



DOW UNIVERSITY OF HEALTH SCIENCES

PHARM-D

Session 2022-23

PROSPECTUS

**Dow College of
Pharmacy (DCOP)**




VISION STATEMENT DUHS

Be an academic leader by generating creative, collaborative, contextual resources to improve health and education by all possible means.



MISSION STATEMENT DUHS

To provide leadership in creating and imparting knowledge through excellence in research and education with the aim to provide cost effective, contextually relevant and quality community services through its faculty, staff and graduates, with continuous efforts for improvement through reflection and learning.





Prof. Mohammed Saeed Quraishy
Vice Chancellor
Dow University of Health Sciences

MESSAGE BY VICE CHANCELLOR

It gives me joy to write this message for the prospectus of the Dow University of Health Sciences, Karachi. DUHS was established in 2004, with just three constituent colleges, and today we are a university with over 30 constituent and affiliated institutions and the most comprehensive health system in Pakistan.

This year, I am also proud to announce that Dow University of Health Sciences, Karachi has continued to enhance the vision of this University by striving to be the pre-eminent academic institution committed to changing and saving lives, as we have continued to place in the QS World University Rankings 2021, with an overall Rank of 401-450. This is a credit to the faculty of DUHS, and their commitment to enhance the learning experience offered to our students that we have achieved progress and prosperity globally, particularly within Asia.

This is also the year we are celebrating our 75th Anniversary of the founding of Dow Medical College, a symbol of scholarship and service to the community that has evolved into DUHS, with expanded program offerings, such as in the fields of the allied health and biomedical sciences, such as pharmacy, physical therapy, medical technology, biotechnology, nursing, public health, business administration, and course in radiology technology, nutritional sciences, midwifery, and optometry.

Furthermore, our symbol of academic excellence is fortified by our adoption of the latest technology, and affordable state of the art healthcare offered, which informs the delivery of quality patient care at Dow University Hospital and our many affiliated healthcare centers and research and diagnostic laboratories. We stand committed to providing and creating a state-of-the-art infrastructure that fosters innovation, research and is evolving to meet the needs of the future, along with providing superior healthcare services today.

Today, we are striving to play a pivotal role in the early diagnosis and treatment of Covid-19 and in the future, I also stand committed to make Dow University of Health Sciences an empowered institution offering the best of the medical knowledge and quality health services.

I am confident that the doctors and health professionals of this institution will go on to contribute to this nation and serve globally with sincerity and ethics, in order to restore faith and humanity to the delivery of healthcare.

Message of the PRINCIPAL



PROF. DR. SUMBUL SHAMIM
PRINCIPAL
Dow College of Pharmacy &
CHAIRPERSON
Department of Pharmacology
DUHS, Karachi.

I am delighted to welcome you to the Dow College of Pharmacy, an esteemed institution providing excellent pharmacy education in Pakistan. Dow College of Pharmacy is recognized for our inclusive ethos and commitment to the highest standards in education, which have made this institute into Pakistan's premier organization offering pharmacy education. We endeavor to set very high values of academic standards. Students aspire to attend our college in intent to accomplish their best. Together, we create a culture of accomplishments and achievements. Our outcomes are remarkable, leading to a prominent place for our alumni in the market and to the field of pharmaceutical sciences.

The Faculty of pharmaceutical Sciences, at Dow College of Pharmacy, Dow University of Health Sciences, was established in the year 2007 to provide quality pharmacy education combined with training at Hospitals and Pharmaceutical Industries of Karachi.

By providing excellent pharmaceutical education in a stimulating academic environment and thorough research, we enable our students to discover, evaluate and implement new vistas of knowledge to improve models of practice and methods of treatment in pharmacy.

We also strive to provide the concept of pharmaceutical ethics so as to mould the conduct and character of the future health care professionals. I am confident that with the team of committed faculty members and supporting staff, we will deliver the time tested human resources for the industry, health care system and society. My prayers are for the success of every student studying Pharmaceutical Sciences at the Dow College of Pharmacy, Dow University of Health Sciences, Karachi.

Thank You

Dean's Message

Welcome to the Dow College of Pharmacy, Faculty of Pharmaceutical Sciences, Dow University of Health Sciences, Karachi. I am humbly honored and privileged to serve our dedicated students, faculty, staff, administration and alumni.



Dow College of Pharmacy, The Faculty of Pharmaceutical Sciences is located in Ojha campus of Dow University of Health Sciences-Karachi. We offer a well-structured five-year Doctor of Pharmacy (Pharm D) program and post-graduate program in Pharmaceutical Sciences. The Faculty of Pharmaceutical Sciences is recognized as one of the outstanding pharmacy education and research institution.

At Dow College of Pharmacy, Faculty of Pharmaceutical Sciences, we strive to provide optimal pharmaceutical education in order to graduate competent pharmacists capable of delivering appropriate pharmaceutical care to improve the state of health of people in Pakistan and abroad. We look forward to be one of the leading pioneers at the local and global level in pharmaceutical education and research development, seeking a bright future in enhancing medical and humanitarian services.

Our Faculty is highly regarded for their exclusive scientific knowledge and friendly approachable manner. We have an accomplished faculty team conducting research in various sub disciplines of pharmacy (pharmacology, pharmaceutics, pharmaceutical chemistry, pharmacognosy and pharmacy practice). We are dedicated to promote excellence in the classroom, creating a student-centered learning environment, and maintaining personalized attention to our students.

Our innovative pharmacy semester system training provides our students with a well-rounded professional degree that ideally prepares them for a rewarding career in pharmacy, whether they choose community pharmacy, hospital pharmacy, clinical pharmacy, pharmaceutical industry, the academia and research or any other career path.

The profession of pharmacy is constantly evolving, and in response to this change, we are constantly implementing important and motivating curricular changes, integrating basic science with clinical practice and emphasizing on active learning, skills development and inter-professional collaboration. We continue to evolve and grow; what remains constant is our commitment to our students, our community and the profession.

As the new dean, I will continue to reach out to our college community as we build and shape the future of our college. I invite you to join us on the road toward your career in the profession of Pharmacy, which will be rewarding, challenging, and enjoyable.

Feel free to contact us if you have any questions or if you would like to visit.

Dean,
Prof. Dr. Noor Jahan
Dow College of Pharmacy,
Faculty of Pharmaceutical Science
Dow University of Health Sciences-Karachi.

STATEMENT OF PURPOSE (PHARM.D PROGRAM)

To provide comprehensive, progressive learning environment that encourages quality education, skill building, high ethical and moral standard in the future pharmacist who can contribute in innovative research, provide quality pharmaceutical care, consultancies and be at the forefront in providing novel pharmaceutical products.

OVERVIEW OF DOW COLLEGE OF PHARMACY

INTRODUCTION:

Dow College of Pharmacy was established in early 2008 and is now one of the top-ranked faculties of the Sindh province. Dow College of Pharmacy was upgraded to the Faculty of Pharmaceutical Sciences; Dow College of Pharmacy in the year 2014. Faculty of Pharmaceutical Sciences, Dow College of Pharmacy is a distinguished and well-renowned entity working under the portal of Dow University of Health Sciences and recognized by the Pharmacy Council of Pakistan and Higher Education Commission.

The aim is to train pharmacy students, who are the backbone of the healthcare system for practicing in various healthcare settings, including hospitals, communities, clinics, etc. we are actually transforming healthcare into a global hub of innovation and opportunity.

The **program** provides a rigorous background in a range of scientific disciplines that are critical to the success of modern pharmaceutical scientists in industry, government, and academia. Pharm.D is a five-year based program. The training also includes hands-on experience in hospitals and pharmaceutical settings. The First Batch of 123 students (morning) passed out in 2013 and presently, 700 students of our five batches are studying in the Pharm. D program. After the successful running of the Morning shift, the evening program was launched in 2015. Under the Leadership of **Principal, Prof. Dr. Sumbul Shamim**, Dow College of Pharmacy provides highly proficient education to its students by utilizing rich resources provided by the university. Institute is equipped with high-end facilities for its Students, Researchers, and Faculty. The faculty is comprised of 47 highly qualified faculty members, with 32 Ph.D. degree holders in relevant fields and also HEC Ph. D approved research supervisors. During their study of courses, students are also provided with the opportunity to carry out clinical ward rounds under the supervision of experienced faculty members and healthcare professionals. This training enables the potential pharmacist to play a significant role in strengthening the quality of health care services in our society. Students of fourth and fifth professionals complete their training in Pharmaceutical service centers of Dow University Hospital and Civil Hospital (ambulatory dispensing area, emergency room pharmacy, in-patient pharmacy,

out-patient pharmacy, bulk store, satellite pharmacy) and different wards (unit) like Medical ICU, Neonatal care unit, Cardiac care unit, cardiac ward, institute of chest diseases, Gynaecology ward, Neuro. / Psychiatry ward, Gastroenterology ward, Paediatric ward, Dialysis center. This clinical training is conducted at Dow University Hospital and Civil Hospital. Till 2022, ten batches of Pharm. D program have graduated from this institute. The entire group of passed-out Pharmacy graduates from Dow College of Pharmacy are offering professional services in various national and multinational organizations, both within and outside Pakistan.

The Faculty of Pharmaceutical Sciences, Dow College of Pharmacy comprised of three capacious building having an area of 82500 sq.ft overall. Each building has fully air-conditioned spacious lecture halls equipped with multimedia, and fully equipped laboratories including laboratories for Pharmaceutics, Pharmacology, Pharmaceutical Chemistry, Pharmacognosy, Industrial Pharmacy, Quality Management, Instrumentation, Anatomy, Physiology, Pathology, Microbiology, Physical Pharmacy, Pharmaceutical Preparation, Compounding and Dispensing and Pharmaceutical Biochemistry.

The university offers a full-time postgraduate program since 2013 in the key areas of Pharmacy and has developed the curriculum format to allow a greater range of options within the program to meet the requirements of pharmacists who have a passion for teaching and research careers in pharmacy and allied health sciences. It provides a sound understanding of drug and disease and diagnostic and instrumental approaches at the molecular level applying contemporary techniques of modern biomedicine. It provides opportunities to acquire and develop the skills of synthesis, analysis, and decision-making, required for careers in the field of pharmaceutical research. Thus, the students are trained as subject specialists, a researcher, and resource people, well equipped with the methodologies of modern trends of teaching and research in various disciplines of pharmaceutical sciences. Research students at DCOP is guided by a team of highly qualified HEC-approved supervisors, they are also provided facilities to work in advanced labs that will help in equipping the practicing pharmacists with the skills to progress into higher levels in all professions of pharmacy. This will enable them to meet the respective intra-disciplinary and cross-disciplinary challenges on the frontiers of pharmaceutical sciences including *in vitro*, *in vivo*, cellular, computer-aided-drug designing, and screening at molecular and genetic levels, etc.

The academic activities at Faculty of Pharmaceutical Sciences, Dow College of Pharmacy are divided into five major disciplines:

1. Pharmacology.
2. Pharmaceutics.
3. Pharmaceutical Chemistry.
4. Pharmacognosy.
5. Pharmacy Practice

PHARMACOLOGY

Pharmacology is the study concerned with all aspects of actions of drugs and other chemicals on living system. It explores the action of drugs, adverse effects, drug interaction, contraindications and their pharmacokinetics. It provides pre-clinical and clinical education in areas of Pharmacology, Therapeutics and Toxicology for undergraduate and post graduate students. Pharmacological research areas include Cardiovascular Pharmacology, Clinical Pharmacology, Molecular and Biochemical Pharmacology, Neurosciences and Inflammatory Pharmacology.

PHARMACEUTICS

Pharmaceutics is the science of drug manufacturing. It involves the processes from new chemical entity turning into a dosage form, modification into the existing formulation in order to enhance their safety and efficacy. This field encompasses the knowledge and guidelines for the manufacturing of formulation, facilities used for manufacturing and regulations for the pharmaceutical manufacturing and marketing.

PHARMACEUTICAL CHEMISTRY

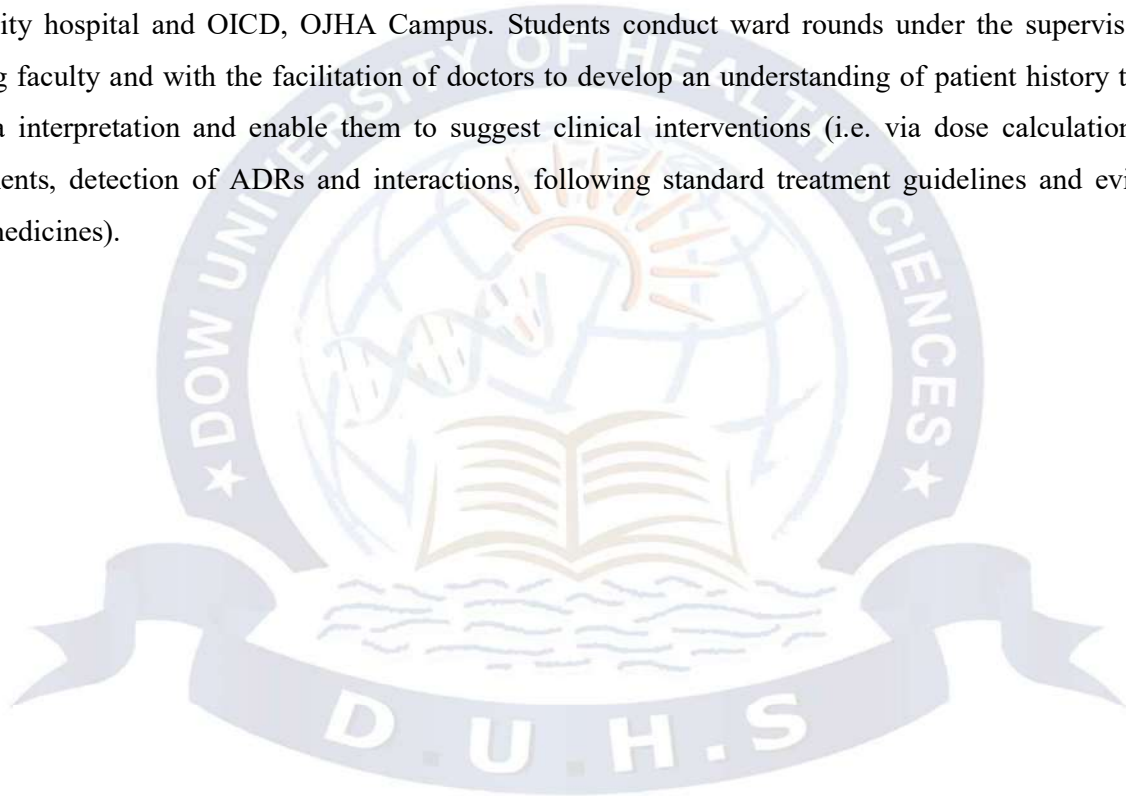
Pharmaceutical Chemistry addresses chemical aspects of drug development, analytical procedures, important reactions involved in quantification and quality testing of drugs. Medicinal chemistry is the most important aspect of this branch of Pharmacy, along with the other courses which make the students aware and to handle various instruments to be used for the analytical purposes including pH meter, Conductivity meter, UV-Visible Spectrophotometer, HPLC, Mass Spectrophotometer, IR and NMR Spectrophotometer, etc.

PHARMACOGNOSY

Pharmacognosy focuses on natural sources of the drugs including plants, animals and minerals. This science includes study related to Procurement of drugs from said sources, effects of these drugs on animals as well as human subjects, drug profiles etc. It also covers the clinical aspects of herbal medicines with quality control, toxicity studies as well as herbal drug interactions. It also elaborates the industrial aspects that cover the cosmaceuticals, nutraceuticals and exploration of new herbal drugs.

PHARMACY PRACTICE

Department of Pharmacy Practice was established in the year 2014 Dec. 22nd, as per the requirements set forth by the Pharmacy Council of Pakistan. The curriculum of pharmacy practice has a major focus on practicing clinical skills in the community, hospital and clinical pharmacy setups learned in the classroom. It is mandatory for student to attend Ward rounds in two different hospital settings i.e. civil hospital, Dow University hospital and OICD, OJHA Campus. Students conduct ward rounds under the supervision of teaching faculty and with the facilitation of doctors to develop an understanding of patient history taking, lab data interpretation and enable them to suggest clinical interventions (i.e. via dose calculations and adjustments, detection of ADRs and interactions, following standard treatment guidelines and evidence based medicines).



Program offered at Dow College of Pharmacy

Under graduate: Pharm. D “Doctor of Pharmacy” (Morning & Evening)

Post Graduate:

M.Phil offered in all five major discipline.

Ph.D in Pharmacology .

SCOPE OF PHARMACY

EXCITING OPPORTUNITIES IN THE PHARMACY FIELD SUCH AS:

- Hospital Pharmacy - Staff Pharmacist, Clinical Pharmacist, Pharmacy Administrator.
- Pharmacy Consultant - Home Health Care, Long-Term Care Facilities, Poison Control Centre.
- Pharmaceutical Industry - Research and Development Pharmacist, Production Pharmacist, Quality Control and Quality Assurance Pharmacist,
- Government Agencies – Ministry of Health, Public Health Services, Drug and Food Inspector and regulatory affairs.
- College and Universities - Research and academia.
- Nuclear Pharmacy - Chemotherapy pharmacist.
- Pharmacy Journalisim

Dow College of Pharmacy



Eligibility Criteria :

- HSSC (Intermediate Science) Pre-Medical/ A-Level or Equivalent, Min. 60% marks or equivalent only certified by IBCC
- Minimum passing marks in entry test shall be 25%
- Candidate's Domicile of Sindh

NUMBER OF SEATS

SEAT DISTRIBUTION FOR Pharmacy COURSE at Dow College of Pharmacy

OPEN MERIT	60
Self-Finance (Morning)	40
Self-Finance (Evening)	50
TOTAL	150

CATEGORIES OF SEATS

A. Open Merit (merit cum choice)

B. Self- Finance Morning & Evening (merit cum choice)

A. OPEN MERIT (merit cum choice)

- 60 (Sixty)** seats have been reserved for Open Merit candidates with Sindh domicile who have studied Matric / O Level AND Inter / A Level.

B. Self- Finance (Morning and Evening) [merit cum choice]

- 40 (Forty)** seats for morning and **50 (Fifty) seats for evening** are reserved for candidates, fulfilling the eligibility criteria of open merit to be selected on merit cum choice basis.

NOTE:

Admissions will be offered on MERIT CUM CHOICE BASIS IN both CATEGORIES.

Fee Structure of PHARM-D

Session 2022-23

FEE TYPE	PHARMD-D Open Merit	PHARMD-D Self Finance
Admission Fee	50,000/-	60,000/-
Tuition Fee	180,000/-	350,000/-
Document Verification Charges	1,000/-	1,000/-
Total	231,000/-	411,000/-

*Above amounts are excluding govt. taxes. Taxes apply as per FBR rules

Transport Fee (Optional) Rs. 32,000/- per year.

RULES FOR THE PAYMENT OF FEE

Payorder of one year tuition fee (of the respective category) will have to be paid within one month after the start of 2nd, 3rd, 4th & Final year.

In case the fee is not submitted during the given specified time, late payment charges will be charged as follows:

First month after lapse of first month.....2.5 % of tuition fee
Second month5.0 % of tuition fee
Third month.....7.5 % of tuition fee
Fourth month.....10 % of tuition fee

Fee of all categories may be increased by 10% every year.

AFTER FOUR MONTHS OF NON PAYMENT, THE SEAT IS LIABLE TO BE CANCELLED AND STUDENT WILL NOT BE ALLOWED TO APPEAR IN ANY EXAMINATION

Fee deposited is refundable as per the Refund policy guidelines of the DUHS.

Taxes will be applied as per the FBR rules.

Hostel and Transport fee will be valid till the last exam of the academic year.


Amounts stated in the fee vouchers are excluded of all Bank charges.

The Fee Structure may be revised by the university at any time during the course of the study, due to unavoidable circumstances.


ACCREDITATION DETAILS OF DOW COLLEGE OF PHARMACY, DUHS

Dow College of Pharmacy aims to offer highest standard of education and research in the country. We endeavor to achieve our objectives in alignment with the pertinent regulatory requirements. In this regard we have always followed guidelines from the “Higher Education Commission of Pakistan (HEC)” and “Pharmacy Council of Pakistan (PCP)”.

The Pharm.D Morning and Evening Programs and Postgraduate Programs (M.Phil in all 5 disciplines and PhD in Pharmacology) offered by Dow College of Pharmacy, are accredited by Pharmacy Council of Pakistan and Higher Education Commission of Pakistan.



The Higher Education Commission of Pakistan is an independent, autonomous, and constitutionally established institution of primary funding, overseeing, regulating, and accrediting the higher education efforts in Pakistan. We feel delighted to declare accreditation of Dow College of Pharmacy by the HEC, Pakistan.



The Pharmacy Council Pakistan (PCP) is the regulator established in terms of the Pharmacy Act, 1967 to regulate pharmacists, pharmacy support personnel and pharmacy premises in Pakistan. PCP is a professional body responsible for the registration of pharmacists and promotion of pharmacy education in the country. Dow College of Pharmacy has its graduate and undergraduate programs accredited by the PCP.

SCHEME OF COURSES FOR PHARM-D

(FIVE YEAR SEMESTER SYSTEM)

1ST Professional Pharm-D

Semester- I			Semester-II		
COURSE NO	SUBJECT	CR HR	COURSE NO	SUBJECT	CR HR
ENG-300	English-A (F English)	2	ENG-301	English-B (Communication & Writing skills)	2
PD-301	Physical Pharmacy-I [Th]	3	PD-302	Physical Pharmacy-II [Th]	3
PD-303	Physical Pharmacy-I [Lab]	1	PD-304	Physical Pharmacy-II [Lab]	1
PD-305	Pharmaceutical Mathematics	3	PD-306	Pharmaceutical Organic Chemistry-II [Th]	3
PD-307	Pharmaceutical Organic Chemistry –I [Th]	3	PD-308	Pharmaceutical Organic Chemistry-II [Lab]	1
PD-309	Pharmaceutical Organic Chemistry –I [Lab]	1	PD-310	Pharmaceutical Biochemistry-II [Th]	3
PD-311	Pharmaceutical Biochemistry-I [Th]	3	PD-312	Pharmaceutical Biochemistry-II [Lab]	1
PD-313	Pharmaceutical Biochemistry-I [Lab]	1	PD-314	Physiology - II [Th]	3
PD-315	Physiology - I [Th]	3	PD-316	Physiology [Lab]	2
PD-317	Anatomy & Histology-I [Th]	2	PD-318	Anatomy & Histology-II [Th]	2
			PD-320	Anatomy & Histology [Lab]	1
	Total Cr. Hr	22		Total Cr. Hr	22

2nd Professional Pharm-D

Semester-III			Semester-IV		
Course No	Subject	Cr Hr	Course No	Subject	Cr Hr
ISL-400	Islamic Studies	2	PKS-401	Pakistan Studies	2
PD-401	Pharmaceutical Microbiology and Immunology - I [Th]	3	PD-402	Pharmaceutical Microbiology and Immunology - II [Th]	3
PD-403	Pharmaceutical Microbiology and Immunology -I [Lab]	1	PD-404	Pharmaceutical Microbiology and Immunology -II [Lab]	1
PD-405	Pharmaceutical Preparation and Dosage form Science-I [Th]	3	PD-406	Pharmaceutical Preparation and Dosage form Science -II [Th]	3
PD-407	Pharmaceutical Biostatistics	3	PD-408	Pharmaceutical Preparation and Dosage form Science [Lab]	2
PD-409	Pharmacology & Therapeutics -I [Th]	3	PD-410	Pharmacology & Therapeutics -II [Th]	3
PD-411	Pharmacology & Therapeutics -I [Lab]	1	PD-412	Pharmacology & Therapeutics -II [Lab]	1
PD-413	General Pharmacognosy [Th]	3	PD-414	Pathology-I [Th]	2
PD-415	Pharmacognosy - I [Lab]	1	PD-416	Chemical Pharmacognosy [Th]	3
			PD-418	Pharmacognosy - II [Lab]	1
	Total Cr. Hr	20		Total Cr. Hr	21

3rd Professional Pharm-D

Semester- V			Semester- VI		
Course No	Subject	Cr Hr	Course No	Subject	Cr Hr
PD-501	Pharmacology & Therapeutics-III [Th]	3	PD-502	Pharmacology & Therapeutics –IV [Th]	3
PD-503	Pharmacology & Therapeutics-III [Lab]	1	PD-504	Pharmacology & Therapeutics-IV [Lab]	1
PD-505	Pathology-II [Th]	2	PD-506	Computer & its Application in Pharmacy [Th]	3
PD-507	Pathology [Lab]	1	PD-508	Computer & its Application in Pharmacy [Lab]	1
PD-509	Pharmaceutical Analysis and Instrumentation-I [Th]	3	PD-510	Pharmaceutical Analysis and Instrumentation-II [Th]	3
PD-511	Pharmaceutical Analysis and Instrumentation-I [Lab.]	1	PD-512	Pharmaceutical Analysis and Instrumentation-II [Lab.]	1
PD-513	Advanced Pharmacognosy - I [Th]	3	PD-514	Advanced Pharmacognosy - II [Th]	3
PD-515	Pharmacognosy - III [Lab]	1	PD-516	Pharmacognosy - IV [Lab]	1
PD-517	Compounding & Dispensing Pharmacy [Th]	3	PD-518	Community Pharmacy [Th]	3
PD-519	Compounding & Dispensing Pharmacy [Lab]	1			
	Total Cr. Hr	19		Total Cr. Hr	19

4th Professional Pharm-D

Course No	Subject	Cr Hr	Course No	Subject	Cr Hr
PD-601	Hospital Pharmacy-I [Th]	3	PD-602	Hospital Pharmacy-II [Th]	3
PD-603	Industrial Pharmacy-I [Th]	3	PD-604	Industrial Pharmacy-II [Th]	3
PD-605	Industrial Pharmacy-I [Lab]	1	PD-606	Industrial Pharmacy-II [Lab]	1
PD-607	Pharmaceutical Quality Management-I [Th]	3	PD-608	Pharmaceutical Quality Management-II [Th]	3
PD-609	Pharmaceutical Quality Management-I [Lab]	1	PD-610	Pharmaceutical Quality Management-II [Lab]	1
PD-611	Clinical Pharmacy- I [Th]	3	PD-612	Clinical Pharmacy –II [Th]	3
PD-613	Clinical Pharmacy-I [Lab]	1	PD-614	Clinical Pharmacy-II [Lab]	1
PD-615	Clinical Pharmacognosy [Th]	3	PD-616	Medicinal Chemistry-II [Th]	3
PD-617	Medicinal Chemistry-I [Th]	2	PD-618	Medicinal Chemistry-I [Lab]	1
	Total Cr. Hr	20		Total Cr. Hr	19

5th Professional Pharm-D

Semester IX			Semester X		
Course No	Subject	Cr Hr	Course No	Subject	Cr Hr
PD-701	Clinical Pharmacy-III [Th]	3	PD-702	Clinical Pharmacy-IV [Th]	3
PD-703	Clinical Pharmacy-III [Lab]	1	PD-704	Clinical Pharmacy-IV [Lab]	1
PD-705	Pharmaceutical Technology-I [Th]	3	PD-706	Pharmaceutical Technology-II [Th]	3
PD-707	Forensic Pharmacy-I [Th]	2	PD-708	Pharmaceutical Technology [Lab]	2
PD-709	Biopharmaceutics & Pharmacokinetics-I [Th]	3	PD-710	Forensic Pharmacy-II [Th]	2
PD-711	Pharmaceutical Marketing & Management-I [Th]	3	PD-712	Biopharmaceutics & Pharmacokinetics -II [Th]	3
PD-713	Medicinal Chemistry- III [Th]	3	PD-714	Biopharmaceutics & Pharmacokinetics [Lab]	2
PD-715	Medicinal Chemistry- II [Lab]	1	PD-716	Pharmaceutical Marketing & Management-II [Th]	3
	Total Cr. Hr	19		Total Cr. Hr	19

SUMMARY OF COURSES CR.Hrs

	1 st Semester	2 nd Semester	Total
	Cr. Hrs	Cr. Hrs.	Cr. Hrs
1 st Prof.	22	22	44
2 nd Prof	20	21	41
3 rd Prof	19	19	38
4 th Prof	20	19	39
5 th Prof	19	19	38
Total	100	100	200

ASSESSMENT METHODS


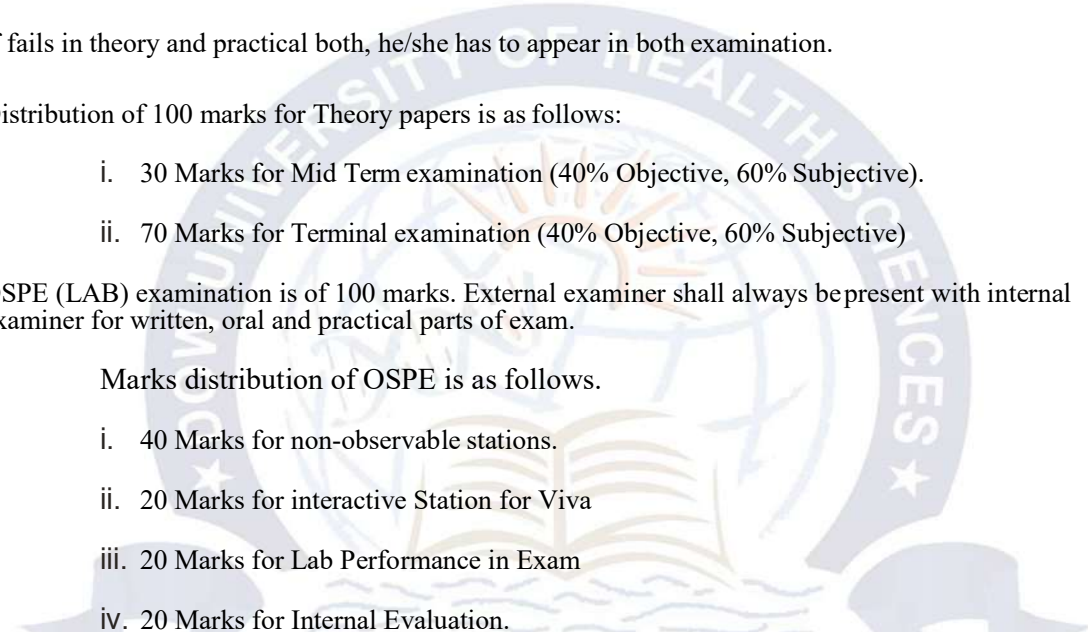
EXAMINATION RULES

CRITERIA FOR AWARD OF DEGREE:

1. For the award of degree students must pass all the courses taught during five years education of Pharm.D.

CRITERIA FOR PROMOTION TO NEXT ACADEMIC YEAR:

1. Any Students, who fails to pass the **First Professional Exam** in five chances availed or unavailed, shall cease to pursue further Pharmacy Education.
2. A student would be promoted to next higher class upon clearing **all courses of previous academic year(s)**. In case of any misinterpretation and discrepancy, Principal's committee decision would be the final.
3. Attendance in each course will be compulsory for all students and no students will be eligible to appear in any course in the University examination unless he/she has attended 75% percent attendance.
 - i. The attendance of students admitted in the university will be counted from the 1st day of semester and not from the date of admission.
 - ii. Students called for national duty such as participation in Olympics, National or, Inter-varsities, games or going to perform Hajj would be given exemption in attendance. These cases would be decided on individual basis.
 - iii. If a student is unable to attend classes continuously for 15 days or more without informing the Dean/Chairpersons of the Departments (in writing) his/her admission will stand cancelled. In case of illness or other similar situations, application along with a medical

- 
- 
- iv. certificate from a registered medical practitioner duly verified by the Senior Medical Officer of the University must be submitted within two days after the ailment.
 - v. Original attendance record is to be submitted to the Principal for record and future reference.
4. The percentage of pass marks in each subject is not less than 50 percent both in theory and practical.
 5. Grace marks are not allowed.
 6. If a student fails in Theory and Pass in Practical examination, he/she will have to appear in theory exam and not in practical examination so is the case vice versa.
 7. If fails in theory and practical both, he/she has to appear in both examination.
 8. Distribution of 100 marks for Theory papers is as follows:
 - i. 30 Marks for Mid Term examination (40% Objective, 60% Subjective).
 - ii. 70 Marks for Terminal examination (40% Objective, 60% Subjective)
 9. OSPE (LAB) examination is of 100 marks. External examiner shall always be present with internal examiner for written, oral and practical parts of exam.


Marks distribution of OSPE is as follows.

 - i. 40 Marks for non-observable stations.
 - ii. 20 Marks for interactive Station for Viva
 - iii. 20 Marks for Lab Performance in Exam
 - iv. 20 Marks for Internal Evaluation.

SCHEDULE OF RETAKE EXAMINATION

Retake Exam for Odd Semester will be conducted just after the Even Semester exams. And Retake Exam of Even Semester will be conducted after the result of Even Semester Exam.

MAXIMUM DURATION FOR COMPLETION OF DEGREE

1. Degree enrollment of the Pharm.D will remain valid for two more years after the expiry of the required duration for the completion of the Pharm.D degree (i.e 5 Year).
 2. However a student unable to complete his/her degree requirement within the validity of his/her enrollment, will have to re-validate / extend his/her enrollment for not more than 2 years by paying a prescribed fee with the permission of the Principal.
- 

GRADING SYSTEM

Numerical Grade (NG)

Assessment of performance on the basis of marks out of 100 fixed for a course of 1 or 3 credit hours unit is NG.

Alphabetical Grade (AG)

Equivalent of numerical grades in terms of alphabets shall be termed as alphabetical grades. (Each letter carries a value in terms of numerical points).

Grading

Marks obtained in Percentage Range	GPA	GRADE
80-100	4.0	A+
75-79	4.0	A
70-74	3.7	A-
67-69	3.3	B+
63-66	3.0	B
60-62	2.7	B-
56-59	2.3	C+
50-55	2.0	C
00-49	0.0	F
Absent	0.0	Abs

DUHS STUDENT'S CONDUCT RULES

A. STUDENT'S CONDUCT RULES

(Applicable to Undergraduate and Postgraduate students of the University and its constituent or affiliated institutions)

These rules are applicable to all students who are admitted to the Dow University of Health Sciences, and include undergraduate and postgraduate medical and dental students, nurses and all those being trained in medical and allied health sciences.

1. No student or group of students shall form society / association / organization with permission from Principal of College.
2. No outsider will be invited by the students to address any meeting at the University or its constituent college / institute / school, hospital etc whether academic, social, religious or political (without prior written permission of the authorities). Decision of authorities will be final and taken on case to case basis.
3. Students are not allowed to paste any poster, pamphlet or fix banners on the wall. Graffiti on walls (wall chalking) of the premises of the University or its constituent college / institute / school, hospital etc be they, academic, social, religious or political, are also not allowed.
4. During teaching hours and / or Clinical posting, students are prohibited to play or roam around in the premises.
5. No student or group of students shall arrange any program, picnic, musical concert sports activities etc, on their own, without prior written permission from the authorities.
6. No student or group of students are allowed to collect money for any purpose whatsoever.
7. University / College Identity Card, (ID) should be displayed, at all times, when the students are in the premises of the University or its constituent college / institute / School / Hospital etc. Faculty members and security staff are authorized to check I.D cards at any time.
8. If any student wants to publish his/her scientific or literary article, he/she must get the draft approved, by the authorities. They are also required to submit the copy of the final article / paper (to be published) for record purposes to the University.
9. Students will not be allowed to address the media or the national press on any subject.
10. Students are forbidden to address higher authorities directly. Any communication intended for higher authorities, needs to be routed through proper channel (Vice Chancellor / Principal / Medical Superintendent / Director)
11. Smoking, pan chewing, littering, spitting and other activities, prejudicial to the conduct are prohibited in the classroom, laboratories, seminar / tutorial rooms, library during and after college hours and wards during clinical postings.
12. Unless specifically permitted, no student or group of students are allowed to enter administrative and department offices / telephone exchange, or teaching areas like laboratory, lecture hall of the institution or department and / or use office equipment(s) / machinery, like telephone, computer, printer, typewriter, overhead projector, slide projector or multimedia etc.
13. No student is allowed to bring a weapon and/or ammunition, liable to cause injury, or any other harmful item, inside the premises.
14. No student or group of students will threaten, stop, harass, forcibly disallow or evict another bonafide student or group of students.
15. Misbehavior with faculty members and other staff members of the University and / or its constituent college / institute / school, hospital etc, by a student or a group of students is completely prohibited. Such misdemeanors would attract penalties as severe as expulsion and rustication.
16. Willful damage to either public or personal property in the University and / or its constituent college / institute / school etc, by a student or a group of students, is completely prohibited. Such misdemeanors would be liable to penalties as severe as expulsion and rustication.
17. Use of loud speakers / amplifiers, megaphone is prohibited in the premises of the University.
18. No student will be allowed to park his / her car inside the premises of the college / University unless specifically allowed by the competent authority.

(A) SUSPENSION

A student shall be liable for suspension upto six months if he/she commits any of the following act:-

1. Misbehaves or quarrels with any teacher or member of the staff.
2. Is generally disobedient.
3. Spreads false rumours.
4. Uses unbecoming, indecent or filthy language.
5. Incites other students to violence.
6. Is inappropriately dressed.
7. Shouts, abuses, quarrels or fights with fellow students.
8. Raises slogans to hurt others, politically or religiously.
9. Interferes with the administration, including the mode or schedule of the examination.
10. Indulges in acts of immorality.
11. Indulges in any kind of political activity including displaying posters or play cards within the College.
12. Remains absent continuously for more than 4 weeks without prior permission.

(B) RUSTICATION

A student may be rusticated for a period of 3 years due to any of the following acts:-

1. Taking forceful possession, making unauthorized use or damaging any property.
2. Involving himself in any agitational activity.
3. Found indulging in activities, prejudicial and detrimental to the good order of the College.
4. Adopting unfair means during examination.
5. Disobeying an order of suspension passed against him.
6. Any other act, which the principal or the disciplinary committee considers inappropriate.
7. Anybody who does not submit the prescribed undertaking about non-involvement in political activities.

NOTE:-

Any student suspended or rusticated for the reasons mentioned above shall not be allowed to appear in the examinations.

(C) EXPULSION

A student is liable to be expelled from the college if he/she commits any of the following act and this order shall be final and irrevocable. If he/she.

1. Is found in possession of fire arms or lethal weapons or Narcotic drugs in the college premises, hostels, examination halls, teaching hospitals or any other area as specified by the university administration.
2. Remains absent for more than three months without permission of the Principal / Director, his/her admission shall be cancelled by the disciplinary committee of that college / institute.

STUDENT'S DISCIPLINARY RULES & PROCEDURE

Any student indulging in conduct contrary to the above mentioned rules shall be dealt with in accordance with the Dow University of Health Sciences Conduct Rules and the procedure mentioned below:

1. Each constituent college will have a Disciplinary Committee to be notified with the approval of the Vice Chancellor to deal with all the disciplinary matters.
2. The Principal on suo moto or on any complaint, may initiate action against any student of the college and refer the case to the Disciplinary Committee of the college for appropriate recommendation.
3. Before taking any action, the Principal shall serve a show cause notice to the student indicating briefly the charges against him. The accused student will have to give a written reply within seven days. He/She will be afforded a chance for personal hearing after which the Principal of the constituent college is empowered to suspend, rusticate or expel the student.
4. The student to whom the Principal has suspended, rusticated or expelled from the college may make appeal to the Vice Chancellor against the decision of the Principal within 30 days.
5. Any student whose name appears in the F.I.R. pertaining to any non-bailable offence as specified in the criminal procedure code (Cr.P.C.) will be suspended. During the pendency of the case he/she will not be allowed classes or take up any examination.

DRESS CODE

ALL STUDENTS MUST WEAR WHITE COAT IN THE CAMPUSES OF DMC AND OJHA CAMPUS (WITH A TAG HAVING NAMED AND CLASS) AND DECENT SHOES / SANDLE BUT NO SLIPPERS, IN CASE OF DEFAULT THEY WILL NOT BE ALLOWED TO ENTER OR A DISCIPLINARY ACTION WILL BE TAKEN.

ATTENDANCE

STUDENTS HAVING ATTENDANCE IN THE CLASS OF LESS THAN 75% WILL NOT BE ALLOWED TO APPEAR IN THE EXAMINATION.

RULES FOR LIBRARY

1. **One book can be borrowed from the library at one time.**
 - Books will not be issued without library card.
 - Book can be borrowed for a maximum period of 3 days.
 - There is no lending facility for reference books, CD's periodicals and newspapers.
2. **Any title in the lending section can be reserved in advance, Please make request at the library desk.**
3. **The following rules pertain to re-issuance of books.**
 - Books can be issued consecutively two times only.
4. **A late fine will be charged if book is returned late.**
 - Rs. 30/= per book per day.
5. **The following rules pertain to book lost / damaged.**
 - In case of damage, full price of the book will be charged.
 - In case of loss, 200% price of the book will be charged.
 - No marking, either in pencil, pen or highlighter is allowed on the books. The book will be inspected at the time of return. In case books are found marked, a fine of Rs. 50 will be charged.
6. **Reference books will not be issued for photocopy.**
7. **Membership can be cancelled for a minimum period of 10 days and this period can be increased in case the student is found continuing violation of rules of library.**

Financial Assistance

- Financial assistance is provided to the students through various Prime Minister Scheme such as Ehsaas Scholarship, HEC Need Based Scholarship Sindh Endowment Fund and Ahsan trust sponsored by Meezan bank based on merit cum need basis and etc.
- The university also provides installment facility to the needy and deserving students.

NUMBER OF STUDENTS GRADUATED AND STUDYING

Currently 486 Students are enrolled in morning shift in all five batches.

241 students are enrolled in five batches of the Pharm.D Evening program.

PHARM.D ODD & Even SEMESTER 2022

BATCH	YEAR	SEMESTER	NO. OF STUDENTS (Morning)	NO. OF STUDENTS (EVENING)	TOTAL
2021	1ST YEAR	1ST	101	49	150
2020	2ND YEAR	3RD	93	49	142
2019	3RD YEAR	5TH	99	50	149
2018	4TH YEAR	7TH	96	51	147
2017	5TH YEAR	9TH	97	42	139
TOTAL			486	241	727

To date, Ten Batches of Pharm.D program have graduated from this institute. Almost 1160 passed out Pharmacy graduates.

Facilities and Salient Features

- There are Spacious class rooms with Audio Visual facilities and centrally air condition for lecture delivery as per advanced teaching methodology, tutorial rooms, animal house, medicinal garden, examination hall and seminar hall for academic activities of the students.
- Excellent laboratory facilities are provided to students where they can work and learn properly. The laboratories are well equipped spacious space laboratories for hands on training during education with latest equipment/machines
- Well provided Library with all types of books and Research Journals on all topics that will be taught to you.
- Digital Library with more than 200 separate working stations for each student for hands on training of Computer and advanced software applications in Pharmacy.
- There is fully maintained animal house that provides animals for the smooth execution of pharmacological experiments.
- Students are properly evaluated through well-structured and organized examination system.
- Regular seminars, workshops and conferences are organized for the dissemination of updated knowledge. Frequent career counseling sessions are also conducted.
- Students are with facility of mentorship in academic and administrative affairs.
- There is also a network of alumni for students' facilitation and inspiration.
- Students are also encouraged to participate in the student's week organized by university that includes sport week, talent show, cooking, body building, singing and poetry competition etc.
- Centralized mosque and spacious cafeteria are also available in the university premises.

FACILITIES

In house Facilities :



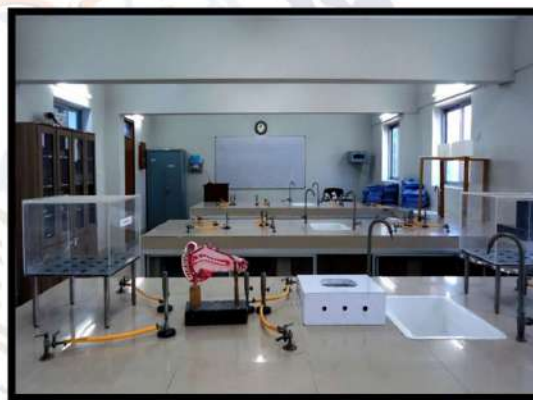
Pharmaceutics Lab



Microbiology Lab



Pharmaceutical Chemistry Lab



Pharmacology Lab



Pharmacognosy Lab



Industrial Pharmacy Lab

Systemic and Molecular Pharmacology Research Lab



D . U . H . S

Pharmaceutics Research Lab



Pharmaceutical Chemistry Research Lab



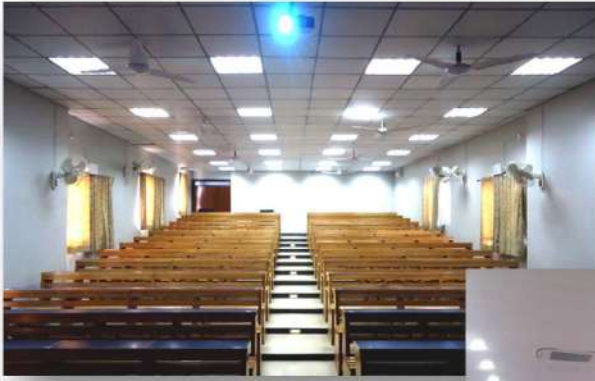
Hospital and Clinical Pharmacy



Girls Common Room, Souvenir Shop and Well Planned Campus Space



Well Equipped Lecture Halls



**Well Provided Library with all Types of Books
and Research Journals on all Topic**



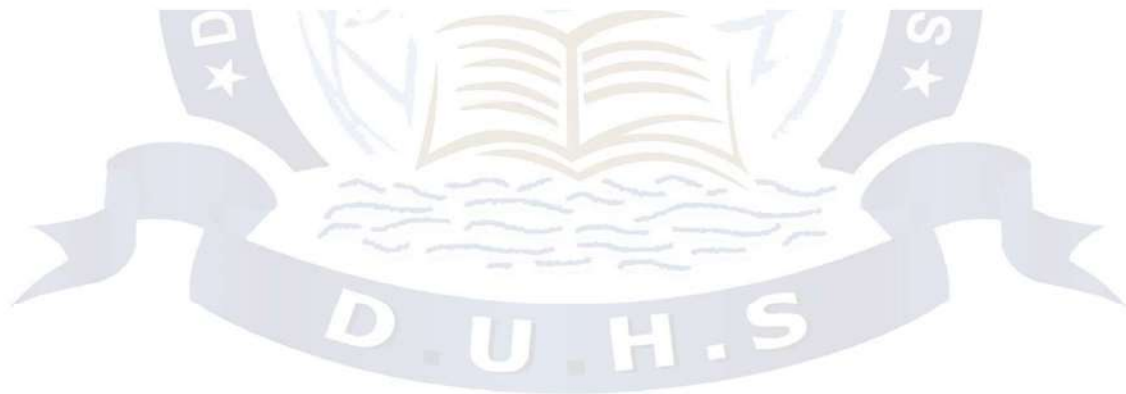


Digital Library at DCOP





**Digital Library Facility in Main
Library Block, Ojha Campus.
> 200 Work Stations**



Animal House at Ojha Campus





Medicinal Herbal Garden





Gymnasium facility at Ojha Campus



Cricket ground facility at Ojha Campus



INDUSTRIAL TRIPS OF FINAL YEAR STUDENTS

BAYER PHARMACEUTICAL PAKISTAN



BOSCH PHARMACEUTICALS PVT LTD



14th August Celebration



FACULTY AT DOW COLLEGE OF PHARMACY



1. Department of Pharmacology

S.#	Name	Designation
1	Prof. Dr. Sumbul Shamim	Professor & PRINCIPAL Chairperson, Dept. of Pharmacology
2	Prof. Dr. Noor Jahan	Professor Faculty of Pharmaceutical Sciences
3	Dr. Saima Mahmood	Associate Professor Dept. of Pharmacology
4	Dr. Shumaila Aman	Assistant Professor Dept. of Pharmacology
5	Dr. Hina Abrar	Assistant Professor Dept. of Pharmacology
6	Dr. Faheema Siddiqui	Assistant Professor Dept of Pharmacology
7	Dr. Auwais Ahmed khan	Assistant Professor Dept. of Pharmacology
8	Dr. Hira Hanif	Assistant Professor Dept. of Pharmacology
9	Dr. Hina Tabassum	Instructor Dept. of Pharmacology
10	Dr. Noor ul Ain Kamran	Research Assistant Dept. of Pharmacology

2. Department of Pharmaceutics

S.#	Name	Designation
1	Dr. Rabia Bushra	Professor & Chairperson Dept of Pharmaceutics
2	Dr. Hafiz Muhammad Arshad	Associate Professor & VICE PRINCIPAL , Dept. of Pharmaceutics
3	Dr. Tariq Ali	Associate Professor Dept of Pharmaceutics
4	Dr. Anab Fatima	Associate Professor Dept of Pharmaceutics
5	Dr. Mahwish Rizvi	Associate Professor Dept of Pharmaceutics
6	Dr. Riffat Yasmin	Assistant Professor Dept of Pharmaceutics
7	Dr. Shumaila Shafique	Assistant Professor Dept of Pharmaceutics
8	Dr. Wajiha Iffat	Assistant Professor Dept of Pharmaceutics
9	Dr. Sana Ghayas	Assistant Professor Dept of Pharmaceutics
10	Dr. Syed Ahsan Ali	Assistant Professor Dept of Pharmaceutics
11	Dr. Hina Saleem	Assistant Professor Dept of Pharmaceutics
12	Dr. Omer Mustapha	Assistant Professor Dept of Pharmaceutics
13	Dr. Syed Saoud Zaidi	Assistant Professor Dept of Pharmaceutics
14	Dr. Rahila Bano	Assistant Professor Dept of Pharmaceutics
15	Dr. Saba Inayat Ali	Lecturer Dept of Pharmaceutics

3. Department of Pharmaceutical Chemistry

S.#	Name	Designation
1	Dr. Moona Mehboob Khan	Associate Professor Incharge, Dept of Pharm. Chemistry
2	Dr. Mahwish Akhtar	Assistant Professor Dept of Pharm. Chemistry
3	Dr. Sana Shamim	Assistant Professor Dept of Pharm. Chemistry
4	Dr. Wajiha Gul	Assistant Professor Dept of Pharm. Chemistry
5	Dr. Sabahat Naeem	Assistant Professor Dept of Pharm. Chemistry
6	Dr. Rabya Munawar	Assistant Professor Dept of Pharm. Chemistry
7	Dr. Faisal Muhammad Khan	Lecturer Dept of Pharm. Chemistry
8	Dr. Sadia Iqbal	Lecturer Dept of Pharm. Chemistry

4. Department of Pharmacognosy

S.#	Name	Designation
1	Dr. Farah Saeed	Associate Professor Incharge, Dept. of Pharmacognosy
2	Ms. Umbreen Farrukh	Assistant Professor Dept of Pharmacognosy
3	Dr. Tehseen Quds	Assistant Professor Dept. of Pharmacognosy
4	Dr. Hina Zahid	Assistant Professor Dept. of Pharmacognosy
5	Dr. Hina Yasin	Assistant Professor Dept. of Pharmacognosy
6	Dr. Madiha Khan	Lecturer Dept. of Pharmacognosy
7	Dr. Erum Shah.	Lecturer Dept. of Pharmacognosy

5. Department of Pharmacy Practice

S.#	Name	Designation
1	Dr. Fakhshena Anjum	Associate Professor & Incharge, Dept of Pharmacy Practice
2	Dr. Najia Rahim	Associate Professor Dept of Pharmacy Practice
3	Mr. Imran Ahsan Mallick	Assistant Professor Dept of Pharmacy Practice
4	Dr. Sadia Shakeel	Assistant Professor Dept of Pharmacy Practice
5	Dr. Kashif Ali	Assistant Professor Dept. of Pharmacy Practice
6	Dr. Ale Zehra	Assistant Professor Dept. of Pharmacy Practice
7	Dr. Farah Khalid	Lecturer/ Pharmacist Dept of Pharmacy Practice

STRENGTH OF FACULTY

- No. of Ph.D. Faculty Members = 32
- No. of M.Phil. Faculty Members = 13
- No. of Pharm.D Faculty Members = 02
- Total number of teachers in Faculty =47