

Department: Chemistry

First semester/first stage						
Course No.	Topics	Hours				Credits
		Theoretical	Practical	tutorial	Sem.	
1	Analytical 1	2	3	1	-	6.00
1	Inorganic 1	2	-	2	-	6.00
1	Earth science	2	2	-	-	6.00
1	Chemical safety and security	2	-	-	-	4.00
1	Human rights and democracy	2	-	-	-	4.00
1	Arabic	2	-	-	-	4.00

Second semester/first stage						
Course No.	Topics	Hours				Credits
		Theoretical	Practical	tutorial		
1	Analytical 2	2	3	1	-	6.00
1	Inorganic 2	2	-	2	-	6.00
1	Mathematics I	2	-	2	-	5.00
1	Physics	2	2	-	-	5.00
1	computer programming	2	2	-	-	5.00
1	English	2	-	-	-	3.00

First semester/second stage				
Course No.	Topics	Hours		Credits
		Theoretical	Practical	
1	Synthetic inorganic chemistry	2	2	3
1	Gravimetric chemistry	2	3	3.5
1	Physical Chemistry-	3	2	4

	Thermodynamics			
1	Organic Chemistry (2)	2	2	3
1	Chemical safety and security	2	-	2
1	Pharmaceutical and medicinal chemistry	2	-	2
1	Differential Equations (1)	2	-	2
1	Programming (2)	1	2	2
1	Baath Party crimes	2	-	2

Second semester/second stage				
Course No.	Topics	Hours		Credits
		Theoretical	Practical	
2	Chemistry of represented elements	2	2	3
2	Separation methods	2	3	3.5
2	Physical Chemistry - Equilibrium	3	2	4
2	organic chemistry	2	2	3
2	Environmental chemistry	2	-	2
2	Differential equations 2	2	-	2
2	Programming 4	2	-	2
2	English	1	2	2

First semester/third stage				
Course No.	Topics	Hours		Credits
		Theoretical	Practical	
1	Coordination Chemistry (1)	2	2	3
1	Kinetic and	3	2	4

	photochemistry			
1	Biochemistry (1)	2	2	3
1	Organic Chemistry (4)	2	2	3
1	Basics of industrial chemistry	2	-	2
1	Life inorganic chemistry	2	-	2
1	English	2	-	2

Second semester/third stage				
Course No.	Topics	Hours		Credits
		Theoretical	Practical	
2	Electrochemistry	2	3	3
2	Coordination chemistry 2	2	3	3
2	Biochemistry 2	2	3	3
2	Organic chemistry 5	2	0	3
2	Industrial chemistry applications	2	0	2
2	Research methodology	2	0	2

First semester/fourth stage				
Course No.	Topics	Hours		Credits
		Theoretical	Practical	
1	Automated spectroscopic analysis	3	2	4

1	Polymer basics	2	2	3
1	Spectroscopic organic diagnosis (1)	1	3	2.5
1	Biochemistry (3)	2	2	3
1	Quantum chemistry	3	-	3
1	Research Project (1)	-	3	3
1	Organometallic chemistry	2	-	2

Second semester/fourth stage				
Course No.	Topics	Hours		Credits
		Theoretical	Practical	
2	Electrolytic analysis	3	2	4
2	Biochemistry 4	3	0	3
2	Petrochemicals	2	2	3
2	Spectrochemistry	3	-	3
2	Spectroscopic organic diagnosis 2	1	3	2.5
2	Anhydrous solvent chemistry	2	-	2
2	English	2	-	2
2	research project	-	6	3