## SHAH ABDUL LATIF UNIVERSITY KHAIRPUR





Department of Biochemistry

15 Febuary 2022





## SELF-ASSESSMENT REPORT (SAR)

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#### Introduction:

Faculty of Natural Sciences, Shah Abdul Latif University, Khairpur is famous for its excellent departments. Department of Biochemistry is one of its few excellent departments and is playing its role not only for the betterment of human beings but also for the wellbeing of Animals and Plants. Department is dedicated to teach biochemistry in a stimulating environment that provides opportunity for hands on experimentation and research.

M.Sc in Biochemistry was started back in1996 when this department was a part of the chemistry department whereas the subject of biochemistry was taught since the start of Shah Abdul Latif campus. Biochemistry became independent in 2004 and since then it is busy in running teaching, courses of B.S, MSc (Pass) MS/M.Phil and Ph.D courses. It is also taught as minor course in different departments like microbiology, Botany, Zoology and Chemistry because without biochemistry their courses are considered as uncompleted.

On the recommendation of Higher Education Commission (HEC) Islamabad, four-year B.S program was introduced first time in this university with new syllabus and has honor for starting B.s program to be at par with technologically developed countries of the world. The curriculum of Biochemistry is updated after every four years and is implemented for teaching.

Graduates of this department had been spread around the world and have won the name and recognition in the field. They have been decorated with the prizes in different forms and also been given placements for the advance studies.

#### **Criterion 1: Program Mission, Objective and Outcomes.**

#### Mission Statement of the University:

- ✓ To achieve and attain Quality Standards and become a Model by providing an outstanding educational environment.
- ✓ Taking measures for capacity building of faculty and supporting staff.
- ✓ Establishing a system to enhance research objectively developed, avoid those policies which encourage malicious activities.

#### **Mission Statement of the Department:**

To graduate articulate and creative individuals ready to face the challenges of the time and fit for the careers.

#### **Program Objectives:**

- 1. Develop an increased awareness of the universe at the bimolecular level.
- 2. Develop an understanding of the biochemistry and biochemical behavior of matter.
- 3. Become prepared for careers in biochemistry and related fields.
- 4. Develop lifelong skills including the ability to think logically and act accordingly.
- 5. Develop discipline in their personal life to lead organization.
- 6. Make them able to setup and operate various scientific equipment used in the field of biochemistry.
- 7. Receive professional training to enhance employability.
- 8. Correct weak undergraduates to face the challenges of the time.
- 9. Carry out independent laboratory investigations of research problems.
- 10. Contribute to the advancement of knowledge in their respective fields.

Program Objectives Assessment								
Objectives	How Measured	When Measured	Improvement Identified					
Develop an increased awareness of the universe at the bimolecular level	Excessive teaching of text at length	Since the start of session	Students are tested by examination.					
Develop an understanding of the biochemistry and biochemical behavior of matter	Transfer of knowledge and practical exercise	Routinely in well-equipped Biochemistry labs	Experiments are performed cheek the ability					
Become prepared for careers in biochemistry and related fields	Extra classes are conducted by Professors of the field and practical performed on various equipment	Throughout BS and M.S Program	Behavior is observed by assigning them related activities.					
Develop lifelong skills including the ability to think logically and act accordingly	Final year students are given small research project	To publish the work done in research journals	Final year studies					

**Table 1.** Shows how Objectives are measured and Improvements have been identified

**Standard 1-2:** The program must have documented outcomes for graduating students. It must be demonstrated that the outcomes support the program objectives and that graduating students are capable of performing these outcomes.

Table: 2. The following	g Table shows how	program outcomes	support the Progr	am Outcomes.
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Program Objectives	Program Outcomes				
	1.	2.	3.		
Develop an understanding of the Biochemistry and behavior of living matter	Students reached in the field of research and development organization are performing very well				
Become prepared for careers in Biochemistry and related fields	Students qualify GRE	Working in research organizations			
Develop discipline in their personal life to lead organization	Progress reports from supervisors are satisfactory				
Make them able to setup and operate various scientific equipment used in the field of Biochemistry	Students are using sophisticated equipment in research organizations with full confidence and success				

Program Objectives			Program Outcomes		
Prog	raili Objectives	1	2	3	
Develop a Biochemis living mat	n understanding of the stry and behavior of ter	XXXX			
Become p Biochemis	orepared for careers in stry and related fields	XXX	X X		
Develop personal li	discipline in their ife to lead organization	XXX			
Make them able to setup and operate various scientific equipment used in the field of Biochemistry		XXX			
Х	Relevant & satisfac	ctory to some extent			
XX	Relevant & satisfac	ctory			
XXX	Very relevant & sa	tisfactory			

XXXX Highly relevant & highly satisfactory

**Standard 1-3**. The result of program's assessment and the extent to which they are used to improve the program must be documented.

#### **Major Future Improvement Plans:**

- To impart quality education in the department using audio visual aids and modern tools along with provision of latest literature, journals, books, reviews and access to internet.
- To upgrade Graduate & Post Graduate Laboratories with the modern & sophisticated equipment.
- *To emphasize problem oriented research work on specific areas related to plants.*
- Overall enhancement of knowledge and skills of faculty members in relation to the latest global advancements in various discipline through exchange programs, short trainings and collaborative research projects within and outside country.

**Table: 4.** Shows Program Strengths & Weakness.

Program Strengths and weaknesses.										
Program	Strengths	Weaknesses	Things to be developed	Activities taken for improvements						
M.Phil/ PhD	Advanced Biochemistry Subjects	Statistics and Communication Skills	Computer Labs Lecture Hall with Audiovisual adds Well equipped analytical lab	Researchers are sent to concerned centers						

**Standard 1.4:** The department must assess its overall performance periodically using quantifiable measures.

**Table: 5.** Number of student enrolment during last three years and student faculty ratio:

Program	Year <b>2022</b>	Students/ Faculty Ratio		
M.Phil.	21	5:1		
PhD	04			
Total	25			

Table: 7. Number of publications, awards, workshops & seminars organized by thefaculty:

Dr. Abdul Majid Ansari(Associate Professor)								
Publications (HEC recognized only)		Research Projects		nograph		Scholars produced		Organized National & International
National	International	Completed	Ongoing	Mo	Awards	M.Phil	Ph.D.	Conferences
05	09					07		01

Dr. Shaista Pathan(Associate Professor)								
Publica recogi	ntions (HEC nized only)	Research	Projects during under solution		nograph		olars uced	Organized National & International
National	International	Completed	Ongoing	Mo	Awards	M.Phil.	Ph.D.	Conferences
30	13	01	01			04		02

Dr. Sanaullah Abbasi (Assistant Professor)								
Publications (HEC recognized only)		Research Projects		nograph		Scholars produced		Organized National & International
National	International	Completed	Ongoing	Mc	Awards	M.Phil.	Ph.D.	Conferences
16	06					04		

Dr. Abdul Rehman Phull (Assistant Professor)									
Publications (HEC recognized only)		Research Projects		nograph		Scholars produced		Organized National & International	
National	International	Completed	Ongoing	Mo	Awards	M.Phil	Ph.D.	Conferences	
02	27					01			

Dr. Sadia Qamer(Assistant Professor)									
Publica recogi	ntions (HEC nized only)	Research	Projects	nograph		Scholars produced		Organized National & International	
National	International	Completed	Ongoing	Mo	Awards	M.Phil.	Ph.D.	Conferences	
05	05								

**Criterion 2:** The curriculum must be designed and organized to achieve the program's objectives and outcomes. Also course objectives must.

#### Curriculum is according to HEC's approved syllabus 2018 (REVISED 2018)

#### M.Phil./MS Programme

SEMESTER	NAME OF SUBJECT	THEORY	PRACTI CAL	CREDITS
First	Advanced Nutritional	3	1	4
	Biostatistical Applications	3	1	4
	Advanced Biochemical Techniques	2	1	3
		08	03	11
Second	Biotechnology	3	1	4
	Metabolic Disorders	3	1	4
	Advanced Research plaining	3	0	3
	& Reports writings			
		09	02	11
	TOTAL	18	05	23

#### PhD Programme

SEMESTER	NAME OF SUBJECT	THEORY	PRACTI CAL	CREDITS
First	Advanced Nutrition and	3	1	4
	human Metabolism			
	Cell line studies	3	1	4
	DNA techniques and clinical	3	1	4
	applications			

		09	03	12
Second	Bio nanotechnology	3	0	3
	Drug's delivery systems	3	0	3
	Advanced food analysis	3	0	3
	applications			
		09	0	09
	TOTAL	18	03	21

## **Standard: 2.1:** The curriculum must be consistent and support the program's documented objectives.

Table:	8 Courses	versus	program	outcomes

Courses/Group of	Objectives							
Courses/Group of Courses Research Methodology and report writing Biochemical Techniques Current Trends in Biochemistry Program Learning Outcomes Students can be able to work individually as well as in ten Research oriented graduates Self-determent and reliance Graduates The graduates produce to render their service in Chemical Industry & Technology Capable to manage the renewable resources Use up to date tools	1				2			
Research Methodology and report writing	The use knowledge to develop small projects			Completion excellent out	of project is come			
Biochemical Techniques	Students are motivated to work in chemical industry							
Current Trends in Biochemistry	Students are given the latest knowledge of the subject			Motivated fo new fields of	or the studies in f studies			
		I	Progr	am Objectives				
Program Learning Outcomes	Skills in critical thinking, Program solving and communication	Initiate and manage change	U F re	Jnderstand Professional ethics and esponsibility	Employ I. S. Technology	Enable organization to make optimal decision		
Students can be able to work individually as well as in tem	X	x		Х		Х		
Research oriented graduates	Х			Х		Х		
Self-determent and reliance Graduates		X		Х				
The graduates produce to render their service in Chemical Industry & Technology	X	Х		Х		Х		
Capable to manage the renewable resources	X	X		X		Х		
Use up to date tools				Х				
Lifelong learning	X			Х				

Professional ethics and			
responsibility	X	Х	Х

**Standard: 2.2.** Theoretical background, problems analysis and solution design must be stressed within the program's core material.

<b>Table: 8.</b> Shows Theoretical background, problem analysis and solution of the courses.						
Elements	Courses					
Theoretical background	Excellent					
Problems analysis	Better					
Solution design	Better					

**Standard: 2.3:** The curriculum must satisfy the core requirements for the program, as specified by the respective accreditation body. Examples of such requirements are given in Table A.1, Appendix A.

- **Standard 2-4:** The curriculum must satisfy the major requirements for the program as specified by HEC, the respective accreditation body / councils. Examples of such requirements are given in Table A.1, Appendix A.
- **Standard 2-5:** The curriculum must satisfy general education, arts, and professional and other discipline requirements for the program, as specified by the respective accreditation body / council. Examples of such requirements are given in Table A.1, Appendix A.

#### Minimum Requirements for Each Program

(Program Semester Credit Hours)

Program	Math & Basic Science	Engineering Topics	General Education	Others

**Standard 2-6:** Information technology component of the curriculum must be integrated throughout the program.

#### Has the IT program been included in the course: Yes $\sqrt{}$ No

**Standard 2-7:** Oral and written communication skills of the student must be developed and applied in the program.

Is there any oral/written communication skills have been included in the program: Yes  $\sqrt{}$  No

#### Criterion 3: Laboratories and Computing Facilities

**Standards: 3-1:** Laboratories and computing facilities must be adequately available and accessible to faculty members and students to support teaching and research activities.

#### Criterion 4: Student Support and Advising:

Students must have adequate support to complete the program in a timely manner and must have ample opportunity to interact with their instructors and receive timely advice about program requirements and career alternatives.

**Standard: 4.1:** Courses must be offered with sufficient freque ncy and number for students to complete the program in timely manner.

**Standard: 4:2.** Courses in the major are must be structured to ensure effective interaction between students and faculty and teaching and teaching assistance?

(1) Well structured  $\sqrt{}$ 

**Standard: 4:3.** Guidance on how to complete the program must be available to all students and access to academic advising must be available to make course decisions and career choices.

#### Are students informed about program requirements?

**Fully** √ No (1)(2)To some extent (3) Does there student advising system exist and how effective it is? No (2)To some extent Completely (1) (3) Have students access to professional counseling?  $\sqrt{}$ **Full** √ (1) No (2) To some extent (3) Do the students have interacted with practitioners and to have membership in technical & professional societies? To some extent  $\sqrt{}$ (1) No (3) Full (2)

#### Alumni Survey (To be filled by Alumni- after the completion of each academic year)

Department of Bioc<u>hemistry</u>

Year: <u>2022</u>

A: E:	xcelle	ent B: Very Good C:	Good	D: F	air	E: Poor	
S. NO	QUE	STION	P	PERCENTAGE / STATUS			
1	Knowledge Did you learn?		А	В	с	D	Е
	1.1	Problem formulation and solving skills.	72%	22%	6%	0%	0%
	1.2	Collecting and analyzing appropriate data.	78%	22%	0%	0%	0%
	1.3	Ability to link theory to practice.	61%	39%	0%	0%	0%
	1.4	Ability to design a system componer or process	it 83%	17%	0%	0%	0%
	1.5	IT knowledge	67%	28%	6%	0%	0%
2	Comr	nunications Skills		1	1		
	2.1	Oral communication	78%	17%	6%	0%	0%
	2.2	Report writing	83%	17%	0%	0%	0%
	2.3	Presentation skills	72%	22%	6%	0%	0%
3	Inter	personal Skills.		1			
	3.1	Ability to work in teams.	83%	11%	6%	0%	0%
	3.2	Ability to work in arduous / challenging situation.	72%	28%	0%	0%	0%
	3.3	Appreciation of ethical Values.	61%	33%	6%	0%	0%
4	Mana	agement / leadership Skills.					
	4.1	Resource and Time management ski	ls 72%	17%	6%	0%	0%
	4.2	Judgment	67%	22%	11%	0%	0%
	4.3	Discipline	72%	22%	6%	0%	0%

# **Employer Survey** (To be filled by Employer- after the completion of each academic year)

Departn	nent of	Biochemistry				Yea	r: <u>2022</u>
A: Ex	celler	nt B: Very Good C: G	ood	D:	Fair	E	: Poor
S. NO	QUE	STION	PI	ERCENT	rage /	STATU	JS
1	Knov	wledge	A	В	С	D	Е
	1.1	Math, Science, Humanities and professional discipline, (if applicable)	56%	39%	0%	6%	0%
	1.2	Problem formulation and solving skills	83%	11%	6%	0%	0%
	1.3	Collecting and analyzing appropriate data	78%	17%	6%	0%	0%
	1.4	Ability to link theory to Practice	72%	22%	0%	6%	0%
	1.5	Ability to design a system component or process	61%	28%	6%	6%	0%
	1.6	Computer knowledge	39%	44%	6%	11%	0%
2	Comr	nunications Skills	1			1	
	2.1	Oral communication	78%	11%	11%	0%	0%
	2.2	Report writing	61%	22%	11%	6%	0%
	2.3	Presentation skills	72%	22%	6%	0%	0%
3	Inter	personal Skills.			1	1	
	3.1	Ability to work in teams	61%	22%	11%	6%	0%
	3.2	Leadership	72%	22%	6%	0%	0%
	3.3	Independent thinking	78%	17%	0%	6%	0%
	3.4	Motivation	72%	22%	6%	0%	0%
	3.5	Reliability	72%	22%	6%	0%	0%
	3.6	Appreciation of ethical values	78%	17%	0%	6%	0%
4	Mana	agement / leadership Skills.					
	4.1	Resource and Time management skills	72%	22%	6%	0%	0%
	4.2	Judgment	72%	17%	11%	0%	0%
	4.3	Discipline	72%	22%	6%	0%	0%

- **Criterion 5:** The processes by which major functions are delivered must be in place, controlled, periodically reviewed, evaluated and continuously improved. To meet this criterion a set of standards must be satisfied.
- **Standard 5:1.** The process by which students are admitted to the program must be based on quantitative and qualitative criteria and Cleary documented.

**Program/credit transfer:** N.A.

Transfer of a student from outside the university: N.A.

How frequently admission criteria are evaluated?

- Admission Criteria: The admission policy is constituted by the "Admission Committee" consists of Deans, and senior faculty members of the university. The departments have no any role. The departments follow policy made by them which is also mentioned in "**Prospectus of the university**". However, the admission criteria are evaluated but not regularly.
- **Standard 5:2.** The process by which students are registered in the program and monitoring of students progress to ensure timely completion of the program must be documented this process must be periodically evaluated to ensure that it is meeting its objectives:

(1)	None	(2)	Not regularly $\checkmark$	(3)	Every	/ year	
Are	the evaluate	ed results u	used to improve the	results?			
(1)	No	(2)	To some extent $\checkmark$	(3)	Yes		
Is th	ere any pol	icy regardi	ng program /credit	t transfer'	?		
(1)	No $\checkmark$	(2)	To some extent	(3)	Well		
					define	ed	
Is th	ere any me	chanism of	student's registrat	ion in the	progra	am?	
(1)	No	(2)	To some extent	(3)	Well	defined $$	
How	frequently	process of	registration is mon	itored?			
(1)	None	(2)	within 1 year (3)	After 1	year	(4) When needed $$	
Are	the evaluati	on results	used to improve th	e results?			
(1)	No	(2)	To some extent $$	(3)	Yes		
Stan	dard 5·3 T	he process (	of recruiting and reta	ining higl	hlv qual	ified faculty members m	niist
Jun	uuru J.J. 11	he in place	and clearly docur	$mantad \Delta$	lso pro	cosses and procedures	for
		ve in place	and creatily docur	nemeu. A	uso pro	cesses and procedures	101

- Shah Abdul Latif University strictly follows the policy of "Equal Opportunity" regardless religion, race, faith, cast &creed, gender regarding recruiting faculty including admissions, educational programs and employment.
- The University applies standard operating methodology for evaluation, such as Annual Confidential Report (ACR), required research papers, teaching experience and all other conditions as directed by the HEC. Thus
- This process ensures the objectives of the program mission.
- **Standard 5:4:** The process and procedures used to ensure that teaching and delivery of course material to the students emphasizes active learning and that course learning outcomes are met. The process must be periodically evaluated to ensure that it is meeting its objectives.
  - It is strictly observed that the time table is followed by the faculty. However, **Weaknesses &Strengths** have been observed through the student feedback for the "Course Evaluation". The department needs to improve in various aspects.
- **Standard 5:5:** The process that ensures that graduates have completed the requirements of the program must be based on standards, effective and clearly documented procedures. This process must be periodically evaluated to ensure that it is meeting its objectives.
  - The process for the degrees of M.Phil/MS/PhD has been well designed by the Advanced Studies & Research Board (ASRB) followed by the HEC directions. Details are as under.

Degree	GPA/Class/GRE	Interview	
MPhil/MS/PhD	Pre-Admission Test (NTS) style	Х	

This process must be periodically evaluated to ensure that it is meeting its objectives. **(Yes)**  $\sqrt{}$ 

The department ensures that the graduates actively participate in laboratory work, punctual in the classes, maintaining attendance over **75%**.

- **Criterion: 6. Faculty:** Faculty members must be current and active in their discipline and have the necessary technical depth and breadth to support the program. There must be enough faculty members to provide continuity and stability, to cover the curriculum adequately and effectively. To meet this criterion the following standards must be satisfied.
- **Standard: 6: 1.** There must be enough full time faculty who are committed to the program to provide adequate coverage of the program areas / courses with continuity and stability. The interest of all faculty members must be sufficient to teach all courses, plan, modify and update courses. The majority must hold a Ph.D. degree in the discipline.

Table: 10. Program areas and number of faculty in each area.							
Program Areas of specialization	Courses in the area.	Number of faculty members in each area	Number of faculty with Ph.D. degree				
Total							

\* One visiting professor

#### **Faculty Resume:**

**Note:** Faculty resumes are well documented as per policy/criteria of HEC. Names of the faculty members and field of specialization are as under.

Name	Position	Qualification	Field of specialization
Dr. Abdul Majid Ansari	Associate Professor/Chairman	Ph.D	Biochemistry
Dr. Shaista Khan	Associate Professor	Ph.D	Biochemistry
Dr. Sanaullah Abbasi	Assistant Professor	Ph.D	Biochemistry
Dr. Abdul Rehman Phull	Assistant Professor	Ph.D	Biochemistry
Dr. Sadia Qamar	Assistant Professor	Ph.D	Biochemistry
Ms. Shazia Solangi	Assistant Professor	MS	Biochemistry
Mr. Saleem Lashari	Lecturer	MS	Biochemistry
Mr. Maqbool Soomro	Teaching Assistant	MS	Biochemistry
Mr. Parwan ujjan	Teaching Assistant	MS	Biochemistry

**Standard 6:2.** All faculty members must remain current in the discipline and sufficient time must be provided for scholarly activities and professional development. Also, effective programs for faculty development must be in place.

- a. Participation in seminars, conferences at National/International levels.
- b. Research proposals for funding and linkage with other Institutions.
- c. Taking classes, involved in research and reading new books in the relevant field.
- d. Publications in HEC recognized journals or journals having impact factors.

- e. Organize workshops, seminars and conferences.
- f. The department arranges lectures from eminent scholars on various topics of the subject for its students and faculty at National level.
- g. Prepare their resume in line with HEC guidelines.

#### Faculty Development Program:

**Standard 6:3.** All faculty members should be motivated and have job satisfaction to excel in their profession.

The following criteria are under practice in order to satisfy the faculty members in their profession.

- a. Fair, timely selection, appointment / promotion as per HEC policy.
- b. Providing Tenure Track salary package
- c. Excellent working environment.

#### 1) General Comments:

a) Teachers have expressed their views that seminars, symposiums and conferences, in general, have motivated to impart the new techniques and methods of teaching.

Suggest programs / factors that could improve your motivation and job satisfaction?

b) More faculty members may be appointed on the regular basis or contact to cover the workload as per HEC policy.

#### **Teacher Evaluation Form** (To be filled by the student)

Department of Biochemistry\_\_\_\_\_Year: 2022

## A: Strongly Agree B: Agree C: Uncertain D: Disagree E: Strongly Disagree

Teacher:		А	В	С	D	E
1	The teacher is prepared for each class	89%	11%	0%	0%	0%
2	The teacher demonstrates knowledge of the subject properly	78%	17%	6%	0%	0%
3	The teacher has completed the whole course	70%	19%	0%	11%	0%

4	The teacher provides additional material apart from the text book	72%	22%	6%	0%	0%
5	The teacher gives citations regarding current situations with reference to Pakistani context.	67%	22%	0%	6%	6%
6	The teacher communicates the subject matter effectively	83%	11%	0%	6%	0%
7	The teacher shows respect towards students and encourages class participation	56%	39%	6%	0%	0%
8	The teacher maintains an environment that is conducive to learning	67%	22%	6%	6%	0%
9	The teacher is punctual & regular.	50%	39%	6%	0%	6%
10	The teacher is fair in examination	78%	17%	0%	6%	0%
11	The teacher returns the chacked scripts etc. with his suggestions to the students.	44%	39%	11%	6%	0%
12	The teacher was available for consultations after class hours.	72%	11%	11%	6%	0%
Cour	se:					
13	The matter presented in the course has increased the knowledge of the subject.	67%	22%	6%	6%	0%
14	The syllabus clearly states course objectives requirements, procedures and grading criteria	67%	28%	6%	0%	0%
15	The subject integrates theoretical course concepts with real world.	61%	39%	0%	0%	0%
16	The assignments and exams taken by the teacher were according to course and syllabi.	78%	22%	0%	0%	0%

### Survey of M.Phil/MS/PhD Students

(To	(To be filled out by graduating students in last semester / year before the award of degree)								
Department of BiochemistryYear: 2022					2022				
A:	Very satisfied	<b>B</b> : Satisfied	C: Uncertain	D: ]	Dissat	isfied	E: Very	<sup>,</sup> dissatis	fied
S. Overtion				Perc	centage/S	Status			
110.		Question			Α	В	С	D	Ε

1The work in the program is too heavy and induces a lot of pressure.73%18%9%0%0%2The program is effective in enhancing analytical and problem solving skills.64%27%9%0%0%3The program is effective in developing analytical and problem solving skills.64%36%0%0%0%4The program is effective in developing written planning abilities.64%27%9%0%0%0%5The program is effective in developing planning abilities.64%27%9%0%0%0%6The objectives of the program have been fully achieved55%45%0%0%0%0%7Faculty was able to meet the program sopod.65%35%0%0%0%0%8Environment was conducive for learning was good.45%18%9%0%0%0%10Whether the Infrastructure of the department was good.73%18%9%0%0%0%11Whether scholarships/grants were aukalable tudents in case of hardship64%36%0%0%0%0%12Mether the program is effective in enhancing.55%45%0%0%0%0%13Whether the program was comprised of Co- curricular and extra-curricular activities64%36%0%0%0%0%14Whether scholarships/grants were assistent extra-curricular activities64%36%0%<				1		1		
2The program is effective in enhancing reanworking abilities.73%27%0%0%0%3The program is effective in developing analytical and problem solving skills.64%36%0%0%0%4The program is effective in developing planning abilities.64%27%9%0%0%5The program is effective in developing planning abilities.64%27%9%0%0%6The objectives of the program have been fully achieved55%45%0%0%0%7Faculty was able to meet the program objectives65%35%0%0%0%8Environment was conducive for learning was good.45%45%0%0%0%9Whether the Infrastructure of the departme was good.73%27%0%0%0%10Whether scholarships/grants were available to students in case of hardship73%27%0%0%0%11Whether scholarship/grants were available to students in case of hardship64%36%0%0%0%11Whether scholarship/grants55%45%0%0%0%0%12Ability to work in teams.55%45%0%0%0%13Independent thinking.64%36%0%0%0%14Holependent thinking.64%36%0%0%0%15Independent thinking.64%36%0%0%0%	1	The work in the program is too heavy and induces a lot of pressure.	73%	18%	9%	0%	0%	
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No.         Question         A         B         C         D         E           A.         Ability to work in teams.         55%         45%         0%         0%         0%           B.         Independent thinking.         64%         36%         0%         0%         0%           C.         Appreciation of ethical Values.         73%         27%         0%         0%         0%           D.         Professional development.         73%         27%         0%         0%         0%           F.         Judgment.         64%         27%         9%         0%         0%           G.         Discipline.         73%         27%         0%         0%         0%           H.         The link between theory and practice.         64%         27%         9%         0%         0%	S.		Percentage/Status					
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H.The link between theory and practice.64%27%9%0%0%	G.	Discipline.	73%	27%	0%	0%	0%	
		Discipline.						

#### **Student Course Evaluation Questionnaire**

(To be filled by each student at the time of Course Completion)

Department of Bioc<u>hemistry</u>

\_Year: <u>2022</u>

#### **CORE QUESTIONS**

Cour	rse Content and Organization	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
1	The course objectives were clear.	55%	27%	0%	9%	9%
2	The Course workload was manageable.	64%	36%	0%	0%	0%
3	The Course was well organized (e.g. timely access to materials, notification of changes, etc.)	73%	27%	0%	0%	0%
Stud	ent Contribution	>81%	>81%	80%	60%	40%
4	Approximate level of your own attendance during the whole Course.	73%	18%	9%	0%	0%
5	I participated actively in the Course.	82%	9%	0%	9%	0%
6	I think I have made progress in this Course.	73%	9%	9%	0%	9%
Lear	ning Environment and Teaching Methods	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
7	I think the Course was well structured to achieve the learning outcomes.	64%	27%	0%	9%	0%
8	The learning and teaching methods encouraged participation.	73%	18%	0%	0%	9%
9	The overall environment in the class was academic & friendly.	82%	9%	0%	9%	0%
10	Classrooms environment were satisfactory.	55%	36%	9%	0%	0%
Lear	ning Resources	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
11	Learn materials provided by teacher were relevant and useful.	73%	9%	9%	9%	0%
12	Recommended reading Books etc. were relevant and appropriate	73%	18%	9%	0%	0%
13	The provision of learning resources in the library was adequate and appropriate.	73%	9%	0%	9%	9%
14	The provision of learning resources on the Web was adequate and appropriate ( if relevant)	36%	45%	0%	9%	9%
Qual	Quality of Delivery		Agree	Uncertain	Disagree	Strongly Disagree
15	The Course stimulated my interest and thought on the subject area Teaching techniques of the teacher were interesting and conducive.	36%	55%	9%	0%	0%
16	The pace of the Course was appropriate	55%	36%	0%	9%	0%

17	Ideas and concepts were presented by the teacher were clear.	73%	18%	0%	0%	9%

Asse	ssment	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
18	The method of assessment were reasonable.	64%	27%	0%	9%	0%
19	Feedback on assessment was timely.	64%	18%	9%	0%	9%
20	Feedback on assessment was helpful.	64%	18%	9%	0%	9%
Addi	tional Core Questions	Strongly	٨ ٣٣٠٥	T	Dicagrag	Strongly
Teac	hing Assistant Evaluation	Agree	Agree	Uncertain	Disagree	Disagree
21	I understood the lectures.	73%	18%	0%	9%	0%
22	The material was well organized and presented.	82%	9%	0%	9%	0%
23	The teacher was responsive to student needs and problems.	91%	0%	9%	0%	0%
24	Had the teacher been regular throughout the course?	82%	18%	0%	0%	0%
Practical		Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
25	The material in the practicals was useful.	64%	36%	0%	0%	0%
26	The demonstrators dealt effectively with my problems.	73%	27%	0%	0%	0%

Criterion: 7.	<b>Institutional Facilities.</b> Institutional facilities, including library, clean rooms and offices must be adequate to support the objectives of the program. To satisfy this criterion, the following standards must be met.
Standard 7:1.	The Institution must have the infrastructure to support new trends in learning such as E-learning.
Standard 7:2.	The library must possess an up-to-date technical collection relevant to the program and must be adequately staffed with professional personnel.
Standard 7:3.	Class rooms must be adequately equipped and offices must be adequate to enable faculty to carry out their responsibility.

#### Details of facilities available in the deportment:

Item	Position	Remarks
Seminar Laboratory &	Yes Good Number of Books	Needs More Including Research
Books/Journals	Available	Journals

Computing Laboratory	Х	At Least 15 Computers needed for research Scholars
Laboratory	5 Laboratories	04 well Equipped Needed
Girls Rooms	Only 01 Class Rooms Available	04 Class Rooms Needed to be Equipped with Multimedia Internet Faculty
Girls Common Rooms	No	Need One big with Complete Faculty of washroom/Dressing Room
Boys Common Rooms	No	Needed
Faculty Offices	4 Small Offices	Insufficient/Three needed
Internet & Digital Library Faculty	No	01 Room with complete facility of internet
Computers	Only one for Faculty Members	The same faculty needed for the research scholars & Postgraduate Students

**Criterion: 8. Institutional Support.** The institution's support and the financial resources for the program must be sufficient to provide an environment in which the program can achieve its objectives and retain its strength.

**Standard 8:1.** There must be sufficient support and financial resources to attract and retain high quality faculty and provide the means for them to maintain competence as teacher and scholars.

- **Standard 8:2.** There must be an adequate number of high quality graduate students, research assistants and Ph.D. students.
- **Standard 8-3:** Financial resources must be provided to acquire and maintain library holding, laboratories and computing facilities.
- The University provides resources to maintain library& laboratories.

## Does the department provide opportunities to the faculty members to attend international / national conferences?

(1) No (2) **To some extent**  $\sqrt{}$  (3) Full