

**University of Al-Anbar**

**College of Pharmacy**

**Department of Clinical Laboratory Sciences**

Title of the course: *Clinical Laboratory Training* Course number: **515**

Level: 5<sup>th</sup> Class, 1<sup>st</sup> Semester

Credit hours: **Laboratory 2 credits 4 hours/week**

Tutors:

Reference text: *Manual for Laboratory Training Adopted by the Department*

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**Objectives:** It provides general information about the biochemical basis of disease and about the principles of laboratory diagnosis; it supplies specific guidance on the clinical value of chemical investigations, indicating their range of application and limitations as well as relating results of laboratory tests to the process of clinical diagnosis and management as these might applied to individual patients.

No	Lecture title	hours
1.	Diagnostic test basics, collecting & transporting specimens, venipuncture, urine specimen, stool specimen.	4
2.	Biochemical tests: Fasting blood glucose, Post-prandial glucose, Oral glucose tolerance test.	4
3.	Blood urea, Blood creatinine, Creatinine clearance, Uric acid.	4
4.	Cholesterol, Lipoproteins, triglycerides.	4
5.	Blood proteins, Bilirubin.	4
6.	Calcium, Inorganic phosphate, Serum chloride	4
7.	Alkaline phosphatase, Acid phosphatase, Alanine amiotransferase, Aspartate aminotransferase, Lactate dehydrogenase, Creatine phosphokinase.	4
8.	Serological tests: VDRL, ASO- Titer, Hepatitis tests.	4
9.	C-reactive protein test, Rheumatic factor test, Rosebengal test, Typhoid fever test( Widal test), Pregnancy Test.	4
10.	General urine examination, urine specimen collection.	4
11.	Hematological tests: RBC count, Hb, PCV, RBC indices, WBC count, Platelets count.	4
12.	Blood typing, Coombs test, Bleeding time, ESR.	4
13	Microbiological tests: culture and sensitivity tests, Staining methods	4
14.	Culture media, Enriched culture media for general use	4
15.	Tests for identification of bacteria, Disk diffusion tests of sensitivity to antibiotics, Choice of drugs for disk test, bacterial disease and their laboratory diagnosis.	4