

COURSE CLASSIFICATION FORM

Course Number/Name		MATH343 Group Theory	
Prepared by		Dr. Rabah Kellil	
Program Learning Outcomes	Levels* (0,1,2, 3,4,5)	Relevant Activities	Assessment Methods/Metrics
a1. Apply fundamentals and concepts of mathematics.	3		<ul style="list-style-type: none"> • Short exams • Quizzes • Discussion
a2. Apply fundamentals and concepts General sciences and Computer skills.	2		<ul style="list-style-type: none"> •
a3. Realize Social and ethical values.	N.A		<ul style="list-style-type: none"> •
b1. Read and construct mathematical arguments and proofs.	3		<ul style="list-style-type: none"> • Short exams • Quizzes • Discussion
b2. Apply critical thinking skills to solve problems that can be modeled mathematically.	3		<ul style="list-style-type: none"> • Short exams • Quizzes • Discussion
c1. Work independently and within a team	2		Midterm exam+ Home works for each Chapter
c2. Bear responsibility for different situations.	2	Report	<ul style="list-style-type: none"> • Home works for each thematic • Discussion
c3. Realize codes of ethics and their importance.	NA		
d1. Communicate a depth and breadth of mathematical knowledge, both orally and in writing.	3		<ul style="list-style-type: none"> • Home works for each thematic • presentation
d2. Ability to Organize, connect and communicate mathematical concepts and or algorithmic ideas.	3		<ul style="list-style-type: none"> • Home works for each thematic • Presentation
d3. Critically interpret numerical and graphical data.	NA		<ul style="list-style-type: none"> •
e1. Use computer and its applications as an office tool	3	Report	<ul style="list-style-type: none"> • Lab work

* 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.

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	MATH243 Group Theory	Semester	Spring 2013-2014				
Instructor	Dr. Rabah Kellil						
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 Ability to apply knowledge of basic mathematics	Lectures, Assignments,		4				
a2 Ability to apply knowledge of basic sciences	Assignments on creativity dealing with physical systems		3				
b1 Ability to Knowledge of contemporary economic issues.							
b2 Ability to apply knowledge of contemporary technological issues.				2			
c1 Ability to demonstrate facility with axiomatic reasoning, including writing accurate, rigorous mathematical proofs.	Design project; Lectures and assignments on how to create, analyze or improve processes, devices or systems.		3				
c2 Ability to Make effective use of abstraction and inductive reasoning as key characteristics of the language and structure of mathematics and abstract	Design project in which students show ability to apply principles of Mathematical and Statistical data		3				
d1 Ability to Design and use valid mathematical models and use them to solve realistic problems, employing techniques from physics, computer	students demonstrate basic knowledge of Mathematics in the development of the problem			2			

Instructor Course Evaluation Form

j4 Ability to use modern mathematical and statistical techniques							
j5 Ability to use information and communications technology.	General discussions on the impact of alternative design solutions on the environment			3			
k1 Ability to select appropriate analytic and design tools for Mathematical problems	General discussions on feasibility studies of some problems that proposed solutions may alter the structure of society			3			
k2 Ability Use technological application software as analysis and application design	Design project with multiple aspects of design engineering; students are urged to learn independently			3			
k3 Ability to Utilize a computer as an office tool. Assumptions, to identify logical fallacies, and to develop.				3			

II. Textbook(s) and/or Lab Manuals (if applicable) 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	The axioms of group theory and some examples of groups- Subgroups- Cyclic groups- Lagrange theorem- Normal subgroup- Factor group- homomorphisms- Fundamental theorems of isomorphisms- Automorphisms- Caley theorem and its generalization- Simple groups- Permutation groups- Class equation-Group action on a set- P-groups- Cauchy theorem- Sylow's theorems- External and internal direct product of group- Burnside theorem- Dihedral- Quaternions- Groups of automorphisms on finite and infinite cyclic groups.						
Course Prerequisites:							Circle One (5=Strongly Agree; 1=Strongly disagree)
2a. Do you believe that the catalog description (above) is accurate for this course?	5						
2b. Do you believe that the course prerequisites (above) are appropriate for this course?		4					
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):	- Marshall Hall, Jr. : The Theory of Groups, Amer Mathematical , 1975.	(5)					
	- W. Ledermann , A. J. Wiet : Introduction to Group Theory, Publisher Longman , 1996.	(5)					
	- J. Rose : A course in group theory, Dover publications, Inc., 1994	(4)					
3a. In general, do you believe this to be an appropriate textbook for this course?	(5)						

Instructor Course Evaluation Form

3b. Was the organization of the textbook appropriate for this course?	(5)					
3c. Was the level of the textbook appropriate for this course?		(4)				

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?			3			
5b. Was the computer lab adequately equipped with well-maintained and updated computers?		4				
5c. Was the computer lab equipped with sufficient number of computers?		4				
5d. Were the special software packages (MATLAB, SPSS, C+, FORTRAN, etc) available and accessible?			3			
5e. Was adequate technical support available when needed?		4				

جامعة المجمعة

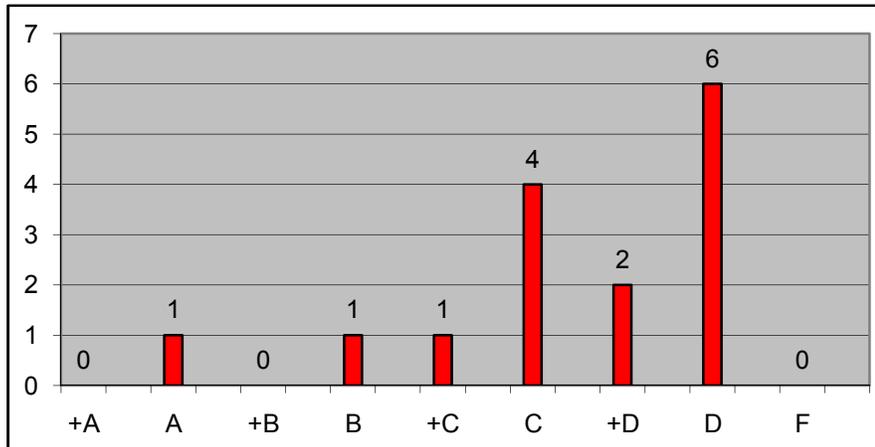
كلية العلوم بالزلفي

نموذج تحويل العلامات النهائي من منوي الى أحرف لطلبة البكالوريوس

الفصل الدراسي	الثاني	الترم الثاني	1435/1434
القسم	الرياضيات	رقم المادة	رياض 243
استاذ المادة	د. رايح عبد الرزاق كليل	اسم المادة	نظرية الزمر
عدد الطلبة المسجلين	16	عدد الطلبة الغائبين عن النهائي	1
عدد الطلبة الناجحين	15	عدد الطلبة الراسبين	0
متوسط الدرجات	2,75	العلامة الدنيا	D
الدرجة العليا	A	نسبة النجاح	93.75%

Average	Percentage	SUM	Count	TO	From	Average
	0	0	0	100	95	A+
	6,66666667	4,75	1	94	90	A
	0	0	0	89	85	B+
	6,66666667	4	1	84	80	B
	6,66666667	3,5	1	79	75	C+
	26,6666667	12	4	74	70	C
	13,33333333	5	2	69	65	D+
	40	12	6	64	60	D
	0	0	0	59	0	F
2,75	100	41,3	15	Total Students		

الرقم	العلامة	التقدير
1	60	D
2	65	D+
3	85	B+
4	65	D+
5	67	D+
6	70	C
7	85	B+
8	90	A
9	65	D+
10	80	B
11	70	C
12	85	B+
13	65	D+
14	72	C
15	65	D+
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Student 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	MATH243 GroupTheory	Semester	Spring 2013-2014			
Instructor	Dr. Rabah Kellil					
Student Name	-----	Student ID	-----			
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	5	4	3	2	1	0
a1. Apply fundamentals and concepts of mathematics.						
a2. Apply fundamentals and concepts General sciences and Computer skills.						
a3. Realize Social and ethical values.						
b1. Read and construct mathematical arguments and proofs.						
b2. Apply critical thinking skills to solve problems that can be modeled mathematically.						
c1. Work independently and within a team						
c2. Bear responsibility for different situations.						
c3. Realize codes of ethics and their importance.						
d1. Communicate a depth and breadth of mathematical knowledge, both orally and in writing.						
d2. Ability to Organize, connect and communicate mathematical and algorithmic ideas.						
d3. Critically interpret numerical and graphical data.						
e1. Use computer and its applications as an office tool						

Instructor Course Evaluation Form

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	The axioms of group theory and some examples of groups- Subgroups- Cyclic groups- Lagrange theorem- Normal subgroup- Factor group- homomorphisms- Fundamental theorems of isomorphisms- Automorphisms- Caley theorem and its generalization- Simple groups- Permutation groups- Class equation-Group action on a set- P-groups- Cauchy theorem- Sylow's theorems- External and internal direct product of group- Burnside theorem- Dihedral- Quaternions- Groups of automorphisms on finite and infinite cyclic groups.				
Course Prerequisites:	Bases of Mathematics	Circle One (5=Strongly Agree; 1=Strongly disagree)			
2a. Do you believe that the catalog description (above) is accurate for this course?	5				
2b. Do you believe that the course prerequisites (above) are appropriate for this course?	5				
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):	<ul style="list-style-type: none"> - Marshall Hall, Jr. : The Theory of Groups, Amer Mathematical , 1975. - W. Ledermann , A. J. Wiet : Introduction to Group Theory, Publisher Longman , 1996. - J. Rose : A course in group theory, Dover publications, Inc., 1994 					Circle One (5=Strongly Agree; 1=Strongly Disagree)				
3a. In general, do you believe this to be an appropriate textbook for this course?		4								
3b. Was the organization of the textbook appropriate for this course?		4								
3c. Was the level of the textbook appropriate for this course?		4								

IV. Computer usage (if applicable) Evaluations:

Computer usage (if applicable):		Circle One (5=Strongly Agree; 1=Strongly Disagree)			
4a. Was the use of computer well integrated with the course?		3			
4b. Was the computer lab adequately equipped with well-maintained and updated computers?		4			
4c. Was the computer lab equipped with sufficient number of computers?		4			
4d. Were the special software packages (MATLAB, SPSS, C++, FORTRAN, etc) available and accessible?				1	
4e. Was adequate technical support available when needed?		4			