



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

#### أهداف المادة:-

- 1- معرفة نظم و تراكيب المنظومات الإذاعية و التلفزيونية و الهاتفية .
- 2- معرفة طرق نقل المعلومات في نظم الاتصالات في الأجهزة الطبية .

Week	Syllabus
1 <sup>st</sup>	General review in electrostatic.
2 <sup>nd</sup>	Gauss's law.
3 <sup>rd</sup>	Steady magnetic field.
4 <sup>th</sup> , 5 <sup>th</sup>	Time – varying magnetic field.
6 <sup>th</sup>	Uniform plane waves.
7 <sup>th</sup> , 8 <sup>th</sup>	Fourier transform.
9 <sup>th</sup> , 10 <sup>th</sup>	Signals & system.
11 <sup>th</sup> , 12 <sup>th</sup>	Periodic, non periodic signals.
13 <sup>th</sup> , 14 <sup>th</sup>	AM & FM systems.
15 <sup>th</sup> , 16 <sup>th</sup> , 17 <sup>th</sup>	Sampling, PAM, PWM, PPM, PCM.
18 <sup>th</sup> , 19 <sup>th</sup> , 20 <sup>th</sup>	Digital modulation (ASK, FSK, PSK ).
21 <sup>st</sup> , 22 <sup>nd</sup>	Noise in analogue & digital systems.
23 <sup>rd</sup> , 24 <sup>th</sup>	Rectangular wave – guides.
25 <sup>th</sup> , 26 <sup>th</sup>	Microwave passive devices.
27 <sup>th</sup> , 28 <sup>th</sup>	Microwave generators.
29 <sup>th</sup> , 30 <sup>th</sup>	Antennas.