

University of Al-Anbar

College of Pharmacy

Department of Clinical Laboratory Sciences

Title of the course: *Practical Medical Physics*

Level: 1st Class, 2nd Semester

Credit hours: **Laboratory 1 credit 2 hours/week**

Tutors:

Reference text: *Lab Manual for Practical Physics Adopted by the Department*

Objectives: Gives students the ability to deal with the concepts of physics, emphasizes the knowledge and skills required to efficiently discharge the duties and responsibilities of the pharmacist. The course deals with the concept of basic physics and application of physics in the medical field. Upon completion of the course the students will be able to understand the physical terminology and abbreviation used to describe the lecture, and the application in medical field.

No	Lab title	hours
1.	Explain how to plot graph and make laboratory report.	2
2.	Optical Fiber Loss (bend) Measurement.	2
3.	Simple pendulum.	2
4.	Spectral photometric	2
5.	Density of liquid.	2
6.	The focal length of convex lens.	2
7.	Measurement of Viscosity of liquids.	2
8.	Ostwald's Viscometer: find viscosity of unknown; find the molecular weight; find concentration of unknown substance.	4
9.	Measuring surface tension (by capillary rise method and traveling microscope).	2
10.	Measuring surface tension (differential height capillary method).	2
11.	Decay curve and half life.	2
12.	Boyle's Law.	2
13.	Speed of sound.	2
14.	Laser application for measurement of single slit.	2