جامعة المجمعة

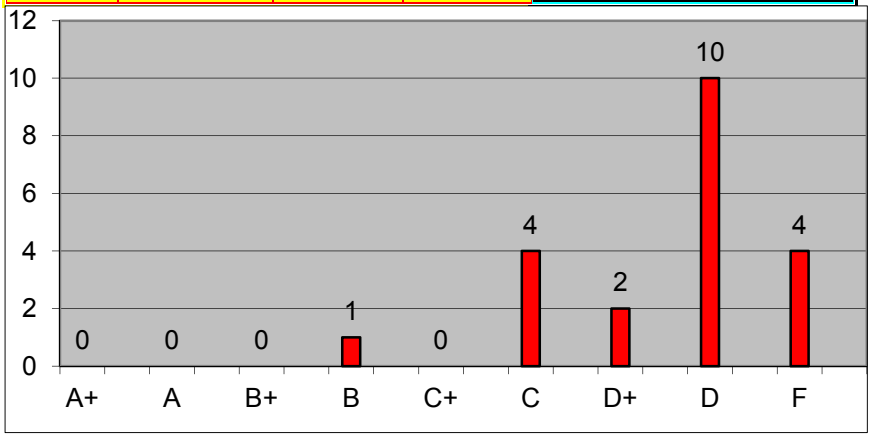
كلية العلوم بالزلفي

نموذج تحويل العلامات النهائي من مئوي الى أحرف لطلبة البكالوريوس

الفصل الدراسي	الثانى	١٤٣٤-١٤٣٥	
القسم	الرياضيات	رقم المادة	'Math352
استاذ المادة	.عبدالمنعم عبدالحميد مجاه	اســـــم المـــــــادة	البرمجة الخطية
عدد الطلبة المسجـليـن	23	عدد الطلبة الغائبين عن التهائي	1
عدد الطلبة النـــاجحين	18	عدد الطلبة الراسبين	4
متوسط الدرجات		العلامة الدنيا	F
الدرجـة العليـــــا	A	نسبة النجاح	81.81%

Average	Percentage	SUM	Count	TO	From	Average
	0	0	0	100	95	A+
	0	0	0	94	90	A
	0	0	0	89	85	B+
	4.76190476	4	1	84	80	B
	0	0	0	79	75	C+
	19.047619	12	4	74	70	C
	9.52380952	5	2	69	65	D+
	47.6190476	20	10	64	60	D
	19.047619	4	4	59	0	F
2.56	100	45	21			Total Students
						22

الرقم	العلامة	التقدير
1	60	د
2	70	ج
3	60	د
4	60	د
5	60	د
6	65	د+
7	60	د
8	60	د
9	60	د
10	60	د
11	62	د
12	49	هـ
13	73	ج
14	82	ب
15	39	هـ
16	71	ج
17	60	د
18	65	د+
19	44	هـ
20	70	ج
21	29	هـ
22	60	د



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جامعة المجمعة
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قسم الرياضيات

COURSE CLASSIFICATION FORM

Course Number/Name		**Math352 Linear Programming**	
Prepared by		**Dr. Abd El-Monem Abd El-hameed Megahed**	
Program Learning Outcomes	**Levels* (0,1,2, 3,4,5)**	**Relevant Activities**	**Assessment Methods/Metrics**
a1. Apply fundamentals and concepts of mathematics.	**5**	- Lectures - assignments	• 2 Midterm and final exam • Home work
a2. Apply fundamentals and concepts General sciences and Computer skills.	**3**	- assignments on methods to solve of a linear programming	• 2 Midterm and final exam • Home work
a3. Realize Social and ethical values	**0**		•
b1. Read and construct mathematical arguments and proofs.	**4**	- Lectures - assignments	Home work • 1 Midterm and final exam
b2. Apply critical thinking skills to solve problems that can be modeled mathematically.	**5**	- Lectures - assignments - Oral discussion	• 2 Midterm and final exam+ Home work + Quizzes
c1. Work independently and within a team	**4**	Divided students into groups and using oral discussion with homework	• Home work
c2. Bear responsibility for different situations.	**3**		• Quizzes
c3. Realize codes of ethics and their importance.	**0**		
d1. Communicate a depth and breadth of mathematical knowledge, both orally and in writing.	**4**	- Lectures - assignments - Oral discussion	• 2 Midterm + final exam • Home work • Quizzes
d2. Ability to Organize, connect and communicate mathematical and algorithmic ideas.	**4**	- Lectures - assignments	• Home work • Quizzes
d3. Critically interpret numerical and graphical data.	**3**	- assignments on information data and represented data	• Home work • Quizzes
e1. Use computer and its applications as an office tool	**3**	- assignments on simplex methods	Home work Quizzes

*** Please mark (or type) High (5), Medium-High (4), Medium (3), Low-Medium (2), Low (1) or Not At All (0) indicating the level to which you believe, as an instructor, the students have achieved these outcomes in this course.**

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Course Objectives and Outcomes

Course Number: Math352 **Course Name: Linear Programming**

Prepared by: Dr. Abd El-monem Megahed

Table 1: Relationship of course objectives/outcomes with PLO and ASIIN Criteria

Course Objectives:	Course Outcomes:	ASIIN	PLO
Knowing how to make the mathematical model of some actual problems (the mathematical formulation of the linear programming problem.	Define the Operations Research and the mathematical models of the real problem,	a, b, e, m	
	Define a convex sets, convex function and concave functions,	b, c	
	Illustrate the concept of polygons and vertex points and the optimization theory	a, n	
	ability to formulate a life problem to mathematical model	C,d	
- Recognizing the optimality theory and the different methods for solving the linear programming problem..	**Define** and **recognize** a different methods for solving the linear programming	a, b, c, g, m , j	
	Shown the ability of working independently and with groups.	n	
	Illustrate how take up responsibility and how to communicate with: Peers, Lecturers and Community.	l, n	
Knowing the problem ,the solution of the duality problem and sensitivity analysis for each problem.	**Define** and **recognize** the duality problem and sensitivity analysis for each problem.	a, b, f, h	
	Explain the relationship between the primal problem and the duality problem	a, i, j, g	
- Knowing how to apply the linear programming in solving some of the actual problem (transportation and networks problems)..	**Define** and **recognize** the transportation problem and network problems	a, c, h,e	
	Appraise how to Use the computer skills and library.	d, h	

Table 2: Methods of assessment of course syllabus

.

Assessment Method	Number/Type				Instructor Assessed	TA/Grader Assessed	Peer/Self Assessed
Homework	5 homework assignments				x		
Mid Terms/Final Exams	2 mid-term; 1 final exam				x		
Quizzes	One biweekly				x		
Individual Projects	1-2 wks	3-4 wks	1/2 sem	Full sem			
Team Projects	1-2 wks	3-4 wks x	1/2 sem	Full sem x	x		x
Lab Assignments							
Computer Assignments							
Computer Tools Used							
Oral Presentations	one				x		x
Written Reports	one				x		
Other	Design project (project binder)				x		

Outcome of ASIIN	
a	Graduates have sound mathematical knowledge. They have a profound overview of the contents of fundamental mathematical disciplines and are able to identify their correlations.
b	Graduates are able to recognize mathematics-related problems, assess their solvability and solve them within a specified time frame.
c	Graduates have a basic ability to work in a scientific way. They are in particular able to formulate mathematical hypotheses and have an understanding of how such hypotheses can be verified or falsified using mathematical methods.
d	Graduates can flexibly apply mathematical methods of fundamental component areas of mathematics and are able to transfer the findings obtained to other component areas or applications.
e	Graduates have abstraction ability and are able to recognize analogies and basic patterns
f	Graduates are able to think in a conceptual, analytical and logical manner.
g	Graduates have an extensive comprehension of the significance of mathematical modelling. Are able to create mathematical models for mathematical problems as well as for problems in other areas of science or everyday life, and have a selection of problem solving strategies at their disposal.
h	Graduates can use basic methods of computer-aided simulation, mathematical software and programming to solve mathematical problems
i	Graduates are in a position to solve more extensive mathematical
j	Graduates can classify, recognise, formulate and solve mathematics-related problems
k	Graduates use electronic media competently
l	Graduates can implement lifelong learning strategies. A prerequisite for this is that the students are per-severing and that they have developed persistence.
m	Graduates can recognise, formulate, classify and solve problems in a mathematical context
n	Graduates can communicate, possibly also in a foreign language, and contribute their work effectively in teams

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Instructor Course Evaluation Form

The purpose of this evaluation is to collect instructor feedback for improving this course and the Mathematics program. Information will also be used for program accreditation purposes.

I. Program Learning Outcomes Evaluations

Course Number/Name	Math352 Linear programming	Semester	2nd 1434/1435
Instructor	Dr. Abd El-monem Megahed		

The course listed above is designed for students to achieve the following outcomes at a Not At All, Low, Low- Medium, Medium, Medium-High or High level.

Please mark (or type) High (5), Medium-High (4), Medium (3), Low-Medium (2), Low (1) or Not At All (0) indicating the level to which you believe, as an instructor, the students have achieved these outcomes in this course.

Program Learning Outcomes	Relevant Activities	5	4	3	2	1	0
a1. Apply fundamentals and concepts of mathematics.	- Lectures - assignments	**5**					
a2. Apply fundamentals and concepts General sciences and Computer skills.	- assignments on methods to solve of a linear programming			**3**			
a3. Realize Social and ethical values.							**0**
b1. Read and construct mathematical arguments and proofs.	- Lectures - assignments		**4**				
b2. Apply critical thinking skills to solve problems that can be modeled mathematically.	- Lectures - assignments - Oral discussion	**5**					
c1. Work independently and within a team	Divided students into groups and using oral discussion with homework		**4**				
c2. Bear responsibility for different situations.				**3**			
c3. Realize codes of ethics and their importance.							**0**
d1. Communicate a depth and breadth of mathematical knowledge, both orally and in writing.	- Lectures - assignments - Oral discussion		**4**				
d2. Ability to Organize, connect and communicate mathematical and algorithmic ideas.	- Lectures - assignments		**4**				
d3. Critically interpret numerical and graphical data.	- assignments on information data and represented data			**3**			
e1. Use computer and its applications as an office tool	- assignments on simplex methods			**3**			

II. Catalog Description , and Course Prerequisites Evaluations:

Based on your experiences in the course, please respond by circling the most appropriate number. Circle N/A for items that are not applicable, or if you have no opinion.

Catalog Description 1434-1435	• Introduction of operations research, Formulate of linear programming problems, Modeling of live problem • Convex sets, Convex function and concave functions. the polygon, vertex point, and optimization theory • Graphical Method ,Analytical Methods (Simplex method, M-technique) • Revised Simplex methods, Two-phases Methods • Duality Problem, sensitivity analysis • applications of the linear programming problem (Transportation problems, Game Theory, Network)						
Course Prerequisites:	Math 241	**Circle One (5=Strongly Agree; 1=Strongly disagree)**					
2a. Do you believe that the catalog description (above) is accurate for this course?		**(5)**	**4**	**3**	**2**	**1**	**N/A**
2b. Do you believe that the course prerequisites (above) are appropriate for this course?		**(5)**	**4**	**3**	**2**	**1**	**N/A**
2c. If not, please list any prerequisites you believe are not appropriate for this course.							

III. Textbook(s) and/or Lab Manuals (if applicable) Evaluations:

Textbook(s) and/or Lab Manuals (if applicable):	**H.A.Taha, Introduction Operations Research 6th edition, London, Macmilla Publishing Company, Inc.** **V. Chvatal: Linear Programming, San Francisco: McGill University , W.H. Freeman and Company,**	**Circle One (5=Strongly Agree; 1=Strongly Disagree)**					
3a. In general, do you believe this to be an appropriate textbook for this course?		**(5)**	**4**	**3**	**2**	**1**	**N/A**
3b. Was the organization of the textbook appropriate for this course?		**5**	**(4)**	**3**	**2**	**1**	**N/A**
3c. Was the level of the textbook appropriate for this course?		**5**	**(4)**	**3**	**2**	**1**	**N/A**

IV. Computer usage (if applicable) Evaluations:

Computer usage (if applicable):	**Circle One (5=Strongly Agree; 1=Strongly Disagree)**					
5a. Was the use of computer well integrated with the course?	**5**	**4**	**(3)**	**2**	**1**	**N/A**
5b. Was the computer lab adequately equipped with well-maintained and updated computers?	**5**	**4**	**3**	**2**	**(1)**	**N/A**
5c. Was the computer lab equipped with sufficient number of computers?	**5**	**5**	**5**	**2**	**(1)**	**(N/A)**

5d. Were the special software packages (MATLAB, SPSS, C+, FORTRAN, etc) available and accessible?	**5**	**4**	**3**	**2**	**1**	**(N/A)**
5e. Was adequate technical support available when needed?	**5**	**4**	**3**	**2**	**1**	**(N/A)**

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استاذ المادة	.عبدالمنعم عبدالحميد مجاه	اســـــم المـــــــادة	البرمجة الخطية
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عدد الطلبة النـــاجحين	18	عدد الطلبة الراسبين	4
متوسط الدرجات		العلامة الدنيا	F
الدرجـة العليـــــا	A	نسبة النجاح	81.81%

Average	Percentage	SUM	Count	TO	From	Average
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	0	0	0	89	85	B+
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	9.52380952	5	2	69	65	D+
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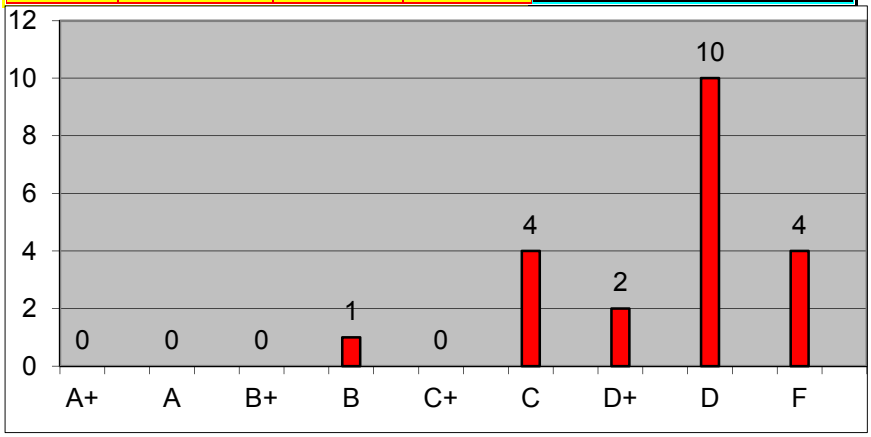
	19.047619	4	4	59	0	F
2.56	100	45	21			Total Students
						22

الرقم	العلامة	التقدير
1	60	د
2	70	ج
3	60	د
4	60	د
5	60	د
6	65	د+
7	60	د
8	60	د
9	60	د
10	60	د
11	62	د
12	49	هـ
13	73	ج
14	82	ب
15	39	هـ
16	71	ج
17	60	د
18	65	د+
19	44	هـ
20	70	ج
21	29	هـ
22	60	د



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COURSE CLASSIFICATION FORM

Course Number/Name		**Math352 Linear Programming**	
Prepared by		**Dr. Abd El-Monem Abd El-hameed Megahed**	
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a3. Realize Social and ethical values	**0**		•
b1. Read and construct mathematical arguments and proofs.	**4**	- Lectures - assignments	Home work • 1 Midterm and final exam
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c3. Realize codes of ethics and their importance.	**0**		
d1. Communicate a depth and breadth of mathematical knowledge, both orally and in writing.	**4**	- Lectures - assignments - Oral discussion	• 2 Midterm + final exam • Home work • Quizzes
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e1. Use computer and its applications as an office tool	**3**	- assignments on simplex methods	Home work Quizzes

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