Program Specification Clinical and Chemical pathology MD (2025- 2026)

1. Basic Information

ProgramTitle (according to what is stated in the bylaw):	MD of Clinical and Chemical pathology
Total number of credit hours/points of the program:	65 credit hours
Number of academic years/levels (expected program duration):	1 st part : 1 semester (15 weeks) 2 nd part: 4 semesters (60 weeks)
Department (s) Participating (if any) in teaching the program:	Clinical and Chemical : pathology department,
Faculty/Institute:	Benha university
University/Academy:	faculty of medicine
Program majors/divisions/tracks/specialties in the final year (if any):	Clinical Chemistry Clinical Hematology
Partnerships with other parties and the nature of each (if any):	Clinical and Chemical pathology department
Name of the program coordinator (attach the assignment decision):	Prof. Dr. Yasser Ismail
Program Specification Approval Date:	9/14/2025
Council responsible for Program Specification Approval (Attach the Decision / Minutes):	9/14/2025

2. **Program Aims** (Brief description of the overall purpose the program)

3. *The overall aims of the program are:*

4. 1.a. Knowing the advanced science and technology of clinical laboratory medicine (clinical chemistry, clinical hematololgy, microbiology and clinical immunology).

5. 1. b. Understanding the principles of different analytical methods including clinical methodology and apply efficiently the procedure of each in (clinical chemistry, clinical hematololgy, microbiology and clinical immunology).

6. 1. c. Integrating clinical pathology knowledge and related knowledge deducing and developing relation between them.

7. 1.d. Awaring of clinical pathology problems in laboratory work and propose creative solution to solve them.

8. 1.e. Performing different professional skills in the field of (clinical chemistry, clinical hematology, microbiology and clinical immunology) using new approiate technological methods.

9. 1.f. Showing proficiency in using automation technology for professional practice instead of manual work.

10. 1.g. Employing available resources (reagent , equipment ,personal) effectively , develop them and work to find new resources.

11.   1.h. Performing continuous medical and practical education and transfer knowledge and experience

to other in the field of clinical pathology.

12.   1.i. Following ethical code of practice and reflect integrity and sincerity.

13.   1.j. Knowing the role of community development and be involved in environmental sanitation.

14.   1.k. Communicating effectively and lead laboratory work team, and make decision in light of

available information in field of clinical pathology

15. Program Structure (Curriculum)

Requirement Category/Type	Number of Courses	Number of Credit Hours/Points	Percentage from the total number of hours/points
University Requirements	**1st part** 4 COMPLSORY **2nd part** 1SELECTIVE + ELECTIVE 1 COURSES	65 hours. 1 st part: one semester (15 weeks) - 10 h 2 nd part: 4 semesters (60 weeks)-40 h Thesis 15h	1 st part: 10 h 15% 2 nd part: 40h 62% Thesis ; 15h **23%**
Faculty/College Requirements (if applicable)			
Program Requirements			

Requirements of the majors/divisions/tracks/specializations in the final year (if any)			1 selective + 1elective	40	
Other requirements	Field Training		logbook		
	Graduation Project				
	Mandatory training year				
	Other (to be mentioned)		Thesis: 6h Conference and workshops attendance	6	
Total Compulsory Courses			4 in 1st part	10 h	
Elective Courses			<u>1 in 2nd part</u>	2h	
Total			<u>+ 1 selective</u>	38 h(total: 50 h)	

- **Program Components**

- **Program courses according to the expected study plan**

Academic Level	Semester	Course Code	Course Title	Course Type (Compulsory / Elective)	Requirement Category/ Type	Number ofCredit Hours/ Points	Number of Weekly Hours		
							Theoretical teaching	Practical training	Other
الاول	فصل دراسي اول	CPAT 701	Clinical heamatology & blood banking (Basic)	اجباري	تخصص	2.5	2	0.5	
الاول	فصل دراسي اول	CPAT 702	Clinical chemistry	اجباري	تخصص	2.5	2	0.5	

Academic Level	Semester	Course Code	Course Title	Course Type (Compulsory / Elective)	Requirement Category/ Type	Number ofCredit Hours/ Points	Number of Weekly Hours		
							Theoretical teaching	Practical training	Other
			(Basic)						
الاول	فصل دراسي اول	CPAT 703	Clinical (microbiology (Basic)	اجباري	تخصص	2.5	2	0.5	
الاول	فصل دراسي اول	CPAT 704	Clinical Immunology (Basic)	اجباري	تخصص	2	2	0.5	
الثاني	فصل دراسي ثاني	CPAT 705	Clinical Chemistry (advanced)	اختياري	تخصص	38	18	20	
الثاني	فصل دراسي ثاني	CPAT 706	Clinical Hematology(advanced)	اختياري	تخصص	38	18	20	
الثاني	فصل دراسي ثاني	CPAT 707	Clinical microbiology (advanced)	اختياري	تخصص	38	18	20	
الثاني	فصل دراسي ثاني	CPAT 708	Clinical Immunology (advanced)	اختياري	تخصص	38	18	20	
الثاني	فصل دراسي ثاني	CPAT 709	Optional (Infetion control and patient Safety)	اختياري	تخصص	2	2	-	
الثاني	فصل دراسي ثاني	CPAT 710	Optional (Total quality management)	اختياري	تخصص	2	2		

16. Academic Standards

- **Adopted Academic Standards (NARS/ARS): ARS**
  * When adopting ARS:<u>The matrix of the academic reference standards (ARS) with the national academic reference standards (NARS) must be attached</u>

- **Date of Adoption of Standards in the governing Council: 3/1/2009**
  * Decision/Minutes of the governing Council to be attached

17. Matrix of Academic Standards (Program Outcomes POs) with Courses

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Compulsory Courses (Name and code)	Academic Standards (Mention code only)													
	المعرفة والفهم													
Clinical (- microbiology (Basic) CPAT 701							2.1.1	2.1.2	2.1.3	2.1.4	2.1.5	2.1.6		
Clinical Immunology (Basic) - CPAT 702							√						2.1.1	المعرفة والفهم
Clinical Chemistry (advanced) - CPAT 703								√					2.1.2	
Clinical Hematology(advanced)- CPAT 704									√				2.1.3	
Clinical microbiology										√			2.1.4	

Compulsory Courses (Name and code)	Academic Standards (Mention code only)									
	المعرفة والفهم									
(advanced) - CPAT 705										
Clinical Immunology (advanced)- CPAT 706								√	2.1.5	
								√	2.1.6	

	المهارات الذهنية									
			2.2.1	2.2.2	2.2.3	2.2.4	2.2.5	2.2.6	2.2.7	2.2.8	2.2.9	
			√								2.2.1
				√							2.2.2
					√						2.2.3
						√					2.2.4
							√				2.2.5
								√			2.2..6
									√		22.7

	المهارات العامة والمتنقلة									
			2.4.1	2.4.2	2.4.3	2.4.4	2.4.5	2.4.6	2.4.7	2.4.8	
			√								2.4.1
				√							2.4.2
					√						2.4.3
						√					2.4.4
							√				2.4.5
								√			2.4.6
									√		2.4.7
										√	2.4.8

- **Identification is done for each major/division/track/specialty in the final year (if any)**
- **Attach a separate matrix of elective courses (if any)**

18. Teaching and Learning strategies/methods to achieve Program Outcomes:

- استراتيجية التعلم النشط
2- استراتيجية التعليم المبني على النتائج
3- استراتيجية التعليم عن بعد...

7. Student Assessment strategies/methods to verify and ensure students' acquisition of Program Outcomes:

ما نقيسه من مخرجات التعلم المستهدفة	الطريقة	م
To assess knowledge & intellectual skills: 2.a.1.......2.a.10., 2.b.1......2.b.10.	Written examination (including case study)	1
To assess knowledge, intellectual skills & General & transferable skills:	Oral examination	2
To assess knowledge, intellectual skills & General & transferable skills, practical & clinical skills: 2.b.1......2.b.10.	Practical & clinical examination	3
To assess knowledge, intellectual skills & General & transferable skills, practical & clinical skills: 2.b.1......2.b.10. 2.a.1.......2.a.9. 2.c.1........2.c.9. 7	Thesis	4

8. Program Key Performance Indicators (if any)

No.	Performance Indicator	Target Level	Method	Measurement
1.				
2.				
3.				

| Name & Signature
Program Coordinator

Prof. Dr. Yasser Ismail | Name & Signature
Vice Dean for Education and Student Affairs

Prof. Dr. Azza Ahmed Abo Senna |