

# Course Specification Clinical hematology& blood banking (2025)

## 1. Basic Information

Course Title (according to the bylaw)	(Basic) Clinical hematology& blood banking			
Course Code (according to the bylaw)	CPAT 701			
Department/s participating in delivery of the course	Clinical and Chemical pathology department			
Number of credit hours/points of the course (according to the bylaw)	Theoretical 2h	Practical 0.5 h	Other (specify)	Total
Course Type	اجباري			
Academic level at which the course is taught	الفرقة/المستوى الاول			
Academic Program	MD of Clinical and Chemical pathology			
Faculty/Institute	faculty of medicine			
University/Academy	Benha university			
Name of Course Coordinator	Prof. Dr. Yasser Ismail			
Course Specification Approval Date	9/14/2025			
Course Specification Approval (Attach the decision/minutes of the department /committee/council ....)	9/14/2025			

## 2. Course Overview (Brief summary of scientific content)

..... Knowledge of the physiological background of Bone marrow and peripheral blood cells.

1.2. Studying the blood hemostasis and different blood and bone marrow diseases. ...

## 3. Course Learning Outcomes CLOs

### Matrix of course learning outcomes CLOs with program outcomes POs(NARS/ARS)

Program Outcomes(NARS/ARS) (according to the matrix in the program specs)		Course Learning Outcomes Upon completion of the course, the student will be able to:	
Code	Text	Code	Text
		2.a.1. Define blood cells, their characters and .functions	2.a.2. State the nature of blood cells, clotting factors and its role in health and disease , list different blood group systems and antigens.
		2.a.3. Describe various diagnostic tests and its role in diagnosis and follow up of hematological diseases.	2.a.4. State the basic rules and practical applications for all hematological investigations.
		2.a.5. Define scientific developments in the field of hematological diseases.	2.a.6. Identify the principles of work of various instruments used to test various blood diseases

<b>Program Outcomes(NARS/ARS)</b> (according to the matrix in the program specs)		<b>Course Learning Outcomes</b> Upon completion of the course, the student will be able to:	
<b>Code</b>	<b>Text</b>	<b>Code</b>	<b>Text</b>

## 4. Teaching and Learning Methods

1- Lectures

2- Seminars

3 - Clinical sessions

4 - Groups discussion

5- Case presentation with interpretation of results

6- E lectures

## Course Schedule

دروس عملية	درس العملى	محاضرة	الموضوع
			<b>Normal hemopoiesis and anemias</b>
		2	Normal hemopoiesis
2	Complete blood cell Count	1	Iron deficiency anemia
1	RBCs morphologoy in health & disease	2	Megaloblastic anemias
1	WBCs morphologoy in health & infection.	2	Aplastic anemia

1	Preperation &staining of bone marrow film	1	anemia of chronic disease
2	Normocellular BM	2	Hereditary spherocytosis, G6PD, Sickle cell anemia , thalathemia
2	Hypercellular BM	2	Paroxysmal nocturnal haemoglobinuria. Immune hemolytic anemia
			<b>Acute leukemias , MPD , LPD</b>
		2	Acute leukaemias
1	ITP	2	MDS
		2	Myeloproliferative neoplasms
1	MDS	2	Chronic lymphoid leukaemias
2	ALL in B.M	1	Plasma cell dyscrasias
2	AML in B.M	1	<b>Normal hemostasis</b>

		2	Abnormalities of platelets
		2	Inherited disorders of coagulation
		2	Acquired disorders of coagulation
		2	<b>Basic of blood banking</b>

## 5. Methods of students' assessment

No.	Assessment Methods *	Assessment Timing (Week Number)	Marks/ Scores	Percentage of total course Marks
1	Exam 1written (Semester work)	-		
2	Exam 2 ..... (Semester work)	-		
3	Final Written Exam	✓	75	
	Final Practical/Clinical/... Exam	✓	30	
	Final Oral Exam	✓	20	
	Assignments / Project /Portfolio/ Logbook	✓		
	Field training	✓		
	Other (Mention)			

\* The methods mentioned are examples, the organization may add and/or delete

## 6. Learning Resources and Supportive Facilities\*

<b>Learning resources (books, scientific references, etc.) *</b>	<b>The main (essential) reference for the course</b> (must be written in full according to the scientific documentation method)	Department book: (By; Staff Members, 2014) Log book: (By: Staff Members, 2014)
	<b>Other References</b>	- <b>Essential Haematology (A.V.Hoffbrand&amp; J.E Petie,2020)</b> <b>Hoffman Hematology Basic Principles - (&amp;Practice(Ronald Hoffman, 2018</b>
	<b>Electronic Sources</b> (Links must be added)	- Journal of clinical pathology  - <a href="http://www.medscape.com">http://www.medscape.com</a>  - <a href="http://www.ncbi.nlm.nih.gov/pmc/">http://www.ncbi.nlm.nih.gov/pmc/</a>  - <a href="http://sciencedirect.com">http://sciencedirect.com</a>
	<b>Learning Platforms</b> (Links must be added)	
	<b>Other</b> (to be mentioned)	
<b>Supportive facilities &amp; equipment for teaching and learning *</b>	<b>Devices/Instruments</b>	✓
	<b>Supplies</b>	✓
	<b>Electronic Programs</b>	✓
	<b>Skill Labs/ Simulators</b>	✓
	<b>Virtual Labs</b>	
	<b>Other</b> (to be mentioned)	

\* The list mentioned is an example, the institution may add and/or delete depending on the nature of the course

**Name and Signature**

**Course Coordinator**

أ.د/ هوايدة محمد كمال

**Name and Signature**

**Program Coordinator**

أ.د/ ياسر اسماعيل

