

Course Syllabus

1	Course title	Hospital Laboratory Training in Blood Banking And Transfusion
2	Course number	0308483
3	Credit hours	3 hrs
3	Contact hours (theory, practical)	Hospital Practice
4	Prerequisites/corequisites	Finishing 90 Cr. Hrs. and 0308364
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	⊠Face to face learning □Blended □Fully online
15	Online platforms(s)	⊠Moodle ⊠
13	omme platforms(s)	□Others
16	Issuing/Revision Date	25/2/2024
17 Co	urse Coordinator:	

Name: Dr. Zaid Aburubaiha	Contact hours: 11:30-13:30 Sun Tue
Office number: 405/ Biology building	Phone number: 0775763767
Email: z.aburubaiha@ju.edu.jo	

18 Other instructors:

Name:		
Office number:		
Phone number:		
Email:		
Contact hours:		



19 Course Description:

This course is a hands-on clinical practice in the Blood Banking and Transfusion 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 Donor History and Physical, Blood Donation (Phlebotomy), Lab tests on Donor Blood, Blood Component Preparation, Compatibility tests and Cross match, Infectious agents testing.



20 Course aims and outcomes:

A- Aims:

This course aims to provide the students with a real experience performing blood collection, preparation and issuing.

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 Course SLOs	SLO (1)	SLO (4)	SLO (5)	SLO (6)	SLO (9)
77 1 1	A1	Demonstrate understanding of the basic components of the Immunohemaological testing.	X				
Knowledge	A2	Show knowledge of the Blood Collection process and component preparation	X	X			
C1.:11.	B1	Perform proficiently a full range of immunohematological tests and compatibility tests.		X			
Skills	B2	Analyze and interpret compatibility testing results and select blood accordingly			X		
Compatance	C1	Able to identify lab errors and solve related problems and able to communicate and discuss Blood Bank results			X	X	
Competence	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	Learning Methods (Face	Platform	Synchronous /	Evaluation	Resources
WEEK	Lecture	Торіс	Outcome	to Face/Blended/ Fully Online)	1 latioi iii	Asynchrono us Lecturing	Methods	Resources
1	One training day at the hospital followed by a lecture	Specimen Considerations in the Blood Bank	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 Instrumentation and Quality Control in the Blood Bank	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	Donor History and Physical exam	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	Blood Donation	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 lecture	Blood Donation	A1, A2, B1, B2, C1,C2	Face to Face	Lecture Room	Synchronous	Written Exams, Oral exams, assignments	Ref. 1 & 2
6	One training	Blood	A1, A2,	Face to Face	Lecture	Synchronous	Written	Ref. 1 & 2



ACCREDITATION & GUALITY ASSURA	day at the hospital followed by a lecture	Component Preparation	B1, B2, C1,C2		Room		Exams, Oral exams, assignments	
7	One training day at the hospital followed by a lecture	Blood Component Preparation	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	Compatibility Testing	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	Compatibility Testing	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	Compatibility Testing	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	Blood component Issuing	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	Infectious screening	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	Evaluation Activity Mark		SLOs	Period (Week)	Platform	
Assignments 10		All Training Topics	All			
Quizzes						
Evaluation	Evaluation 30		All			
First Exam						
Oral exam	20	Blood Banking and Transfusion	All	16	In campus	
Final Exam	40	Blood Banking and Transfusion	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:

- 12 training days, 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** Signature: *Mahmoud Jaghoub*