

**Biochemistry I course report
2024-2025**

1. Basic Information:

Course title:	Biochemistry I		
Course code:	1103		
Department:	Biochemistry department		
Program on which the course is given:	Bachelor of medicine and surgery (MBBCh)		
Faculty:	Faculty of Medicine		
University:	University of Benghazi		
Academic level:	phase: 1	year: 1	Year: 2024-2025
Prerequisite:	Premedical courses		
contact hours:	Lecture: 95	Practical: 18	Total: 117
System applied to choose exam committee: Internal and external examiners are nominated by department council and approved by Faculty council			
External evaluation of the exam:		Applied	√ Not applied
No. of staff members delivering the course:	9		
Approval date:	2025		

2. Specialized Information:

2.1. Statistics:

First round examination					
1.	Total number of students targeted for the exam	1450			
2.	Number of Absentees	244			
3.	Number of Attendees	1206			
4.	Number of Passed Students	565			
5.	Number of Failed Students	641			
6.	Results %:	38.9%			
4.	Grading of students completing the course:				
	Excellent	V. Good	Good	Pass	Fail
	120	125	161	159	641

Second round examination				
1.	Total number of students targeted for the exam	885		
2.	Number of Absentees	276		
3.	Number of Attendees	609		
4.	Number of Passed Students	254		
5.	Number of Failed Students	631		
6.	Results %:	29%		
7.	Grading of students completing the course:			
	Excellent	V. Good	Good	Pass
	0	7	21	226
				631

2.2. Course teaching:

2.2.1. Lectures:

module No.	Topic	No. of hours
1	chemistry of amino acids and proteins	15
2	enzymes	12
3	vitamins	12
Mid-term exam		
4	Clinical enzymology	6
5	Carbohydrate chemistry	8
6	Lipid chemistry	6
7	Nucleic acid	6
8	Clinical nutrition	6
9	minerals	8
10	Body fluids	6
11	immunochemistry	6
12	Cell membrane	4
Final Exam		

2.2.2. Practical/Tutorial:

1	Laboratory safety	2
2	Introduction to colorimetric	2
3	Estimation of total serum proteins	2
4	measurement of serum albumin	2
5	Estimation of serum Vitamin B12	2
6	Estimation of serum transaminases	2
7	Estimation of serum calcium	2
8	Estimation of serum phosphorus	2
9	Urine analysis	2
10	Performing venipuncture	2
11	Inserting cannula into peripheral veins	2

2.2.3. % of Actually given course content:

	100%	√	95 - <100		85 - <95		75 - <85		<75
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2.2.4. Degree of fulfillment of staff members of the course content:

	100%	√	95 - <100		85 - <95		75 - <85		<75
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2.2.5. % of Contents covered in the exam:

√	100%		95 - <100		85 - <95		75 - <85		<75
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2.2.6. Teaching and learning methods:

2.2.6.1.	Lecture
2.2.6.2.	practical

2.2.7. Student assessment:

	Methods of Evaluation	Percentage (%)	Date of Evaluation	NOTE
First round examination				
1	Mid-Term Exam	20%	January 2025	
2	Final-Term Exam	50 %	May 2025	
3	Final Practical Exam	20 %	May 2025	5degree report + 5degree activity (poster 20 lab exam
4	Final Oral Exam	10%	May 2025	
	Total	100%		
Second round examination				
1	Final-Term Exam	70%	July 2025	
2	Final Practical Exam	20%	July 2025	
3	Final Oral Exam	10%	July 2025	
	Total	100%		

3. Teaching resources:

3.1. Scientific references:							
√	available		available to some extent		not available		
3.2. Helping tools:							
√	available		available to some extent		not available		
3.3. Laboratories and practical resources:							
	available	√	available to some extent		not available		not applicable
3.4. IT facilities:							
	available		available to some extent	√	not available		

4. Inadequacies and administrative constraints:

4.1.	<ul style="list-style-type: none"> Inadequate biochemical kits for labs due to large number of students
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5. Students' evaluation:

5.1.	Course contents	3.7
5.2.	CLOs	3.2
5.3.	Lectures and Learning facilities	3.2
5.4.	Staff Member	3.6
Total		13.7
5.5. Student Comments (if any):		

6. Comments of external examiners (if any):

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7. Suggestions for course enhancement:

Due to ongoing maintenance at the Faculty of Medicine and the temporary unavailability of laboratory facilities, practical sessions will be conducted through pre-recorded videos prepared by faculty members

8. Achieved and non-achieved actions from previous year:

	Action required in order of priority	Person responsible	achieved	non-achieved
1.	Performing venipuncture			✓
2.	Inserting cannula into peripheral veins			✓
3.	Academic guidance for students (proper organization and supervision)			✓
4.	Team-Based Learning (TBL) sessions			✓

1. Reasons of non-achieved actions:

- Performing venipuncture and inserting cannula into peripheral veins were not achieved due to the large number of students and limited (lab skills) space and facilities.
- Team-Based Learning (TBL) sessions were not conducted because the number of students exceeded available staff and facilities.
- The department faces challenges with the high student-to-staff ratio and insufficient classrooms, laboratories, and lecture halls.
- The department requires comprehensive maintenance and upgrading of teaching facilities

2. Action plan:

Action plan for next academic year

No.	Action required in order of priority	Person responsible	Completion date	Strategy / Notes
1	Organize smaller, structured practical sessions for venipuncture and cannula insertion	Head of Department and teaching staff	End of academic year	Limit number of students per session based on lab capacity and staff availability
2	Reorganize academic guidance and supervision for students	Course Coordinator and teaching staff	Ongoing, reviewed annually	Ensure guidance sessions are properly scheduled and aligned with staff workload
3	Conduct Team-Based Learning (TBL) sessions	Course Coordinator and teaching staff	Start of next academic year	Split students into smaller teams to match available staff and classroom resources
4	Improve infrastructure (increase lab/lecture capacity, maintenance, and resources)	Course Coordinator and teaching staff	End of academic year	Renovate and maintain labs/halls to meet student numbers
5	Ensure student intake is proportional to university facilities	Head of Department and University Administration	Start of next academic year	Set a maximum number of medical students per year based on available lecture halls, labs, and staff numbers

	Name	Signature
Course Instructor:	Dr. Sara Shoaib Boawena	
Course Coordinator:	Dr. Sara Shoaib Boawena	
Head of Department:	Dr. Salima Hawda	
Approval Date	2/10/2025	