

Course Syllabus

1	Course title	Hospital Laboratory Training in Hematology & Histological Techniques	
2	Course number	0308482	
3	Credit hours	3 hrs	
	Contact hours (theory, practical)	Hospital Practice	
4	Prerequisites/corequisites	Finishing 90 Cr. Hrs. and 0308363 + 0308232	
5	Program title	Bachelor of Clinical Laboratory Sciences	
6	Program code	0308	
7	Awarding institution	University of Jordan	
8	School	Science	
9	Department	Clinical Laboratory Sciences	
10	Course level	Fourth Year	
11	Year of study and semester (s)	Second Semester 2023/2024	
12	Other department (s) involved in teaching the course		
13	Main teaching language	English	
14	Delivery method	<input checked="" type="checkbox"/> Face to face learning <input type="checkbox"/> Blended <input type="checkbox"/> Fully online	
15	Online platforms(s)	<input checked="" type="checkbox"/> Moodle <input checked="" type="checkbox"/>	
		<input type="checkbox"/> Others.....	
16	Issuing/Revision Date	25/2/2024	

17 Course Coordinator:

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18 Other instructors:

Name:

Office number:

Phone number:

Email:

Contact hours:



19 Course Description:

This course is a hands-on clinical practice in the Clinical Hematology and Histology lab sections at the University of Jordan Hospital Laboratories. It is a 2 Credit hours course, 75 contact training hours distributed over 12 training days. During this training period the student will receive, process and communicate results for specimens from patients admitted to the University Hospital. The student will cover Complete Blood Count (CBC) testing, Blood film preparation and evaluation, Erythrocyte Sedimentation Rate (ESR), Coagulation Tests, Special stains in hematology in addition to Tissue processing and slide preparation for pathology evaluation.

20 Course aims and outcomes:

A- Aims:

This course aims to provide the students with a real experience performing routine and special hematological tests and preparing slides from different tissues.

B- Students Learning Outcomes (SLOs):

For purposes of mapping the course SLOs to the MLS program SLOs, upon the successful completion of the program, graduates are expected to be able to:

SLO(1). Understand and apply the theoretical foundations of medical laboratory sciences to accurately calibrate and operate advanced laboratory equipment.

SLO(2). Demonstrate knowledge of safety protocols, Ministry of Health regulations, and environmental preservation practices when handling samples of pathogens and chemical/biological risks.

SLO(3). Acquire in-depth technical knowledge to stay abreast of scientific advancements and actively participate in local and global applied research in the field.

SLO(4). Perform diverse analyses and effectively interpret results for various clinical samples across laboratory disciplines such as hematology, clinical chemistry, microbiology, urine analysis, body fluids, molecular diagnostics, and immunology.

SLO(5). Apply practical training to solve complex problems, troubleshoot issues, and interpret results, ensuring a connection between data and specific medical conditions for precise diagnosis.

SLO(6). Show effective communication skills to convey information accurately and appropriately in a laboratory setting.

SLO(7). Demonstrate a commitment to lifelong learning and innovation by applying modern techniques, critically analyzing information, and contributing to the creation and application of new knowledge in medical laboratory sciences which fulfil the requirements of national and international CBD.

SLO(8). Uphold professional behavior, ensuring the confidentiality of client information, and respecting client privacy throughout all aspects of laboratory work.

SLO(9). Apply managerial skills that align with quality assurance, accreditation, quality improvement, laboratory education, and resource management, showcasing competence in the effective administration of laboratory practices.

Descriptors	ILO/ID	Program SLOs	SLO (1)	SLO (4)	SLO (5)	SLO (6)	SLO (9)
		Course SLOs					
Knowledge	A1	Demonstrate understanding of the basic components of the hematological lab testing and tissue preparation.	X				
	A2	Show knowledge of the different hematology lab tests.	X	X			
Skills	B1	Perform proficiently a full range of routine and special hematological tests and be able to prepare slides from different tissues.		X			
	B2	Analyze and interpret hematology lab results and correlate them to disease conditions			X		
Competence	C1	Able to identify lab errors and solve related problems and able to communicate and discuss hematology lab results			X	X	
	C2	Exercise and master ethical consideration, good lab practices and demonstrate clinical lab management and organization skills					X

21. Topic Outline and Schedule:

Week	Lecture	Topic	Student Learning Outcome	Learning Methods (Face to Face/Blended/ Fully Online)	Platform	Synchronous / Asynchronous Lecturing	Evaluation Methods	Resources
1	One training day at the hospital followed by a lecture	Specimen Considerations in the Hematology Lab	A1, A2, B1, B2, C1,C2	Face to Face	Lecture Room	Synchronous	Written Exams, Oral exams, assignments	Ref. 1& 2
2	One training day at the hospital followed by a lecture	Lab Automation and Quality Control in the Clinical Hematology Lab	A1, A2, B1, B2, C1,C2	Face to Face	Lecture Room	Synchronous	Written Exams, Oral exams, assignments	Ref. 1& 2
3	One training day at the hospital followed by a lecture	Complete Blood Counts	A1, A2, B1, B2, C1,C2	Face to Face	Lecture Room	Synchronous	Written Exams, Oral exams, assignments	Ref. 1& 2
4	One training day at the hospital followed by a lecture	Complete Blood Counts	A1, A2, B1, B2, C1,C2	Face to Face	Lecture Room	Synchronous	Written Exams, Oral exams, assignments	Ref. 1& 2
5	One training day at the hospital followed by a	Blood Film Preparation and Evaluation	A1, A2, B1, B2, C1,C2	Face to Face	Lecture Room	Synchronous	Written Exams, Oral exams,	Ref. 1& 2

	lecture						assignments	
6	One training day at the hospital followed by a lecture	Blood Film Preparation and Evaluation	A1, A2, B1, B2, C1,C2	Face to Face	Lecture Room	Synchronous	Written Exams, Oral exams, assignments	Ref. 1& 2
7	One training day at the hospital followed by a lecture	Erythrocyte Sedimentation Rate	A1, A2, B1, B2, C1,C2	Face to Face	Lecture Room	Synchronous	Written Exams, Oral exams, assignments	Ref. 1& 2
8	One training day at the hospital followed by a lecture	Coagulation Studies	A1, A2, B1, B2, C1,C2	Face to Face	Lecture Room	Synchronous	Written Exams, Oral exams, assignments	Ref. 1& 2
9	One training day at the hospital followed by a lecture	Coagulation Studies	A1, A2, B1, B2, C1,C2	Face to Face	Lecture Room	Synchronous	Written Exams, Oral exams, assignments	Ref. 1& 2
10	One training day at the hospital followed by a lecture	Special Stains in the Hematology Lab	A1, A2, B1, B2, C1,C2	Face to Face	Lecture Room	Synchronous	Written Exams, Oral exams, assignments	Ref. 1& 2
11	One training day at the hospital followed by a lecture	Histology and Microtechniques	A1, A2, B1, B2, C1,C2	Face to Face	Lecture Room	Synchronous	Written Exams, Oral exams, assignments	Ref. 1& 2
12	One training day at the hospital followed by a lecture	Histology and Microtechniques	A1, A2, B1, B2, C1,C2	Face to Face	Lecture Room	Synchronous	Written Exams, Oral exams, assignments	Ref. 1& 2
13								Ref. 1& 2
14	Oral Exam	Oral Exam	A1, A2, B1, B2, C1,C2	Face to Face	Lecture Room	Synchronous	Written Exams, Oral exams, assignments	Ref. 1& 2
15	Written Exam	Written Exam	A1, A2, B1, B2, C1,C2	Face to Face	Lecture Room	Synchronous	Written Exams, Oral exams, assignments	Ref. 1& 2

22 Evaluation Methods:

Opportunities to demonstrate achievement of the SLOs are provided through the following assessment methods and requirements:

Evaluation Activity	Mark	Topic(s)	SLOs	Period (Week)	Platform
Assignments	10	All Training Topics	All		
Quizzes					
Evaluation	30	Hospital Training evaluation, attendance and Log Book	All		
First Exam					
Oral exam	20	Clinical Hematology and Histological Techniques	All	16	In campus
Final Exam	40	Clinical Hematology and Histological Techniques	All	16	In campus

23 Course Requirements

The clinical preceptor in each clinical experience will provide feedback about each student to the CLS supervisor at the University. Students will undergo knowledge and performance assessments. Assessment forms will be used to evaluate student performance, knowledge, behavioral and professional skills during the clinical experience. The clinical preceptor may use the assessment forms to provide individual counseling and employment recommendations for the success of the student. Students must successfully complete a final assessment for each clinical rotation to demonstrate competency in that particular MLS discipline. Satisfactory performance for each clinical experience will be indicated by a numerical grade; all students must obtain an 50% or greater in all areas to satisfactorily complete the clinical rotation. A grade below 50% will require remediation or potentially repeating the clinical practicum course/clinical experience. A course syllabus for each clinical rotation will have details about its specific topic area.

24 Course Policies:

A- Attendance policies:

- 8 hours per day from Sunday to Thursday.
- Following the rotation schedule assigned by the hospital for trainee.
- A weekly meeting at the university for one hour for case study presentations and discussions

B- Absences only permitted after writing a leave of absence request. You need to show evidence of a valid reason (e.g. Medical report)

C- Health and safety procedures: All students should comply with the Hospital health and safety procedures

D- Honesty policy regarding cheating, plagiarism and misbehavior. All students should comply with



the university Honesty policy regarding cheating, plagiarism, misbehavior

E- Grading policy:

Hospital evaluation and attendance	20%
Presentation (case study)	10%
Logbook	10%
Oral Examination	20%
Comprehensive Examination	40%
Fail:	0-49
Pass :	50-100

25 References:

A- Required book(s), assigned reading and audio-visuals:

1. **Henry's Clinical Diagnosis and Management by Lab Methods, 23rd Ed.**
2. **Laboratory Medicine: the diagnosis of disease in the clinical laboratory, 2nd Ed.**

B- Recommended books, materials, and media:

26 Additional information:

Name of Course Coordinator: **Dr. Zaid Aburubaiha**

Signature: *Aburubaiha Zaid* Date: 1/2024

Head of Curriculum Committee/Department: **Dr. Suzan Matar**

Signature: *Suzan Matar*

Head of Department: **Dr. Ahmed Abu siniyeh**

Signature: *Ahmed Abu siniyeh*

Head of Curriculum Committee/Faculty: **Dr. Mu'ayyad Al Hseinat**

Signature: *Mu'ayyad Al Hseinat*

Dean: **Prof. Mahmoud Jaghoub**

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