

Course Description Form

1. Course Name:					
Abstract algebra II					
2. Course Code:					
Math3211					
3. Semester / Year:					
2 nd semester / 2023–2024					
4. Description Preparation Date:					
2024					
5. Available Attendance Forms:					
6. Number of Credit Hours (Total) / Number of Units (Total)					
3 Hours					
7. Course administrator's name (mention all, if more than one name)					
Name: Dr. Ayat Abdulaali Neamah Email: ayatneamah@nahrainuniv.edu.iq					
8. Course Objectives					
Course Objectives	<ul style="list-style-type: none"> - Introducing students to basic concepts and important theorems in basic algebra topics - Equipping students with the basic concepts of the theory of groups. - At the end of this semester , the student can <ul style="list-style-type: none"> - Create complex examples in the topic of group theory. - Proof of new theories, preliminaries and results in the subject of the group 				
9. Teaching and Learning Strategies					
Strategy	The main strategy that will be used in this module is to encourage the students participation in the module activities. This strategy will be by giving the students quizzes, assignments, projects and midterm exams throughout the semester				
10. Course Structure					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method

1	3	Homomorphism of groups + isomorphism of group + Examples		Theoretical lectures	Weekly quizzes
2	3	Some theorems		Theoretical lectures	Weekly quizzes
3	3	Kernel and image of homomorphism+ examples		Theoretical lectures	Weekly quizzes
4	3	Fundamental theorem of homomorphism of groups		Theoretical lectures	Weekly quizzes
5	3	Automorphism + some theorems and problems		Theoretical lectures	Weekly quizzes
6	3	Permutation of groups + order of permutation+ some examples		Theoretical lectures	Weekly quizzes
7	3	Exam + Cyclic permutation + product of disjoint cycles		Theoretical lectures	Weekly quizzes
8	3	even permutation and odd permutation		Theoretical lectures	Weekly quizzes
9	3	Important properties of even and odd permutation		Theoretical lectures	Weekly quizzes
10	3	Definition of Alternating group+ Examples		Theoretical lectures	Weekly quizzes
11	3	Some Theorems		Theoretical lectures	Weekly quizzes
12	3	Cayley's theorem and its proof		Theoretical lectures	Weekly quizzes
13	3	Cyclic group + Examples		Theoretical lectures	Weekly quizzes
14	3	Some Theorems and problems		Theoretical lectures	Weekly quizzes
15	3	Review		Theoretical lectures	Weekly quizzes

11. Course Evaluation

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports ... etc

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Introduction to Abstract Algebra
Main references (sources)	Rose, John S., A course on group theory Dover, Newyork 1994
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	