



Technical college\Mosul	30 Weeks	No. of week hours		
Department: Medical Instrumentation Engineering		Th.	App.	Unit
		2	2	6
Third Year	Subject: Medical electronic systems.			

أهداف المادة:- تعريف الطالب على بعض الدوائر الالكترونية و كيفية عملها و استخدامها في المجال التطبيقي الطبي و كيفية بناء أنظمة مختلفة .

Week	Syllabus
1 st	Regulated power supplied .
2 nd	Monolithic regulators .
3 rd	Switching regulators .
4 th , 5 th	Additional switching regulator toologies .
6 th	Active filters .
7 th , 8 th	Butter worth filter , practical realization .
9 th , 10 th	Band pass filter , band – reject filter .
11 th , 12 th	Active resonant and band pass filter .
13 th	Active RC band pass filter .
14 th	Digital to analogue converters (DAC) .
15 th	A lodder – type DAC , multiplying DAC .
16 th	Analogue to digital converters (ADC) .
17 th , 18 th	The counting ADC , successive approximation ADC .
19 th , 20 th	The parallel – comparator ADC , dual – slope or radiometric ADC .
21 st , 22 nd , 23 rd	Medical data acquisition system .
24 th	Microcomputer based system .
25 th	Monitoring .
26 th , 27 th	Control .
28 th , 29 th , 30 th	Other medical electronic systems .