

****Course Specification Chemistry Department****

****LEVEL ONE:**

NO	Course Code	Course Name	C.Hours	Lec	Lab	Tut	Co-requisites
1	MAT 101	Calculus(1)	4	3	0	2	
2	PHY 101	General Physics(1)	3	2	0	2	
3	PHY 119	General Physics Lab	1	0	2	0	PHY 101
4	CHM 101	General Chemistry(1)	4	2	2	2	
5	HST 102	History of KSA	2	2	0	0	
6	IDE 133	Monotheism	2	2	0	0	
7	QUR 101	The Holy Quran(١)	1	1	0	0	
			17	12	4	6	
				22			

**** LEVEL TWO:**

NO	Course Code	Course Name	C.Hours	Lec	Lab	Tut	Prerequisites
1	CHM 102	General Chemistry(2)	4	2	2	2	CHM 101
2	CHM 121	Organic Chemistry(1)	4	2	2	2	CHM 101
3	STA 111	Int.to Probability & Statistics	3	2	0	2	MAT 101
4	MAT 103	Mathematics	4	3	0	2	MAT 101
5	JR 200	Fiqh (Islamic Jurisprudence)	2	2	0	0	
6	Qur 151	The Holy Quran(٢)	1	1	0	0	
			18	12	4	8	
				24			

****LEVEL THREE:**

NO	Course Code	Course Name	C.Hours	Lec	Lab	Tut	Prerequisites
1	CHM 211	Inorganic Chemistry(1)	4	2	3	1	CHM 102
2	CHM 221	Organic Chemistry(2)	4	2	2	2	CHM 121
3	CHM 241	Physical Chemistry(1)	4	2	2	2	CHM 102
4	CHM 251	Software in Chemistry	2	0	4	0	CHM 121
5	HST 101	Sirah (Biography of Prophet Mohamed)	2	2	0	0	
6	QUR 201	The Holy Quran(٣)	1	1	0	0	
			17	9	11	5	
				25			

****LEVEL FOUR:**

NO	Course Code	Course Name	C.Hours	Lec	Lab	Tut	Prerequisites
1	CHM 212	Inorganic Chemistry(2)	4	2	3	1	CHM 211
2	CHM 224	Organic Compounds Spectroscopy	2	2	0	0	CHM 221
3	CHM 231	Analytical Chemistry	4	2	3	1	CHM 102
4	CHM 242	Physical Chemistry(2)	4	2	3	1	CHM 241 MAT 103
5	ART 102	Arabic Composition	2	2	0	0	
6	Qur 251	The Holy Quran(ع)	1	1	0	0	
			17	11	9	3	
				23			

**** LEVEL FIVE:**

NO	Course Code	Course Name	C.Hours	Lec	Lab	Tut	Prerequisites
1	CHM 313	Organometallic Chemistry	3	3	0	0	CHM 212
2	CHM 325	Heterocyclic Chemistry	3	3	0	0	CHM 221
3	CHM 332	Instrumental Analysis	4	2	3	1	CHM 231
4	CHM 343	Electrochemistry and Corrosion	4	2	3	1	CHM 242
5	PHY 255	Introduction to Modern Physics	2	2	0	0	PHY 101
			16	12	6	2	
				20			

**** LEVEL SIX:**

NO	Course Code	Course Name	C.Hours	Lec	Lab	Tut	Prerequisites
1	CHM 326	Synthesis of Organic Compounds	2	0	4	0	CHM 325
2	CHM 327	Organic Reactions Mechanism	3	3	0	0	CHM 224
3	CHM 333	Chemical Separation Methods	4	2	3	1	CHM 332
4	CHM 345	Colloids and Surface Chemistry	4	2	2	1	CHM 242
5	CHM 346	Quantum Chemistry	2	2	0	0	CHM 242
6	PSY 301	Educational Psychology	2	2	0	0	
			17	11	9	2	
				22			

****LEVEL SEVEN :**

NO	Course Code	Course Name	C.Hours	Lec	Lab	Tut	Prerequisites
1	CHM 414	Selected Course(2)	3	2	2	0	Upon Specifying the course
2	CHM 428	Polymers and Petrochemicals	2	2	0	0	CHM 325
3	CHM 434	Environmental Chemistry	3	2	2	0	CHM 333
4	CHM 447	Homogenous and Heterogeneous catalysis	2	2	0	0	CHM 345
5	CHM 448	Solid State & Material Science	4	4	0	0	CHM 343
6	ENG 206	Technical Writing	2	2	0	0	
			16	14	4	0	
				18			

****LEVEL EIGHT :**

NO	Course Code	Course Name	C.Hours	Lec	Lab	Tut	Prerequisites
1	CHM 415	Nuclear & Radiation Chemistry	2	2	0	0	CHM 313
2	CHM 416	(Selected Course(3	3	2	0	0	Upon Specifying the course
3	CHM 429	Carbohydrate Chemistry and Natural Products	4	2	3	1	CHM 327
4	CHM 449	Nano-Chemistry	2	2	0	0	CHM 345
5	CHM 461	Research Project	3	1	4	0	
			14	9	9	1	
				19			

TOTAL	Credit Hours	Lec	Lab	Tut
	132	90	56	27
	173			

Course Descriptions - Medical Sciences Track and Engineering College

NO	Course Code	Course Name
1	CHM 103	General Chemistry
2	CHM 202	Organic Chemistry
3	CHM 203	Organic Chemistry Lab
4	CHM 222	Physical Chemistry
5	CHM 223	Physical Chemistry Lab