

**** Plan and specification of - Physics Department courses****

****LEVEL ONE:**

NO	Course Code	Course Name	Credit Hours	Lec	Lab	Tut	Prerequisites	Co-Prerequisites
1	MAT 101	Calculus(1)	4	3	0	2		
2	PHY 101	General Physics (1)	3	3	0	1		
3	PHY 119	General Physics Lab (1)	1	0	2	0	PHY 101	
4	CHE 101	General Chemistry(1)	4	3	2	1		
5	ENG 140	English(1)	3	3	1	0		
6	IDE 133	Monotheism	2	2	0	0		
7	QUR 101	The Holy Quran(١)	1	1	0	0		
			18	15	5	4		
				24				

****LEVEL TWO:**

NO	Course Code	Course Name	Credit Hours	Lec	Lab	Tut	Prerequisites	Co-Prerequisites
1	MAT 102	Calculus(2)	4	3	0	2	MAT 101	
2	PHY 105	Classical Mechanics (1)	3	3	0	1	PHY 101	
3	CHE 102	General Chemistry(2)	4	3	2	0	CHE 101	
4	ENG 190	English(2)	3	3	1	0	ENG 140	
5	JR 200	Fiqh (Islamic Jurisprudence)	2	2	0	0		
6	Qur 151	The Holy Quran(٢)	1	1	0	0		
			17	15	3	4		
				22				

****LEVEL THREE:**

NO	Course Code	Course Name	Credit Hours	Lec	Lab	Tut	Prerequisites	Co-Prerequisites
1	PHY 230	Thermal Physics	3	3	0	1	PHY 101 MAT 101	
2	PHY 250	Modern Physics	3	3	0	1	PHY 101 MAT 101	
3	PHY 281	Thermal Physics and Mechanics Lab	2	0	3	0	PHY 101 PHY 230	PHY 230
4	MAT 251	Math Software	2	2	2	0	MAT 101	
5	STA 111	Intr.toProbability and Statistics	3	3	1	1	MAT 101	
6	HST 101	Sirah (Biography of Prophet Mohamed)	2	2	0	0		
7	QUR 201	The Holy Quran(ر)	1	1	0	0		
				16	14	6	3	
					23			

****LEVEL FOUR:**

NO	Course Code	Course Name	Credit Hours	Lec	Lab	Tut	Prerequisites	Co-Prerequisites
1	MAT 203	Calculus(3)	4	3	0	2	MAT 102	
2	PHY 220	Electricity and Magnetism	3	3	0	1	PHY 105 MAT 102	
3	PHY 240	Waves and Optics	3	3	0	1	PHY 105 MAT 102	
4	PHY 282	Waves and Optics Lab	2	0	3	0	PHY 101	PHY 240
5	MAT 221	Intr.Linear Algebra	3	2	0	2	MAT 251	
6	ART 102	Arabic Composition	2	2	0	0		
7	Qur 251	The Holy Quran(ع)	1	1	0	0		
				18	14	3	6	
					23			

****LEVEL FIVE:**

NO	Course Code	Course Name	Credit Hours	Lec	Lab	Tut	Prerequisites	Co-Prerequisites
1	PHY 333	Mathematical Physics	3	3	0	1	MAT 203	
2	PHY 321	Electromagnetic fields	3	3	0	1	PHY 220 MAT 203	
3	PHY 303	Classical Mechanics (2)	3	3	0	1	PHY 105 MAT 203	
4	PHY 381	Electromagnetism Lab	2	0	3	0	PHY 220	PHY 321
5	CS140	Computer Programing(1)	4	4	2	0		
				15	13	5	3	
					21			

**** LEVEL SIX:**

NO	Course Code	Course Name	Credit Hours	Lec	Lab	Tut	Prerequisites	Co-Prerequisites
1	PHY 334	Mathematical Physics (2)	3	3	0	1	PHY 333	
2	PHY 312	Quantum Mechanics.pdf	3	3	0	1	PHY 303 STA 111	
3	PHY 332	Statistical Physics.pdf	3	3	0	1	PHY 230 STA 111	
4	PHY 324	Electronics	3	3	0	1	PHY 220	
5	PHY 382	Electronics Lab	2	0	3	0	PHY 381	PHY 324
6	علم ٢٠٧	مهارات الاتصال	2	2	0	0		
				16	14	3	4	
					21			

****LEVEL SEVEN:**

NO	Course Code	Course Name	Credit Hours	Lec	Lab	Tut	Prerequisites	Co-Prerequisites
1	PHY 461	Solid State Physics	4	3	0	2	PHY 312	
2	PHY 462	Atomic Physics	3	3	0	1	PHY 312	
3	PHY 464	Nuclear Physics	3	3	0	1	PHY 312	
4	PHY 436	Computational Physics	3	3	0	1	CS140 PHY 334	
5	PHY 481	Solid State Physics and Modern Physics Lab	2	0	3	0	PHY 382	PHY 461
6	ENG 206	Scientafic Writing	2	2	0	0	ENG 190	
				17	14	3	5	
					22			

****LEVEL EIGHT:**

NO	Course Code	Course Name	Credit Hours	Lec	Lab	Tut	Pre requisites	Co-Prerequisites
1	PHY 404	Fluid Mechanics	3	3	0	1	PHY 303	
2	PHY 471	Selected Topics in Physics (1)	3	3	0	1	depenent upon topic	
3	PHY 472	Selected Topics in Physics (2)	3	3	0	1	depenent upon topic	
4	PHY 498	Final Year Project	2	2	0	0	PHY 461 PHY 464	
5	PSY 301	Educational Psyshology	2	2	0	0		
6	HST 102	History of KSA	2	2	0	0		
				15	15	0	3	
					18			

RESUMES

TOTAL	Credit Hours	Lec	Lab	Tut
	132	114	28	32
	174			