

Course Overview

Medical instrument I

Course code :	AMT 406
Course title:	Medical instrument I
Level/semester:	Forth Semester
Preceding Courses & Main Subjects	General Physics
Credit hours: 3	Theoretical: 2
	Practical: 1

Course content (theory)

التمارين العملية	عدد الساعات	عدد المحاضرات	الموضوعات الرئيسية التي يغطيها المقرر	م
2	6	3	<p style="text-align: center;">PRESSURE</p> <p style="text-align: center;">Force</p> <p>Examples from anesthetics practice</p> <p>Non-official SI units of pressure</p> <p>Pressure in liquids</p> <p>Gauge and Absolute Pressure</p> <p>Mechanical methods of pressure measurement</p> <p>Atmospheric (barometric) pressure</p>	1
2	6	3	<p style="text-align: center;">Heat and Temperature</p> <p style="text-align: center;">Definitions</p> <p style="text-align: center;">Unit of measurement:</p> <p>Specific heat and its anesthetic applications</p> <p>Latent heat and its anesthetic application</p> <p>Transfer of heat</p> <p>Heat loss from the body</p> <p>Temperature scales</p> <p>The SI unit of temperature</p> <p>Non electrical thermometer</p> <p>Electrical thermometer</p>	2
2	6	3	<p style="text-align: center;">Humidity & Humidification</p> <p style="text-align: center;">Definitions</p> <p>Anesthetics consideration</p> <p>Physics of humidity</p> <p>Absolute humidity</p> <p>Relative humidity</p>	3

			Methods of humidification of inspired gases	
2	6	3	Fluid flow Laminar flow Hagen Poiseuille Formula Turbulent flow - Factors which change laminar flow to turbulent flow - Applications in an aesthetic practice Bernoulli Effect Venture Effect Injector	4
2	4	2	Gas flow measurement Rota meter THE GAS LAW	5

Course Title:-Practical

EXERCISE	CONTENTS	HOURS
1	How to inter change between multiple units of pressure	3
2	Differentiate between various types of temperature scales	3
3	Differentiate between HME and humidifier	3
4	General look of components of anesthesia system of gases	3
Total		12