Introduction:

To establish the department of pharmacy we aim to educate and train the people for present as well as for future concern so that they become useful and productive member of health care team, thus, serving the needs of society in best possible way. The Department of pharmacy is committed to provide an environment of academic excellence and research, and social responsibilities that facilitate and propagate the acquisition of knowledge and skills related to the profession of pharmacy and the disciplines in pharmacy education.

It is the need of the region that the large number of students are insisting/demanding every year for admission in pharmacy from entire Sindh, as Shah Abdul Latif University is the only Institute in upper Sindh that can cater the pharmacy education in upper Sindh no any private institute conduct pharmacy education in upper Sindh. Whereas, in Karachi there are about three private institutions besides faculty of pharmacy at Karachi university who approximately admit about 360-400 students every year. Also a large number of foreign students from more than 12 countries apply and get admission there. As per through survey a maximum number of foreign students in Pakistan are studying in institute of pharmacy university of Sindh.

Keeping in the view the rest of population of upper Sindh except Karachi. We aim to give admissions up to 50 students per year in order to acquire the knowledge of pharmacy and spread its scope in the region.

Department of pharmacy will comprise of initially four subjects like pharmaceutics (including Microbiology) Pharmaceutical Chemistry (including Biochemistry)Pharmacology(including Physiology)and Pharmacognosy (including Photochemistry)and in future new subjects like department of eastern medicine etc could be started. We want to start Pham D(Five year courses)with new subjects like clinical pharmacy, anatomy, histology, pathology etc. We are also anxious to establish research nucleus as RESEARCH CENTER OF PHARMACEUTICAL SCIENCES in near future which will provide us a window for collaborating with pharmaceutical industries institution R&D sector in country as well as abroad. This research Institute will also attract students for postgraduate students (M.Phil/Ph.D). This program will no doubt save foreign exchange to be spent on our student and help to produce qualified persons to serve the nation in better way.

Criterion 1: Program Mission, Objective and Outcomes.

Standards 1.1: The program must have documented measurable Objectives that support Faculty / Institution Mission Statements.

Mission Statement of the University:

- Providing affordable and accessible quality Undergraduate, Graduate and Postgraduate degree programs, national and international in scope.

- Imparting learner-centered teaching through qualified faculty using modern teaching aids and methodologies.

- Creating and promoting quality research environment, providing consultative facilities to Industrial/Business & services sector with a realization of needs of community and national responsibility towards economic growth and welfare.

- Building national character and put focus on production of quality graduates to contribute in the economic, industrial and social development of the country.
- Promoting a campus environment that welcomes, honors men and women, and values intellectual curiosity, pursuit of knowledge and academic freedom with integrity

Mission Statement of the Department:

To prepare pharmacists to provide optimal pharmaceutical care, and to prepare graduate and postgraduate students for leadership in teaching, research, practice and service. The Department faculty generates and disseminates knowledge to promote safe, clinically effective, and cost-efficient use of medications.

Program Objectives:

1. To make the Pharmacy department as bench make for other Universities by providing Scientific Conducive and friendly academic atmosphere with research facilities.

2. To provide research oriental facilities and student can compete internationally and locally.

Table 1. Shows how Objectives are measured and Improvements have been identified			
Program Objectives Assessment			
Objectives	**How Measured**	**When Measured**	**Improvement Identified**
To make the Pharmacy department as bench mark for other Universities by	**By interaction with other pharmacy students or graduates during**	yearly	

providing Scientific Conducive and friendly academic atmosphere with research facilities.	**pharmaceutical industrial visits and during visits of hospitals.**		
To Provide research oriental facilities and student can compete internationally and locally	**To create research atmosphere in students and their attachment in practicals.**	weekly	

☞ **Note: Improvement Made:** This will be informed after AT visits.

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 Table shows how program outcomes support the Program Outcomes.

Program Objectives	Program Outcomes		
	1.	**2.**	**3.**
To make the Pharmacy department as bench make for other Universities by providing Scientific Conducive and friendly academic atmosphere with research facilities.	To reduce the incidents of adverse drug reactions, drug – drug interactions ,diseases, drug and food interactions, medication errors etc.	Cost effectiveness of medicines	Over all life style of the people will be enhanced by minimizing extra cost associate with adverse drug reactions, drug – drug interactions ,diseases, drug and food interactions, medication errors etc.
To Provide research oriental facilities and student can compete internationally and locally	It may be helpful in drug discovery, drug development, drug formulation and medicine of good quality.	Number of entrepreneurs can be increased.	To serve the humanity by providing drug and health education.

Survey of Graduating Students:

A: Very satisfied   B: Satisfied   C: Uncertain   D: Dissatisfied E: Very dissatisfied

S. No.	Question	Percentage/Status				
1.	The work in the program is too heavy and induces a lot of pressure.	A	B	C	D	E
		33%	37%	23%	03%	03%
2.	The program is effective in enhancing team-working	A	B	C	D	E

	abilities.	43%	50%	03%	03%	00%
3.	The program is effective in developing analytical and problem solving skills.	**A**	**B**	**C**	**D**	**E**
		37%	50%	10%	03%	00%
4.	The program is effective in developing written communication skills.	**A**	**B**	**C**	**D**	**E**
		43%	33%	23%	00%	00%
5.	The program is effective in developing planning abilities.	**A**	**B**	**C**	**D**	**E**
		47%	30%	10%	13%	00%
6.	The objectives of the program have been fully achieved	**A**	**B**	**C**	**D**	**E**
		50%	27%	17%	07%	00%
7.	Faculty was able to meet the program objectives	**A**	**B**	**C**	**D**	**E**
		30%	47%	10%	13%	00%
8.	Environment was conducive for learning	**A**	**B**	**C**	**D**	**E**
		53%	30%	00%	13%	03%
9.	Whether the Infrastructure of the department was good.	**A**	**B**	**C**	**D**	**E**
		40%	53%	03%	03%	00%
10.	Whether the program was comprised of Co-curricular and extra-curricular activities	**A**	**B**	**C**	**D**	**E**
		20%	33%	17%	27%	03%
11.	Whether scholarships/ grants were available to students in case of hardship	**A**	**B**	**C**	**D**	**E**
		10%	03%	23%	13%	50%

Strengths
- ➢ The program is satisfactory in team-working capabilities.
- ➢ Developing independent and written communication is also satisfactory.
- ➢ Objectives are almost achieved.

Weaknesses
- ➢ The program is too heavy and stressful
- ➢ Infrastructure of the Department needs to be improved.
- ➢ Scarcity of scholarships for students in case of hardship.
- ➢ There is uncertainty in developing analytical and problem solving skills.

Alumni Survey:

The data have been collected by the students, who graduated from the university and working at different institutes/departments, regarding the quality of education they received and experienced in the university. **The next will be conducted after 2 years.**

General Assessment Alumni Survey:

• Poor in IT knowledge, Collecting and analyzing appropriate data, Report writing and presentation skills.

√. Excellent ability working in team
√. Good in oral presentation,
√. Independent thinking and
√. Sound in discipline
√. Ability Problem formulation and solving skills

General Comments:

Almost all have given comments that there must be very comprehensive computer related teaching method, group discussion, research project preparation & presentation.

5

EMPLOYER SURVEY:

A: Excellent   B: Very good   C: Good   D: Fair   E: Poor

KNOWLEDGE					
1. Math, Science, Humanities and professional discipline, (if applicable)	A	B	C	D	E
	0%	40%	40%	20%	0%
2. Problem formulation and solving skills	A	B	C	D	E
	0%	20%	60%	20%	0%
3. Collecting and analyzing appropriate data	A	B	C	D	E
	20%	0%	40%	0%	40%
4. Ability to link theory to Practice	A	B	C	D	E
	0%	20%	20%	20%	40%
5. Ability to design a system component or process	A	B	C	D	E
	0%	20%	20%	60%	0%
6. Computer knowledge	A	B	C	D	E
	20%	0%	20%	40%	20%
COMMUNICATION SKILLS					
1. Oral communication	A	B	C	D	E
	20%	0%	40%	40%	0%
2. Report writing	A	B	C	D	E
	20%	0%	0%	60%	20%
3. Presentation skills	A	B	C	D	E

		A	B	C	D	E	
		20%	0%	0%	40%	40%	

INTERPERSONAL SKILLS

		A	B	C	D	E
1.	Ability to work in teams	20%	0%	20%	60%	0%
2.	Leadership	20%	0%	0%	20%	60%
3.	Independent thinking	0%	20%	0%	60%	20%
4.	Motivation	0%	20%	0%	20%	60%
5.	Reliability	0%	20%	60%	0%	20%
6.	Appreciation of ethical values	0%	40%	40%	0%	20%

WORK SKILLS

		A	B	C	D	E
1.	Time management skills	20%	20%	20%	20%	20%
2.	Judgment	0%	20%	20%	40%	20%
3.	Discipline	0%	60%	20%	20%	0%

Program Objectives	Program Outcomes		
	1	2	3
To make the Pharmacy department as bench make for other Universities by providing Scientific Conducive and friendly academic atmosphere with research facilities.	XXX	XXX	XXX

To Provide research oriental facilities and student can compete internationally and locally	XX

XX	XX	XX

X	Relevant & satisfactory to some extent
XX	Relevant & satisfactory
XXX	Very relevant & satisfactory
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:

☞ For upgrade the strength of the students, we are making fresh admission yearly.
☞ We will be in position to convert setup of the department into the faculty.
☞ We will be in position to start the research program and enroll the student in M. Phil and Ph. D.
☞ To Establish the Pharmaceutical research laboratory and Auditorium in near future for research and national and international seminars at department.

Table: 4. Shows Program Strengths & Weakness.

Program Strengths and weaknesses.				
Program	**Strengths**	**Weaknesses**	**Things to be developed**	**Activities taken for improvements**
Pharmacy-I Pharmacy-V	Very good teaching in the areas of pharmacology, clinical pharmacy, pharmaceutics and pharmacy practics Young faculty is passionate for research	Insufficient/outdated/out of order equipments for conducting lab practical in the department. Deficiency of Senior teachers and scholarships for students.	1. Relevant books & Journal 2. Training for laboratory attendant. 3. High-Tech Laboratory 4. IT training	Various posts for senior faculty have been announced.

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 **2019**	Students/ Faculty Ratio	Year **2020**	Students/ Faculty Ratio	Year **2021**	Students/ Faculty Ratio
Pharm-D	50	4.5:1	50	4.5:1	50	4.5:1

5Yrs						

Student Course Evaluation:

Program Assessment Analysis:

The Student Course Evaluation Questionnaire filled by the students at the time of course completion. The following are overall views of the students. The data for the performance has been collected from more than 20 students selected randomly.

Student Course Evaluation Assessment:

Weaknesses:
- Attendance of the student's is not satisfactory as, only 38–57% attended the classes over 61% and 81% respectively.
- The provision of learning resources in the library is insufficient. Only 67% students think that the required learning resources in the library are adequate and appropriate.
- Assessment methods and timely feedback of assessment is poor, it requires more attention.
- Practical material and demonstration is weak, needs to be improved.
- Students may be encouraged more to participate in the lecture/group discussion.

Strengths:
- Course objectives very clear and organized.
- Teaching methods, learning and learning outcomes encouraging, but need to be improved.
- Class environment satisfactory.
- Courses are interesting, useful and helpful for future.

General comments by the students:
- Provision of latest research instrument in the laboratories so that we can learn more practical work in comparison of theoretical.
- Provision of microscopic slides of various tissue culture at microbiology laboratory so that we can understand different tissues of the body clearly.

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

Publications (HEC recognized only)		Research Projects		Monograph	Awards	Scholars produced		Organized National & International Conferences
National	International	Completed	Ongoing			M.Phil	Ph.D.	
03	02	--	--	--	--	--	--	--

9

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

Program:
Pharmacy Degree: (5 Years; 10 Semesters)

Semester	Course Number Both Theory/ Practical	Category (Credit Hours) 1 Credit hr= 1 Class hour & 2-3 Laboratory Hours per week =1 Cr H **Ratio 2:1 (Theory: Practical) Total CrHs 18*8=144**				
		Math & Basic Science		Core Course	Humanities and Social Sciences	Technical
		Math	Basic Science.			
1st	ENG 300				English-A (Functional English)	
	PHARM 310		Pharmaceutics-IA (Physical Pharmacy-I			
	PHARM 311		Pharmaceutical Chemistry-IA (Organic-IA			
	PHARM 312		Pharmaceutical Biochemistry-Il A			
	PHARM 313		Physiology-A			
	PHARM 314		Anatomy & Histology			
2nd	ENG 301				English-B (Communication & Writing skills)	
	PHARM 315		Pharmaceutics-IB(Physical)Pharmacy			
	PHARM 316		Pharmaceutical Chemistry-IB (Organic)			
	PHARM 317		Pharmaceutical Chemistry-IIB (Biochemistry)			
	PHARM 318		Physiology-B			
3rd	IS 402				Islamiat	
	PHARM 410		Pharmaceutics-IIA (Dosage Forms Science)			
	PHARM 411		Pharmaceutics-IIIA (Pharmaceutical Microbiology & Immunology)			
	PHARM 412		Pharmacology and Therapeutics-IA			
	PHARM 413		Pharmacognosy-IA (Basic)			
	PHARM 414		Pharmacy Practice-IA		Pharmaceutical	

			(Pharmaceutical Mathematics)	Mathmetics	
4th	PS-403			Pakistan Studies	
	PHARM 415		Pharmaceutics-IIB (Dosage Forms Science)		
	PHARM 416		Pharmaceutics-IIIB (Pharmaceutical Microbiology & Immunology)		
	PHARM 417		Pharmacology and Therapeutics-IB		
	PHARM 418		Pharmacognosy-IB (Basic)		
	PHARM 419		Pharmacy Practice-IB (Bio-statistics)	Bio-Statitics	
5th	PHARM 510		Pharmacy Practice-IIA (Dispensing Pharmacy)		
	PHARM 511		Pharmaceutical Chemistry-IIIA (Pharmaceutical Analysis)		
	PHARM 512		Pharmacology and Therapeutics-IIA		
	PHARM 513		Pharmacognosy-IIA (Advanced)		
	PHARM 514		Pathology		
6th	PHARM 515		Pharmacy Practice-IIB (Community, Social & Administrative Pharmacy)		
	PHARM 516		Pharmaceutical Chemistry-IIIB (Pharmaceutical Analysis)		
	PHARM 517		Pharmacology and Therapeutics-IIB		
	PHARM 518		Pharmacognosy-IIB (Advanced)		
	PHARM 519		Pharmacy Practice-III (Computer and its Applications in Pharmacy)		Computer and its application in Pharmacy
7th	PHARM 610		Pharmacy Practice-IVA (Hospital Pharmacy)		
	PHARM 611		Pharmacy Practice-VA (Clinical Pharmacy-I)		
	PHARM 612		Pharmaceutics-IVA (Industrial Pharmacy)		
	PHARM 613		Pharmaceutics-VA (Biopharmaceutics & Pharmacokinetics)		
	PHARM 614		Pharmaceutics-VIA (Pharmaceutical Quality Management)		

8th	PHARM 615		Pharmacy Practice-IVB (Hospital Pharmacy)			
	PHARM 616		Pharmacy Practice-VB (Clinical Pharmacy-I)			
	PHARM 617		Pharmaceutics-IVB (Industrial Pharmacy)			
	PHARM 618		Pharmaceutics-VB(Biopharmaceutics & Pharmacokinetics)			
	PHARM 619		Pharmaceutics-VIB (Pharmaceutical Quality Management)			
9th	PHARM 710		Pharmaceutics-VIIA (Pharmaceutical Technology)			
	PHARM 711		Pharmacy Practice-VIA (Advanced Clinical Pharmacy-II)			
	PHARM 712		Pharmacy Practice-VIIA (Forensic Pharmacy)			
	PHARM 713		Pharmacy Practice-VIIIA (Pharmaceutical Management & Marketing)			
	PHARM 714		Pharmaceutical Chemistry-IVA (Medicinal Chemistry)			
10th	PHARM 715		Pharmaceutics- VIIB (Pharmaceutical Technology)			
	PHARM 716		Pharmacy Practice-VIB (Advanced Clinical Pharmacy-II)			
	PHARM 717		Pharmacy Practice-VIIB (Forensic Pharmacy)			
	PHARM 718		Pharmacy Practice-VIIIB (Pharmaceutical Management & Marketing)			
	PHARM 719		Pharmaceutical Chemistry-IVB (Medicinal Chemistry)			
Total:	198					
Minimum Requirement	198					

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

Table: Courses versus program outcomes

Courses/Group of Courses	Objectives		
	1	2	3

Pharmacology	To reduce the incidents of adverse drug reactions, drug – drug interactions ,diseases, drug and food interactions, medication errors etc.	Cost effectiveness of medicines	Over all life style of the people will be enhanced by minimizing extra cost associate with adverse drug reactions, drug – drug interactions ,diseases, drug and food interactions, medication errors etc.
Pharmaceutics	It may be helpful in drug discovery, drug development, drug formulation and medicine of good quality.	Number of entrepreneurs can be increased.	To serve the humanity by providing drug and health education.
Pharmacognosy	It Helps to study natural plants with chemical constituents and medicinal uses.	Knowledge of local plants can be improved by identification ,isolation etc	Diseases can cured from chemical constituents obtained from plants at lower cost
Pharmaceutical Chemistry	It helps in separation of many compounds of therapeutic uses from mixture by employing various techniques	studying structure activity relationship of various drugs helps in drug discovery and modification of drug actions	It helps in research to obtain many drugs of different activities of different classes.
Pharmacy Practice	It helps in studying social & administrative pharmaceutical science subjects.	Patient Pharmacist and Physician coordination, Drug compliance and monitoring of ADRs.	It helps researchers to get epidemiological knowledge of drugs, pharmacoeconomics, pharmacovigilance etc.

Weaknesses:

- More field as well as laboratory work be encouraged including short courses on laboratory training, professional ethics and social impact of the Plant sciences need to be introduced.

Strengths:

- The curriculum fulfills all basic requirements of program's objective.
- The curriculum design, theoretical background within program's core material and requirements.

Program Learning Outcomes	Program Objectives				
	Skills in critical thinking, Program	Initiate and manage	Understand Professional ethics and	Employ I. S. Technology	Enable organization to make

	solving and communication	change	responsibility		optimal decision
Professional students can be produced	×	×	×		×
Research oriented graduates	×		×		×
Self determinants,self-motivation and reliable Graduates are produced		×	×		
The graduates serve the nation by improving the overall health of public.	×	×	×		×
Capable to manage the minimum resources and maximize the performance	×	×	×		×
Overall enhance the quality of health by changing life style	×		×		×
Life Long serving the community	×	×			×
Professional ethics and social responsibility	×		×		×

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

Table: 8. Shows Theoretical background, problem analysis and solution of the courses.

Elements	Courses
Theoretical background (Each theoretical subject contains 3 credit hours)	Pharm310, Pharm311, Pharm312, Pharm313, Pharm314, Pharm315, Pharm316, Pharm317, Pharm318 Pharm410, Pharm411, Pharm412, Pharm413, Pharm414, Pharm415, Pharm416, Pharm417, Pharm418 Pharm419 Pharm510, Pharm511, Pharm512, Pharm513, Pharm514, Pharm515, Pharm516, Pharm517, Pharm518, Pharm519, Pharm610, Pharm611, Pharm612, Pharm613, Pharm614, Pharm615, Pharm616, Pharm617, Pharm618, Pharm619, Pharm710, Pharm711, Pharm712, Pharm713, Pharm714, Pharm715, Pharm716, Pharm717, Pharm718, Pharm719.
Problems analysis (Each Practical subject contains 1 credit hours)	Pharm310, Pharm311, Pharm312, Pharm313, Pharm314, Pharm315, Pharm316, Pharm317, Pharm318 Pharm410, Pharm411, Pharm412, Pharm413, Pharm414, Pharm415, Pharm416, Pharm417, Pharm418 Pharm419 Pharm510, Pharm511, Pharm512, Pharm513, Pharm514, Pharm515, Pharm516, Pharm517, Pharm518, Pharm519, Pharm610, Pharm611, Pharm612, Pharm613, Pharm614, Pharm615,

	Pharm616, Pharm617, Pharm618, Pharm619, Pharm710, Pharm711, Pharm712, Pharm713, Pharm714, Pharm715, Pharm716, Pharm717, Pharm718, Pharm719.
Solution design (Humanity social and Technical subjects)	ENG 300, ENG 301, IS 402, PS 403, PHARM 414, PHARM 419, PHARM 519

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	Statistics	Computer & its application	Functional English	Communication and writing english	Pakistan study	Islamiat
Pharm – D 5 Years	03	03	04	02	04	02	03

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 ✓   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 ✓   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.

Laboratory Facilities/Provision:

At present, department has seven laboratories for experimental work.

Laboratory in the Department:

Lab 1: PHARMACEUTICS LABARATORY

a) Courses being taught (PHARM-D)

b) Software available(**No)**

c) All major apparatus/equipments available (**Mostly)**

d) Proper safety regulations **(observed accordingly)**

Title: Location	
	Department of pharmacy
Subjects:	To study various subjects, for example : pharmaceutics(physical pharmacy) ,bio-pharmaceutics, quality control.
Courses being taught	PHARM310, 315, 613,618,614,619
Major Apparatus/Equipments	Centrifuge machine, dispensing balance, distillation unit, disintegration apparatus, dissolution apparatus, single punch machine, fribilator distillation assembly.
Non-functional Equipment	Single punch machine
Safety Regulations	Observed accordingly

Lab 2: PHARMACOGNOSY LABARATORY
a) Courses being taught PHARM-D
b) Software available(NO)
c) All major apparatus/equipments available **(NOT ALL)**
d) Proper safety regulations **(observed accordingly)**

Location	Department of pharmacy at SALU
subjects	To study subjects of Pharmacognosy
Courses being taught	PHARM-413, 418, 513, 518.
Major Apparatus/Equipments	centrifuge, microscope, Paper and thin layer liquid chromatography assembly, soxihliator, percolator
Glasshouse/Greenhouse	No
Non-functional Equipment	All functioning
Safety Regulations	Observed accordingly

Collaborative Lab 3: PHARMACEUTICAL CHEMISTRY LABARATORY

a) Courses being taught: PHARM-D

b) Software available **NO**

c) All major apparatus/equipments available **NO**

d) Proper safety regulations (**observed accordingly**)

Location	Department of pharmacy at SALU
Subjects	To study various subjects :biochemistry, organic chemistry, analytical chemistry , medicinal chemistry .
Course being taught	PHARM 311, 316, 317, 511, 516,714, 719
Major Apparatus/Equipments	Double beam spectrophotometer, levo and dextrorotatory apparatus, PH meter.
Glasshouse/Greenhouse	NO
Non-functional Equipment	NIL
Safety Regulations	Observed accordingly

Lab 4: PHARMACOGNOSY LABARATORY
a) Courses being taught PHARM-D
b) Software available(NO)
c) All major apparatus/equipments available (**NOT ALL**)
d) Proper safety regulations (**observed accordingly**)

Location	Department of pharmacy at SALU
Subjects	To study various subjects :pharmacology, physiology, pathology, histology,
Courses being taught	PHARM- 412, 417,512, 517, 313, 314, 318, 514
Major Apparatus/Equipments	Sphygmomanometer, Stethoscope, Kymograph, Organ bath, ECG machine
Glasshouse/Greenhouse	No
Non-functional Equipment	All functioning
Safety Regulations	Observed accordingly

Lab 5: INDUSTRIAL LABARATORY
a) Courses being taught PHARM-D
b) Software available(NO)
c) All major apparatus/equipments available (**NOT ALL**)
d) Proper safety regulations (**observed accordingly**)

Location	Department of pharmacy at SALU
Subjects	To study various subjects :Industrial pharmacy and pharmaceutical technology.
Courses being taught	PHARM-612, 617, 710, 715
Major Apparatus/Equipments	Capsule filling machine, Homogenizer, Mixer
Glasshouse/Greenhouse	No
Non-functional Equipment	All functioning
Safety Regulations	Observed accordingly

Lab 6: MICROBIOLOGY LABARATORY

a) Courses being taught PHARM-D
b) Software available(NO)
c) All major apparatus/equipments available **(NOT ALL)**
d) Proper safety regulations **(observed accordingly)**

Location	Department of pharmacy at SALU
Subjects	To study microbiology
Courses being taught	PHARM-411, 416
Major Apparatus/Equipments	Microwave oven, Sterilization equipment, Laminar air flow assembly, microscopes, microscopic slides, stains and dyes.
Glasshouse/Greenhouse	No
Non-functional Equipment	All functioning
Safety Regulations	Observed accordingly

Lab 7: COMPUTER LABARATORY
a) Courses being taught PHARM-D
b) Software available(NO)
c) All major apparatus/equipments available **(NOT ALL)**
d) Proper safety regulations **(observed accordingly)**

Location	Department of pharmacy at SALU
subjects	To study Computer and its application in pharmacy
Courses being taught	PHARM-519
Major Apparatus/Equipments	Core 2 duo computers with internet connection.
Glasshouse/Greenhouse	No
Non-functional Equipment	All functioning
Safety Regulations	Observed accordingly

Standard: 3/2 Laboratory manuals/ documentation instruction for experiments must be available and readily accessible to faculty and students.

(1) None   (2) Available for students   (3) Available for Faculty   (4) **Both√**

Standard: 3/3 There must be adequate support personnel for instruction and maintaining the program.
√ YES
Standard: 3/4 The University computing infrastructure and facilities must be adequate to support program's objectives Computing Facilities.

computing facility in the department is available for both faculty and students.

==

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 frequency and number for students to complete the program in timely manner.

Table: 9. Shows classes/week of Major Courses offered in 5 –Year program.

Major Courses offered: Pharmacy 5 Year Program @ the Ratio of 4:3		
Course offered/Year	Classes/week /CrHs	Practical/week/CrHs
First proff: 1st Semester	17	5
First proff :2nd Semester	16	4
Second proff:1st Semester	18	4
Second proff: 2nd Semester	17	4
Third proff::1st Semester	15	5
Third proff: 2nd Semester	15	4
Fourth proff . 1st Semester	15	4
Fourth Proff:. 2nd Semester	15	4
Fifth proff:1st Semester	15	3
Fifth proff:. 2nd Semester	15	3

☞   The above mentioned classes are strictly followed throughout the academic year. The core courses, optional can be easily completed under the favorable environment.

The compulsory courses managed by the pharmacy department, however, other compulsory disciplines and optional subjects are managed by the related departments. The details of the compulsory subjects other than the offered by the pharmacy department are following.

5-Year Pharmacy: Program					
Subject:	Managed by:	Theory: CrHs/ Class.		Practical: CrHs/ Class.	
Islamic Studies	Dept. of Islamic studies	Second proff:	1st Semester 03 / 2nd Semester --- / ---	Second proff:	1st Semester -- / 2nd Semester --
Pakistan Studies	Dept. of Pakistan Studies	Second proff.	1st Semester -- / 2nd Semester 02	Second proff	1st Semester -- / 2nd Semester --
Pharmaceutical Mathematics	Dept. of Mathematics	Second proff	1st Semester 03	First proff	1st Semester -- / 2nd Semester --
Bio-Statistics	Dept. Statistics	Second proff	1st Semester -- / 2nd Semester 3	First proff	1st Semester -- / 2nd Semester --
Computer and its application in pharmacy	Dept. of Computer Science	Third proff	1st Semester / 2nd Semester 03	First proff	1st Semester / 2nd Semester 01

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√

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?

(1) No   (2) To some extent   (3) √Fully

Does student advising system exist and how effective it is?

(1) No   (2) To some extent   (3) √ completely

Have students access to professional counseling?

(1) No   (2) To some extent   (3) √Full

Do the students have interacted with practitioners and to have membership in technical & professional societies?

(1) No   (2) √   to some extent   (3) Full

===

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: NA

Transfer of a student from outside the university: NA

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 objective**s**:

How frequently admission criteria are evaluated?

(1) None   (2) √Not regularly   (3) Every Year

Are the evaluated results used to improve the results?

(1) No   2) To some extent   (3) √ yes

Is there any policy regarding program /credit transfer?

(1) No   (2) To some extent   (3) √ Well defined

Is there any mechanism of student's registration in the program?

(1) No   (2) To some extent   (3) Well defined√

How frequently process of registration is monitored?

(1) None   2) within 1 year (3) After 1 year (4) When needed√

Are the evaluation results used to improve the results?

(1) No   2) To some extent   (3) Yes√

Standard 5:3. The process of recruiting and retaining highly qualified faculty members must be in place and clearly documented. Also processes and procedures for faculty evaluation, promotion must be consistent with institution mission statement. These processes must be periodically evaluated to ensure that it is meeting with its objectives.

☞ 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 Pharmacy-5 years. has been well designed by the Board of Advanced Studies & Research (BASR) followed by the HEC directions. Details are as under.

Degree	GPA/Class/GRE	Interview	
Pharm-D 5 Year	Pre-Admission Test (NTS) style	X	

This process must be periodically evaluated to ensure that it is meeting its objectives. √ **(Yes)**

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

Teacher Evaluation (Filled by the student)

(**A**: Strongly Agree, **B**: Agree, **C**: Uncertain, **D**: Disagree, **E**: Strongly Disagree :)

INSTRUCTOR		A	B	C	D	E
1	The Instructor is prepared for each class.	73%	27%	0%	0%	0%
2	The Instructor demonstrates knowledge of the subject.	63%	30%	3%	0%	3%
3	The Instructor has completed the whole course.	27%	37%	27%	7%	3%
4	The Instructor provides additional material apart from the textbook.	47%	23%	20%	7%	3%
5	The Instructor gives citations regarding current situations with reference to Pakistani context.	27%	27%	23%	20%	3%
6	The Instructor communicates the subject matter effectively.	63%	27%	10%	0%	0%
7	The Instructor shows respect towards students and encourages class participation.	77%	20%	0%	3%	0%
8	The Instructor maintains an environment that is conducive to learning.	47%	43%	7%	3%	0%
9	The Instructor arrives on time.	67%	20%	7%	0%	7%
10	The Instructor leaves on time.	27%	50%	13%	7%	3%
11	The Instructor is fair in examination.	57%	40%	3%	0%	0%
12	The Instructor returns the graded scripts etc. in a reasonable amount of time.	37%	53%	10%	0%	0%
13	The Instructor was available during the specified office hours and for after class consultations.	40%	40%	13%	3%	0%
COURSE		A	B	C	D	E
1	The Subject matter presented in the course has increased your knowledge of the subject.	73%	23%	0%	0%	3%

2	The syllabus clearly states course objectives requirements, procedures and grading criteria.	A	B	C	D	E	
		37%	50%	13%	0%	0%	

3	The course integrates theoretical course concepts with real world applications.	A	B	C	D	E	
		40%	40%	17%	0%	3%	

4	The assignments and exams covered the materials presented in the course.	A	B	C	D	E	
		40%	40%	13%	7%	0%	

==

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 Sami Shaikh	Associate Professor/ Chairman	Ph.D.	Pharmacology
Mr. Shahida Mallah	Assistant Professor	Ph.D.	Pharmacology
Mr. Zuheeb Ahmed memon	Assistant Professor	Ph.D.*	Pharmaceutics
Mr. Sajid Ali Mojai	Assistant Professor	Ph.D.*	Pharmacy Practice
Ms. Marvi Metlo	Assistant Professor	Ph.D.*	Pharmaceutics
Mr. Shahzad Mughal	Assistant Professor	Ph.D.*	Pharmaceutics
Dr. Naeem Mahar	Assistant Professor (TTS)	Ph.D.	Pharmaceutics
Dr. Jawad Ali	Assistant Professor	Ph.D.	Pharmaceutics

	(TTS)		
Mr.Rashid Ali Arbani	Lecturer	M.Phil.*	Pharmaceutics
Ms. Saiqa Lashari	Lecturer	M.Phil.*	Pharmacology
Ms. Saima Samtio	Lecturer	M.Phil.*	Pharmaceutics
Ms. Sumbal Talib	Lecturer	Ph.D.*	Pharmaceutics

Note: Star (*) mark indicates continuity of the said program.

27

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.

☞ **Faculty Survey:**

Are all faculty members current in their disciplines?
(a) Up to 20 % (b) Up to 50% (c) Up to 75% (d) √ **Over 75%**

Is there sufficient time for faculty members for scholarly activities and professional development?
(a)   No   (b) √   To some extent   (c)   **Full**

Faculty Development Program: NA.

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.
I. Fair, timely selection, appointment / promotion as per HEC policy.
II. Providing Tenure Track salary package
III. Excellent working environment.

FACULTY SURVEY:

The following information has been collected through the Proforma from the faculty members:
The data is shown as percentage:

A: Very satisfied   **B**: Satisfied   **C**: Uncertain   **D**: Dissatisfied   **E**: Very dissatisfied.

1	The Instructor is prepared for each class.	A	B	C	D	E
		33%	50%	17%	00%	33%
2	The Instructor demonstrates knowledge of the subject.	A	B	C	D	E
		33%	67%	00%	00%	33%
3	The Instructor has completed the whole course.	A	B	C	D	E
		17%	83%	00%	00%	17%
4	The Instructor provides additional material apart from the textbook.	A	B	C	D	E
		0%	100%	00%	00%	00%
5	The Instructor gives citations regarding current situations with reference to Pakistani context.	A	B	C	D	E
		00%	83%	17%	00%	00%
6	The Instructor communicates the subject matter effectively.	A	B	C	D	E

		A	B	C	D	E	
		00%	100%	00%	00%	0%	
7	The Instructor shows respect towards students and encourages class participation.	**A**	**B**	**C**	**D**	**E**	
		00%	67%	33%	00%	00%	
8	The Instructor maintains an environment that is conducive to learning.	**A**	**B**	**C**	**D**	**E**	
		00%	50%	50%	00%	00%	
9	The Instructor arrives on time.	**A**	**B**	**C**	**D**	**E**	
		0%	100%	00%	00%	00%	
10	The Instructor leaves on time.	**A**	**B**	**C**	**D**	**E**	
		33%	67%	00%	00%	33%	

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.

===

Criterion: 7. Institutional Facilities. 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 Library & Books	Reasonable number of books available.	Needs more books including research journals
Computing Laboratory	Yes	Updated computer systems plus air conditioner for computer lab is required
Laboratory	seven labs are present	Lacking of equipments
Greenhouse/ Glasshouse	No	---
Class Rooms	Reasonable number of classes are available	More classrooms are needed & equipped with Multimedia, internet facility
Female faculty washroom	No	Required on urgent basis
Girls Common Room	√ Yes	Not spacious, needed one big with complete facility of washroom/dressing room.
Girls separate washroom	No	Required on urgent basis because we have more than 150 girls enrolled.
Boys Common Room	No	Needed
Faculty offices	Yes	Needed more
Internet & Digital Library Facility	Yes	Separate room for digital laboratory required.
Computers	Yes	needed Updated computer systemsfor the faculty, research scholars and students.
Seminar/ Conference room	No	Needed on urgent basis for national and international seminars or conferences.

==

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.
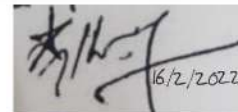
☞ The University provides resources to maintain library & laboratories.

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

(1) √ No   (2) To some extent   (3) Full

Chairman

Department of Pharmacy   **Signature**