

**Msc 1<sup>st</sup> Part**

**APPLIED PHYSICS**

✓ **Course Aims:**

The broad aims of the course are as follows:

1. To provide the candidates with basic scientific knowledge and theories of physical medicine and to recognize its benefits and hazards.
2. To prepare the candidate to utilize this knowledge in management of different lesions of muscles, joints and other musculoskeletal disorders.

➤ **Course Content:**

<b>Subjects</b>	<b>Lectures (1 hr/week For 15 weeks)</b>	<b>Total Teaching Hours (15 hours/ 15 weeks)</b>
Electromagnetic spectrum: 1- Ultra-violet rays	1 hr/ wk for one wk	1 hr
2- Infra red rays	1 hr/ wk for one wk	1 hr
3 -LASER waves	1 hr/ wk for one wk	1 hr
4-High frequency currents (SW, MW)	1 hr/ wk for 2 wks	2 hr
Resistance	1 hr/ wk for one wk	1 hr
Types of electric current: • Direct current • Sinusoidal current • Faradic current • TENS	1hr/ wk for 4 wks	4 hr

<ul style="list-style-type: none"> <li>• Didynamic current</li> <li>• Interferential current</li> </ul>		
Ultrasonic waves	1 hr/ wk for one wk	1 hr
Latent heat	1 hr/ wk for one wk	1 hr
Viscosity, surface tension	1 hr/ wk for one wks	1 hr
Hydrotherapy	1 hr/ wk for 2 wks	2 hr