Course Description Form

1. Course Name:
Clinical Laboratory Training
2. Course Code:
Phcls24-5211-
3. Semester / Year:
2nd semester/5th year
4. Description Preparation Date:
1/2/2025
5. Available Attendance Forms:
Sheets signed by students
6. Number of Credit Hours (Total) / Number of Units (Total)
4 hours Practical/ 2 unites
7. Course administrator's name
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8. Course Objectives

Course Objectives	Learning students about various Tests applied in hospital labs (Biochemical, Hematological, Bacteriological, Virological, General urine exam, general stool exam). Showing them the normal values of each studied parameter, and teach them how to explain abnormalities in association with clinical symptoms and diseases.

9. Teaching and Learning Strategies

Strategy	Explain work principles+ Applying the lab examinations + making weekly reports + written and practical quiz+ Visiting specific laboratories in general hospitals to take a look on status situation in lab work field.

10. Course Structure					
Week	**Hours**	**Required Learning Outcomes**	**Unit or subject name**	**Learning method**	**Evaluation method**
1	4	Importance of laboratory tests, how to make sampling	Diagnostic test basis, collecting and transporting specimen.	Practical	Exam & report
2	4	Glucose situation in the body	Biochemical test: fasting blood glucose, Post prandial glucose, oral glucose tolerance test.	practical	Exam & report
3	4	Kidney function	Blood urea, blood creatinine, creatinine clearance, uric acid.	practical	Exam & report
4	4	Blood lipids situation	Cholesterol, lipoprotein, triglycerides.	practical	Exam & report
5	4	Liver function	Blood proteins, bilirubin.	practical	Exam & report
6	4	Testing blood minerals	Calcium, inorganic phosphate, serum chloride.	practical	Exam & report
7	4	Analysis of protein metabolism	Alkaline phosphatase, acid phosphatase, alanine aminotransferase, aspartate amino transferase, lactate dehydrogenase, creatinine phosphokinase.	practical	Exam & report
8	4	Virology test	Serological tests: VDRL, ASO-titer, hepatitis test.	practical	Exam & report
9	4	Serological tests for infections	C-reactive protein test, Rheumatic factor test, rosbengal test, typhoid fever test (Widal test), Pregnancy test, TORCH test.	practical	Exam & report
10	4	Urinalysis	General urine exam, urine specimen collection.	practical	Exam & report
11	4	Stool analysis	General stool exam, stool specimen collection	practical	Exam & report
12	4	Blood analysis	Hematological tests: RBC count, Hb, PCV, RBC indices, WBC count, Platelet count.	practical	Exam & report
13	4	Blood analysis	Blood typing, COMB test, Bleeding time, ESR.	Practical	Exam &

					report
14	4	Bacteriological and sensitivity test	Microbiological tests: culture and sensitivity test, staining methods, enriched media. VITEK II system	practical	Exam & report
15	4	Applications of Clinical Microbiology	Identifying the most prevalent lab techniques that can be used in diagnostic microbiology and correlate that with the most clinical prevalent infections	practical	Exam & report

11. Course Evaluation

- 40 M Quest Practical: (10% Class activity and reports + 5% Oral exam. + 15% practical exam %10+written exam)
- 60 M final exam

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- 100 M total

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Oxford handbook of Clinical and Laboratory investigation. By: Drew Provan, 4th ed. 2018.
Main references (sources)	Manual for laboratory training adopted by the department
Recommended books and references (scientific journals, reports...)	Laboratory tests in general practice. K reports 59 C. By: Gillet Pierr, et al 2007
Web sites	https://labtestsonline.org.uk
Curriculum development	5% (Microbiology and Serology)