <li>✓ Calibration of some parameters (if any).</li> <li>✓ Preparation of the report</li> <li>✓ Preparation of the presentation.</li> </ul> </li> </ul>	30		90
Total hours	30		90

Topics ta	ught	as a percent	age of t	the content spe	cified:	
>90 %		70-90 %	80	<70%		
easons in deta	il for	not teaching	any to	oic Shortage o	of time. The actu	ual term wa

Reasons in detail for not teaching any topic Shortage of time. The actual term was 13 Weeks If any topics were taught which are not specified, give reasons in detail None

# 2- Teaching and learning methods:

Lectures: Weekly Lecture Practical: Weekly lab.

Other assignments/homework: weekly assignments

If teaching and learning methods were used other than those specified, list and give reasons: Non

## 3- Student assessment:

Method of assessment	Percentage of total
Written examination	60 %
Oral examination	
Practical/laboratory work	20 %
Other assignments/class work	10 %
Mid-Term Exam	10 %



Total 100 %

Members of examination committee Dr. Abdelmagid A. Abdalla

Role of external evaluator None

4- Facilities and teaching materials:

Totally adequate Yes

Adequate to some extent

Inadequate

List any inadequacies

5- Administrative constraints List any difficulties encountered

6- Student evaluation of the course:

List any criticisms	Response of course team
<b>~</b>	>

- 7- Comments from external evaluator(s): Non
- 8- Course enhancement:

Progress on actions identified in the previous year's action plan: No previous comments Action State whether or not completed and give reasons for any non-completion Non

9- Action plan for academic year 2017-2018

Actions required Completion date Person responsible

Non

Course coordinator: Dr. Abdelmagid A. Abdalla

Signature:

Date: 28/8/2017